City of St. Helena
Special City Council Meeting
Monday, June 26, 2023 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

PLEASE NOTE: Any person who wishes to speak regarding an item on the agenda or make a comment under the "Oral Communication" portion of the agenda may do so, but please observe the time limit of four minutes.

The City Council meeting will be live-streamed on Comcast Channel 28 and on the City's website.

Public comment **for City Council meetings will be accepted via email to publiccomment@cityofsthelena.org. All public comments must be received three hours prior to the meeting. All other public comments received after the deadline will be attached to the item the next business day or soon thereafter. Public comments will not be read out loud but will be publicly available and attached to the on-line City Council agenda.**

Simultaneous Spanish interpretation services during meetings can be scheduled upon request. To ensure interpreters are available, requests must be made at least 72 hours in advance by calling the Office of the City Clerk at (707) 968-2640 or emailing cityclerk@cityofsthelena.org.
The schedule of upcoming meetings and published meeting agendas can be found on the City of St. Helena website at https://sthelena.civicweb.net/portal/.

Servicios de interpretación en español durante la reunión pueden ser solicitados por el público. Para asegurar que los intérpretes estén disponibles, los servicios tienen que ser solicitados al menos 72 horas antes de la reunión llamando a la oficina de la Secretaria de la Ciudad al (707) 968-2640 o por correo electrónico a cityclerk@cityofsthelena.org .
El horario de las reuniones publicadas y próximas puede ser localizado en el sitio de web de la Ciudad en https://sthelena.civicweb.net/portal/ .

Page

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
   Mayor: Paul Dohring, Vice Mayor Eric Hall:, City Council Members: Anna Chouteau, Lester Hardy, Billy Summers
4. ADOPTION OF THE AGENDA
5. PUBLIC COMMENT:
   Under California law, public comments at special meetings are limited to subjects on the agenda only. Therefore public comment will take place during consideration of the item. Each person's comments shall be limited to 4 minutes.
6. NEW BUSINESS:

6.1. Request by Ben and Kelly Van Zutphen to subdivide a 16.9-acre parcel to establish 51 single-family residential lots, 11 of which are proposed with accessory dwelling units on approximately 13.4 acres. A 3.13-acre parcel will be established to accommodate a 25-unit multi-family housing development. Two additional remnant parcels (Parcel A; 0.06 acres) and (Parcel B; 0.04 acres) will remain with no plans for future development. A total of 87 units are intended to be built. The currently vacant project site is located north of Hunt Avenue and east of the future extension of Adams Street within the Medium Density Residential (MR) Zoning and (MDR) General Plan districts. 5 - 950

CEQA Determination: Environmental Impact Report
Prepared By: Eric Norris, Planning Consultant
Recommendation:
After considering the project, staff report, supporting documents, technical studies and all testimony, written and spoken, the Planning Commission of the City of St. Helena recommends that the City Council:

1. Adopt the attached Resolution certifying the Final EIR, and approving a Mitigation Monitoring Program, Findings of Fact and Statement of Overriding Considerations; and

2. Adopt the attached Resolution approving the requested Tentative Map No. 2022-001, File #PL10-040 for the Hunter Subdivision project.

Staff Report - Pdf
Presentation
Public Comment.Henry Gundling
Public Comment.Joyce Armington
Public Comment.Kristi Nelson Pennington
Public Comment.Elizabeth Green.
Public Comment.Elizabeth Green
StHelena-TA-06082023-060823
St Helena Citizens for Sustainable Future petitions
Public Comment.Pat Dell
Public Comment.Pat Dell2
Public Comment.Mary Stephenson
Public Comment.Angela Zivkovic, PhD
Public Comment.Sandra Lowry
Public Comment. Joshua Devore DPF Law
Public Comment.Elizabeth Green 3
Public Comment.Elizabeth Green 4 (attachment comment 3)
Public Comment.Gayle Davies
Public Comment.Grace Kistner
Public Comment.N O'Neill
Public Comment. Holland & Knight LLP 1
Public Comment. Holland & Knight LLP 2
Public Comment.Bill Thompson
Public Comment.Daniel Hale
Public Comment.Greg Reynolds
Public Comment.Joe McGrath

Public Comment.Sandra Archibald
Public Comment.Ann Nevero
Public Comment. Holland & Knight LLP 3

6.2. Attachments 14a 951 - 1588
Att 14a Hunter Draft EIR

6.3. Attachment 14b 1589 - 1868
Att 14b APP A_NOP and Comments Received

6.4. Attachments 14c-d 1869 - 2110
Att 14c APP B_LESA Model
Att 14d APP C_CalEEMod Results

6.5. Attachment 14e 2111 - 2175
Att 14e APP D_Biological Resources Reports

6.6. Attachment f-g 2177 - 2333
Att 14f APP E_Confidential Hunter Cultural XPI_Ph2 Report_5.15.2020_App B, C, D
Att 14g APP F_Geotechnical Engineering Report

6.7. Attachment 14h 2335 - 2562
Att 14h APP G_Phase I ESA

6.8. Attachment i-k 2563 - 2747
Att 14i APP H_Hydrology Report
Att 14j APP I_Noise Model Outputs
Att 14k APP J_Water Neutral Report

6.9. Attachment l 2749 - 3251
Att 14l APP K_HunterSubdivision_TIS_04.06.21a_revNov2022

6.10. Attachment 15 3253 - 4066
Att 15 Final EIR for the Hunter Subdivision Project 1-2023

6.11. Attachment 16 4067 - 4069
Att 16 Hunter Subdivision Traffic Analysis Summary 10-10-22

7. ADJOURNMENT

The next Regular City Council meeting is scheduled for June 27, 2023, at 6:00 p.m.

This agenda was posted at City Hall, 1088 College Avenue, and at Vintage Hall, 465 Main Street, St. Helena, California on June 9, 2023.

Cindy Tzafopoulos, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 967-2792. Notification 72 hours prior to the meeting as required by

Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Any supplemental writings or documents distributed to a majority of the City Council regarding any item on this Agenda, after the posting of the Agenda, will be available for public review in the City Clerk's Office located at 1088 College Avenue, St. Helena, California, during normal business hours and by appointment. In addition, such writings or documents will be made available on the City's web site at https://sthelena.civicweb.net and will be available for public review at the respective meeting.

Report to the City Council
Special City Council - 26 Jun 2023

Agenda Section: **NEW BUSINESS:**

Subject: **Request by Ben and Kelly Van Zutphen to subdivide a 16.9-acre parcel to establish 51 single-family residential lots, 11 of which are proposed with accessory dwelling units on approximately 13.4 acres. A 3.13-acre parcel will be established to accommodate a 25-unit multi-family housing development. Two additional remnant parcels (Parcel A; 0.06 acres) and (Parcel B; 0.04 acres) will remain with no plans for future development. A total of 87 units are intended to be built. The currently vacant project site is located north of Hunt Avenue and east of the future extension of Adams Street within the Medium Density Residential (MR) Zoning and (MDR) General Plan districts.**

CEQA Determination: **Environmental Impact Report**

Prepared By: Eric Norris, Planning Consultant

Reviewed By: April Mitts, Assistant City Manager

Approved By: Anil Comelo, City Manager

BACKGROUND

PLANNING COMMISSION ACTION

On February 7, 2023, the Planning Commission of the City of St Helena held a duly noticed public hearing to consider the Hunter project's Environmental Impact Report and the proposed Tentative Map. At the conclusion of the February 7 meeting, the Planning Commission voted 4-0 (member Rothfeld was absent) to 1) approve Planning Commission Resolution PC2023-001, recommending that the City Council certify the Final Environmental Impact Report for the proposed project and adopt a Statement of Overriding Considerations, and 2) approve Planning Commission Resolution PC2023-002, recommending that the City Council approve Tentative Map TM2022-001.

BACKGROUND

A detailed discussion of the project's background is provided in the May 1, 2023, City Council staff report (included in Attachment 8 to this report). Topics addressed in the May 1 report include:

- 1993 General Plan
- Zoning History

PROJECT PROCESSING

The proposed project being considered by the City Council at this time is a Tentative Subdivision Map to subdivide an approximately 17-acre parcel of land in the eastern area of the city, east of the existing terminus of Adams Street. The proposed subdivision would create lots for 51 single family homes, and a separate parcel (lot 52) on which multi-family attached housing units would be built. The proposed Tentative Subdivision Map is included as Attachment 9 to this report.

Additional information on the proposed project is included in the May 1, 2023, City Council staff report.

ANALYSIS

A complete, detailed analysis of the proposed project is provided in the May 1, 2023, City Council staff report. Topics addressed in the Analysis include:

- Required findings for approval of a Tentative Map
- Required findings to deny a "housing development project" per state law
- Consistency with the 1993 General Plan
- Consistency with the Zoning Code
- Design of the subdivision for passive or natural heating or cooling.

CEQA

A comprehensive draft environmental impact report (EIR) was prepared for the proposed project and circulated for public review from September-November 2021. A final EIR, which includes all of the comments received during the public review period and responses to the comments, has been prepared.

Additional information on the Draft and Final EIR are included in the May 1, 2023, City Council staff report. Topics in the May 1 staff report include:

- Topics addressed in the Draft EIR
- Alternatives Considered
- Potentially Significant Impacts
- Significant and Unavoidable Impact: Vehicle Miles Traveled
- Statement of Overriding Considerations
- Public and Agency Comments on the Draft EIR
- Mitigation Monitoring and Reporting Plan

DISCUSSION

PROJECT ISSUES

The May 1, 2023, City Council staff report provides a detailed discussion of a wide variety of issues related to the project, including:

- Water Neutrality
- Trail/Open Space
- Levee/Flooding
- Parking
- Aesthetics
- Sewer Capacity
- "High Density" Nature of the Project
- Traffic/Congestion
- Intersection Design Adams Street/Starr Avenue and Starr Avenue/Street A
- Vacation of City Property

Please see the May 1 staff report (attachment 7 to this report) for a discussion of these issues.

ADDITIONAL ISSUES FROM THE MAY 1, 2023 CITY COUNCIL MEETING

The following are issues raised at the May 1 City Council meeting, either in public comments or the Council's discussion. Staff's responses are provided.

1. Emergency Evacuation—Many commentors expressed concern that the addition of new homes in the area would hinder the evacuation of persons in the area (and particularly in the Vineyard Valley mobilehome community) during an emergency.

Staff's Response: This issue has been raised many times in public comments on the Draft EIR and the proposed project. Staff understands the concerns expressed by residents. However, staff's conclusion, based on consultation with the St Helena Police and Fire departments, is that the addition of new homes will not negatively affect the ability of the area to evacuate in time of emergency.

For more information, please see Final EIR Master Response #1, "Emergency Evacuation," included as Attachment 1 to this report.

2. Levee Safety—Many commentors expressed concern about the design and maintenance of the adjacent levee. Some commentors have suggested that the levee's integrity is being compromised by the presence of gopher burrows, which they assert results from what they believe is an inadequate program of inspection and maintenance.

Staff's Response: Detailed responses to these and other comments related to the levee and its design and maintenance are included in Attachment 3, Final EIR Master Response #3, "Napa River Flood Protection/Levee."

Records of levee inspections verifying that the levee has been inspected for rodent burrows are available on the City's web site:

https://www.cityofsthelena.org/publicworks/page/flood-control-and-river-restoration-project

3. Affordable Housing/Relationship of the Project to Meeting RHNA Allocations—Several commentors expressed concern that housing in the proposed project "will not be affordable."

Staff's Response: As required by the St Helena Municipal Code, 20 percent of the homes in the project will be affordable to very low, low, and moderate income households. There will be no restrictions on the price of the remaining units, but the City's requirement for affordability will apply to 20 percent of the housing units.

The proposed project is required to comply with the City's Inclusionary Housing requirements (Chapter 17.146 of the St Helena Municipal Code) however it is not required that the inclusionary housing agreement be completed as part of the Tentative Map; a detailed Affordable Housing Agreement spelling out the exact number of units in each income category and where they will be located must be approved by the City Council before a Final Map can be approved (proposed condition of approval #28).

By providing both market-rate and affordable units, the proposed Hunter Project represents about one-third of the 256 housing units allocated to the City in the current 6th Cycle Regional Housing Needs Allocation (RHNA). If the Hunter project is not approved, another location (or locations) would need to be located to build these units. Staff suggests that the Hunter site, which has been proposed for residential development for at least 30 years in the General Plan, is an appropriate location on which to help the City meet its mandated housing needs.

4. Letters from Attorneys—The City received two letters from a law firm (DP&F) representing opponents of the proposed project: "RE: Hunter Subdivision Project Tentative Map No. 2022-001, File #PL10-040," April 30, 2023; and "RE: Hunter Subdivision Project Environmental Impact Report. 2022-001, File #PL10-040," April 30, 2023. The letters raise a number of issues related to the environmental impact report and the recommended approval of the proposed tentative map. The letters are provided as Attachment 4 to this staff report.

Staff's Response: Detailed responses to the DP&F letters, prepared by the City Attorney's office, are provided as Attachment 5 to this staff report.

5. Spanish Language Outreach—Some commenters and City Council members expressed concern that there was no specific Spanish-language outreach associated with the Hunter project. They question whether Spanish-speaking households should have been provided with information in their native language.
Staff's Response: The City currently does not have a policy requiring that public notices for development projects be provided in any language other than English. This is a policy which the City Council may wish to discuss for future projects. All noticing and materials for the Hunter project comply with current City requirements.

6. Status of the Onsite Well—Several commentors, including attorneys representing project opponents and Water Audit California, have suggested that the existing onsite well is not available to be used as proposed to irrigate outdoor landscaping in the proposed project. (The applicant has proposed using the well for all outdoor needs to reduce the need for City-supplied potable water.) Correspondence from project opponents and Water Audit California assert that the well falls into a category of "abandoned" under state law and, therefore, a new permit would need to be obtained (replacing the well's existing 1976 permit). The commentors then assert that the new permit would be subject to severe limitations on water extraction which would be substantially lower than the amount of water use proposed by the applicant.

Staff's Response: Based on a review of the correspondence and relevant state law, staff concludes that the statutes referred to (by Water Audit California in particular) are intended to address wells which have been entirely abandoned and which need to be properly dismantled and capped to prevent accidents. The well in question, although not currently connected to electrical service, on the other hand, is not abandoned, is fully operational, and was verified in 2021 to be able to be pumped at levels exceeding the proposed usage. The limitations which the commentors suggest apply to the well do not, in fact, apply and will not limit use of the well.

7. Statement of Overriding Considerations—Several City Council members discussed the proposed Statement of Overriding Considerations (SOC), which must be adopted due to the presence of one unavoidable adverse impact of the proposed project (too many Vehicle Miles Traveled, or "VMT"). The SOC, in simple terms, is a statement of the reasons why the proposed project's benefits outweigh the adverse impact that would result. Councilmembers asked what would happen if the SOC were not adopted, and whether the project's benefits in fact outweigh its impact on VMT.

Staff's Response: Detailed information on the Statement of Overriding Considerations is provided in the May 1 City Council staff report; the complete text of the SOC is included in the CEQA Resolution attached to this staff report (Attachment 6). Staff's recommendation is that the impact at hand—that the number of miles that will be driven by residents of the proposed project exceeds the standard at issue—is outweighed by the benefits of providing more housing in St Helena and in particular providing 20 percent of units at prices/rents affordable to very low, low, and moderate income households. As discussed earlier in this report, building housing at this site would meet

approximately one-third of the City's current Regional Housing Needs Allocation, an important goal of the City as it seeks to maintain conformance with state housing mandates.

If the SOC is not adopted, project approval could not proceed, the tentative map would not be approved, and development of housing at the project site would not occur. This could in turn lead to a number of adverse outcomes, including potential legal challenge of the Council's decision, issues with the State of California Department of Housing and Community Development (which enforces compliance with state housing law), and increase the risk that the City would receive future "builder's remedy" projects (under the Housing Accountability Act, cities that do not have a housing element in substantial compliance with state law cannot deny certain housing projects, even if they are not in compliance with the City's zoning or general plan). For these reasons, staff recommends that the City Council adopt the Statement of Overriding Considerations.

8. Future Applications—Several Councilmembers asked about future applications which will need to be approved before the project can be developed, and whether additional information is available about these applications.

Staff's Response: The following applications will need to be approved if the tentative map is approved:

- Affordable Housing Agreement—Must be approved by the City Council at a public meeting prior to approval of the Final Map

- Final Map/Subdivision Improvement Agreement (CC)—Must be approved by the City Council before the Final Map is recorded

- Conditional Use Permit for Multi-Family (PC)—Must be approved by the Planning Commission before the multi-family homes can be built

- Design Review (PC)—Must be approved by the Planning Commission before the single family and multi-family homes can be built

There are also numerous conditions of approval as noted in the resolution which will need to be satisfied before the final map can be approved and recorded and building permits issued.

Staff does not have additional information at this time on the details of any of these applications. All of the applications will require a public hearing or be considered at a public meeting of the approving body (Council or Planning Commission) at which the public will be able to provide written and oral comments.

9. Extension of Adams Street to Silverado Trail—Several commentors have asked why the applicant is not required to either build or contribute to the extension of Adams Street to Silverado Trail.

Staff's Response: The extension of Adams Street to Silverado Trail is one of two alternatives included in the General Plan to connect downtown to Silverado Trail. General Plan policy CR1.C states as follows [italics added]:

"CR1.C Evaluate the following new connections to promote increased bicycle, pedestrian, and non-automobile-based transportation, consistent with the requirement for the preparation of a "Special Study" as described in the Circulation Element. Where feasible, preserve existing rights-of-way.

- Starr Avenue extension north to Adams Street
- Consider three options for a connection to Mills Lane: a) Starr Avenue extension to Mills Lane; b) College Avenue extension to Mills Lane; or c) Allison Avenue extension to Mills Lane
- Adams Street from its current eastern terminus to Starr Avenue
- Consider two options to connect downtown St. Helena to Silverado Trail: a) Adams Street extension to Silverado Trail; b) Mills Lane extension to Silverado Trail"

To date, a special study has not been undertaken and the City Council has not made a choice about the appropriate route to connect downtown to Silverado Trail.

The Hunter project is not required to provide the connection to Silverado for several reasons:

1. The City has not yet decided which route to choose (Adams Street or Mills Lane) to connect downtown to Silverado Trail.
2. The proposed project does not require this roadway to provide acceptable circulation. The project adds very small levels of congestion to a handful of intersections, but these impacts to not rise to the level of requiring a substantial new roadway (and a bridge over the Napa River) to correct.
3. The project will pay development impact fees which can be combined with fees from other projects and other funding sources to construct whichever connection to Silverado Trail is ultimately selected by the City.

The proposed project does include the construction of extensions of Adams Street (partial extension to provide access to northern project entrance) and Starr Avenue, which are included in General Plan policy CR1.C. The project does not preclude the eventual extension of Adams Street, since the alignment of that future roadway is outside of the physical limits of the Hunter project.

10. Water Neutrality (Will Project Make City's Water Situation Worse?)—Many commentors have expressed concern that the Hunter project will negatively affect the

City's water system by adding demand for City-provided water. These concerns generally include questions about projected water use and the ability of the project to achieve water neutrality.

Staff's Response: The issue of the City's Water Neutrality requirements has been considered and is the subject of extensive discussion in prior staff reports, the project's Draft EIR, and the Final EIR. Please refer to Attachment 2, Master Response #2 in the Final EIR, "St. Helena Water Supply and Water Neutral Policy For Development," which addresses this issue.

As noted in the discussion of issue #6 above (the status of the onsite well), staff's conclusion is that the onsite well can be used as proposed to provide water for outdoor uses (mostly irrigating landscaping), providing about half of the water savings needed to fully offset the project's water use. The project's conditions of approval require the installation of water-conserving projects elsewhere in St Helena to achieve the rest of the required water savings.

11. Proposed Accessory Dwelling Units—Several commentors asked whether the City would require that the proposed Accessory Dwelling Units (to be built with 11 of the single family homes) are rented to low-income households.

Staff's Response: The proposed Accessory Dwelling Units (ADUs) will not be counted toward the project's required affordable housing (see the discussion of issue #3, above). Because the ADU units will not be part of the required affordable units, and consistent with City practice for other ADUs, the City will not require that these units are rented to low-income households. The use of the ADUs will be up to the owners of the homes with which they are built.

12. Tom Belt Comments: Water Use Projections Are Too Low/Water Use Criteria "Lacks Validation"—This commentor suggests that the project's projected interior water use is too low, citing a 34.9-gallons-per-capita figure used to calculate total water use.

Staff's Response: The 34.9-gallons-per-day figure is based on dividing the projected interior water use of 279 gallons per day per single family home by the number of persons (8, based on 2 persons per bedroom in a 4-bedroom home) used in the calculations. Using the City's average household size of 2.2 persons, the per-capita use is 127 gallons per day.

By comparison, the State of California Department of Water Resources reported in 2021 that, "…current statewide median indoor residential water use is 48 gallons per capita per day, and that a quarter of California households already use less than 42 gallons per capita per day."

[https://water.ca.gov/News/News-Releases/2021/Nov-21/State-Agencies-Recommend-Indoor-Residential-Water-Use-

Standard#:~:text=The%20report%20notes%20that%20the,gallons%20per%20capita%20per%20day.]

The calculations used to project future water use are therefore conservative. Projected daily water use per person (using St Helena's average household size) is approximately three times higher than the statewide average.

13. Tom Belt Comments: Will City Ensure That Water Use Will Not Exceed Projections?—This commentor asked whether the City would ensure that water use does not exceed projections.

Staff's Response: The City meters water use per household, but to date has not implemented any type of program which would flag homes with excessive water use. As noted above, the projected per-person water use for the project is about three times higher than the statewide average, the likelihood that water use will exceed projections is very low.

14. Tom Belt Comments: In-Lieu Fee to Offset Water Use?—This commentor asked whether an in-lieu fee to offset projected water use is too low and would not achieve enough mitigation. The commentor also asked if an in-lieu fee would be adjusted if water use was higher than projected.

Staff's Response: The proposed conditions of approval do not allow the payment of an in-lieu fee to offset the project's water use. Condition of approval #73 requires that the developer build and bring on line one or more projects that would reduce water use in the city or provide additional supply.

As noted in the discussion of issue #12, the water use projections for the project are conservative and not likely to be exceeded. Also, as discussed for issue #13, the City does not monitor household water use, so there is no current process in place to provide for penalties or fees if water use projections are exceeded.

15. Change.Org Petition—In late April, 2023, an online petition in opposition to the Hunter project was posted on the web site Change.org (https://www.change.org/p/save-the-city-of-st-helena-urge-city-council-to-vote-no-on-the-hunter-eir). After reviewing the information in the petition, staff prepared and circulated a press release correcting several factual errors. The press release is included as Attachment 10 to this staff report.

16. Water Audit California Comment Letter—On May 1, 2023 (the date of the previous City Council hearing), Water Audit California delivered a letter Attachment to the City Council and other city officials commenting on and raising concerns about the CEQA process which has been followed for the Hunter project and the adequacy of the analysis of water use and water neutrality. The letter is included as Attachment A letter responding to the Water Audit California letter is provided as Attachment 12.

CITY COUNCIL HEARING 6-26-23

Responses to letters received after publication of this staff report will be attached to the agenda.

CONDITIONS OF APPROVAL

The Resolution for approval of the proposed tentative map includes recommended conditions of approval which include the following minor changes from the conditions included in the Resolution prepared for the May 1 City Council meeting.

COA #69 is proposed to be deleted. As discussed in the attached memorandum from the City of St Helena Fire Department (Attachment 13 to this report), the proposed emergency vehicle access (EVA) from Street A to the levee road is no longer warranted, based in the availability of access to and from the Hunter subdivision on local streets and the designation of the levee road in 2018 as the evacuation route for residents of the Vineyard Valley mobile home community.

~~*69. EVA: From Street A to levee: Prior to the issuance of a Certificate of Occupancy, the emergency vehicle access road (EVA) shall be improved to provide an all-weather access road (paved) from Street A up to the existing levee road to the north. The width of the EVA shall be a minimum of 21 feet from face of curb to face of curb within an overall 25 ft. wide dedicated EVA. The EVA shall accommodate emergency vehicles (must provide for turning radii to accommodate fire vehicles as per the Fire Department requirements.) Turning templates shall be provided with the improvement plans during the plan check process to ensure the EVA can accommodate Fire Department apparatus.*~~

COA #88 is proposed to be revised to clarify the storm drain improvements the condition refers to, and that the developer is responsible for installing these improvements:

COA #88: Prior to the issuance of the first building permit, all City-required ***in-tract drainage*** *improvements* ***as shown on the proposed Tentative Map*** ~~*related to storm water for the project*~~ *shall be installed by the project developer at* ~~*it's*~~ ***the developer's*** *expense. Drainage improvements shall be designed* ~~*and funded by the developer*~~ *in accordance with the Design Criteria utilizing the rationale method and any applicable adopted City drainage plans.*

COA #90 is proposed to be revised to correct a reference to another condition (COA #91):

COA #90: Post-development flows storm water discharge from parcel 009-030-057 shall not exceed the pre-development discharge including the projected build-out, expressed as 30% undeveloped pervious and 70% impervious drainage watershed. Applicant shall prepare an analysis to show compliance with this COA. Refer to COA #90 #91 for additional requirements of the analysis.

COA #91 is proposed to be revised to clarify the use of a Reimbursement Agreement through which the City will reimburse the applicant for offsite drainage improvements:

COA #91: Prior to building permit issuance, the applicant shall provide to the City an analysis of the capacity and condition of existing drainage facilities downstream of the development (including any detention/retention ponds), including recommendations for offsite drainage improvements, which shall be constructed prior to the issuance of the first certificate of occupancy. Site grading and drainage improvements shall be shown on the improvement plans. In the unlikely event that the downstream facilities require improvements, the applicant ***and the City*** *shall enter* ***into*** *a Funding Agreement ~~as a means of reimbursement from~~* ***whereby the applicant is reimbursed for said improvements by*** *~~from~~ the City.*

COA 124 is proposed to be deleted. As discussed above for COA 69, the proposed emergency vehicle access is no longer needed; this condition is therefore not needed.

~~124. Access to the levee road is restricted for public use and only granted to emergency vehicles and emergency egress for Vineyard Valley Mobile Home Park residents. Signage prohibiting its use by the public is recommended. Public access will be granted at the discretion of the Authority Having Jurisdiction during emergencies/evacuations.~~

FISCAL IMPACT

There are no direct fiscal impacts to the General Fund resulting from the approval of the Tentative Parcel Map. Future development of the project site could increase the property tax and impact fee revenues, based on the size and value of the future homes that would be built in the subdivision.

RECOMMENDED ACTION

After considering the project, staff report, supporting documents, technical studies and all testimony, written and spoken, the Planning Commission of the City of St. Helena recommends that the City Council:

1. Adopt the attached Resolution certifying the Final EIR, and approving a Mitigation Monitoring Program, Findings of Fact and Statement of Overriding Considerations; and

2. Adopt the attached Resolution approving the requested Tentative Map No. 2022-001, File #PL10-040 for the Hunter Subdivision project.

ATTACHMENTS

Att 1 FEIR Master Response 1 Emergency Evacuation
Att 2 FEIR Master Response 2 Water Supply and Water Neutrality
Att 3 FEIR Master Response 3 Napa River Flood Protection and Levee
Att 4 Letters from DPF April 2023
Att 5 City Attorney Responses to Attorney Letters

Att 6 Hunter FEIR CC Reso for 6-26-23
Att 7 Hunter Subdivision CC Reso for 6-26-23
Att 8 CC Staff Report 5-1-2023
Att 9 Tentative Map 1-24-23
Att 10 Press Release City Response to Online Misinformation About the Hunter Subdivision 5-26-23
Att 11 Water Audit California's Comment to CSHHunter EIR 5-1-23
Att 12 Response to Water Audit California's Comment
Att 13 Hunter EVA Letter 6-6-23

MASTER RESPONSE 1: EMERGENCY EVACUATION

Numerous comments were raised regarding emergency evacuation, specifically for residents of the adjacent Vineyard Valley Mobile Home Park (Vineyard Valley). Concerns included the addition of vehicles from the Proposed Project and the potential to hinder evacuation of residents in the area, including in the Vineyard Valley development during an emergency. Commentors asked whether this impact was considered and expressed concern about potential adverse impacts to public safety.

Roads that would provide emergency access near the Project site include Pope Street, Hunt Avenue, Starr Avenue, Adams Street, and Silverado Trail as well as the existing levee maintenance road that borders the northwest boundary of the Project site and the adjacent City detention basin. The Vineyard Valley development currently has only one access to enter/exit the development from Pope Street. Emergency access is provided via the maintenance road adjacent to the northern boundary.

On August 3, 2021, the St. Helena Police Department in conjunction with the St. Helena Fire Department conducted a practice emergency evacuation drill of Vineyard Valley residents. The emergency simulated a major incident, such as a fire, where the residents of Vineyard Valley would be asked to leave in a moment's notice in their vehicles. Residents evacuated in approximately 25 to 30 minutes. The attached “After Action Report,” dated Sept 20, 2021, provides additional detail on the evacuation drill.

Based on the results of the evacuation drill, the St. Helena Police Department has concluded that any additional traffic from the Proposed Project would not significantly impact the ability of Vineyard Valley residents to safely evacuate the development in the event of an emergency. The Police Department also concluded that the proposed extension of Starr Avenue to Adams Street will help facilitate future evacuations by providing additional roadway capacity and additional routing options for emergency traffic (J.Tharp September 2021)[1]. If, for some reason, the levee maintenance road is closed residents of Vineyard Valley would exit using the access onto Pope Street.

Another concern with regard to the Proposed Project’s potential impact on emergency evaluation concerned construction activities and their potential to block access to the levee maintenance road in the event of an emergency. Construction equipment would be staged on the Project site and would not be allowed to to park or be stored on or block access to the maintenance road. Access to the maintenance road would be maintained during all construction activities, even during construction of the extension of Adams Street, to ensure adequate emergency access would be available. All construction trucks and equipment would access the site from either Starr Avenue or Adams Street. No construction vehicles would be permitted on the levee maintenance road.

Emergency access and public safety is evaluated in the Draft EIR in Sections 3.8, Hazards and Hazardous Materials, 3.12, Public Services and Recreation and 3.14, Transportation and

[1] City of St. Helena Police Department, After Action Report, Lt. Justin Tharp, September 20, 2021.

Circulation. The St. Helena Fire Department has reviewed the proposed Tentative Subdivision Map and has not identified any issues with the Project's proposed emergency access.

As discussed in Section 3.8, Hazards and Hazardous Materials, Napa County, in coordination with other jurisdictions including the City, has prepared a Draft 2020 Multi-Jurisdictional Hazard Mitigation Plan Update, which has not yet been adopted (DEIR p. 3.8-11). The plan covers each of the major natural hazards that pose risks to County infrastructure and residents and includes:

- Focusing resources on the greatest risks and vulnerabilities,
- Building partnerships by involving citizens, organizations, and businesses,
- Increasing education and awareness of threats and hazards, as well as their risks,
- Communicating priorities to state and federal officials, and
- Aligning risk reduction with other community objectives.

The potential for the Project to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan is evaluated under Impact 3.8-3 on page 3.8-20 of the Draft EIR. As noted in the discussion, the Project includes three points of access -- the extension of Starr Avenue, Adams Street, and emergency vehicle access via the levee maintenance road-- to facilitate the ingress and egress of emergency response vehicles, including the City and County Fire Department's apparatus, Project residents, and Vineyard Valley residents. The emergency vehicle access onto the maintenance road would be designed with bollards or a fence that would be kept locked. In the event of an emergency requiring evacuation, police or fire personnel/vehicles would have access to remove the bollards/unlock the gate through a locked box (e.g., knox box) to enable access to the site and as a third egress option for Project residents to evacuate. The Project has been designed to ensure all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide multiple points of emergency ingress and egress to ensure a safe evacuation in the event of an emergency.

The ability of the City's police and fire services to protect future Project homes and residents is addressed in Section 3.12, Public Services and Recreation. As discussed, the Project site would be served by the City's police and fire departments located at 1480 Main Street, approximately 0.2 miles from the site. Development of the Project site would increase the demand for fire protection and emergency services; however, as discussed on page 3.12-14, the Project is required to comply with Chapter 15.36 of the City's Municipal Code and the State Building Code, which requires installation of approved automatic sprinkler systems in all single-family and multi-family buildings. The Project would be developed consistent with 1993 General Plan Policy 8.5.6 and 2019 General Plan Policy PS4.D, which requires new development to meet the minimum fire flow rates specified by the City's Fire Code. In addition, as mentioned above all streets and roads are designed to be adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide emergency ingress and egress. The site and construction plans for the proposed single family homes and the multi-family development on Lot 52 would be subject to plan review by the City's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included.

Section 3.14, Transportation and Circulation also addresses adequate emergency access under Impact 3.14-4 on page 3.14-51. The analysis reiterates what has previously been mentioned: the Project includes two primary access points, Starr Avenue and Adams Street as well as a

separate emergency vehicle access. In the event of an emergency there would be three roadways that would enable vehicles to safely enter/exit the Project site and all streets and roads would be designed to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.

MASTER RESPONSE 2: ST. HELENA WATER SUPPLY AND WATER NEUTRAL POLICY FOR DEVELOPMENT

Numerous commenters have questioned the ability of the City of St. Helena (City) to meet the water demands of the Hunter Subdivision project (Proposed Project or Project), the viability of relying on the City's Water Neutral Policy, how the effects of climate change and current drought conditions are considered, and whether implications of the outcome of the City's Water Audit lawsuit should be included in the analysis. The following responds to these concerns.

Water Demand

The Draft EIR addresses the City's water supply and availability in Section 3.13, Utilities and Service Systems. The City currently sources its water supply from Bell Canyon Reservoir, extracted groundwater from the Stonebridge Well Complex, and water purchased from the City of Napa (DEIR pp. 3.13-2 and 3). Bell Canyon Reservoir has a physical storage capacity of 2,400 acre-feet (AF) with a safe yield estimated at between 500-1,100 AF. Existing water rights permit the City to divert up to 1,800 AF between November 15 and April 15 of each year. The City owns and operates two active groundwater wells, collectively known as the Stonebridge Well Complex, that have a combined capacity of approximately 595 gallons per minute (gpm). These wells have the potential to provide 960 acre-feet of potable water per year if both are operated continuously (DEIR p. 3.13-7). However, the City limits groundwater production to a long-term average not to exceed 450 AF per year. As stated on page 3.9-19 of the Draft EIR, groundwater pumping at these two wells has averaged 350 AFY between 2006 and 2019, with a range of 182 acre-feet in 2012 to a high of 526 acre-feet in 2013. This period captures multi-year drought conditions and according to monitoring data of a groundwater monitoring well located approximately 600 feet from the Project site, the groundwater level trend has been stable through this period (DEIR p. 3.9-42).

The City of Napa is contracted to provide the City with a minimum of 600 AF of water with an option for an additional 200 AF when feasible (DEIR p. 4.13-4). In the 2019 watershed report for Bell Canyon, the reservoir provided 43.6% of the City's water supply, the City of Napa supplied 42.5%, and the Stonebridge Wells the remaining 13.8% in 2018. However, the share of water from each source can change from year to year as the three sources of water supply allow for flexibility in order to adapt to changing conditions.

As shown in Table 3.13-1 on page 3.13-3 of the Draft EIR, the City's water deliveries have varied from year to year but overall have shown a decreasing trend from 1,882 AF in 2013 to 1,629 AF in 2020. The City's Safe Yield Committee determined that the potable water system can provide a total supply of up to 1,950 AF per year as a sustainable rate on a long-term basis (DEIR p. 3.13-11). This safe yield value recognizes that drought periods will be experienced and that circumstances may require the implementation of water restrictions (Phase III) during a dry year, but that these restrictions do not represent "undue hardships" (St. Helena Municipal Code Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 Water Shortage Emergencies, Drought and Water Conservation*)*. The Committee considered "undue hardship" to be Phase IV or V restrictions, or three or more consecutive months of Phase III restrictions. The domestic water demand for the Project at 19.88 AF per year is based on the Water Neutral Report prepared for the Project (Appendix J). The Water Neutral Report also estimates

outdoor/landscaping uses, which would be served by the onsite agricultural well and is therefore separate from the analysis of domestic water use.

The Water Neutral Report conservatively assumes the Proposed Project will include eight persons per single family residence which is much higher than the City's average of 2.45 persons per household (DEIR p. 3.13-24),[2] and therefore likely overstates actual water use. However, assuming this conservative estimate of 19.88 AF of domestic water use per year, the additional demand of the Project in combination with the recent total deliveries (1,629 + 19.88 = 1,648.88 AF) would still be far below the City's adopted safe yield of 1,950. Therefore, the new water demand associated with the Proposed Project could be met by the City's potable water system even without the water offset requirements of the City's Water Neutral Policy, as discussed further below.

Water Neutral Policy

The City's Water Neutral Policy included in Chapter 13.12, Water Use and Efficiency, of the Municipal Code requires that new development be water-neutral (from the City-delivered water system) through any combination of on-site water conservation measures and/or off-site retrofitting and/or use of well water (DEIR p. 3.13-21). For the Proposed Project, there are no opportunities for on-site water conservation since the site has no current water demand. Therefore, the Project must demonstrate water neutrality through off-site retrofitting and system improvements which must be demonstrated in a quantitative water analysis of the Project.

Per Municipal Code Section 13.12.050, the developer is responsible for identifying residential or nonresidential properties eligible for retrofitting and verify to the Department of Public Works that the required number of retrofits have been completed prior to the issuance of a certificate of occupancy. Appendix J of the Draft EIR includes the quantitative water analysis completed for the Project as required by the Water Neutral Policy. The report concluded that the offset of the Project water demands could be met through financial assistance with existing system improvements (e.g., payment of required fee) commensurate with the cost of retrofitting existing residences with low flow fixtures, but also includes a variety of suggested methods to increase domestic water supply or reduce demand to offset the Project's domestic water use.

As detailed in the Water Neutral Policy, the water demand of the Project would equate to retrofitting 333 residences with water conservation fixtures, but this is not to say that the policy can only be met through residential retrofits. For example, the Water Neutral Report referenced the potential for assisting the City in repairs to the transmission line between the City and Rutherford where a substantial amount of water is lost due to the current condition of the old pipeline. Reducing water losses is a gain for the supply system.

As part of the Project's proposed Conditions of Approval it states that no building permits may be issued until the developer has identified and implemented offsite improvements that reduce water loss from the public water distribution system and/or identify and implement offsite improvements that result in a net increase in potable water availability equivalent to 19.8 AFY,

[2] Exterior water demand (landscape irrigation, etc.) would be met by an onsite well and is not included in this estimate, which includes interior domestic uses only.

or a combination of these. Therefore, with adherence to this regulatory requirement and the required Conditions of Approval, occupancy of the Proposed Project would not occur until the City's Public Works Department has verified completion of these retrofits or system improvements that meet the City's construction standards to offset the Project's new water demand. As a result, the City would be able to meet the Project's water supply demand and result in a less-than-significant impact.

Climate Change

One of the effects of global climate change is an increase in variabilities of weather patterns and an increased probability to experience periods of drought. While climate change can create drier years in which precipitation is below annual averages, it can also result in very wet years.

The City recognizes that future periods of drought conditions are likely and may become more frequent. The establishment of the safe yield of 1,950 AF per year completed by the City's Safe Yield Committee provides the parameters for long term management of water supply resources. As discussed above, the new water demands for the Proposed Project would be offset through adherence to the City's Water Neutral Policy where retrofits or system improvements equivalent to the proposed new demands would be in place prior to issuance of building permits for development of the Project.

However, as mentioned above, the City may still be forced to enact water conservation and/or water rationing requirements during drought periods because of strains on the system that would be due to the effects of climate change. The City's Municipal Code (Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 Water Shortage Emergencies, Drought and Water Conservation) establishes the thresholds and requirements for water emergency phases, water conservation, and regulations that can adapt to changing conditions and enact emergency requirements for users as appropriate for long term water supply planning.

Therefore, the Draft EIR does consider the effects of climate change in Project impacts related to water supplies. The EIR determines that the Project can be adequately served based on existing water supplies. Compliance with the City's Water Neutral Policy would further ensure that the Project does not adversely effect the City's future water supplies.

Water Audit Lawsuit

Several comments have referenced the Water Audit lawsuit and have suggested that the outcome of that lawsuit should be considered as part of the analysis of water supply and hydrologic resources related to the Project. The lawsuit claims the City has violated its public trust in its management of water resources. The plaintiffs seek to increase monitoring and oversight of groundwater and surface water resources. The lawsuit claims poor documentation of water uses, including pumping at the City's Stonebridge Well Complex, and water deliveries to vineyards, wineries, and the Meadowood resort.

The Water Audit's complaint does not ask for changes to existing water uses. Instead, it seeks an injunction to stop the City from issuing new groundwater well drilling permits until enough

information is available to make informed water allocation decisions. The Proposed Project does not include a requirement for a new groundwater well drilling permit and so a potential injunction on new well drilling permits would not affect the Project.

As discussed on page 3.9-15 of the Draft EIR, there is an inactive groundwater well located in the northern portion of the Project site that may have been historically used to provide construction water for the City's Flood Protection Project and was used in the past for agricultural irrigation. The Project proposes to use this well for the irrigation of public and private landscaping and all other outdoor uses, which are estimated to require 17.16 AF per year (DEIR p. 3.13-32).

Regarding concerns about hydraulic conductivity with the adjacent Napa River, a site-specific well capacity and sustainability report was prepared that included conducting a 24-hour pump test as part of evaluating the hydrogeologic characteristics of the existing on-site well (Appendix L of the Draft EIR). The pump test ran at a rate of 40 gpm, which was nearly four times as high as the proposed rate for the Project (10.6 gpm). The study concluded that the onsite well draws from an aquifer with high transmissivity (i.e., ability of the water bearing unit to transmit water flow) and that the proposed pumping would not likely adversely affect either local water levels or Napa River flows. The onsite well is screened from 80 feet below ground surface (bgs) to 410 feet bgs, which is within the deeper volcanic aquifer and below the Napa Valley alluvium (the shallow water bearing unit that is considered hydraulically connected to the Napa River).

Therefore, whereas the Water Audit lawsuit is primarily concerned with the management of water resources that would affect the water levels of the Napa River, the well capacity and sustainability report determined that the pumping of the onsite well to supply the Project's public and private landscaping would not adversely affect flows in the Napa River. The analysis under Impact 3.9-2 starting on page 3.9-40 of the Draft EIR provides a detailed analysis of potential impacts associated with using the on-site well.

Considering that the Project does not require obtaining a well drilling permit and that a site-specific hydrogeologic study has demonstrated that the Project would not adversely affect water levels, the outcome of the Water Audit lawsuit would not alter the findings of the Draft EIR.

CEQA requires that the determination of significant effects be based on substantial evidence that include facts, reasonable assumptions predicated upon facts, expert opinion supported by facts, and not speculation (CEQA Guidelines § 21082.2). Therefore, the final outcome of the Water Audit lawsuit may have ramifications for the City in its long-term management of water resources but would not affect the analysis or impact significance determinations that were made in the Draft EIR.

MASTER RESPONSE 3: NAPA RIVER FLOOD PROTECTION/LEVEE

The Hunter Subdivision Project (Project or Proposed Project) was in the past in a flood zone but is now protected from a 200-year flood event (equivalent to less than a 0.5% annual chance) by the St. Helena Comprehensive Flood Protection Project (Flood Protection Project). The Project does not have an impact on the Flood Protection Project's effectiveness or on flood hazards for surrounding communities, either directly or indirectly.

Many commenters have raised concerns that the Project would put people and property at unreasonable risk if a major flood event overtops the levee[3] (i.e., greater than 200-year flood) and/or if the levee fails. These concerns generally revolve around the Project's perceived physical impacts on the levee; the levee's current condition, inspections, and maintenance; a perception that the project would increase existing flood risks for neighboring communities (e.g., Vineyard Valley and Hunt's Grove); confusion over levee certification/accreditation; and legal, liability, and insurance questions.

Comments that raised concerns about growth inducement (due to the levee reducing SFHAs in the City) are comments on the Flood Protection Project, not the Project.

As a general matter, the bulk of the comments received do not question the accuracy of the information contained in the Draft EIR or the adequacy of the analysis presented. Rather, they express differing opinions about levels of acceptable risk and a lack of trust in the design, construction, and maintenance of the Flood Protection Project. The Draft EIR includes a detailed description of the flood hazards present; the engineering, design, and maintenance of the Flood Protection Project; and the City's emergency management procedures in Section 3.9, Hydrology and Water Quality (Draft EIR pp. 3.9-6 through 3.9-13). This information was provided for reference purposes and addresses a majority of the comments received that relate to flooding and levee protection. The reason this information was included in the Environmental Setting section of Section 3.9 (Hydrology and Water Quality), rather than being addressed as an impact, is because impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review.[4]

Flood Risks

The Project does not have an impact on the levee's effectiveness or on flood hazards for surrounding communities, either directly or indirectly. California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369* held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents" but they must analyze hazards the project might risk exacerbating. For example, if a project proposes development on a site with existing subsurface hazards, then grading/development of the project may exacerbate the risk of those existing subsurface hazards.

[3] Note that references to the levee are inclusive of the floodwall component of the Flood Protection Project.

[4] "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (Ballona Wetlands Land Trust v. City of Los Angeles (2011) 201 Cal.App.4th 455, 473.)

Accordingly, the State Office of Planning and Research's 2018 revisions to the CEQA Guidelines—which the City uses as its CEQA thresholds of significance—removed reference to property damage, personal injury, or loss of life due to flooding or levee failure (i.e., pre-existing hazards) from Appendix G (included in the CEQA Guidelines).

Placement of the Project within an area protected from the 200-year flood does not substantially increase public exposure to flood risk, even though the risk is not zero. The Draft EIR acknowledges that there is residual risk to residents which is why the Federal Emergency Management Agency or FEMA encourages the purchase of optional flood insurance (i.e., FEMA preferred risk policy) (Draft EIR p. 3.9-8, first paragraph). The Project's Conditions of Approval require that prior to issuance of building permits, all future occupants will be provided information which describes the flood risk and notifies the buyer of the availability of low-cost Preferred Risk Policy flood insurance. Comments that address legal, liability, and/or insurance issues fall outside the scope of CEQA review, because they are not related to impacts of the project on the environment.

It is not the role of the Draft EIR to guarantee that there would be zero risk to life or property in the event of an extreme (i.e., greater than 200-year) or catastrophic flood event. The level of risk to the Project and its residents is reasonably and acceptably low due to the 200-year level of protection afforded by the Flood Protection Project. The description of flood emergency stages, preparedness, and response (Draft EIR pp. 3.9-11 and 3.9-12) remains accurate and indicates a reasonable plan for alerting and protecting residents from major flood events.

In the last paragraph on page 3.9-7, the Draft EIR speculates as to the style of flooding that would occur in the Project site based on its position outside of the regulatory floodway, if there were a levee overtopping event. The style of flooding would be dependent on the location, speed of water level rise, and levee response to an overtopping event. No portion of the Project site is located within the FEMA regulatory floodway. Therefore, the text on page 3.9-7 is revised to remove the reference to flooding being "slow and gradual." Please see Chapter 3, Changes to the Draft EIR for the revised text.

For the same reasons, the text on page 3.9-12 is also revised to remove the characterization of what could happen in the event of a flood. As previously indicated, this would be an impact of the pre-existing environment on the Proposed Project rather than the Proposed Project's impact on the environment. Please see Chapter 3, Changes to the Draft EIR for the revised text.

Clarification on Terminology/Concepts

Many commenters have expressed concern about the levee's design and construction, because it was not designed and built by the Army Corps of Engineers (ACOE) and is maintained by the City. As noted above, the Project does not have an impact on the levee's effectiveness or on flood hazards for surrounding communities, either directly or indirectly. California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369* held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents" but they must analyze hazards the project might risk exacerbating. Accordingly, comments

regarding existing structures, such as the levee, that will not be directly or indirectly impacted the Project, are outside the scope of CEQA review for this Project.

However, for strictly informational purposes the City provides the following: there are numerous non-federal levees throughout the United States that are safely built and maintained by local and/or state entities. The City of St. Helena Department of Public Works oversees inspection, maintenance and repairs of the levee, and has confirmed that the levee was designed and built by qualified contractors in accordance with ACOE engineering and safety standards (Draft EIR p. 3.9-8).

Levee certification is the process that deals specifically with the design and physical condition of the levee and is the responsibility of the levee owner or community in charge of the levee's operations and maintenance. Certification must be completed for the levee to be eligible for accreditation by FEMA. Certification consists of documentation, signed and sealed by a registered Professional Engineer, as defined in Chapter 44 of the Code of Federal Regulations (44 CFR), Section 65.2. By virtue of FEMA's approval of the City's application for a Letter of Map Revision (LOMR) and subsequent revision of the Flood Insurance Rate Map (FIRM), the levee is a FEMA-accredited levee system[5] that has undergone the certification process. While FEMA does not design, build, maintain, inspect, or certify levees, it uses the best available data about flood hazards and levee conditions to create FIRMs and Flood Risk Products (FRPs). These FIRMs and FRPs are tools that provide a more precise, up-to-date picture of the flood hazards facing levee-impacted areas, which is important given that the flood risks change over time.

The modern construction of the levee makes it more secure than other accredited levee systems that may have received accreditation decades ago, and the 200-year level of protection provides substantial additional protection against flooding that takes into consideration increased rainfall and runoff due to climate change.

Levee Condition and Maintenance/Inspections and City Detention Basin

Several concerns were raised that the levee has not been properly maintained and may be subject to reduced performance due to animal burrows, erosion, and/or pump malfunctions. As discussed below, these issues are outside the scope of CEQA review of the Project, because the Project does not physically infringe upon or otherwise affect the levee. (See *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.)*

However, for strictly informational purposes, the City provides the following: the City employs qualified individuals to inspect the levee on a monthly basis to detect any potential issues and take action on them as they arise. For example, in the past issues were found with the operation/startup of the detention basin's pump and it will be repaired by a qualified contractor. Further, it is up to the professional judgement of the City's engineer as to when any animal burrows may compromise the levee's safety. Per the inspection reports, the City has an animal

[5] A FEMA-Accredited Levee System is levee system that FEMA has shown on a FIRM that is recognized as reducing the flood hazards posed by a 1-percent-annual-chance flood. This determination is based on the submittal of data and documentation as required by 44CFR§65.10 of the NFIP regulations. The area landward of an accredited levee system is shown as Zone X (shaded) on the FIRM except for areas of residual flooding, such as ponding areas, which are shown as Special Flood Hazard Area (SFHA).

burrow control program in place and conducts burrow control activities as needed. The City also makes its levee inspection reports and summary reports available online here: https://www.cityofsthelena.org/publicworks/page/flood-control-and-river-restoration-project.

Several commenters referred to erosion or runoff from the Project affecting the City's detention basin. These commenters are referred to Draft EIR pages 3.9-44 and 3.9-45, which explains that the detention basin was designed assuming the Project would consist of 70% impervious (developed) area, when in fact it would consist of about 58% impervious area. The estimate of the Project's impervious surface coverage was calculated based on design drawings of the Project. Accordingly, as discussed in the Draft EIR on page 3.9-45, the Project would not contribute increase flows or erosion to off-site properties because the detention basin has been adequately sized and designed.

Commenters also requested information on what funds were used to construct the levee (Flood Control Project), what funds the City uses for repair and maintenance of the levee, what funds would be available to repair homes in the event of a levee breach, would the City be held liable in the event of a levee breach, and is the City non-compliant with the terms of Measure A.[6] Concerns regarding the financing of the levee, ongoing repairs and maintenance, financing to address damages in the event of a catastrophic flood, and liability are outside the scope of CEQA review, because they are not related to impacts of the project on the environment. In addition, economic effects of a project are not considered significant effects on the environment unless the economic changes are connected to physical environmental effects (CEQA Guidelines Section 15131(a)).

Regarding the comment suggesting that the City could be non-compliant with the County's Measure A ordinance, it is assumed the commenter is referencing subsection G, which states "none of the projects are intended or designed to encourage population growth in the County." To clarify, the Project site has been designated and zoned for residential development since the City's 1975 General Plan. The City's Flood Protection Project was designed consistent with the intent of Measure A to provide flood protection to residents and businesses in the County. Development of this site with residential uses would not be considered encouraging new population growth in the City because this site has been planned for future development for over 45 years.

[6] Measure A is an ordinance of the Napa County Flood Protection and Watershed Improvement Authority that adopted by Napa County residents in 1998. It is used to finance the Napa River Flood Protection Project. Each City and Town in Napa County receives a portion of Measure A revenues to fund flood protection projects. Subsection G states "none of the projects are intended or designed to encourage population growth in the County."

JOSHUA S. DEVORE
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April 30, 2023

Via Email:

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RE: Hunter Subdivision Project Environmental Impact Report. 2022-001, File #PL10-040

Dear Mayor Dohring, Vice Mayor Hall, Council Members, City Manager Comelo, Community Development Director DeRosa:

As you are aware, we represent the Saint Helena Citizens for a Sustainable Future, a diverse group of City residents. We have provided several letters on this project to the Planning Commission on this project, highlighting several of the procedural and substantive deficiencies in the application process and consideration. (Those letters are included in your Agenda packet for the May 1 meeting, along with Staff's responses, and we encourage you to review those letters in chronological order for context. We have not set out again every point in those letters for sake of brevity; although due to the importance of the issues, some of that information is restated and emphasized below.)

The Planning Commission nevertheless – reluctantly as can be seen in the video of the hearing – passed the project on to the City Council. The Planning Commission appeared severely cowered by pressure to approve housing. Its referral to the City Council is thus not in any way persuasive that the Environmental Impact Report warrants certification, nor the underlying tentative map. A separate letter addresses the serious procedural and substantive issues with the tentative map itself and the Project generally failing to comply with the applicable General Plan and municipal code.

Review of the record shows the Planning Commission made the recommendation of approval on the notion the State is forcing it to approve housing. This violates CEQA. The decision to certify the EIR and approve the Project must only be made by the City because the City independently

believes it is complete and appropriate.[1] The Housing Accountability Act clearly states that it does not overrule CEQA.[2] The Council must make and take sole responsibility for its actions in exercising its judgment under CEQA and to the Project as a whole.

Prior correspondence to the Planning Commission highlighted the defects in the EIR. An attachment to the Staff Report for the February 7, 2023, Planning Commission meeting attempted to respond to those comments. Failing to do so credibly, Staff has tried again, with an additional response included as Attachment 28 to the Agenda Packet.

As discussed below, that response contradicts the EIR itself.[3] It misunderstands the impact and direction of the changed Napa Valley Subbasin management policies set by Napa County. It displays an ignorance of the City and the way people live, work, and go to school here that is disheartening. And it either does not know what a firebreak is, or forgets the existing vineyards protecting the Monte Vista neighborhood, and in turn the rest of the City, that will be removed.

Certification of a final EIR requires this Council to exercise its own independent judgment and analysis.[4] The Council should exercise that judgment to reject certification.

Required Findings

As discussed in our accompanying letter, the Project does not comply with the applicable general plan or zoning code. But even if it did, the subdivision Project must still be denied, as the Council can and must make the following findings:

> 1. The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density.
>
> 2. There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified other than disapproval of the housing development project or approval upon condition that the project be developed at a lower density.

[1] P.R.C. § 21082.1(c)(3) ("As part of the … certification of an environmental impact report, find that the report or declaration reflects the independent judgment of the lead agency.")
[2] Gov. C. § 65589.5(e) ("Neither shall anything in this section be construed to relieve the local agency from making one or more of the findings required pursuant to Section 21081 of the Public Resources Code or otherwise complying with the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code)."
[3] We note that the "Final" Final EIR, which was presented to the Planning Commission on February 7, 2023, was not posted on the City's website in violation of P.R.C. 21082.1(d). Only an earlier October 2022 version of the document was posted.
[4] P.R.C. § 21082.1(c)(3); CEQA Guideline 15090(a)(3).

(SHMC § 16.16.080(B).) For the following reasons, there is substantial evidence in the record that the Project presents adverse impacts to public health and safety which have not or cannot be mitigated.

By contrast, in order to Certify the EIR, the Council would need to find, in the exercise of its independent judgment, that "[c]hanges or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment."[5] Where significant impacts on the environment are identified, as here, the Council would also need to find "that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment."[6] Those findings must be based on substantial evidence in the record.[7] As discussed further below, this standard for adoption of a statement of overriding considerations cannot be made on the current record.

The EIR Fails to Adequately Analyze Groundwater Impacts as the Proposed Well Use on the Property Is Contrary to Current Standards

As discussed in our prior letters but discussed further here in light of Staff's latest attempted response, the Project is for the subdivision of a 16.92 acre property. The EIR analyzed its proposed groundwater use of an on-site well of up to 17.16 acre-feet per year to provide for all on-site irrigation of public and private landscaping, as well as a small remnant of an existing vineyard.[8]

Not only the Draft, but the ***Final*** EIR recognized the well on the property was not in use and described it repeatedly as "inoperable." (E.g., DEIR at 3.9-43 ("the well is currently inoperable and would need to be repaired so it is operational."); 3.13-1 (well "has been used historically to supply irrigation water to the site but is currently inoperable"; 3.9-15; 3.13-2; 3.13-32. The FEIR fixed typographical errors in the text of 3.13-2, but still states the well is not currently in operation.) The Phase I Environmental Site Assessment performed in March 2018 also says the well is inoperable.

Somewhat incredibly, Staff's latest response in Attachment 28 on this issue is to directly contradict the EIR as to the "inoperable" well, and now claim that the well is operable after all. It attempts to drastically revise the CEQA baseline for the Project in an attachment to the Staff report that has not been circulated for public comment. Despite Staff's eleventh-hour efforts, substantial evidence in the record states that there is no operating well on the property, and it has not been operating for a considerable period of time. The use of the well had been long abandoned. The required baseline of "existing" water use on the parcel is zero.[9]

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[5] P.R.C. § 21081(a)(1); *see also* CEQA Guideline 15091.
[6] P.R.C. § 21081(b); *see also* CEQA Guideline 15093.
[7] P.R.C. § 21081.5.
[8] DEIR 3.9-40.
[9] *See* Napa County Water Availability Analysis, May 12, 2015 (discussing throughout analysis of "existing" and "current" water usage compared to a proposed project.)

DEIR Appendix L, a September 9, 2021, Well Capacity Study Memorandum emphasizes that "it is recommended that the annual groundwater use conform with County policy." While phrased as a suggestion by the consultant, this is indeed a legal requirement. The City has always deferred well issues to the County because the City does not have its own department to handle such issues.[10]

Disturbingly, DEIR Appendix L was omitted from the February 2023 Staff Report to the Planning Commission (which we noted at the time), and it has now been withheld from the City Council as well despite it being a critical subject. Appendix L was prepared under the prior standard of a maximum allocation of 1 acre-foot of water per acre. It found the Project already not in compliance with that standard. Given this repeated identified issue, we can only conclude the Applicant does not like its conclusion that the Project's groundwater use must follow County policy and the use is not consistent with that policy, and thus had it removed it from the EIR and the Council's materials.

No update of that analysis has been prepared to comply with the revised substantially reduced allocation limit of the lesser of 0.3 ac-ft/ac or no-net-increase, though the outcome is obvious: the proposed project substantially exceeds the allowed groundwater allocation. The expert that prepared the Well Capacity Study has not opined on Staff's latest response attempting to undo the record.

Seemingly belatedly realizing that the well usage is indeed a significant barrier to the Project, Staff, on behalf of the applicant, has now attempted to estimate a historical use of the well.

There is no evidence, factual or legal, that the no-net-increase calculation can be properly divined from a hypothetical long-abandoned previous use. Staff's response, which is not attested to by a groundwater expert, attempts to reverse engineer a hypothetical past use that does not exist, of which there are no documented records, and which the EIR does not analyze. This is not competent, substantial evidence on which the Council can rely in certifying the EIR. (Indeed, it is not even referenced in the EIR, as it was just invented.) While historical use may in some cases be considered for baseline analysis (but only where the conditions have been in flux making the existing conditions not emblematic), there must be substantial evidence to support that baseline.[11] "**An existing conditions baseline shall not include hypothetical conditions**...."[12] To

[10] As such, Napa County would appear to be a Responsible Agency for the project's groundwater usage. However, the EIR fails to identify Napa County as a Responsible Agency.

[11] *Contra* CEQA Guideline 15125(a)(1) ("Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence.")

[12] CEQA Guideline 15125(a)(3) (emphasis added).

the extent Staff is now contending a different baseline should have been used, the EIR needs to be revised and recirculated.

In doing this, Staff brazenly accuses our prior comment of misunderstanding the County's unambiguous policy of limiting the use of wells subject to discretionary project approval to the lesser of 0.3 acre-feet per acre or no net increase. That "no net increase" is from "*existing*" uses.[13] This is readily apparent from the County's simple summaries of the new policy, and a published FAQ.

The limitation to the lesser of '0.3 ac-ft/ac or no net increase' applies to new discretionary uses of existing wells. A "Tier 1" analysis must be performed to document the "*existing"* uses on site and the potential increases. From the Napa County FAQ on the new well standards[14]:

> *10. Do the new standards apply to discretionary projects where projects rely on existing wells?*
>
> *Yes, if the project involves an increase in groundwater use on the existing wells.*
>
> *…*
>
> *14. Does the 0.3 AF/acre water use limitation also apply to new or modified discretionary permits?*
>
> *Yes. The WAA Guidelines will be updated to reflect this, but this limit goes into effect immediately.*

As stated by Napa County, its "new regulatory requirements for a Tier 1 analysis are pursuant to CEQA, Napa County's Water Availability Analysis (WAA) Guidelines, dated May 12, 2015, Napa County's Drought Emergency, Governor's Executive Order N-7-22, recent court decisions, and pending State litigation."[15]

These rules are clear. These rules are dictated by State law. They are not optional. Ignoring the County's requirements as dictated by State law, including CEQA and SGMA, and indeed the DEIR's own expert, would be an abuse of discretion.

[13] https://www.countyofnapa.org/DocumentCenter/View/25905/Well-Permit-Standards-and-WAA-Requirements--January-6-2023?bidId=
[14] (*See* Napa County Well Permit Standards FAQ, *available at* https://www.countyofnapa.org/DocumentCenter/View/25906/Well-Permit-Standards-FAQs---15-July-2022.)
[15] https://www.countyofnapa.org/DocumentCenter/View/25905/Well-Permit-Standards-and-WAA-Requirements--January-6-2023?bidId=

The project needs to be revised to comply with the current water use limitations, and the EIR must be corrected and recirculated considering the changes in groundwater policy that are unanalyzed.[16]

Further, as we noted previously, significant new information has been made available which contradicts the EIR's conclusions regarding the state of local groundwater. The significant new information from 2022 is that "**Several wells located near the Napa Valley Subbasin margin in the northeastern Napa area, southwestern Yountville area, and southeastern St. Helena area show periods of groundwater decline during times of drought**."[17] Although the proposed findings for the Project have been slightly modified since we noted this critical information, the EIR's simply ignoring the evidence of an increase in the severity of the project's impacts on groundwater resources is not reasonable.

As we said previously, the project needs to come up with at least an additional 12 acre-feet of water from somewhere else. It cannot do so from the well. The latest response does not change this fact. It does appear Staff, in consultation with the Applicant but not the public, have recognized this is a major problem; but are unwilling to address it directly. Staff have revised one of the conditions for the project: Proposed Condition of Approval 85 now suggests that the well should nevertheless be used for the project in violation of County policy, but then abandoned "if" the contemplated City reclaimed water system ever reaches the site. This is inconsistent with the law and, in any event, unreasonable.

The EIR Fails to Conduct the Required Well Interference Analysis

Further, and relatedly, the water neutrality analysis credits the more-than-17 acre-feet of water use from the well to "groundwater" as opposed to the City's water. By doing so it is purportedly not subject to the City's water neutrality ordinance. But this ignores the fact that the project site well is likely drawing from the same basin that supplies the City's wells. While Staff's latest response in Attachment 28 argues that some of the City's drinking water comes from other reservoirs, it has no actual response to the fact that the Project well will extract groundwater very close to the City's Stonebridge well, and thus is simply taking the City's water via other means.

There is no analysis of well interference which would suggest that the onsite well is a different source of water than the City's wells. This is despite **the City's September 27, 2018 Second Notice of Identified Issues Letter specifically requiring a well interference analysis**.[18] Thus, the EIR

[16] Note also that, because the well is proposed solely as non-potable water for outdoor irrigation and other non-consumption uses, the well is not a public water system that might otherwise be entitled to exceed this limit.
[17] (Napa Valley Subbasin Groundwater Sustainability Plan Summary, Executive Summary (Jan. 2022) p. 2, *available at* https://www.countyofnapa.org/DocumentCenter/View/23549/GSP_Executive-Summary-Abstract?bidId=.)
[18] *Available at:* https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/project/3486/second_issues_letter-final.doc.pdf

should have analyzed well interference. Having failed to do so, the well usage should have been included in the water neutrality analysis and required offset.

As discussed above, the failures to address significant new information regarding changes to County groundwater policy driven by State law and the depletion of groundwater locally is directly related to the severity of the project's impact on groundwater resources and requires additional analysis. The EIR failed to analyze well interference, an issue that was specifically identified as a potential significant impact. The EIR cannot be certified until these real and significant issues are addressed. Depletion of groundwater above allowed limits from the City's groundwater source presents an adverse impact to public health and safety that has not been properly analyzed or mitigated.

The EIR's Water Neutral Analysis Is Outdated and Deficient

Relying on the well for exterior water use and excluding it from its calculations, the EIR fancifully suggests that the Project will be water neutral, despite its demand for nearly 20 acre-feet (approximately 6.5 million gallons) per year beyond that produced by the onsite well. However, this conclusion is drawn from an analysis of potential water offsets from several years prior to the recent drought, the Phase I and Phase II water emergencies, and the substantial cutbacks that were made by residents of the City in response. Those measures greatly reduced water usage already, and there has been no update to the potential water offset analysis in several years, rendering it meaningless. As such, the Water Neutral Report, DEIR Appendix J, is fatally deficient and must be updated to account for current conditions. It relies on an analysis of potential water saving measures from February 2017.[19] There has been no consideration of the substantial changes in the last six years. Substantial new information has emerged since that time that has not been incorporated, including the responses to the drought and water emergency. At the very least, the EIR cannot be certified until Appendix J is updated, as there is no reliable evidence to conclude the water neutrality requirements can be met.

We also note the Applicant has recently requested revision of the Project's conditions of approval to allow for piecemeal compliance with the water neutrality ordinance. That request should be rejected. Given the scope of the offsets required, the Applicant will need to undertake a major water offset project prior to construction, and any such project must be considered in coordination with the development Project as a whole. It cannot be allowed to attempt to offset one house at a time.

The EIR Fails to Analyze or Mitigate Traffic and GHG Impacts

The Project's impacts on vehicles and traffic have of course been a major issue of contention. As the Staff report notes, the Project came to halt nearly a decade ago because improvements were

[19] DEIR Appx. J at Attachment 3, Municipal Water Saving Measures (Feb. 2017).

needed to the Silverado Trail/Pope Street intersection. The Applicant has now tried to move forward ignoring those necessary improvements.

More recently, the Applicant's counsel itself and numerous commenters opposed to the project have stated that the traffic analysis for the project is deficient. While the sides obviously offer different reasons and seek opposing results, it does appear that no one thinks the traffic analysis done here has been sufficient.

As we noted previously, there is extensive evidence in the record that the project's impacts on traffic are improperly analyzed and not mitigated despite available solutions being previously proposed. Although the Applicant suggests only vehicle miles travelled (VMT) and not level of service (LOS) should be the standard under CEQA, the only traffic study provided focuses on the latter.

Yet the EIR completely fails to thoroughly analyze or mitigate VMT. The DEIR's analysis uses an Affordable Housing percentage of 28.73%, whereas as of the current application, there is officially none. Staff's latest attempted response is that there must be some affordable housing in order to comply with the City's code, but no one can say exactly how much because no one knows, as the required information has not been submitted.

The EIR, apparently without relying on any traffic experts, essentially concludes that though the City has not adopted VMT significance thresholds, that the project is indeed significant in its impact, but that there is no mitigation available. This suggestion is directly contrary to the general plan itself, which provides for improvements to the City's street network that would lessen the length of the project's trips – particularly connection of Adams to Silverado Trail.[20] No analysis, however, was conducted; the only traffic study that was prepared on behalf of the Applicant generally indicated that the Project should be required to make improvements to the road network.

Staff's response to this issue is essentially that it sounds expensive and complicated, so there is no reason to look into it. That is not a reasonable response: this is a major development. It will likely cost a hundred million dollars to construct. It will generate well more than that in sales for the developer. That a necessary available on-site mitigation is ignored and unanalyzed because it might cost a small percentage of that is not reasonable.

In short, there is no credible evidence in the record to support the finding that reasonable mitigations or changes have been incorporated into the project to account for the significant impact of VMT, let alone LOS. The operative traffic study identified that road improvements were necessary mitigation. The Project was tabled for nearly a decade for this reason.

The Traffic Study (DEIR Exhibit K) – which the EIR appears to suggest now applies to analysis of the general plan rather than CEQA – repeatedly fails to use reasonable assumptions for the

[20] DEIR 3.14-19.

Project, substantially undercounts the expected traffic increase, and does not comport its analysis with the description or stated intended use of the Project. But whether or not the traffic study is used in consideration with CEQA's transportation element, the EIR's Greenhouse Gas analysis does depend on the traffic study. (DEIR 3.7-27.) As such, the flaws in the traffic study are a CEQA issue as well as a general plan issue, and the operational Greenhouse Gas analysis is inadequate. Idling vehicles are a substantial contributor to GHG emissions.[21] The EIR fails to analyze the significant impact of idling vehicles resulting from the Project sitting in the unmitigated traffic it will create.

Among other issues with the traffic study, the 11 Accessory Dwelling Units, which are touted as providing additional workforce housing, are allocated only 4 AM Peak Hour outbound trips. This makes no objective sense. Reasonable assumptions would suggest the affordable and multi-family units to lead to more trips for the residents of those units given the nature of the local workforce. Staff indicates that standard assumptions were used for these estimates, but there is nothing standard about work-force life in Napa Valley. There is no subway to walk to. Jobs are widely distributed and require driving for essentially all workers. Project-specific analysis is required where general assumptions are known to be inapplicable. The traffic study thus fails to account for the unique nature of the Napa Valley economy and local transportation demands, and significantly understates the impact of the Project.

It also ignores the reality of life in Saint Helena. For example, the traffic report apparently incredibly claims that the 87 new units will result in only two (2) people driving their children to school by crossing Main at Adams – the main access to the Project. And only one (1) will go pick their child up. (Traffic Study Figure 8, February 2023 Staff Report p. 2007.) Staff's latest response in Attachment 28 is to reveal its ignorance of St. Helena: its response is to "assume this comment refers to students attending St. Helena Elementary School on Adams Street" and to acknowledge the estimate of seven (7) students attending just that school (already belying the traffic study).

But anyone that actually lived here would know that all four of our public schools are on the west side of town. Getting to all of them from the Project would involve crossing or accessing Main Street, which is most likely to occur at Adams. Staff's suggestion that parents could choose other routes that are already known to be worse, such as Hunt Avenue or Pope Street, does not bolster the traffic analysis. Indeed, the Project is shown to have a material adverse impact on Pope/Main already.

Even worse, the existing analysis ignores the significant impact that the Project would have on evacuation routes in the event of an emergency. While for an individual scale event, it is possible that connection of Adams to Starr would be beneficial as the EIR and Staff suggests, that is not

[21] *See, e.g.,* U.S. Dept. of Energy, Idling Reduction for Personal Vehicles, *available at* https://afdc.energy.gov/files/u/publication/idling_personal_vehicles.pdf.

supported by substantial evidence for the case of a large-scale event. The City remains bottlenecked, particularly at Pope/Silverado.

As we discussed previously, the traffic study shows a nearly-quarter mile backup at the Pope Street bridge by 2040. The report admits "the project would be inconsistent with the City's LOS policies at the Silverado Trail/Pope Street intersection." And, shamefully, the Traffic Report essentially throws up its hands in acknowledging that improvements to Silverado Trail and Pope Street are necessary; but because they might be hard, nothing can be done about it.

The Traffic Report includes several required mitigation measures and improvements that are recommended to address traffic issues, yet none have been incorporated into the project. While the latest Staff response baldly suggests that the applicant cannot be required to construct these improvements individually, it does not conduct any analysis to reach that conclusion. Rather, the necessary improvements – especially connection of Adams to Silverado Trail, meet the *Nollan/Dolan* essential nexus and rough proportionality tests given that the improvement is necessarily located on, and immediately adjacent to, a very large-scale project.[22] And again, the Silverado Trail/Pope improvements were previously identified as necessary for the Project as well, which is why it languished. By failing to address these necessary issues, the project thus plainly is inconsistent with the General Plan, whether or not LOS is considered as a CEQA element.

The suggestion that a statement of overriding considerations can be adopted now without attending to the previously identified issues is contrary to law. Prior to adopting a statement of overriding considerations, the law requires that a finding be made that the impact is unavoidable and that changes or alterations have been included to mitigate or avoid the significant impacts.[23] That finding must be based on substantial evidence in the record.[24] However, the record of the Project, dating back more than a decade, is replete with evidence that traffic impacts of the Project can indeed be mitigated, and failure to do so is contrary to the applicable general plan principles.

Both the above-noted improvements to Silverado Trail/Pope Street and the planned connection of Adams Street to Silverado Trail have been repeatedly identified as mitigations to the impacts and risks of the project. Further, connection of Adams Street to Silverado Trail would substantially lessen project vehicle miles travelled (VMT), allowing project traffic direct access to a major thoroughfare without the additional distance travelled through City streets. Because such improvements are specifically contemplated in the City's long-term plans, but neither properly analyzed nor included as mitigation measures, failure to require the project to carry out this immediately-adjacent improvement that would directly mitigate the project's impacts on VMT (and LOS) is contrary to the evidence in the record and clearly inconsistent with the General Plan.

[22] *Nollan v. Cal. Coastal Comm.* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374.
[23] P.R.C. § 21081.
[24] CEQA Guideline 15093.

The EIR Fails to Analyze or Mitigate Impacts to Public Safety

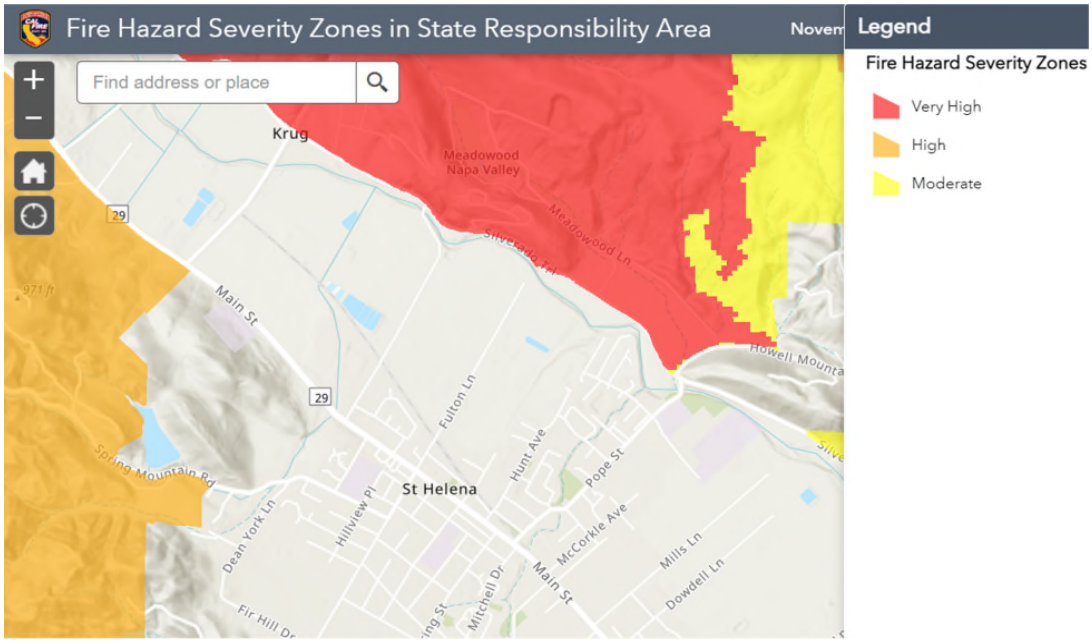
These failings to mitigate the Project's impacts on the road network underscore the EIR's failure to seriously analyze its substantial danger to the public, including wildfire and flood risks. Although the EIR notes that the property actually burned during the Glass Fire, there is no other acknowledgement that the property currently serves as critical firebreak for the rest of the City. Incredibly, Staff's latest response suggests that the Project site does not meet the definition of a firebreak. Staff apparently forgets the existing vineyard on the property – vineyards are widely recognized as acting as crucial firebreaks.[25]

The Board of Forestry's recently adopted 2021 State Fire Regulations emphasize the need to preserve and implement firebreaks in projects.[26] The EIR and proposed findings repeatedly ignore the Project's location near the SRA Very High Fire Hazard Severity Zone. Although the EIR Thresholds in the proposed Findings repeatedly state the issue of concern to be whether a project is "**in or near** state responsibility areas or lands classified as very high fire hazard severity zones" (VHFHSZ), the findings of less-than-significant impacts and related explanations repeatedly state only that the Project is not "in" the VHFHSZ.

Although the proposed findings say on page 63 that the Project is not near a SRA or VHFHSZ, that is obviously incorrect, making the entirety of the EIR's wildfire analysis unreliable and contrary to evidence. The Project is immediately adjacent to the VHFHSZ:

[25] *See, e.g., https://www.northbaybiz.com/2018/06/28/vineyards-as-firebreaks/*

[26] The project is not technically subject to CAL FIRE's jurisdiction, but the agency's emphasis on firebreaks is highly instructive and persuasive. Failure to adhere to State Fire Regulations that did not technically apply, and the naïve belief that urban development was immune to wildland fires, led to the destruction of Coffey Park in the 2017 Tubbs Fire. (*Despite clear risks, Santa Rosa neighborhood that burned down was exempt from state fire regulation,* LOS ANGELES TIMES (Oct. 15, 2017)*, available at: https://www.latimes.com/local/lanow/la-me-ln-coffey-park-explainer-20171011-story.html.*)



(CAL FIRE State Responsibility Area Fire Hazard Severity Zone Map.)[27]

The failure to analyze the Project as "**near**" the SRA/VHFHSZ is a critical shortfall. Again, this property *actually burned in the Glass Fire.*

Removing the Project's critical firebreak of six acres of vineyard is a wildfire impact that is not even acknowledged, let alone analyzed and mitigated. Removing the protective vineyard and expanding development at the Wildland-Urban Interface presents a clear and present danger to the current residents of the entire City. At a minimum, the Project must be revised and conditioned to retain a firebreak between the new development and existing development by leaving the existing vineyard intact.

The risk is substantially worsened by the failure to address the needed road improvements. Without connection of Adams Street to Silverado Trail and the mitigation of the Silverado Trail/Pope Street intersection conditions, the Project presents substantial threats to public safety.[28] The Project lacks safe emergency access and egress and would worsen existing emergency evacuation times for residents of the City. The Project creates specific threats to public safety by failing to mitigate its everyday traffic impacts and ignoring the potential for loss

[27] *See* https://osfm.fire.ca.gov/fire-hazard-severity-zones-maps-2022/.
[28] E.g., DEIR App. K, p. 15 (February 2023 Staff Report p. 1989) (Finding of the current Pope Street bridge: "emergency access can be impeded due to congestion along the bridge, creating difficulty for services to be provided to areas along Silverado Trail.")

of life and property that could occur as a result of the increased traffic on already overburden public roads during a wildfire.

Meanwhile, the Project will obstruct emergency access for existing residents, particularly those in Vineyard Valley. There is no evidence that the levee maintenance road is a suitable evacuation road for the Project. It does not meet the City's Fire Department Access Road Standards, which requires a 30-foot paved road with two feet of shoulders.[29],[30] The second access to Lot 52 also fails to meet this standard. (Relatedly, it is also unclear how the proposed terminus of Adams Street actually fits in the indicated location, which appears to require grading of the current western end of the levee.)

To the extent the levee maintenance road is a planned emergency access route for the Project, it must be improved to meet the City's Fire Access Road standards as part of the Project.[31] In turn, the environmental impacts thereof must be identified and examined in a revised EIR.

There is no evidence that the contemplated additional emergency access point onto the levee can be technically or legally constructed, particularly in light of the required conservation easements and numerous permit issues related to the flood control project, including the Incidental Take Permit under the Endangered Species Act.

The potential construction of housing behind a levee that appears to be substandard and poorly maintained is a significant threat to public safety that has been repeatedly downplayed by the Applicant and Staff, and requires rejection of this Project as currently proposed. As noted by other commenters, the City has repeatedly failed to maintain the levee, yet is financially responsible for the massive liability a failure would cause. As the Project is proposed behind a levee for which the City is entirely responsible, any failure thereof would result in ruinous liability to the City. Unless the Applicant is conditioned to post a security for the liability that it is seeking to take on by developing in a high-risk location, the financial risk of the Project cannot be concluded to warrant a statement of overriding considerations.

The current reemergence of Tulare Lake, inundating 100 square miles of homes and farms, is a prescient reminder that water finds a way to get to the lowest point, despite humans' efforts to defy gravity.[32] As the Project presents a real threat to the safety of the public, it should be rejected irrespective of any other considerations -- whether or not it technically complies with

[29] *See* City of St. Helena Street, Storm Drain & Sidewalk Standards, *available at* https://www.cityofsthelena.org/sites/default/files/fileattachments/public_works/page/2491/publicworkscitystandards_0.pdf

[30] We also note the levee maintenance road does not even meet the lesser Road and Street Standards dictated by Napa County or CAL FIRE for safe evacuation from a property with more than four residences of a paved 20' road with 2' shoulders. See Napa County Road and Street Standards, 2023, available at: https://napa.legistar.com/View.ashx?M=F&ID=11891814&GUID=307CAE5E-C950-4706-9300-255BFD6D91A2

[31] But there is no evidence the levee was designed to carry traffic or support a road, and correspondence from 2015 appears to suggest that the levee was not designed or anticipated to carry a roadway.

[32] https://www.sfchronicle.com/climate/article/tulare-lake-flooding-california-17905335.php

the City's zoning code or general plan (which as we have noted separately, it does not.) (Gov. C. § 65589.5(j)(1)(A) ("The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved.")).

The EIR Is Deficient on Numerous Other Topics that Reveal Its Bias

The EIR's analysis of numerous other topics is insufficient and shows a lack of serious effort to identify and mitigate impacts of the Project. Amongst those issues are the following:

Aesthetics

The EIR suggests there will be no impact on aesthetics, despite the Project being designed contrary to the General Plan's prohibition on the use of cul-de-sacs that obstruct vineyard views. The Project will substantially alter the current view from Adams Street/Library Lane, and remove or otherwise obstruct current vineyard and hillside views. While the EIR and proposed findings suggest the project will undergo design review in the future, no actual designs or use permit application for the multi-family parcel has been considered. As such, the EIR's conclusions are based on speculation, not actual substantial evidence in the record. This is the result of the Project's piecemeal consideration in violation of City code.

Moreover, while the EIR acknowledges the impact of lighting and requires mitigation by the Applicant, there does not appear to be any restriction on future residents from modifying or altering exterior lighting. The mitigation should be revised to address the potential for future spillover lighting-related issues and impose restrictions through appropriate CC&Rs.

Agricultural Resources

The Project calls for removal of multiple acres of vineyard directly contrary to the General Plan. 5.8 acres of Prime Farmland will be lost, again directly contrary to the General Plan, in addition to an 0.6 acres of Farmland of Statewide Importance. The failure to fully analyze or adopt an alternative project to preserve that Farmland lacks substantial or persuasive evidence to justify that this loss cannot be avoided or mitigated.

Air Quality

As discussed above, the Project's operation GHG emissions due to its contribution to vehicles stuck in traffic has not been properly analyzed. Vehicle emissions degrade air quality, both of GHG components and other emissions. As such, the EIR fails to fully consider the Project's air quality impacts.

Biological Resources

The Project is immediately adjacent to the Napa River and the habitat restoration project on the riparian side of the levee. The Project intends to fill four wetlands. While the project is required to obtain a permit for such fill, the proposed findings do not provide any evidence that such fill is

unavoidable, or that Alternative 3, the Park/Open Space Alternative which would preserve the wetlands, is not an environmentally superior alternative to the Project. Indeed, the Alternatives' analysis is sorely lacking, as there are numerous issues with the proposed Project that could have been address by Alternatives, particularly those that avoid removal of the vineyards.

Land Use and Planning

As discussed in the accompanying correspondence, the Project is wildly at odds with the applicable 1993 General Plan policies. It is likewise at odds with the current General Plan as well, for essentially the same reasons. The EIR's conclusion that the Project is consistent with the applicable General Plan and land use regulations, including the City's subdivision code, is contrary to the evidence in the record.

Noise

Because no design and no use permit for the multi-family development on Lot 52 has been presented, it is impossible to evaluate the noise impacts of a dense but undefined development. The EIR lacks any, let alone substantial evidence to support a finding, that the Project, and particularly Lot 52, will not have a significant impact on noise. Once again, the piecemeal approach to the Project renders the EIR insufficient as it fails to consider the whole of the Project.

Recreation

Although the EIR discusses the Project's potential impact on the use of other recreational facilities, it wholly ignores that the site is currently used for recreation, and that recreation site will be lost as a result of the Project. The Project will have a significant and unavoidable impact on recreation for the countless residents that currently use the property for recreation purposes. The proposed findings failure to even mention, let alone mitigate, these impacts lacks substantial evidence and fails to acknowledge the significant impact the Project will have on area residents' recreation.

Failure to Provide Affordable Housing

Because of the significant unavoidable impacts on the environment the Project will have, a statement of overriding considerations is required. A statement of overriding considerations requires balancing of, *inter alia,* the economic benefits of the project with its demands on the environment. However, there is no affordable housing agreement to consider that might balance the benefits of the Project to the pressing need for affordable housing. As noted separately, to the extent an affordable housing agreement is to be proposed in connection with the Project, it must be considered concurrently in order to meaningfully balance the economic and social impacts of the Project. Without that, any purported benefit would be purely speculative and lack substantial evidence.

Given the absence of an affordability plan to consider, there is no basis to conclude that the Project will provide the needed affordable housing consistent with the City's requirements that would warrant a statement of overriding considerations. As noted in our accompanying letter, the Applicant's prior efforts to propose an Affordable Housing Agreement were soundly rejected. The project design of shunting a potentially affordable multifamily project to the side of the single-family development was found contrary to the City's inclusionary policies. Relying solely on the position that the City's code requires some affordable housing and therefore justifies a current factual finding that the Project *does* provide that benefit is akin to concluding that every project complies with the law because the law requires it to.

This is not an instance where the Applicant simply has not yet proposed a plan. It did, and it was soundly rejected. The February 2020 Notification to the Applicant[33] was clear:

> *as we have discussed previously, City staff continues to have concerns with the fact that a portion of the affordable units will be provided as rental ADUs and the remainder of the affordable units clustered on a single parcel. Section 17.146.050(I) declares:*
>
> > *Affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction to market rate units in the same residential project. Subject to the approval of the planning commission, square footage of affordable units and interior features in affordable units need not be the same as or equivalent to those in market rate units in the same residential project, so long as they are of good quality and are consistent with contemporary standards for new housing. Affordable units shall be dispersed throughout the residential project, or, subject to the approval of the planning commission, may be clustered within the residential project when this furthers affordable housing opportunities.*

The Planning Commission has not been presented with any request to approve such a design. Indeed, City Staff concluded in 2020 that:

> *the affordable units are not dispersed throughout the project. Over two-thirds of the units are located on a single parcel, and an additional eleven ADUs will be located on a handful of the other 51 lots. The proposal does not meet the spirit nor the letter of the requirement that the units be dispersed throughout the project.*[34]

It appears that the current external planning consultant is ignoring City Staff's prior conclusions and did not include this information in its staff report for the Planning Commission to consider. The Planning Commission has now passed the project to the City Council without any analysis of

[33] Notification of Final Unresolved Issues and Questions (Feb. 27, 2020), *available at*: https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/project/3486/02-20-2020_unresolved_issues_and_questions_hunter-final-c2.pdf.
[34] Id.

the conflict of the Project with the City's affordable housing policy.[35] Worse, the Staff Report provided to the City Council notes that the Applicant submitted a proposed Affordable Housing Agreement on February 1, 2019, but does not mention the City's rejection in 2020 discussed above. This raises serious questions as to whether the EIR reflects the City's "independent judgment,"[36] and whether the City Council is receiving the full and complete analysis it is entitled to in making such a profoundly important decision.

Given the Applicant's repeated failures to submit an acceptable affordable housing plan, it is impossible to conclude that the Project will comply with the City's affordable housing policy. Indeed, the effort to approve solely the subdivision map to allow the creation of 51 single-family lots without scrutiny of the affordable housing component appears intended precisely to avoid the need to comply with the City's policies of integrating affordable housing of similar types and styles into a project.

To be blunt, the only integrated affordable housing proposal appears to be that a handful of rich people will make money off some poor people living in their backyards, while the rest of the affordable units are packed together in place of an existing vineyard. City Staff previously found this proposal not to meet City code. To approve the Project as currently presented, the Council will now need to ignore City Staff's prior conclusion it is contrary to City code. The City Council would need to make an affirmative finding that the Project is consistent with the City's affordability program and general plan and warrants approval despite its significant unavoidable impacts. It cannot do so on this record.

In light of the above, the Council must exercise its independent judgment to conclude the Project is inconsistent with the General Plan and municipal code and has failed to submit an acceptable affordability proposal or design, and to require the Project to be redesigned consistent with the City's objective standards.

The Required Findings for a Statement of Overriding Consideration Cannot Be Made

Statements of overriding consideration are required to explain in detail how and why the benefits of the proposed project outweigh the unavoidable, adverse environmental impacts and why the City is willing to accept such impacts. CEQA Guideline 15093 provides the following instructions:

> *(a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the*

[35] *See generally,* Report to the City Council, Special City Council 01 May 2023.
[36] P.R.C. § 21082.1(c)(3).

> *unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."*
>
> *(b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing* ***the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.***

The draft statement of overriding consideration fails to identify real, quantifiable benefits, and does not have evidence to rely on for affordable housing in particular. Again, there is no actual affordable housing proposal and the prior proposal was soundly rejected on the basis that the Project's design was discriminatory and inconsistent with City policy and the General Plan. The draft barebones statement "The Project provides needed housing to the City, particularly affordable housing" is not supported by any meaningful evidence in the record and is contrary to the current state of the Project. The Project does not supply a mix of types and affordability of housing as required by the General Plan, and does not supply any of the critical middle-income housing that is sorely lacking in the City.

By evading consideration of the Project's implementation of affordable housing requirements and multi-family use and design elements, it attempts to lock in a single-family development with no opportunity to require compliance with the City's inclusionary housing policies or General Plan requirements for a mix of housing types.

The apparent suggestion that simply all housing projects are good and must be approved is wrong. The Planning Commission made this error. The City Council should not repeat it.

Conclusion

The Applicant has repeatedly attempted to avoid scrutiny of the design of its project. The EIR presented for Certification poorly analyzes only a hypothetical, unsubmitted project, not the Project currently under consideration by the Council. In doing so, the EIR has failed to analyze numerous elements of the Project. Some are incapable of full consideration, such as aesthetics, without an actual proposed multi-family project. Others are clearly inadequate on the current record as discussed in detail above.

As detailed above, the Project's problems are numerous and, in short, present significant threats to public safety, and fail to meet the legal requirements of the City and the State with respect to, at a minimum, safety, environmental, water, and affordable housing.

The Project puts the current residents of the City at substantial risk to benefit White Fang LLC's development interests.

The EIR should not be certified. The substantial deficiencies discussed above require remediation and recirculation following the Applicant's submission of all of the necessary information for consideration of the whole of the Project.

Sincerely,

DICKENSON, PEATMAN & FOGARTY PC



Joshua S. Devore

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April 30, 2023

Via Email:

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RE: Hunter Subdivision Project Tentative Map No. 2022-001, File #PL10-040

Dear Mayor Dohring, Vice Mayor Hall, Council Members, City Manager Comelo, Community Development Director DeRosa:

As you are aware, we represent the Saint Helena Citizens for a Sustainable Future, a diverse group of City residents. We have provided several letters on this project to the Planning Commission on this project, highlighting several of the procedural and substantive deficiencies in the application process and consideration. (Those letters are included in your Agenda packet for the May 1 meeting, along with Staff's responses, and we encourage you to review those letters in chronological order for context. We have not set out again every point in those letters for sake of brevity.)

The Planning Commission nevertheless –reluctantly as can be seen in the video of the hearing – passed the project on to the City Council. The Planning Commission appeared severely cowered by pressure to approve housing. Its referral to the City Council is thus not in any way persuasive that the tentative map nor its accompanying Environmental Impact Report warrant approval. A separate letter addresses the serious issues with the Environmental Impact Report.

This project has an extensive history. It was previously halted nearly a decade ago due to its impacts on traffic and needed improvements to the Pope Street/Silverado Trail intersection. It has recently moved forward, ostensibly on the notion that traffic is no longer an issue of concern under the California Environmental Quality Act, and thus can be ignored. This is incorrect – the impact on traffic is still highly relevant to whether the project is consistent with the General Plan.

But there are also countless other issues with the project raised by the hundreds of public comments raised in opposition. Some of these significant items are discussed further below.

In short, this Council's function is to determine whether the project is consistent with the City's residents' vision of St. Helena as described in the General Plan. Where it is not, it is the Council's job to reject the project to protect the current residents from the deigns of out-of-town developers. Given the languishing of this project by the applicant, it is subject to the 1993 General Plan rather than the current one; but its failures to fulfill the City's vision are nonetheless apparent.

The City Council Meeting Must Be Rescheduled Because It Does Not Comply with the Law

As a preliminary matter, the City Council has set the matter for hearing on May 1, 2023. That hearing is illegal and contrary to City code. The Planning Commission was required to file its report and recommendation with the City Council *prior* to setting a hearing on the tentative subdivision map. (SHMC § 16.16.070. ("At the next regular city council meeting **following the filing of the planning commission's report with it**, the city council shall fix the hearing date at which the tentative map will be considered by it, which date shall be within thirty (30) days thereafter.")) That did not happen. Indeed, no Planning Commission report and recommendation was prepared separate from the Staff Report prepared by Interwest Consulting Group provided with the public agenda for the May 1, 2023 Special Meeting.

This failure to proceed as required by law has deprived the public of the opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The May 1, 2023, Special Meeting is thus contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.

Indeed, it appears throughout the recent process that the City has been poorly served by the latest consultant on the project, Interwest Consulting Group. There has been no independent review of the project - only advocacy for the applicant by the retained outside service. The City has been repeatedly advised to ignore its municipal code to benefit the applicant. The City Council should take a sharp eye to any of the analysis provided by Interwest Consulting Group. Indeed, as discussed further below, the analysis is repeatedly directly contrary to the facts and law.

The Tentative Map Cannot Be Approved Because the Complete Project Has Not Been Presented to the City, As Required by Law

As described extensively in our prior correspondence to the Planning Commission, the City's code clearly and unambiguously requires the applicant to submit for *all* of the necessary approvals to carry out the project, including an affordable housing agreement and required multi-family use permit prior to consideration of a tentative map. The applicant has not done that. This failure to proceed as required by law is fatal to the project, and any approval will be a clear abuse of discretion.

As we set out previously in additional detail, Title 16 of the Saint Helena Municipal Code, the City's Subdivision Ordinance, provides unambiguously that:

> All applicants for tentative maps and tentative parcel maps **shall concurrently submit applications for *all* other discretionary approvals**, including but not limited to, conditional use permits, variances, rezonings, and general plan amendments.

(Subdivision Ord., § 16.04.120 (emphasis added.)) Here, however, the Staff Report directly admits "future applications" are required for additional discretionary portions of the project. This renders the approval illegal, the record incomplete, and consideration now directly contrary to Section 16.04.120's mandate that the requests be made "concurrently."

This isn't just a procedural nicety. Such a system makes perfect sense, as otherwise it is impossible to consider the whole of the project. Ignoring this rule is ignoring the entirety of the Project.

Attachment 29 to the May 1 Agenda, Staff 's second attempt at a response to our prior letter to the Planning Commission of February 6, 2023, acknowledges this failing by the applicant to submit the required approvals over the dozen years the Project has been pending. But it attempts to ignore that failure by arguing that the Applicant was supposedly not told of the requirements, and a state law adopted some six years after the application was deemed complete prevents the City from following its law now. That is wrong on both the facts and the law.

For example, the April 17, 2018 Notification of Identified Issues clearly identifies the requirement for and cites the code sections for the Affordable Housing and Conditional Use Permit for Multifamily Housing. The suggestion that the Applicant was not notified of these issues previously is contrary to the record:

> *The type of uses conceptually proposed on Lot 52 (duet multifamily units) require Conditional Use Permit and Design Review approval (see SHMC section 17.40.030.) and development of Lot 52 is required to meet the minimum gross density on the project site. Based on this, the City is following up on past requests for additional information as to the development of the multifamily parcel (and preferably Use Permit and Design Review applications) which provide more project specifics, and detail how the future development will comply with the requirements of the Medium Density Residential zoning and development standards.*[1]

The City had plainly been requesting this information for a considerable time. The September 27, 2018, Comment Letter indicated that the Applicant had provided a draft Affordable Housing agreement that failed to meet the City's standards. By February 2020, the Applicant had offered

[1] Available at: https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/project/3486/hunter_subdivision_issues_letter-april_2018.pdf

to enter into an Affordable Housing and Regulatory Agreement "in conjunction with the approval of a Tentative Subdivision Map." The City soundly rejected the plan as inconsistent with inclusionary housing principles in its Notification of Final Unresolved Issues and Questions.[2] It also clearly called out the need for a use permit for the multifamily development:

> *With 16.92 acres and a total of 87 units, the overall project density is 5.14 units per acre. The site is located within the Medium Density Residential (MDR) General Plan designation with a density range of 5.1 to 16 units per acre. The site is in the MR Zoning District that permits single family residences and Accessory Dwelling Units. Residential condominium projects, attached duplex or triplex units are permitted in the MDR District subject to the Approval of a Conditional Use Permit in each case. Based on your current subdivision plan,* ***you should concurrently submit a Conditional Use Permit application****.*

(Id. Emphasis added.) The Applicant has ignored this direction for years.

Staff's sole response is to argue the current version of the Government Code Section 65589.5(j), regarding the timing and contents of a response to a housing project application, which did not exist at the time of the project's application, *post hoc* controls the project. However, statutes do *not* generally apply retroactively,[3] and a plain reading of the timelines in Section 65589.5(j)(2) shows that applying that section retroactively to a prior application would have immediately made all actions on the Project – and every other similar project – suddenly untimely. This interpretation is unreasonable, and we are unable to locate any authority that would support Staff's position. Indeed, the First District Court of Appeal recently found directly to the contrary in connection with another amendment to the Housing Development code. Such amendments are ***not*** retroactive unless explicitly stated in the legislation.[4] Section 65589.5(j)(2) is thus inapplicable and is not a basis to ignore the City's code.

The other applications required for the Project – an affordable housing agreement and a use permit for multifamily development – are for other discretionary approvals. They are required by code and recognized in the EIR. They are not precluded by the legal "completeness" (or not) of the tentative map application itself – they are distinct legally mandated discretionary applications.

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[2] Available at: https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/project/3486/02-20-2020_unresolved_issues_and_questions_hunter-final-c2.pdf

[3] "Generally, statutes operate prospectively only." *Ruegg & Ellsworth v. City of Berkeley (2021) 63 Cal.App.5th 277, 307 [277 Cal.Rptr.3d 649, 671, 63 Cal.App.5th 277, 307]* (quoting cases). "[A] statute may be applied retroactively only if it contains express language of retroactivity or if other sources provide a clear and unavoidable implication that the Legislature intended retroactive application." *Id.* (quoting cases.)

[4] *Ruegg & Ellsworth v. City of Berkeley* (2021) 63 Cal.App.5th 277, 307 [277 Cal.Rptr.3d 649, 671, 63 Cal.App.5th 277, 307], *reh'g denied (May 19, 2021), review denied (July 28, 2021.)*

And in any event, requiring additional supporting and clarifying information after a completeness determination is routine and allowed by the Permit Streamlining Act. The Permit Streamlining Act specifically contemplates the requirement for additional information following a completeness determination, and states specifically that "[t]he agency may, in the course of processing the application, request the applicant to clarify, amplify, correct, or otherwise supplement the information required for the application" and that a completeness determination "shall not be construed as limiting the ability of a public agency to request and obtain information which may be needed in order to comply with [CEQA]."[5] Indeed, the entirety of the EIR process occurred after the completeness determination was made. The suggestion that additional information on the planned "design and improvement"[6] of Lot 52 – which the Council is required to review and approve in connection with the subdivision – cannot be required after the completeness determination is specious.

The City needs to follow its own law and reject the piecemeal attempt at approval of only a part of the Project. Neither the Permit Streamlining Act nor the subsequent amendments to the Housing Accountability Act alter this; it is a failure to submit *all* of the information necessary to analyze the project as a whole, which the City's Subdivision Code – and CEQA – require to be considered and analyzed collectively.

Failure to proceed as required by law is an abuse of discretion.[7]

The Required Findings Cannot Be Made

Without a complete collection of the required discretionary approvals, the City simply cannot make the required findings for approval. The City Council must make two findings to approve a tentative map:

> 1. That the proposed subdivision, ***together with the provisions for its design and improvement***, is consistent with the general plan, any applicable specific plan, and other applicable provisions of this code; and
>
> 2. Except for condominium conversion projects where no new structures are added, that the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council.

(SHMC § 16.16.080 (emphasis added.))

Put simply, one must know the entirety of what a subdivision project is in order to properly approve it. The City must approve not just the lots, but the "provisions for [their] design and

[5] Cal. Gov. C. § 65944(a), (c).
[6] SHMC § 16.16.080.
[7] Cal. C. Civ. P. 1094.5; *see, e.g., No Oil, Inc. v. City of Los Angeles (1974) 13 Cal.3d 68, 88 [118 Cal.Rptr. 34, 47, 529 P.2d 66, 79], supplemented (1975) 13 Cal.3d 486 [119 Cal.Rptr. 216, 531 P.2d 784].*

improvement."[8] The applicant continues to evade submission of those details for the most important component of the project.

The application seeks approval of 51 single family lots, and one multi-family lot with purportedly 25 units. That multi-family lot requires separate consideration and approval, as multi-family housing is a conditional use.[9] Conversely, as of this moment in time, the use indicated for Lot 52, the multi-family parcel, is not allowed.[10] The applicant thus is seeking to ram through its single-family lots without any analysis or consideration of the "design and improvement" of the multi-family portion of the project.

Doing so will severely restrict the City's ability to shape the critical affordable housing that the property has the possibility to provide. If the tentative map is approved without consideration of a*ll* of the necessary approvals, it eliminates the ability to require a larger affordable housing component. It also locks the City into directly violating the General Plan, as Lot 52 is entirely planted with vineyards. (Contra 1993 General Plan CD 4.3.5 (4.3.5 "Require future residential development to conform to the pattern and density of older, neighboring areas of town in order to complement existing town character and **ensure that densities are high enough to protect against unnecessary incursion into vineyard agricultural areas**.") Thus, directly contrary to the General Plan's policy of designing projects to avoid removal of vineyard, the City will be left with no choice than to approve the vineyard removal for the only multi-family parcel that is part of – and required by – the project to meet the minimum density requirements of the zoning code.

The property has been described as a key component of the City's housing plans. If that is to be true, it needs to be thoroughly and properly vetted. Rushing through an improper approval of a single-family home subdivision will have irreversible deleterious impacts on the City that will persist long after the current Council is out of office. We agree with and echo the letter from Our Town St. Helena: the discriminatory and inadequate cramming of a small multi-family development into an existing vineyard to make way for 51 luxury, likely-second homes is wholly inappropriate and contrary to the City's urgent needs for affordable housing. It is indeed contrary to law.

Moreover, there is no evidence that the project, which depends on 11 ADUs to purportedly meet the minimum density requirements, would achieve that threshold. Studies show that only approximately half of ADUs are used as rental units.[11] Thus, without deed restrictions requiring the rental of the ADUs, and conditions requiring minimum rental income and related fees, the ADUs are not meaningful additions to the City's housing stock or the required density. But again,

[8] *Id.*
[9]
[10] The applicant initially submitted a map with no development shown in Lot 52 at all. (*See* our Letter of October 31, 2022)
[11] UC Berkeley Center for Community Innovation, Implementing the Backyard Revolution: Perspectives of California's ADU Owners, (April 22, 2021), *available at:* https://www.aducalifornia.org/wp-content/uploads/2021/04/Implementing-the-Backyard-Revolution.pdf.

the applicant has failed to submit the mandated Affordable Housing Agreement that might inform whether such conditions could or would be met.

As discussed further below, the project is inconsistent with the General Plan for a host of reasons, including but not limited to its widespread ignorance of the applicable 1993 General Plan policies, impacts on traffic, public safety, destruction of vineyard, and water usage.

But, more basically, as a result of the failure to submit the multi-family use permit application and design, there is no evidence in the record to support the required second finding on passive or natural heating or cooling opportunities. There is no submitted design for Lot 52, the multi-family housing portion of the project. Although the staff report indicates that some of the single-family homes meet the requirement for passive or natural heating or cooling, there is no evidence that the multi-family homes will.

Put indelicately, on the current record the only finding favorable to the project the City Council could make is that it does not care whether the residents of the purportedly affordable portion of the development have had their interests in passive or natural heating or cooling attended to. And it must make this finding now, based on evidence in the record now – not simply condition future compliance.

As the second required finding cannot be made, the Project must be rejected. The Council can reach this conclusion now without further need to wade through the lengthy issue of General Plan consistency – or lack thereof.

General Plan Inconsistencies

Returning to the larger issue of the first required finding for approval, the woeful attempt in the General Plan consistency analysis provided with the agenda to show the project is consistent with the General Plan firmly demonstrates the opposite.[12] For example, and by no means exhaustive, the provided General Plan consistency analysis mentions only three of the dozens of applicable 1993 General Plan Land Use and Growth Management Elements.

Among those "LU" policies the analysis omits are the following:

> 2.6.5 Encourage the continuation of agricultural and low-intensity uses adjacent to the Urban Limit Line.
>
> 2.6.14 Encourage a mix of housing types and price ranges to allow choice for current and future generations of St. Helenans.
>
> 2.6.17 Minimize situations where new residential development will block public view of surrounding vineyards

[12] As the Project is subject to the 1993 General Plan, all references herein are to that version of the General Plan unless otherwise stated.

> 2.6.20 Encourage the subdivision and development of larger parcels (3 acres or more) as "planned unit developments" to ensure a more comprehensive and creative approach to planning the development as a single unit
>
> > *The "planned unit development" approach provides developers with greater design flexibility while ensuring the City adequate design review.* The *intent* is *to create developments that complement existing community character. The City will favor planned unit developments that provide generous amounts of open space, covered parking, the separation of pedestrian and vehicle traffic, and on larger tracts, a variety of housing types: single-family detached, duplex, and multi-family dwellings, in one and two-story structures.*
>
> 2.6.24 Require residential developers to contribute toward the provision of community facilities and services (e.g., recreation facilities and programs, educational facilities, traffic and transportation facilities and services) consistent with State law requiring a nexus between project impacts and required mitigation.

The consistency analysis ignores these elements because the Project ignores them.

The 1993 General Plan Community Design Element reflects a general rejection of 'suburbanization' of the City. In response to the nature of the recent development of the time, the 1993 General Plan, 4.2 Community Form and Character Issues, provided:

> *Residents are clearly concerned that the special character of St. Helena is being lost through new development and growth. Although the last ten years have seen little new development, residents perceive a continuing loss of character and values. In part, this perception is the result of the growth of the valley in general as a tourism destination, and the resultant traffic congestion and impact on local serving businesses. However,* ***it is also the result of the design and planning of new development, that is more suburban in nature than the historic pattern in town.***

Put plainly: the City looked at the then-recent development on the East side, said 'we don't like it', and directed a return to the classic design of the West side of town.

Again, the General Plan consistency analysis wholly fails to comport the project to the applicable Community Design General Plan policies. It ignores numerous applicable policies, while addressing only a handful of the Community Design elements. Even then, the policies it does address show the project is directly at odds with the General Plan. For example, the consistency analysis states the following:

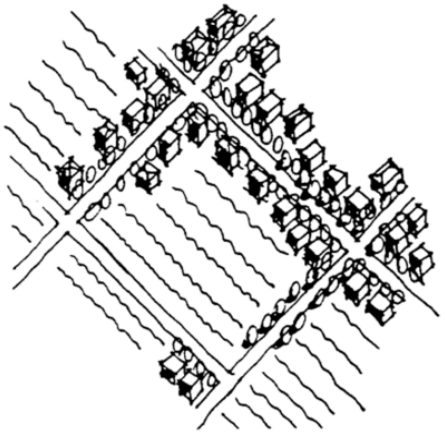
4.3.5 Require future residential development to conform to the pattern and density of older, neighboring areas of town in order to complement existing town character and ensure that densities are high enough to protect against unnecessary incursion into vineyard agricultural areas.	The proposed subdivision is consistent with the density requirements of the site's General Plan land use designation.

Obviously, the explanation does not match the element. Instead of comporting the design to the older areas of town to avoid incursion into vineyard agriculture, the project merely purportedly meets the bare minimum density by squeezing in one dense parcel. The consistency analysis ignores the remainder of the element, which is unmet.

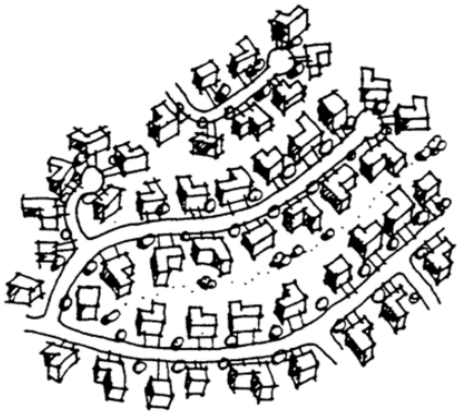
The next element similarly fails the straight-faced test:

4.4.1 Use the grid pattern of street layout as the template for future developing areas. Streets should be straight, should meet at right angles, and cul-de-sacs and a suburban pattern should be avoided.	The proposed street layout follows a grid pattern as much as possible, given the site's shape and the location of adjacent connecting streets. One cul-de-sac is included in the proposed subdivision where no other street pattern is feasible.

To be clear, this is what the General Plan depicts as desired vs. not:



Traditional Grid Pattern



Suburban Pattern

(General Plan 4.4 at 4-16.)

In short, the City considered whether it wanted a project in the future exactly like that proposed, and rejected it. The excuse that the project meets the grid pattern as much as possible is incredible. Offsetting 'Street A' into an awkward intersection into a prototypical subdivision is directly contrary to the element. The design is also inconsistent with Element 4.6.2, which prohibits cul-de-sacs to block views of vineyards.

The next General Plan element analyzed, 4.4.2, the ability to continue Adams Street to Silverado Trail, also fails. The consistency analysis wrongly states that the project "will complete the planned roadway system." But the planned roadway system extends Adams Street to Silverado Trail. The project, on the other hand, obstructs a clear path to the east, and there is no evidence that construction of a public street on the existing levee is technically feasible nor safe. The levee was not designed to carry traffic, and there is no evidence that Adams Street can feasibly be extended if the project is constructed as proposed. Although the General Plan consistency analysis later acknowledges Transportation Element 5.3.2, which calls for extension of Adams to Silverado Trail, it does not consider how the project is consistent or inconsistent with the plan.[13]

There is no evidence that the project is anything other than a complete obstacle to completion of the road network's second access to Silverado Trail.

[13] The analysis also ignores related Public Health and Safety element 8.2.11: "Encourage and support regional efforts to displace motor vehicles off State Route 29 and onto alternative modes of transit." Failure to address access to Silverado Trail ignores this policy.

Returning to the offered 1993 Consistency Analysis, the next element analyzed again belies the consistency:

4.5.1 The sense of a strong connection to the surrounding agricultural open space and hillsides must be preserved in the future. Views of vineyard, hillsides, creeks and major landscape features should be maintained.	Views of the vineyards to the north of the proposed subdivision are currently available from the levee road, which will not be affected by the proposed project.

The "sense of a strong connection" is plainly destroyed by the Project. The attempt at consistency is quite literally to tell residents they should walk around the Project and look the other direction. And similarly, the next element analyzed again shows the project wholly at odds with the General Plan:

4.7.3 The new eastern entry via the Adams extension should be planned to maximize open space and vineyard views. Where possible, vineyards should be maintained up to the road edge. Residential development should front on the road with sufficient lot depth to allow a generous setback for sound and privacy. Large specimen street trees should be planted in residential areas to mitigate the scale of the street and encourage pedestrian and bicycle movement.	The proposed project extends Adams Street to connect with the northward extension of Starr Avenue, but does not otherwise affect the layout or design of the future extension of Adams Street.

The General Plan thus dictates residential development should front on Adams Street, not an oddly-adjacent 'Street A'. The future extension of Adams Street would plainly not front on residential developments, but instead would be adjacent to a feeder road. Instead of large yards facing Adams Street and preserving vineyards, the project results in the exact opposite – multiple roads created by removing vineyards.

This is also, for example, directly contrary to General Plan policy CD 4.3.26:

> Encourage residential building siting and design that is similar to that found in the older neighborhoods in town. In these areas consistent setbacks, porches and generously landscaped front yards add to community enjoyment by all. Restrict location of driveways and garages to minimize their visual impact on the street.

In short, this Project by no means meets the applicable General Plan's Land Use and Community Design elements.

It also fails to grapple with the most basic General Plan issue that stalled the project previously: traffic. Nearly a decade ago, it was identified that improvements were needed to the Silverado Trail/Pope Street intersection. The most recent traffic study still states that improvements to the intersection are necessary, and that the project will add traffic to that intersection to such an extent that in a short time, traffic will be backed up past the new City Hall. Yet, no mitigation whatsoever has been provided to account for these significant impacts on quality of life.

This violates the General Plan Traffic elements, including 5.4.1 and 5.4.2, which direct the City to attempt to maintain tolerable levels of service (at least LOS C) at the City's intersections.

More critically, the Project is inconsistent with the most important elements of the General Plan – those related to Public Health and Safety. Countless commenters have already opined that the Project is unsafe both to the current residents and the future residents. Those issues include that the project is flood prone, behind an uncertified levee with evidence of deficient maintenance. It is also a necessary firebreak that actually functioned as such in the 2020 fire. The proposed emergency access via the levee maintenance road is not what the levee was designed for and there is no evidence that using the levee for evacuation will be consistent with the long-term structural stability of the levee. Adding substantial population without addressing other transportation issues is a clear and imminent risk to the health and safety of the City's existing residents.

Meanwhile, the consistency analysis analyzed only two of the extensive list of Public Health & Safety elements of the General Plan. Of the two chosen, one is misleading:

8.5.7 Ensure that all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.	The proposed subdivision has been reviewed by the Public Works and Fire departments for consistency with City roadway standards

The staff report reveals that there actually was *no* standard for intersection design in the City's standards. Thus, despite the intersection of Adams Street/Starr/Street A being clearly awkward and dangerous (and contrary to design standards that could have been referenced such as those by Napa County or CalTrans), the consistency analysis simply states that the subdivision 'has been reviewed.' It has *not* been found safe or adequate. And again, access depends on the levee access road that is not designed for that use.

But most significantly, the consistency analysis ignores numerous other elements that are highly relevant to the Project, and with which it is in conflict. Among the 1993 General Plan Public Health & Safety elements that are unaddressed and unmet are numerous elements discouraging

construction within Flood Hazard Areas. Those Guiding Policies in Section 8.6 clearly discourage development subject to flood risk:

> 8.6.1 Prohibit the introduction of intensive urban development into designated Flood Hazard Areas.
>
> 8.6.2 Uses vulnerable to floods, including public facilities and infrastructure, shall be protected against flood damage at the time of initial construction.
>
> 8.6.3 Prohibit the construction of structures or flood barriers which would unnaturally divert flood waters or would increase flood hazards in other areas.
>
> 8.6.4 Require a grading permit for any filling, grading, or dredging that may increase potential for flood damage.
>
> 8.6.5 Restrict the alteration of natural flood plains, stream channels, and natural protective barriers which help accommodate or channel flood waters.
>
> 8.6.6 Prohibit the siting of uses within Flood Hazard Areas that could result in health and safety hazards due to the release of chemicals or other substances as a result of inundation or erosion.
>
> 8.6.7 Encourage the use of Flood Hazard Areas within new development areas for open space and recreation uses, including parks and greenbelts.
>
> 8.6.8 Ensure that any new development that is allowed within the floodplain is constructed so that the lowest floor elevation is at least one foot above the 100-year flood level.

Development exposed to flood risk is plainly discouraged. Moreover, implementing policy 8.6.11 "Require[s] developers with land adjacent to the Napa River to construct or contribute a fair share toward the construction of necessary flood control improvements."

As has been widely discussed by earlier commenters, the project places the entire development at risk of flooding. The staff report acknowledges the flood risk, but asserts it to be of a 200-year flood, and thus not a "Flood Hazard Area." Even assuming that to be true,[14] though less likely than a 100-year flood (but only by half), the risk to life and property remains and the potential ruinous financial liability to the City remains unaddressed. Indeed, the City's counsel has provided a legal analysis stating that the City could be held liable for flood damage, particularly if the levee is not adequately maintained. As such, compliance with General Plan policy 8.6.11 would suggest that at a minimum the Project be conditioned to indemnify the City from that potential liability via a bond for the replacement costs of the Project, and to be responsible for the costs of maintaining the necessary flood control improvements.

[14] There is considerable inconsistency in the record about the protection level afforded by the levee. We do note the FAQ provided as attachment 23 to the agenda misstates the 500 year flood risk as 0.02% annually. It should read 0.2%.

Finally, the Project conflicts with numerous Public Facilities and Services and Parks and Recreation policies. Among those is PF 9.4.6 which requires "All subdivision proposals shall be consistent with the need to minimize flood damage." However, the Project proposes to develop portions of the site subject to flood risk, and potentially places the City at ruinous financial risk as a result.

Thus, for all of the above reasons, and those stated by the numerous other commenters, the Project is inconsistent with the General Plan and the Council cannot make the required finding of consistency.

Findings For Denial

Pursuant to SHMC § 16.16.080(D), the City Council:

> may deny approval of the tentative map on any grounds provided by the law including, without limitation, a finding that the discharge of waste from the proposed subdivision into an existing community sewer system would result in, or add to, violation of existing requirements prescribed by a state regional water quality control board. A tentative map ***shall be denied*** if ***any*** of the following findings are made:
>
> 1. That the proposed map is not consistent with the general plan, applicable specific plans, or other applicable provisions of this code;
>
> 2. That the design or improvement of the proposed subdivision is not consistent with the general plan, applicable specific plans, or other applicable provisions of this code;
>
> 3. That the site is not physically suitable for the type of development;
>
> 4. That the site is not physically suitable for the proposed density of development;
>
> 5. That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat. Notwithstanding the foregoing, the planning commission may approve such a tentative map if an environmental impact report was prepared with respect to the project and a finding was made pursuant to Section 21081(a)(3) of CEQA that specific economic, social or other consideration make infeasible the mitigation measures or project alternatives identified in the environmental impact report;
>
> 6. That the design of the subdivision or the type of improvements are likely to cause serious public health problems;

> 7. That the design of the subdivision or the type of improvements will conflict with easements of record or easements established by court judgment, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the city council may approve a map if it finds that alternate easements for access or for use will be provided and that those will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction, and no authority is granted to the planning commission to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision;
>
> 8. That all requirements of the California Environment Quality Act and the rules and procedures adopted by the city council pursuant thereto have not been met;
>
> 9. That the applicant has failed to submit complete or adequate information;
>
> 10. Subject to Section 66474.4 of the state Subdivision Map Act, that the land is subject to a contract entered into pursuant to the California Land Conservation Act of 1965 (commencing with Section 51200 of the Government Code) and that the resulting parcels following a subdivision of the land would be too small to sustain their agricultural use.

(Emphasis added.) As described above, and by countless other commenters, numerous of these findings can be made here. They include that:

- The proposed map is not consistent with the General Plan as discussed above.
- The design or improvement is not consistent with the General Plan as discussed above.
- The site is not physically suited for the proposed development as discussed above, particularly in regards to its location adjacent to the levee and removal of vineyard firebreaks.
- The site is not suited for the proposed density due to its location adjacent to the levee and lack of development of the road network, existing parking shortcomings, and removal of vineyard firebreaks.
- Substantial unmitigated environmental impacts persist and no overriding considerations justify those impacts, including impacts on groundwater, GHGs, aesthetics, and others as further discussed in our accompanying letter.
- The EIR does not comply with CEQA as discussed in our accompanying letter.
- The Applicant has failed to provide necessary information as discussed above.

Conclusion

The City Council members have a duty to the citizens that elected them to protect the City from adverse interests. It must manage the City consistent with the General Plan and the Municipal Code. This project violates both, and the Council should do its duty and protect the voters from this proposed violation of their collective will.

Sincerely,

DICKENSON, PEATMAN & FOGARTY PC



Joshua S. Devore

cc: City Attorney Ethan Walsh: Ethan.Walsh@bbklaw.com
City Clerk Cindy Tzafopoulos: cityclerk@cityofsthelena.org

Hunter Subdivision project

Responses to April 30, 2023 Comments of Joshua S. Devore
Tentative Map No. 2022-001, File #PL10-040

Comment #1

Commenter contends that the May 1, 2023, public hearing should have been rescheduled because the Planning Commission did not file a report and recommendation with the City Council prior to setting a hearing on the tentative subdivision map, as required by St. Helena Municipal Code Sections 16.16.060 and .070.

Response #1

The form of the required Planning Commission report and recommendation is the resolution adopted by the Planning Commission at its April 7, 2023, meeting. Neither the City's municipal code nor the provisions of the State Subdivision Map Act that Sections 16.16.060 and .070 are modeled after require a particular form for that report. The Planning Commission resolution contains the Planning Commission's recommendation, it was available prior to the Council hearing date being set, and was included in the materials provided for the May 1 Council hearing. The City complied with Sections 16.16.060 and 16.16.070 and there was no need to reschedule the May 1 hearing.

Comment #2

Commenter again argues that the applicant was required to concurrently submit all other applications for discretionary permits that would eventually be required for the development of the proposed subdivision. Commenter further argues that the City is not required to comply with Government Code Section 65589.5(j)(2), because to do so would require retroactive application of that statutory requirement, which was enacted after the Hunter Subdivision application was deemed complete.

Response #2

The City has explained in detail in prior reports that Section 65589.5(j)(2) limits the City's ability to deny an application for a housing development project for failure to comply with certain objective requirements after the project application is deemed complete. The City does believe that the Hunter Subdivision project is subject to Section 65589.5(j)(2) (which was adopted over five years ago), and the City is not applying this requirement retroactively in this instance. This issue, including an explanation of why the City is not applying this requirement retroactively, is addressed further in Section 2 of the letter from Daniel Golub and William Sterling (the applicant's attorneys) to City Council dated May 1, 2023 (the "Golub/Sterling letter"). City staff agrees with the legal analysis contained in Section 2 of that letter, and refers readers to that letter for further explanation as to why it is not appropriate to deny the Hunter Subdivision based on the reasons set forth in Comment #2 of Commenter's letter.

Comment #3

Commenter argues in his third comment that the City cannot make the findings required for approval of a tentative map pursuant to Section 16.16.080. Commenter first argues that the City Council cannot make the finding of consistency with the General Plan and Subdivision Ordinance because the City Council is not considering the other future approvals that will be required for ultimate development of the proposed subdivision. Secondly, Commenter argues that the City Council has not made findings that the design of the multifamily development provides, to the extent feasible, for future passive heating and cooling opportunities in the subdivision.

Response #3

Response #2 and the Golub/Sterling letter address why the City is considering this tentative map separate from the future approvals required for development of the property. It is certainly possible and not uncommon for a City Council to evaluate a tentative subdivision map on its own to determine consistency with the City's General Plan and Subdivision Ordinance. City staff has provided the reasons why this proposed subdivision is consistent with the General Plan and Subdivision Ordinance in detail as part of the agenda materials. In his letter the Commenter argues that Lot 52 should not be developed with multifamily units because it is currently planted with vineyards, and that the development would not meet the density or affordability requirements without inclusion of the multifamily units. As discussed in the staff materials provided, this property, including Lot 52, is designated and zoned for residential use, and it would be inconsistent with the City's General Plan or Zoning to prohibit the development of this property for residential purposes.

The Commenter also argues that the proposed accessory dwelling units should not be counted towards the minimum density for the overall project unless there are deed restrictions requiring that the accessory dwelling units be rented. However, the City's Zoning Code explicitly allows that accessory dwelling units may be counted toward minimum density in the Medium Density Residential (MR) Zoning District, and there are not requirements for specific deed restrictions in order for these units to be counted toward minimum density. (SHMC §17.40.060(E)(3).)

Finally, Commenter argues that the City Council cannot approve the tentative subdivision map because there is no evidence that the multifamily units will be constructed in a manner that provides for natural heating or cooling. The requirement to provide for natural heating and cooling opportunities, to the extent feasible, is focused on configuration and design of the subdivision, not construction of the buildings on future lots. As staff previously outlined in the staff materials for the Planning Commission hearing and May 1 Council hearing, the Subdivision Map Act provides examples of natural heating and cooling opportunities. These include design of lot size and configuration to permit orientation of structures to allow for southern exposure, and/or to take advantage of shade or prevailing breezes. This requirement does not pertain to the future construction on the lots created, and staff has addressed how the configuration of the subdivision provides for natural heating and cooling through configuration of the subdivision, to the extent feasible.

Most importantly, with all of Commenter's arguments, it is important to recall the standard that applies to the City Council in reviewing this proposed subdivision. As set forth in Government Code Section 65589.5(j)(1), the City may only deny the project if it finds, based on written findings supported by a preponderance of the evidence in the record that (1) the project would have a specific adverse impact upon the public health or safety unless the project is disapproved, and (2) there is no feasible method to satisfactorily mitigate or avoid the adverse impact other than the disapproval of the housing development project or the approval on the condition that it be developed at a lower density. Commenter does not provide evidence that the alleged inconsistencies with the General Plan and Subdivision Ordinance rise to the level of a "specific adverse impact" as defined in Section 65589.5(j)(1), and therefore, even if these inconsistencies did exist, they are not sufficient grounds to deny the application for the tentative subdivision map.

Comment #4

Commenter makes numerous arguments as to why he believes the proposed subdivision is inconsistent with the City's General Plan.

Response #4

These arguments are also addressed in the Golub/Sterling letter. Please refer to Section 3 of the Golub/Sterling letter for an explanation of why Commenter's arguments do not serve as an appropriate basis for denial of the proposed subdivision.

Hunter Subdivision project

Responses to April 30, 2023 Comments of Joshua S. Devore

Comment #1

Commenter contends that there is no operating well on the project site and asserts that the well has not been operating for some time, rendering it abandoned. Commenter then states that "the required baseline of "existing" water use on the parcel is zero." Commenter further asserts that the City is using historical well production data to provide a hypothetical baseline with regard to the capacity of the project's on-site well.

Response #1

Substantial evidence in the EIR including the pump test (Draft EIR Appendix L, "Well Capacity Study, September 9, 2021") , and acknowledged by the Commenter, confirms that the on-site well is operational. Further, Commenter provides no evidence that the well is abandoned. Indeed, the original application for the project, filed with the City in 2010, not only mentions the then-current use by the City of water from the on-site well, but also expressly calls for the use of the on-site well to provide landscaping water for the project. Accordingly, the record confirms the ongoing intent to continue use of the legally permitted on-site well.

Finally, Commenter incorrectly asserts that the EIR employed a hypothetical baselines of water use based on historic production of the on-site well. As review of the EIR confirms that this is not the case. The EIR states, at page 3.13-31, that the project's "estimated indoor water demand is 19.88 acre-feet per year at completion during normal water years (see Table 3.13-10). The Proposed project's landscape irrigation demand would account for 17.16 acre-feet per year." Given this, the EIR concludes that that project's "entire water demand [is] 37.04 acre-feet per year…." Accordingly, the EIR evaluated the project's entire water demand as new, and thus was employing a baseline of zero water use.

Comment #2

Commenter asserts that the City should update its Well Capacity Study Memorandum "to comply with the revised substantially reduced allocation limit" under Napa County policy as, in his opinion, Napa County's policy applies to the project's on-site well.

Response #2

This comment is based on an apparent misunderstanding of County's current policy regarding wells. The existing well on project site, which was originally permitted in 1976, remains operable (the well was once referenced in the EIR as "inoperable" because it was not in use at the time, but it was subsequently verified in the 2021 test of the well to be operable and capable of meeting projected needs).

Because the well has an existing permit that, to the City's current knowledge, does not require modification, and because no increase in well use over historic levels is proposed, the evidence before the City does not suggest that a new well permit is required by Napa County. Giving this, the pumping limitations cited in the comment (which affect only new wells, or modified wells with new permits) would not apply. Further, as documented in detail in the EIR and in the proposed approval documents, the City's Water Neutrality Ordinance applies to the project.

Comment #3

Commenter states that the water drawn from the project's on-site well may be drawing from the same basin that supplies the City's wells, and contends that the EIR should have included "an analysis of well interference." Commenter asserts that the on-site well is drawing from the same basin as the City's wells, and that "the project's water neutrality analysis should have included the entirety of the project's water use, without any exclusion for the well."

Commenter also cites a September 27, 2018 Second Notice of Identified Issues Letter sent to the applicant by the City as specifically requiring a well interference analysis.

Response #3

The FEIR considers the potential impact of the existing Hunter groundwater well on the Napa Valley Subbasin as a whole. This consideration included the Stonebridge Well (SBW) field. The FEIR acknowledges that the Hunter well is an existing facility and does not represent a new demand on the Subbasin. The FEIR also acknowledges that the City does not rely exclusively on the SBW facility for its water supply. The City also sources drinking water from Bell Canyon Reservoir and City of Napa. Substantial evidence in the FEIR reflects that these sources are hydraulically independent of the Napa Valley Subbasin and reduce the City's dependence on SBW. This is confirmed by the 2021 Well Capacity Study, which noted that,

> "During the 24-hour pumping test, depth to groundwater was steady at 23 feet below ground surface (about 192 feet above sea level)."

Given that there was no drawdown of groundwater levels at the site of the well itself, it can be concluded that use of the well—particularly on an intermittent basis—would not cause a drawdown of water levels at the SBW facility.

Since the project will source its outdoor and domestic water need from such hydraulically independent water sources, the City appropriately did not the impact of the Hunter Development on other, independent, water sources.

Staff's opinion is that the 2021 Well Capacity Study resolves the issue of the well interference study discussed in the September 27, 2018 letter. As discussed above, the 2021 Well Capacity Study found no drawdown of water in the well under constant pumpting.

Comment #4

Comment asserts that, due to its reliance on water-saving measures from February 2017, the EIR's Water Neutral Report must be updated to account for current conditions.

Response #4

This comment does not raise new information but instead reiterates known risks related to groundwater availability during drought conditions. This potential risk and the measures imposed to avoid and reduce potentially significant impacts with regard to the project's use of water are discussed at length in the FEIR.

Comment #5

Commenter opines that the EIR wrongly concludes that is no mitigation available to address the project's significant impacts relating to Vehicle Miles Traveled ("VMT"). Commenter states that improvements to the City's street network would lessen project's trips – particularly connection of Adams to Silverado Trail – and so should be required as mitigation for the project's VMT impacts.

Response #5

As required by CEQA the EIR seeks to identify feasible mitigation measures. The connection of Adams Street to Silverado Trail, via a new bridge over the Napa River, is a multi-million-dollar project. This improvement, and similar improvements raised by the Commenter, are not feasible mitigation measures because a public agency cannot require mitigation that does not bear a reasonable relationship to the burden created by the development. (*See Dolan v City of Tigard* (1994) 512 US 374; *Nollan v California Coastal Comm'n* (1987) 483 US at 835 n4.)

In *Dolan*, the U.S. Supreme Court adopted a "rough proportionality" standard for the relationship between a project's impacts and a dedication requirement imposed by the approving agency. Based on an individualized determination relating to the project, the City would have to demonstrate that both the nature and extent of the required dedication, in this case the multi-million dollar off-site improvements proposed by Commenter, are reasonably related to the impact of the proposed project.

Further, the court in *Alliance for Responsible Planning v Taylor* (2021) 63 Cal.App.5th 1072, 1085, applied the *Nollan/Dolan* test in holding that requiring new development to pay fees to mitigate cumulative traffic was unconstitutional. The court found the measure violated the *Nollan/Dolan* rough-proportionality test because it required a developer to construct improvements, as would be the case here if the City attempt to impose the mitigation measures recommended by the Commenter, would exceed the extent of the development's own impact. Like any government exaction or condition of approval, a mitigation measure cannot violate state or federal constitutional standards. This limitation is explicitly stated in CEQA Guidelines sections 15041(a) and 15126.4(a)(4).

Finally, by providing a new, more convenient travel route between St Helena and local and regional destinations, construction of the new Adams Street connection to Silverado Trail could itself create new VMT by encouraging additional vehicle travel. This potential impact will need to be addressed at the time the City is considering approval of such a project, but is at this time speculative and beyond the scope of the EIR for the Hunter project.

Comment # 6

Commenter contends that the EIR uses an Affordable Housing percentage of 28.73% in its traffic analysis, when there is no affordable housing in the project. Further Commenter stated that the EIR fails to use reasonable assumptions for the project, substantially undercounts the expected traffic increase, and does not comport its analysis with the description or stated intended use of the project.

Response # 6

As noted in the EIR and in the proposed conditions of approval for the Tentative Map, the proposed project will be required to comply with the City's inclusionary housing regulations, and to obtain an approved Affordable Housing Agreement before the map can be recorded. The project will, in fact, include affordable housing as required by the St Helena Municipal Code, which for a project of the size proposed requires that 20 percent of units be affordable. The "28.73%" figure is apparently derived from a statement in the Project Description in the Draft EIR that, "The Proposed Project applicant has proposed to enter into an Affordable Housing Agreement with the City for the 25 multi-family units." This overstates the 20 percent requirement, which for the 76 single-family and multi-family units would be 15 units.

The trip generation rates were calculated using the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition (2017). This manual provides substantial evidence supporting the EIR's estimations of vehicle trips for proposed development projects. The project's trip generation estimates and distribution patterns were reviewed and approved by the City's Traffic Engineer for use in the traffic impact analysis (TIA).

Trip generation is determined by housing type, rather than affordability, per the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017. Therefore, as described in Section 3.1 of the Traffic Impact Study, Hunter Subdivision (April 2021), trip generation for the proposed project is based on single-family detached housing (ITE Code 210) and Multifamily Housing, Low Rise (ITE Code 220).

Comment # 7

Commenter states that idling vehicles are a substantial contributor to GHG emissions and opines that the EIR fails to analyze the significant impact of idling vehicles resulting from the project sitting in the unmitigated traffic it will create. Specifically, Commenter objects to what he states is the allocation of 4 AM Peak Hour outbound trips for the 11 Accessory Dwelling Units and claims that the 87 new units will result in more than two people driving their children to school by crossing Main at Adams, and more than one person picking children. He opines that "reasonable assumptions would suggest the affordable and multi-family units to lead to more trips

for the residents of those units given the nature of the local workforce." Further, Commenter objects to the use of standard assumptions given the "unique nature of the Napa Valley economy and local transportation demands."

Response #8

Commenter does not provide any substantial evidence to support his non-expert opinion questioning the EIR's analysis of traffic. The EIR's analysis is supported by the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition (2017) and by the review of the City's Traffic Engineer.

Comment #9

Commenter asserts that improvements to Silverado Trail and to Pope Street and its bridge over the Napa River are necessary and objects to the City's determination that the project applicant cannot be required to construct these improvements individually. Commenter contends that the necessary improvements – "… especially connection of Adams to Silverado Trail, meet the *Nollan/Dolan* essential nexus and rough proportionality tests given that the improvement is necessarily located on, and immediately adjacent to, a very large-scale project."

Response # 9

The Commenter's legal opinion that the City can require the project applicant to construct improvements to the Silverado Trail and Pope Street is just that, legal opinion. As discussed in **Response to Comment #5**, the City has determined that the Commenter's recommended improvements are legally infeasible.

Comment #10

Commenter opines that the City cannot adopt a statement of overriding considerations because the project's VMT impacts are not significant and unavoidable but, in his opinion, can be addressed via requirement of improvements to Silverado Trail/Pope Street and the connection of Adams Street to Silverado Trail.

Response #10

Commenter's opinion regarding the legal feasibility of requiring the project applicant to make improvements to Silverado Trail/Pope Street and the connection of Adams Street to Silverado Trail are addressed in Response to Comment #9 above. The City has determined that the project's VMT impacts are not legally feasibly mitigatable and thus remain significant and unavoidable. Please See Responses to Comment #5. CEQA provides that lead agencies must weigh a proposed project's benefits against its unavoidable environmental risks and may find the adverse impacts "acceptable" if the benefits outweigh those effects. (Public Resources Code §21081(b); CEQA Guidelines §15093(a).) The City Council will undertake such a consideration at its hearing on the EIR and project.

Comment #11

Commenter asserts that the existing vineyard on the property is "crucial firebreak" and objects to that City's position that project is not near a SRA or VHFHSZ because the project "immediately adjacent to the VHFHSZ." The Comment opines that the project "must be revised and conditioned to retain a firebreak between the new development and existing development by leaving the existing vineyard intact."

Response #11

As the City has previously informed Commenter, the project site does not meet the definition of a "firebreak," which is an obstacle to the spread of fire, such as a strip of open space in a forest. The Hunter Property in its current state does not provide an obstacle to fire-spread; in fact just the opposite. The area is under constant scrutiny during weed abatement and fire seasons to reduce the potential for the spread of fire across the site.

Residential homes, such as the proposed project, constructed in accordance with California Fire Code requirements (fire resistant building materials, fire sprinkler systems, etc.) do not constitute a significant fire threat. Residential fires are much easier to contain than grass and vegetation wildfires.

Finally, Commenter is incorrect that the project is "immediately adjacent to the VHFHSZ." The project site and the surrounding land uses are located within an area mapped as "Non-VHFHSZ" under the Local Responsibility Area map by CAL FIRE (CalFire 2019). The VHFHSZ is across the Napa River from the project site – neither immediate nor adjacent.

Comment #12

The Commenter assert that "without connection of Adams Street to Silverado Trail and the mitigation of the Silverado Trail/Pope Street intersection conditions," the project "lacks safe emergency access and egress and would worsen existing emergency evacuation times for residents of the City."

Response # 12

Please see Final EIR Master Response 1 for a detailed discussion of the EIR's analysis of emergency access issues.

Comment # 13

Commenter contends that the project "will obstruct emergency access for existing residents, particularly those in Vineyard Valley" and states that the "levee maintenance road is [not] a suitable evacuation road for the project" because it not 30-feet wide and paved with two feet of shoulders. Commenter asserts that [t]o the extent the levee maintenance road is a planned emergency access route for the project, it must be improved to meet the City's Fire Access Road standards as part of the project."

Response # 13

As stated in the Final EIR:

> Based on the results of the evacuation drill, the St. Helena Police Department has concluded that any additional traffic from the Proposed project would not significantly impact the ability of Vineyard Valley residents to safely evacuate the development in the event of an emergency. The Police Department also concluded that the proposed extension of Starr Avenue to Adams Street will help facilitate future evacuations by providing additional roadway capacity and additional routing options for emergency traffic (J.Tharp September 2021). If, for some reason, the levee maintenance road is closed residents of Vineyard Valley would exit using the access onto Pope Street.

Regarding the standards which apply to the levee road as an evacuation route, the standard cited by the commenter (30-foot width with two-foot shoulders) is incorrectly cited. This standard is for emergency vehicle (e.g., fire apparatus) access. The levee road, which was designated as the official evacuation route for the Vineyard Valley mobilehome community, meets City standards for emergency evacuation.

It should be noted that the City of St Helena Fire Department has determined (as discussed in the June 27, 2023 staff report) that the emergency vehicle access to the levee road is no longer needed and has recommended that it be removed from the proposed tentative map. If the City Council concurs with this recommendation, the easement and permit issues cited by the commenter would become moot.

Comment #14

Commenter asserts that the "the contemplated additional emergency access point onto the levee" cannot be constructed given "required conservation easements and numerous permit issues related to the flood control project, including the Incidental Take Permit under the Endangered Species Act."

Response #14

The proposed emergency access point to the levee road from the project site is shown in Figure 2-4a of the EIR. The levee road is a gravel road owned and maintained by the City of St. Helena. No conservation easements or permits would be required to construct the connection, other than a City encroachment permit (an entitlement which is identified in the EIR project description). There is no evidence that an incidental take permit would be necessary under either the State or Federal Endangered Species Act. The habitat type adjacent to the roadway is annual grassland (see Figure 3.4-1 and page 3.4-9 of the EIR). As discussed in the EIR (Section 3.4), there is low potential for special status species to occur on the project site. White-tailed kite and pallid bat may use trees in the project vicinity for roosting habitat. Preconstruction surveys and avoidance measures, as required by Mitigation Measures BIO-1 and BIO-2, would avoid any potential for incidental take to protected species.

It should be noted that the City of St Helena Fire Department has determined (as discussed in the June 27, 2023 staff report) that the emergency vehicle access to the levee road is no longer needed and has recommended that it be removed from the proposed tentative map. If the City Council concurs with this recommendation, the easement and permit issues cited by the commenter would become moot.

Comment #15

Comment opines that "any failure [of the existing levee] would result in ruinous liability to the City."

Response #15

This is not a comment regarding the adequacy of the City's compliance with CEQA. However, as a point of information, and was already included in the agenda materials for the City's May 1, 2023 hearing regarding the project, the City Attorney advised that:

> The case [law] regarding liability stemming from flood control projects make clear that the City would not be liable for damages simply because a flood event occurred, or even simply based on the failure of the levee, were that to occur at some point in the future. Any risk of liability would be based on and evaluation of the specific facts in event of future flooding, based on the factors described above. To limit its exposure to liability, and more importantly, to protect the community from future flooding, the City should conduct regular maintenance and inspections of the levee, and conduct repairs of the levee when deemed necessary or appropriate. This continuing inspection, maintenance and repair of the levee will help to demonstrate reasonable behavior on the part of the City. Further, the levee was designed and constructed in accordance with US Army Corps of Engineers standards to a 200 year flood standard. There is no indication that the design or the construction of the levee was unreasonable. The City should continue to be diligent in its inspection and maintenance of the levee, as it should with all public infrastructure. However, the City is not subject to strict liability based on its ownership of the levee, and any future liability will be based on whether the City is reasonable, based on the multifactor test described in this memo.

Comment #16

Commenter asserts that the project "will substantially alter the current view from Adams Street/Library Lane, and remove or otherwise obstruct current vineyard and hillside views" and requests mitigation to restrict future residents from modifying or altering exterior lighting.

Response # 16

The project's impacts on views and change in visual character of the project site is addressed in Section 3.1 of the Draft EIR, Aesthetics/Visual Resources. The analysis in Section 3.1 reviews project compliance with the City's General Plan, Zoning Ordinance, and Design Review requirements and also provides visual simulations of the proposed project to illustrate how development of the project would change views of the project site. As noted in Chapter 2, project Description, if the project is approved the City would require additional subsequent discretionary approvals, including Design Review.

Based on the analysis in the Draft EIR, all Aesthetic impacts would be less than significant with the exception of an increase in lighting that would result in a significant impact. Implementation of Mitigation Measure AES-1, which requires lighting design guidelines be developed for the project to minimize glare and light spillover would reduce that impact to less than significant.

The Commenter's opinion that the project would result in undesirable impacts, while not supported by substantial evidence, is noted and forwarded to the decision makers for their consideration.

Comment #17

Commenter objects to the EIR's conclusion that the project will not result a significant impact to agricultural resources.

Response #18

Substantial evidence in Chapter 3.2 of the Draft EIR, Agriculture and Forestry Resources, confirms that the project will not result in a significant impact to agricultural resources. Specifically the Draft EIR states:

> The project site includes 5.8 acres of Prime Farmland and 0.6 acres of Farmland of Statewide Importance (as defined by the FMMP) that would be converted to urban uses as a result of Proposed project implementation (see Table 3.2-1). The site also includes land designated as Farmland of Local Importance and Urban Land. Due to the presence of 6.4 acres of "Important Farmland," the LESA Model (Appendix B) was used to evaluate the quality of agricultural lands on the project site to determine the significance of potential Proposed project impacts. As described above, under Methods of Analysis, the LESA Model is used to provide a quantitative and consistent approach to determining potentially significant impacts to agricultural resources during the environmental review process. The model results in individual scores for the LE and SA factors, along with a total score out of 100 possible points.
>
> The dominant soil type on the project site is Bale clay loam (see Section 3.6, Geology and Soils), which has a relatively high Land

> Capability Classification and average to above-average Storie Index. This resulted in a moderate LE score. The relatively small size of the project site and the amount of urban land near the site resulted in a low SA score, despite the relatively good availability of water (due to the on-site irrigation well). The model returned an LE score of 35 and a SA score of 13.8 for a total score of 48.8 (see Appendix B). As shown in Table 3.2-3, the loss of agricultural resources would be considered significant only if the individual LE and SA subscores are each greater than or equal to 20 points. Therefore, impacts associated with the removal of prime farmland and farmland of statewide importance would be less than significant.

Comment #19

The Commenter recommends adoption of Alternative 3, the Park/Open Space Alternative to avoid fill of wetlands.

Response #19

The Comment is noted and will be provided to decision-makers for their consideration.

Comment #20

Commenter objects to the EIR's conclusion that the project is consistent with the applicable General Plan and land use regulations.

Response #20

Substantial evidence in Chapter 3.10 of the Draft EIR, Land Use, confirms that the project will not result in a significant impact related to any inconsistency with the City's applicable General Plan and land use regulations. Commenter's opinion is not supported by substantial evidence.

Comment #21

Commenter asserts that the EIR lacks substantial evidence to support a finding, that the project, and particularly Lot 52, will not have a significant impact on noise.

Response #21

Substantial evidence in Chapter 3.11 of the Draft EIR, Noise and Vibration, confirms that the project, with the implementation of recommended mitigation, will not result in a significant impact related to noise. Commenter's opinion is not supported by substantial evidence.

Comment #22

The Commenter asserts that the EIR should describe the project as impacting recreational facilities currently on the project site.

Response #22

As detailed in the EIR, the project site is privately-owned and is therefore not a public recreation area. Additionally, as discussed in Section 3.12, Public Services and Recreation, the proposed project applicant would pay required park fees to be used by the City to purchase land to construct new parks or upgrade existing recreation facilities. Commenter's opinion is not supported by substantial evidence.

Comment #23

Commenter asserts that the City cannot consider the development of affordable housing on the site in adopting statements of overriding consideration because there is no currently proposed affordable housing agreement. Commenter further opines that the draft statement of overriding consideration does not identify benefits.

Response #23

As noted in the EIR and in the proposed conditions of approval for the Tentative Map, the proposed project will be required to comply with the City's inclusionary housing regulations, and to obtain an approved Affordable Housing Agreement before the map can be recorded. Accordingly, contrary to the Comment, the project will, in fact, include affordable housing as required by the St. Helena Municipal Code.

The City has determined that the project's VMT impacts are not feasibly mitigatable and thus significant and unavoidable. CEQA provides that lead agencies must weigh a proposed project's benefits against its unavoidable environmental risks and may find the adverse impacts "acceptable" if the benefits outweigh those effects. (Public Resources Code §21081(b); CEQA Guidelines §15093(a).) The City Council will undertake such a consideration, including consideration of the project's required affordable housing, at its hearing on the EIR and project.

CITY COUNCIL RESOLUTION NO. XXXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST, HELENA, CERTIFYING THE ENVIRONMENTAL IMPACT REPORT (STATE CLEARINGHOUSE # 2018032014) FOR THE HUNTER SUBDIVISION PROJECT; ADOPTING FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT; ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS; AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM.

WHEREAS, the proposed Hunter Subdivision Project, Tentative Map 2022-001 ("Project") entails the subdivision of a 16.9 acre site (Assessor's Parcel No. 009-030-057; hereinafter, the "Project site") in the City of St. Helena ("City") into 51 lots to accommodate single-family residences, a 3.4-acre parcel that would accommodate 25 attached residential units (which would be income restricted, with 5 units affordable to very low-income families, and 20 to moderate income families), a 0.06-acre parcel that would not be developed, and a 0.04-acre parcel for an existing agricultural well, which will supply water for all onsite landscaping and other outdoor uses; and

WHEREAS, the proposed Project would result in the development of 87 residential units—51 single-family residences, accessory dwelling units ("ADUs") on 11 of the single family lots, and 25 attached residential units—resulting in an average density of 5.1 dwelling units per acre; and

WHEREAS, the proposed Project further includes grading of the Project site, construction of the extensions of Starr Avenue and Adams Street, construction of local residential streets, and installation of utility lines; and

WHEREAS, the proposed Project requires discretionary approvals from the City, including a Tentative Subdivision Map Approval (insert TSM No. 2022-001) and future discretionary approvals including an Affordable Housing Agreement, design review, and a conditional use permit, all of which must be obtained before development of the proposed Project may proceed;

WHEREAS, pursuant to Public Resources Code section 21067 of the California Environmental Quality Act (Pub. Resources Code, § 21000, *et seq.*) ("CEQA") and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000, *et seq.*), the City is the lead agency for the proposed Project; and

WHEREAS, pursuant to CEQA and the State CEQA Guidelines, the City determined that an Environmental Impact Report ("EIR") should be prepared in order to analyze all potential adverse environmental impacts of the proposed Project; and

WHEREAS, the City issued a Notice of Preparation ("NOP") for the Draft EIR that provided for a comment period of over 30 days, from March 6, 2018 to April 9, 2018, and the NOP

was sent to each responsible agency, trustee agency, the Office of Planning and Research ("OPR"), and interested parties, including members of the public who had requested such notice; and

WHEREAS, the City held a public scoping meeting on March 12, 2018 to further solicit comments on the scope of the Draft EIR; and

WHEREAS, the City initiated a 45-day public review and comment period for the Draft EIR, issuing a Notice of Availability and releasing the Draft EIR for public review and comment from September 23, 2021 through November 8, 2021; and

WHEREAS, pursuant to State CEQA Guidelines section 15086, the City consulted with and requested comments from all responsible and trustee agencies, other regulatory agencies, and others during the 45-day public review and comment period; and

WHEREAS, the City received a total of 122 letters during the 45-day public review and comment period, including 2 letters from interest group organizations, and 120 letters from individual members of the public; and

WHEREAS, the City held two public meetings, on November 2, 2021, and November 30, 2021, to further solicit public comments on the Draft EIR; and

WHEREAS, the City has prepared a Final EIR, consisting of the comments received during the 45-day public review and comment period on the Draft EIR, written responses to those comments, and revisions to the Draft EIR. For the purposes of this Resolution, the "EIR" shall refer to the Draft EIR, as revised by the Final EIR, together with the other sections of the Final EIR; and

WHEREAS, the EIR prepared in connection with the Project identified, discussed and sufficiently analyzed significant effects which may occur as a result of the Project, feasible mitigation measures necessary to avoid or substantially lessen the Project's potential environmental impacts and a range of feasible alternatives capable of eliminating or reducing any of these effects in accordance with CEQA and the State CEQA Guidelines; and

WHEREAS, the Planning Commission on February 7, 2023, held a public hearing to consider a recommendation to the City Council on the certification of the Final EIR; and

WHEREAS, following the conclusion of the public hearing, the Planning Commission adopted Resolution PC2023-001, recommending that the City Council certify the Final EIR; and

WHEREAS, all of the findings and conclusions made by the City Council pursuant to this Resolution are based upon the oral and written evidence presented to it as a whole and not based solely on the information provided in this Resolution; and

WHEREAS, prior to taking action, the City Council has heard, been presented with, reviewed and considered all of the information and data in the administrative record, including the Draft EIR, the Final EIR; and

WHEREAS, the City Council has reviewed and considered as well as the City Council's draft CEQA findings, draft Statement of Overriding Consideration, attached hereto as **Exhibit A**, and the draft Mitigation Monitoring and Reporting Program ("MMRP") attached hereto as **Exhibit B**, and all oral and written evidence presented to it during all meetings and hearings; and

WHEREAS, the EIR reflects the independent judgment of the City and is deemed adequate for purposes of making decisions on the merits of the Proposed Project; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY ST. HELENA DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The above recitals are true and correct and incorporated herein by reference.

SECTION 2. The City Council hereby finds that it has been presented with the EIR, which it has reviewed and considered, and further finds that the EIR is an accurate and objective statement that has been completed in full compliance with CEQA and the State CEQA Guidelines. The City Council finds that the EIR reflects the independent judgment and analysis of the City. The City Council declares that no evidence of new significant impacts or any new information of "substantial importance" as defined by State CEQA Guidelines section 15088.5, has been received by the City after circulation of the Draft EIR that would require recirculation. Therefore, the City Council hereby certifies the EIR based on the entirety of the record of proceedings.

SECTION 3. The City Council hereby adopts the "CEQA Findings of Fact" which were prepared in accordance with State CEQA Guidelines sections 15091 and which are attached hereto as Exhibit A and incorporated herein by this reference.

SECTION 4. Pursuant to Public Resources Code section 21081.6, the City Council hereby adopts the Mitigation Monitoring and Reporting Program attached hereto as Exhibit B and incorporated herein by this reference. Implementation of the Mitigation Measures contained in the Mitigation Monitoring and Reporting Program is hereby made a condition of approval of the Project. In the event of any inconsistencies between the Mitigation Measures set forth in the EIR or the Findings of Fact and the Mitigation Monitoring and Reporting Program, the Mitigation Monitoring and Reporting Program shall control.

SECTION 5. The documents and materials that constitute the records of proceedings on which this Resolution has been based are located at the City of St. Helena City Hall at 1572 Railroad Ave. St. Helena, CA. The custodian for these records is the City of St. Helena City Clerk. This information is provided in compliance with Public Resources Code Section 21081.6.

SECTION 6. City staff shall cause a Notice of Determination to be filed and posted with the County Clerk and the State Clearinghouse within five working days of the adoption of this Resolution.

I HEREBY CERTIFY that the City of St. Helena City Council approved the foregoing at a Special Meeting of the St. Helena City Council on June 26, 2023, by the following vote:

Mayor Dohring: _____

Vice Mayor Hall: _____

Councilmember Chouteau: _____

Councilmember Hardy: _____

Councilmember Summers: _____

APPROVED:	ATTEST:
_____	_____
Paul Dohring, Mayor	Cindy Tzafopoulos, City Clerk

ADOPTED AND APPROVED the 26th day of June, 2023.

EXHIBIT A: DRAFT FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS

SECTION 1. FINDINGS REGARDING LESS THAN SIGNIFICANT IMPACTS NOT REQUIRING MITIGATION

Consistent with Public Resources Code section 21002.1 and State CEQA Guidelines section 15128, the EIR focused its analysis on potentially significant impacts, and limited discussion of other impacts for which it can be seen with certainty that there is no potential for significant adverse environmental impacts. State CEQA Guidelines section 15091 does not require specific findings to address environmental effects that an EIR identifies as "no impact" or a "less than significant" impact. Nevertheless, the City Council hereby finds that the Project would have either no impact or a less-than-significant impact to the following resource areas:

A. AESTHETICS

1. Scenic Vistas

Threshold: Would the Project have a substantial adverse effect on a scenic vista?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.1-24 through 3.1-26.)

Explanation: The City's 1993 General Plan and the City's recently adopted 2019 General Plan do not designate any specific scenic resources or vistas within the City for protection, and so the Project will not have a substantially adverse effect on any designated scenic vista. Moreover, the Project has been designed to protect views of the surrounding hillsides and open space areas through the orientation of Starr Avenue and Adams Street, and the Project site itself does not include highly valued landscape and is not considered a scenic vista. For these reasons and the reasons discussed in the EIR, the Project would not have a substantial adverse effect on a scenic vista. (Draft EIR, pp. 3.1-24 through 3.1-26.)

2. Scenic Resources within a State Scenic Highway

Threshold: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Findings: No impact. (Draft EIR, p. 3.1-24.)

Explanation: The Project would not substantially damage scenic resources within a state scenic highway because there is no state highway that would be impacted by the Project. The Project site is located approximately 0.2 miles from SR 29, an eligible state scenic highway, but the Project site is not visible from the highway due to intervening trees, buildings, and structures. The Project site does not contain any scenic resources such as rock outcroppings, does not contain any other significant natural or historical features that are visible from a state scenic highway, and, accordingly, would not limit view of such features from SR 29 or any other state scenic highway. For these reasons and the reasons discussed in the EIR, the Project would not substantially damage scenic resources within a state scenic highway. (Draft EIR, p. 3.1-24.)

3. Existing Visual Character of the Site and Surrounding Area

Threshold: Would the Project conflict with applicable zoning and other regulations governing scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.1-26 through 3.1-34.)

Explanation: The Project will comply with the City's Design Review Ordinance and undergo design review to ensure that the Project is visually consistent and compatible with the applicable General Plan, with adjacent buildings, and with the existing environment. Additionally, the Project will comply with the site's zoning requirements, including requirements relating to building height and mass. For these reasons and the reason set forth in the Draft EIR, the Project would not conflict with applicable zoning or other regulations governing scenic quality. (Draft EIR, pp. 3.1-26 through 3.1-27.)

Additionally, the Project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Views of the site are limited and primarily available from private property (i.e., backyards), at the terminus of Starr Avenue and Adams Street, along Del Rio Court (a private street) within the immediate vicinity of the site, and from a gravel maintenance road bordering the north/northwest boundary of the site used by the public as a walking trial. (Draft EIR, p. 3.1-27.) Visual simulations in the Draft EIR illustrate the fact that the Project will not substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Draft EIR, pp. 3.1-29, 3.1-21.) For these reasons and the reasons set forth in the EIR, the Project will have a less-than-significant effect relating to this issue, and no mitigation is required. (Draft EIR, pp. 3.1-26 through 3.1-34.)

B. AGRICULTURE AND FORESTRY RESOURCES

1. Farmland Conversion

Threshold: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: Less-than-significant impact. (Draft EIR, p. 3.2-12.)

Explanation: While the Project site does include 5.8 acres of Prime Farmland and 0.6 acres of Farmland of Statewide importance that would be converted to urban uses as a result of the Project, the Project would have a less-than-significant impact relating to this issue. The California Land Evaluation and Site Assessment ("LESA") model—a model designed to ensure a quantitative and consistent approach to determining potentially significant impacts to agricultural resources—was used to assess the Project's impact on agricultural lands. Based on the LESA assessment which evaluated the soil resource quality, project size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands the quality of agricultural lands on the

Project site were found to be low quality and did not meet the standard to be considered significant agricultural resources. (Draft EIR, pp. 3.2-9-3.2-10.)As set forth in the EIR, the Project's impacts associated with the removal of prime farmland and farmland of statewide importance would be less than significant. (Draft EIR, p. 3.2-12.)

2. Agricultural Zoning

Threshold: Would the Project conflict with existing zoning for agricultural use, or with a Williamson Act contract?

Finding: Less-than-significant impact. (Draft EIR, pp. 3.2-11.)

Explanation: The Project site is not under a Williamson Act contract and does not include any land zoned for agricultural use. (Draft EIR, pp. 3.2-6, 3.2-11.) There are agriculturally zoned lands to the north and northwest of the Project site. The Project would not directly or indirectly affect lands to the north and northwest such that continued agricultural use would be impaired. . Notably, the development of residences on the Project site would not directly or indirectly result in conversion of the agricultural land to the north and northwest of the Project site to non-agricultural uses. The City's Municipal Code (Chapters 17.32 through 17.60 and 17.68) includes provisions that require property owners adjacent to agricultural operations to recognize that adjacent properties have the right to farm and that there is a good faith expectation that the adjacent neighbors will not complain to the City regarding legal normal agricultural activities, including day or night disbursement of chemicals, and creation of dust, noise, or fumes. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.2-11 through 3.2-13.)

3. Forestland Zoning

Threshold: Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Finding: No impact. (Draft EIR, pp. 3.2-6, 3.2-11.)

Explanation: The Project site does not contain any forest or timberland and is not zoned for forest land, timberland, or timberland production. (Draft EIR, pp. 3.2-6, 3.2-11.)

4. Loss of Forest Land

Threshold: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No impact. (Draft EIR, pp. 3.2-6, 3.2-11.)

Explanation: The Project site does not contain forest land and is not designated as forest land. (Draft EIR, pp. 3.2-6, 3.2-11.)

5. Indirect Conversion

Threshold: Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Finding: Less-than-significant impact. (Draft EIR, pp. 3.2-12 through 3.2-13.)

Explanation: While there is agricultural land to the north and northwest of the Project site that is currently in active agricultural production, the Project would result in physical changes to the environment that would . directly or indirectly result in a conversion of this farmland to non-agricultural use. In addition, the City's Municipal Code includes provisions that require property owners adjacent to agricultural operations to recognize that adjacent properties have the right to form and that there is a good faith expectation that the adjacent neighbors will not complain to the City regarding legal normal agricultural activities, including day or night disbursement of chemicals, and creation of dust, noise, or fumes. As noted above, the Project would not convert forest land to non-forest use, as there is no forest land on the Project site. For these reasons and the reasons set forth in the EIR, the Project would have no impact to farmland or forest land. (Draft EIR, pp. 3.2-12 through 3.2-13.)

C. AIR QUALITY

1. Air Quality Management Plan Consistency

Threshold: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.3-28 through 3.3-31.)

Explanation: The Bay Area Air Quality Management District ("BAAQMD") has set forth a three-step methodology for determining a project's consistency with the applicable air quality plan. The EIR engaged in this three-step process and concluded based on substantial evidence that the Project would support the goals of the applicable air quality plan (the 2017 Clean Air Plan), that the Project complies with applicable control measures from the applicable air quality plan, and that the Project would not disrupt or hinder implementation of any control measures from the applicable air quality plan. As part of this analysis, the EIR demonstrated the Project would result in less than significant construction and operational emissions and would not result in long-term adverse air quality impacts. For these reasons and the reasons set forth in the EIR, the Project would not conflict with or obstruct implementation of the applicable air quality plan and would thus have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.3-28 through 3.3-31.)

2. Criteria Pollutant Emissions

Threshold: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.3-31 through 3.3-36.)

Explanation: The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region, the San Francisco Bay Area Air Basin ("SFBAAB"), is in non-attainment under applicable federal or state ambient air quality standards. BAAQMD has developed thresholds of significance to determine whether a project's individual emissions would be cumulatively considerable. The EIR estimated the Project's emissions relating to both construction and operation using the CalEEMod model and concluded, based on substantial evidence, that the Project would not result in a cumulatively considerable net increase of any criteria pollutant (including ROG, NO_x, PM_{10}, and $PM_{2.5}$) for which the SFBAAB is in non-attainment. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.3-31 through 3.3-36.)

3. Sensitive Receptors

Threshold: Would the Project expose sensitive receptors to substantial pollutant concentrations?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.3-36 through 3.3-37.)

Explanation: The Project would not generate substantial criteria air pollutant emissions or associated pollutant concentrations, as construction and operation of the Project would not exceed the BAAQMD significance thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$. Moreover, the Project would not expose sensitive receptors to substantial concentrations of Toxic Air Contaminants ("TACs"), as the Project's TAC emissions during both construction and operation of the Project would be well below the BAAQMD significance thresholds. The Project additionally would not expose sensitive receptors to significant carbon monoxide concentrations, as the Project's carbon monoxide emissions would be less than significant. For these reasons and the reasons set forth in the EIR, the Project would not expose sensitive receptors to substantial pollutant concentrations, and the Project thus have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.3-31 through 3.3-37.)

4. Objectionable Odors

Threshold: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Findings: Less-than-significant impact. (Draft EIR, p. 3.3-28.)

Explanation: The Project does not include a land use associated with the generation of odors that could affect a substantial number of people and would not generate such odor impacts. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.3-28.)

D. BIOLOGICAL RESOURCES

1. Riparian Habitat and Sensitive Natural Communities

Threshold: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Findings: Less-than-significant impact. (Draft EIR, p. 3.4-43.)

Explanation: There are no riparian habitats or sensitive natural communities within the Project site that were identified in local, regional, or federal plans, policies, or regulations. For this reason and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.4-43.)

2. Local Policies or Ordinances Protecting Biological Resources

Threshold: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Findings: Less-than-significant impact. (Draft EIR, p. 3.4-43.)

Explanation: The Project would not conflict with any local policies or ordinances protecting biological resources. For example, the Project would not require removal of any trees, and no permit relating to this issue is therefore required. For these reasons and the reasons set forth in the EIR, there would be a less-than-significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. 3.4-43.)

3. Adopted Habitat Conservation Plans

Threshold: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

Findings: No Impact. (Draft EIR, p. 3.4-43.)

Explanation: The Project site is not located within the boundary of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any approved local, regional, or state habitat conservation plan. Thus, no impact would occur in this regard, and no mitigation is required. (Draft EIR, p. 3.4-43.)

E. ENERGY RESOURCES

1. Wasteful, Inefficient, or Unnecessary Consumption

Threshold: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.5-14 through 3.5-16.)

Explanation: The Project would not result in inefficient, wasteful, or unnecessary consumption of energy during construction or operational activities. The EIR analyzed the Project's potential consumption of various energy resources, including electricity, natural gas, and petroleum during both the Project's construction and operation phases, and it concluded based on substantial evidence that the Project would have a less-than-significant impact relating to this issue. For these reasons and the reasons set forth in the EIR, the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. (Draft EIR, pp. 3.5-14 through 3.5-16.)

2. Conflict with Energy Plans

Threshold: Would the Project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.15-19 through 3.15-20.)

Explanation: The Project is required to meet Title 24 and California Green Building Standards Code (CALGreen) standards to reduce energy demand and increase energy efficiency, and the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.15-19 through 3.15-20.)

F. GEOLOGY AND SOILS

1. Rupture of an Earthquake Fault

Threshold: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death, involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Findings: No impact. (Draft EIR, p. 3.6-20.)

Explanation: The Project site is not located within a fault rupture hazard zone. Because the Project site is not crossed by any known active or potentially active fault, the Project would

not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault, and no mitigation is required. (Draft EIR, p. 3.6-20.)

2. Landslides

Threshold: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death, involving landslides?

Findings: No impact. (Draft EIR, p. 3.6-20.)

Explanation: The Project site is not located in an area subject to landslides. The Project site is located on relatively flat ground and is not adjacent to any areas with steep slopes or hillsides that could result in a landslide. The Project would therefore not cause potential substantial adverse effects relating to landslides, and the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.6-20.)

3. Soil Erosion or Loss of Topsoil

Threshold: Would the Project result in substantial soil erosion or the loss of topsoil?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.6-20 through 3.6-21.)

Explanation: The Project would not result in substantial soil erosion or the loss of topsoil. A potentially significant impact relating to soil erosion or loss of topsoil could occur if the Project would result in soil erosion sufficient to undermine structures or compromise slope stability—e.g., if the Project would result in rills (small narrow channels) and gullies, whereby storm runoff produces deep incisions into the soils and slopes. The Project, however, would not result in such soil erosion because the Project site is on relatively flat land. Moreover, runoff resulting from the Project would not result in substantial soil erosion or loss of top soil, as runoff would be managed and discharged into an existing detention basin. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.6-20 through 3.6-21.)

4. Septic Tanks

Threshold: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Findings: No impact. (Draft EIR, p. 3.6-21.)

Explanation: The Project would not include septic tanks or alternative wastewater disposal systems; rather, the Project would connect to the City's sewer system to convey wastewater to a treatment plant. For these reasons and the reasons discussed in the EIR, the Project would not result in a significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. 3.6-21.)

5. Geologic Features

Threshold: Would the Project directly or indirectly destroy a unique geologic feature?

Findings: Less-than-significant impact. (Draft EIR, p. 3.6-21.)

Explanation: The Project would not directly or indirectly destroy a unique geologic feature. The Project site does not contain any unique geologic features, such as a landform or rock outcrop of scientific, cultural, or aesthetic interest. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue and not mitigation is required. (Draft EIR, p. 3.6-21.)

G. GREENHOUSE GAS EMISSIONS

1. Greenhouse Gas Emissions

Threshold: Would the Project generate greenhouse gas emissions ("GHGs"), either directly or indirectly, that may have a significant impact on the environment?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.7-30 through 3.7-31.)

Explanation: The Project would not generate GHGs, either directly or indirectly, that could have a significant impact on the environment. The EIR analyzed the amount of GHGs that would be generated by the Project during both its construction and operation phases, and it concluded based on substantial evidence that the amount of GHGs generated by the Project would be below BAAQMD's GHG threshold of significance. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.7-30 through 3.7-31.)

2. Conflicts with Applicable Plans, Policies, and Regulations

Threshold: Would the Project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.7-31 through 3.7-38.)

Explanation: The Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose or reducing the emissions of greenhouse gases. The City has not adopted an applicable GHG reduction plan. As set forth in the EIR, the Project would be consistent with the Association of Bay Area Governments ("ABAG") and Metropolitan Transportation Commission's Plan Bay Area, the California Air Resources Board's ("CARB") Scoping Plan, and other goals and policies adopted for the purpose of reducing GHG emissions. (Draft EIR, pp. 3.7-31 through 3.7-38.) For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.7-31 through 3.7-38.)

H. HAZARDS AND HAZARDOUS MATERIALS

1. Hazardous Materials

Threshold: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.8-15 through 3.8-16.)

Explanation: The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during its construction or operation.

During construction of the Project, no acutely hazardous materials would be used, and while some hazardous materials (such as fuels, motor oil, and lubricants) would be used in small amounts, the materials would not pose a significant risk to off-site residents or construction workers because they would be used and stored in accordance with existing laws and regulations. Moreover, development of the Project would be subject to existing regulatory requirements for hazardous materials, including requirements under the National Pollutant Discharge Elimination System ("NPDES") permit through the development and implementation of a Stormwater Pollution Prevention Plan ("SWPPP"). The SWPPP would require implementation of control measures for hazardous material storage, soil stockpiles, inspections, maintenance, training of employees, and containment of releases to prevent contaminated runoff into nearby stormwater collection systems or waterways. Included within the SWPPP, best management practices would be required to contain hazardous materials and minimize the contact of hazardous materials with stormwater. (Draft EIR, p. 3.8-15.)

During operation of the Project, residents would be expected to use and store typical household hazards such as house paint, cleaning products, herbicides, and pesticides. The amounts of hazardous materials that residents store or use is negligible and not considered sufficient to create a significant safety hazard to the public, or otherwise pose a significant risk to human health or the environment. (Draft EIR, p. 3.8-16.)

For these reasons and the reasons set forth in EIR, the Project would not create a significant hazard to the public or the environment through the routine transport, use, or dispose of hazardous materials, and impacts relating to this issue would be less than significant. (Draft EIR, pp. 3.8-15 through 3.8-16.)

2. Acutely Hazardous Materials within ¼ Mile of an Existing or Proposed School

Threshold: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Findings: Less-than-significant impact. (Draft EIR, p. 3.8-14.)

Explanation: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Project site is not located within one-quarter mile of an existing or proposed school. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.8-14.)

3. Hazardous Materials Sites

Threshold: Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Findings: Less-than-significant impact. (Draft EIR, p. 3.8-14.)

Explanation: The Project would not be located on a site that is included on a list of known hazardous materials sites, as confirmed in the EIR and in a Phase I ESA prepared for the Project. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.8-14.)

4. Public Airports and Private Airstrips

Threshold: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?

Findings: No impact. (Draft EIR, p. 3.8-15.)

Explanation: The Project site is not located within an airport land use plan or within two miles of an airport. For these reasons and the reasons set forth in the EIR, there would be no impact relating to this issue. (Draft EIR, p. 3.8-15.)

5. Emergency Access

Threshold: Would the Project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.8-20 through 3.8-21.)

Explanation: Neither the construction nor the operation of the Project would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. During construction, the Project will implement the SWPPP, which would include an Integrated Contingency Plan and an evacuation plan for construction workers in the event of an emergency. Compliance with the SWPPP and the Integrated Contingency Plan would ensure impacts are less than significant during construction. The Project would similarly have a less-than-significant impact during its operation phase, as the City's Fire Department will review

the site plans to ensure adequacy of emergency access. Streets and roads will be adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and the Project will have alternative emergency ingress and egress. For these reasons and the reasons set forth in the EIR, the Project will have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.8-20 through 3.8-21.)

6. Wildland Fires

Threshold: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.8-21 through 3.8-22.)

Explanation: Neither construction nor operation of the Project would expose people to adverse impacts involving wildland fire. CalFire does not identify the Project site as being within an area susceptible to wildland fires. During construction of the Project, the Project will comply with best management practices included within the SWPPP to further ensure that the Project would not result in wildfires. Operation of the Project would not have adverse impacts relating to wildland fires, as the Project will be built in compliance with the California Building Code's requirements for fire protection. Moreover, and as discussed above, the Project is designed with an emergency vehicle access to facilitate the ingress and egress of emergency response vehicles, including the City and Napa County Fire Department's apparatus, and the Project is designed to further provide emergency evacuation access for residents. For these reasons and the reasons set forth in the EIR, the Project would not result in a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.8-21 through 3.8-22.)

I. HYDROLOGY AND WATER QUALITY

1. Compliance with Water Quality Standards

Threshold: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.9-34 through 3.9-39.)

Explanation: The Project would not violate any water quality standards or waste discharge requirements, and it would not otherwise substantially degrade surface or groundwater quality. Construction of the Project would not result in any potentially significant impact relating to this issue because the Project would comply with the Construction General Permit, and the City's Stormwater and Runoff Pollution Control Ordinance would require implementation of a SWPPP to address potential construction-related impacts on water quality. The standard requirements contained in a SWPPP are sufficient to address a project's potential to violate water quality standards or waste discharge requirements. Operation of the Project would likewise not result in any potentially significant impact relating to this issue as the Project would comply with the standards and performance criteria contained in the Small MS4 Permit, which requires

development projects to adhere to site design measures, source control measures, treatment control measures, and certain operation and maintenance requirements that ensure a less-than-significant impact. For these reasons and the reasons set forth in the EIR, the Project would not result in a significant impact relating to this issue. (Draft EIR, pp. 3.9-34 through 3.9-39.)

2. Groundwater Supplies

Threshold: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.9-40 through 3.9-43.)

Explanation: The Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basis. The County works with local jurisdictions, including the City, to sustainably manage the Napa Valley Groundwater Subbasin in compliance with the Sustainable Groundwater Management Act ("SGMA"). In its most recent assessment of conditions, the County, through its technical consultant, has determined that the Subbasin is not exhibiting significant impacts with regard to the applicable sustainability indicators defined by SGMA, including lowering of groundwater levels, depletion of groundwater in storage, degradation of groundwater quality, and depletion of interconnected surface waters. The EIR additionally includes an analysis of the Project's demand on groundwater resources, including the Project's use of the on-site well, and the EIR concluded, based on substantial evidence, that the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.9-40 through 3.9-43.)

3. Existing Drainage Patterns and Runoff

Threshold: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.9-44 through 3.9-45.)

Explanation: The Project would not alter the course of a stream or river and is not located within a Special Flood Hazard Area ("SFHA") of the Napa River, and accordingly, the Project would not impede or redirect flood flows in a manner that would result in substantial erosion or siltation on- or off-site. Moreover, the Project would not result in substantial erosion or siltation on- or off-site as the off-site City detention basin has been designed with adequate capacity to capture and treat increases in the rate and volume of stormwater runoff associated with development in this area of the City, including development of the Project site with impervious surfaces. Additionally, the Project would be subject to the most recent standards and performance

criteria contained in the Small MS4 Permit and a Stormwater Control Plan that complies with the Bay Area Stormwater Management Agencies Post Construction Manual. The Project's compliance with existing permitting requirements and standard conditions of approval (i.e., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation, including erosion and siltation. For these reasons and the reasons set forth in the Draft EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.9-44 through 3.9-45.)

4. Surface Runoff and Flooding

Threshold: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

Findings: Less-than-significant impact. (Draft EIR, p. 3.9-45.)

Explanation: The Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. The City-owned off-site detention basin has been designed to store the increase in storm water runoff generated from the Project site during a 100-year storm event. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.9-45.)

5. Stormwater Drainage System Capacity and Polluted Runoff

Threshold: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.9-45 through 3.9-46.)

Explanation: The Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project would comply with the City's Municipal Code, which requires the Project to construct storm drains or improve existing storms drains to ensure adequate capacity is available to carry runoff produced by a 10-year storm event. The Project's utility plan confirms that on-site storm flows at the Project site would be conveyed to the off-site detention center via storm drain lines. Moreover, the existing off-site detention basin was designed to accommodate runoff from the Project site. For these reasons and the reasons set forth in the EIR, the Project's impact relating to this issue would be less than significant. (Draft EIR, pp. 3.9-45 through 3.9-46.)

6. Flood Flows

Threshold: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

Findings: Less-than-significant impact. (Draft EIR, p. 3.9-44.)

Explanation: The Project would not alter the course of a stream or river and is not located within a Special Flood Hazard Area ("SFHA") of the Napa River, and accordingly, the Project would not impede or redirect flood flows in a manner that would result in substantial erosion or siltation on- or off-site. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.9-13.)

Natural Hazards

Threshold: In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

Findings: No impact. (Draft EIR, p. 3.9-34.)

Explanation: The Project site is not within a flood hazard, tsunami, or seiche zone, and the Project and does not contain the preconditions necessary for a project to be at risk of hazards due to a tsunami, or seiche which require a reasonable distance and elevation relative to a coastline (for sea level rise or seiche) or large body of water (for seiche waves). There be no impact (or risk) associated with a tsunami or seiche. For these reasons and the reasons set forth in the EIR, there would be no impact relating to this issue. (Draft EIR, p. 3.9-13.)

7. Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

Threshold: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Findings: Less-than-significant impact. (Draft EIR, p. 3.9-46.)

Explanation: The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The County works with local jurisdictions, including the City, to sustainably manage the Napa Valley Groundwater Subbasin in compliance with SGMA. In its most recent assessment of conditions, the County, through its technical consultant, determined that the Subbasin is not exhibiting significant impacts with regard to the applicable sustainability indicators defined by SGMA, including lowering of groundwater levels, depletion of groundwater in storage, degradation of groundwater quality, and depletion of interconnected surface waters. Moreover, the Project would comply with applicable regulations and permits designed to comply with the Water Quality Control Plan for the San Francisco Bay

Region. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.9-46.)

J. LAND USE AND PLANNING

1. Divide an Established Community

Threshold: Would the Project physically divide an established community?

Findings: No impact. (Draft EIR, p. 3.10-14.)

Explanation: Due to the Project's location, development of the Project would not physically divide an established community because there is no development northwest or northeast of the site. The Project would, instead, provide a continuation of the existing neighborhood with development of a new residential area. For these reasons and the reasons set forth in the EIR, the Project would have no impact relating to this issue. (Draft EIR, p. 3.10-14.)

2. Applicable Land Use Plans, Policies, or Regulations

Threshold: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.10-14 through 3.10-19.)

Explanation: The Project would not cause a significant environmental impact due to a conflict with the applicable General Plan or any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The EIR analyzed the Project's consistency with the City's 1993 General Plan, 2019 General Plan, Housing Element Update, and Zoning Ordinance, as well as the Project's consistency with the Plan Bay Area 2040. The EIR concluded, based on substantial evidence, that the Project would not result in a significant environmental impact due to a conflict with any of the foregoing. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.10-14 through 3.10-19.)

K. MINERAL RESOURCES

1. Statewide Mineral Resources

Threshold: Would the Project result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

Findings: No impact.

Explanation: The Project site is not located within an area known to be underlain by regionally important mineral resources. The California Geological Survey identifies the Project site as MRZ-4, indicating that insufficient information exists to assign the site with any other mineral resource zone

designation. No mineral resources have been identified in or around the Project site, and none of the previous use of the Project site included mining activities or mineral processing. For these reasons, this issue was dismissed from further discussion during the EIR scoping period (see Notice of Preparation issued March 6, 2018). No comments were received by the City regarding mineral resources during scoping or review of the Draft EIR. The Project would no impact relating to mineral resources, and no mitigation is required.

2. Locally Important Mineral Resources

Threshold: Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Findings: No impact.

Explanation: The Project site is not located within an area known to be underlain by locally-important mineral resources. The California Geological Survey identifies the Project site as MRZ-4, indicating that insufficient information exists to assign the site with any other mineral resource zone designation. No mineral resources have been identified in or around the Project site, and none of the previous use of the Project site included mining activities or mineral processing. The City's General Plan does not identify the Project site as containing locally important mineral resources. For these reasons, this issue was dismissed from further discussion during the EIR scoping period (see Notice of Preparation issued March 6, 2018). No comments were received by the City regarding mineral resources during scoping or review of the Draft EIR. The Project would have no impact relating to mineral resources, and no mitigation is required.

L. NOISE

1. Groundborne Vibration

Threshold: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.11-17 through 3.11-18.)

Explanation: The Project would not generate excessive groundborne vibration or groundborne noise levels. The EIR analyzed the vibration that would be generated by the use of heavy equipment necessary for the construction of the Project, and it determined, based on substantial evidence, that vibration generated by the Project would be below the relevant threshold of significance set forth by Federal Transit Administration. For these reasons and the reasons set forth in the EIR, the Project would result in a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.11-17 through 3.11-18.)

2. Private/Public Airports

Threshold: For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Findings: No impact. (Draft EIR, p. 3.11-14.)

Explanation: The Project site is not located within the vicinity of a private airstrip or an airport land use plan, and it is not located within two miles of a public airport. For these reasons and the reasons set forth in the EIR, the Project would have no impact relating to this issue. (Draft EIR, p. 3.11-14.)

M. POPULATION AND HOUSING

1. Induce Substantial Growth

Threshold: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Findings: Less-than-significant impact. (Draft EIR, pp. 4-3 through 4.6.)

Explanation: The Project would not induce substantial unplanned population growth in the area. While the Project does entail residential development and would result in population growth, the population growth is not unplanned. The Project site was designated for future residential development in the City's 1993 General Plan and 2019 General Plan, and the Project site is located within the City's Urban Limit Line with access to existing utilities. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 4-3 through 4.6.)

2. Displacing Housing and People

Threshold: Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Findings: No impact.

Explanation: The Project does not entail the demolition of any housing, and would not otherwise displace any residents. (Draft EIR, p. 2-2.) For these reasons and the reasons discussed in the EIR, the Project would not have no impact relating to this issue.

N. PUBLIC SERVICES

1. Fire Protection Services

Threshold: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.12-13 through 3.12-14.)

Explanation: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, relating to fire protection services. The Project site would be served by the City's fire department located at 1480 Main Street, approximately 0.2 miles from the Project site. Moreover, the increase in population generated by the Project is within the projected population growth in the City's 1993 and 2019 General Plans and would not generate an increase in population that would necessitate the construction of a new facility or expansion of an existing facility. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.12-13 through 3.12-14.)

2. Police Services

Threshold: Would the proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.12-14 through 3.12-15.)

Explanation: The Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, relating to police protection services. The Project would be served by the City's police station, approximately 0.2 miles from the Project site. While the City would likely hire an additional police officer to serve the approximately 213 residents the Project would add to the City, the addition of one police officer would not require the construction of new, or the expansion of existing, police facilities because adequate space is available at the existing St. Helena Police Department Facility. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.12-14 through 3.12-15.)

3. Education

Threshold: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?

Findings: Less-than-significant impact. (Draft EIR, p. 3.12-15.)

Explanation: No school would need to be constructed or physically altered in order to accommodate the approximately 28 students that would be generated by the Project. As set forth in the EIR, the local primary school, elementary school, middle school, and high school all have sufficient capacity to accommodate the students generated by the Project. In addition, the Project will pay all required school impact fees consistent with Government Code Sections 65995–65998. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.12-15.)

4. Parks

Threshold: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.12-16 through 3.12-17.)

Explanation: Parks within the vicinity of the Project include Lyman Park, Jacob Meily Park, and Lewis Station, all of which are located within approximately 0.3 miles of the Project site. These parks have adequate facilities to accommodate the Project's estimated 213 residents, with such facilities including picnic and turf areas, children's playgrounds, and a walking trail. Moreover, park and recreational impact fees are imposed on all residential development within the City, and the Project applicant must pay all required park fees, which the City will use to ensure that the increased use of existing parks due to the Project's anticipated residents would not cause result in substantial physical deterioration of the park facilities. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.12-16 through 3.12-17.)

5. Other Public Facilities

Threshold: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or a need for new or physically altered governmental facilities, the construction of which could cause significant

environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

Findings: Less-than-significant impact. (Draft EIR, p. 3.12-16.)

Explanation: While the 213 residents generated by the Project would increase demand for existing public facilities within the City (including the George and Elsie Wood Public Library and City Hall), Chapter 3.32 of the City's Municipal Code requires payment of a civic improvement fee that would offset any impacts the Project might have. The civic improvement fee was calculated to ensure new development would pay its proportionate share of the cost of existing and future capital assets required to serve the City. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.12-16.)

O. RECREATION

1. Existing Facilities

Threshold: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.12-16 through 3.12-17.)

Explanation: Parks within the vicinity of the Project include Lyman Park, Jacob Meily Park, and Lewis Station, all of which are located within approximately 0.3 miles of the Project site. These parks have adequate facilities to accommodate the Project's estimated 213 residents, with such facilities including picnic and turf areas, children's playgrounds, and a walking trail. Moreover, park and recreational impact fees are imposed on all residential development within the City, and the Project applicant must pay all required park fees, which the City will use to ensure that the increased use of existing parks due to the Project's anticipated residents would not cause result in substantial physical deterioration of the park facilities. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.12-16 through 3.12-17.)

2. New Recreational Facilities

Threshold: Does the Project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Findings: No impact. (Draft EIR, pp. 3.12-16 through 3.12-17.)

Explanation: The Project does not propose to construct any new on- or off-site recreation facilities, and the Project would not expand any existing off-site recreational facilities. For the foregoing reasons and the reasons discussed in the EIR, the Project would have no impact relating to this issue. (Draft EIR, pp. 3.12-16 through 3.12-17.)

P. TRANSPORTATION

1. Consistency with Circulation Performance Plans

Threshold: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.14-39 through 3.14-40.)

Explanation: The Project would be consistent with applicable plans, city ordinances, and policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Notably, the Project would provide adequate sidewalks and bicycle amenities and would not conflict with any plans or policies supporting either the development of these facilities or the use of these facilities. The Project would not conflict with any plans or policies that address transit, pedestrian, and bicycle facilities. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.14-39 through 3.14-40.)

2. Transportation Hazards

Threshold: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.14-46 through 3.14-51.)

Explanation: The Project would not increase hazards due to a geometric design feature or incompatible use that would contribute to an increase in collisions or create visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site.

The Project would result in the extension and construction of roads, but these roads would be designed to accommodate emergency service vehicles and maintain accessibility for pedestrians and bicyclists according to City street design standards. For example, the Project would extend Starr Avenue northward into the Project site, and intersect with Adams Street, which the Project would also extend eastward from its current terminus. As Starr Avenue is extended northward, it would narrow from an approximately 75-foot right-of-way (ROW) to a 60-foot ROW with 4-foot-side sidewalks and a 6-foot-wide planter strip on both sides of the street, consistent with City's street standards. This extension, along with Adams Street, would be designed to accommodate emergency service vehicles and maintain accessibility for pedestrians and bicyclists according to City street design standards. (Draft EIR, pp. 3.14-46 through 3.14-47.)

The Project would also result in internal public residential streets within the Project site to accommodate neighborhood circulation and provide on-street parking on both sides of the Starr Avenue and Adams Street extensions (where permitted). These roadways would be designed to be consistent with all applicable City street design criteria and conform to the City's Municipal Code

(Section 16.32.060) to ensure that emergency service vehicles can adequately access and circulate within the Project site. As explained in the EIR, there are no visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site. (Draft EIR, p. 3.14-47.)

The EIR additionally considered accident data and a collision analysis to determine whether the Project would increase hazards due to a geometric design feature or incompatible use. The analysis, based on substantial evidence, demonstrates that the Project would have a less-than-significant impact. (Draft EIR, pp. 3.14-47 through 3.14-48.)

The EIR further analyzed the Project's potential to increase hazards during Project construction, and the EIR concluded, based on substantial evidence, that the Project would have a less-than-significant impact. Notably, while certain construction activities could require temporary lane closures, the Project would first be required to obtain construction permits through the City, and the City's traffic engineer would first prepare a temporary traffic control plan for the construction activities. As a result, the Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses during construction of the Project. (Draft EIR, pp. 3.14-49 through 3.14-50.)

For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.14-46 through 3.14-51.)

3. Emergency Access

Threshold: Would the Project result in inadequate emergency access?

Findings: Less-than-significant impact. (Draft EIR, p. 3.15-51.)

Explanation: The Project would not result in inadequate emergency access. The St. Helena Fire Department has reviewed the proposed Tentative Subdivision Map, and it did not identify any issues with inadequate emergency access. Notably, the Project includes two primary access points, Star Avenue and Adams Street, as well as a separate emergency vehicle access. In the event of an emergency, there would be three avenues that would enable vehicles to enter or exit the Project site. Moreover, the Project would be consistent with 1993 General Plan Policy 8.5.7 and 2019 General Plan Policy PS4.6, which require all streets and roads be designed with adequate width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress. Additionally, once the Tentative Subdivision Map is approved, the Project's Final Subdivision Map would be subject to additional review by the St. Helena Fire Department to confirm that the Project provides proper emergency access. For these reasons and the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, p. 3.15-51.)

Q. UTILITIES AND SERVICE SYSTEMS

1. Utilities Infrastructure

Threshold: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.13-27 through 3.13-30.)

Explanation: While the Project would require new water, sewer, storm drain, electric power, natural gas, and telecommunications infrastructure on site to serve the proposed residential development (e.g., on-site water, sewer, and storm drain lines and utility connections), the Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. As explained in the EIR, the City's water and wastewater treatment and conveyance facilities and the City's stormwater drainage facilities have the capacity to accommodate the demands of the Project, and the Project would not require the construction of new such facilities or expansion of the existing facilities. Additionally, the City collects development impact fees on new development to pay for public improvements relating to water projects, sewer projects, and stormwater drainage projects. The Project applicant would pay these fees, which would help offset any increased demands on the City's water, sewer, and stormwater drainage systems. The Project will be served by Marin Clean Energy for electricity service, by Pacific Gas & Electric Company for natural gas service, and by various service providers for telecommunications services. The Project would not require the relocation or construction of electric power, natural gas, or telecommunications facilities. For these reasons and the reasons set forth in the EIR, the Project would result in a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.13-27 through 3.13-30.)

2. Sufficient Water Supplies

Threshold: Would sufficient water supplies be available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.13-31 through 3.13-32.)

Explanation: Sufficient water supplies would be available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. The long-term safe yield of the City's water supply is 1,950 acre-feet per year, which consists of 600 acre-feet from the City of Napa contract, 900 acre-feet from Bell Canyon reservoir, and an average use of 450 acre-feet from groundwater. Recent water usage in the City is well below the 1,950 acre-feet target, with water usage ranging from 1,882 acre-feet (2013) to 1,465 acre-feet (2016) and averaging 1,637 acre-feet over the last eight years. Even if one were to add the Project's entire water demand of 37.04 acre-feet per year to the highest water demand in recent years of 1,882

acre-feet, this would result in a City-wide water demand of 1,919 acre-feet, which is below the Safe Yield of 1,950 acre-feet.

In addition, the Project will comply with the City's water neutrality policy, meaning that the 37.04 acre-feet per year of water that would be used during Project operation would be completely offset through a combination of using the on-site water well for irrigation needs and implementation of water conserving measures. Notably, the existing on-site agricultural well is proposed to be used to provide non-potable supplies to the separately plumbed landscape irrigation systems throughout the Project site to irrigate public and private landscaping. The on-site well has sufficient capacity to meet the Project's estimated landscape water demand of 17.16 acre-feet per year. Moreover, to comply with the City's water neutrality policy, the Project applicant is required to off-set the Project's water demand as a condition of approval. To comply with Municipal Code section 13.12.030, the Project applicant shall identify and implement offsite improvements that reduce water loss from the public water distribution system and/or identify and implement offsite improvements that result in a net increase in potable water availability equivalent to 19.8 AFY, or a combination of these.

For these reasons and the reasons set forth in the EIR, the Project would result in a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.13-31 through 3.13-32.)

3. Wastewater Treatment Capacity

Threshold: Would the Project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.13-32 through 3.13-33.)

Explanation: The City's Waste Water Treatment Plant ("WWTP") has adequate capacity to serve the Project's existing demand in addition to the WTTP's existing commitments. The WWTP is permitted, and has capacity, to discharge up to 0.5 MGD during dry weather and up to 2.8 MGD during wet weather of treated effluent. The Project is expected to generate an average of 0.018 MGD of wastewater. As the WWTP currently treats an average flow of 0.384 MGD, the additional 0.018 MGD combined with the current average flow of 0.384 MGD would not exceed the plant's permissible allowable average dry weather flow effluent of 0.5 MGD. Because adequate capacity is available at the WWTP to serve the Project, and for the reasons discussed in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.13-32 through 3.13-33.)

4. Landfill Capacity

Threshold: Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.13-33 through 3.13-34.)

Explanation: The Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, and it would not otherwise impair the attainment of solid waste reduction goals. During construction, the Project would contribute less than 0.1% of the Clover Flat Landfill's permitted capacity per day. As this is a relatively minimal contribution, the Clover Flat Landfill would have adequate landfill capacity for the Project's construction debris. During operation, the Project would contribute approximately 0.04 percent of the average unused daily capacity of the Clover Flat Landfill, and the Project would therefore not exceed the capacity of the landfill. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.13-33 through 3.13-34.)

5. Solid Waste

Threshold: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Findings: Less-than-significant impact. (Draft EIR, pp. 3.13-33 through 3.13-34.)

Explanation: The Project would comply with applicable federal, state, and local management and reduction statutes and regulations related to solid waste. Notably, the 2016 CALGreen Tier 1 mandatory measures require preparation of a Construction Waste Management Plan that documents the diversion of materials as required by CALGreen and at least 65% of nonhazardous construction waste would be required to be recycled or salvaged. The Project would comply with these mandatory measures. Additionally, the Project would comply with the City's Source Reduction and Recycling Element solid waste diversion requirement and the AB 939 solid waste diversion requirements. The Clover Flat Landfill provides mandated commercial recycling processing services, production of organic feedstocks for composting, and renewable energy generation. The Project would be required to comply with all applicable local and state solid waste diversion, minimization, and recycling regulations. For these reasons and the reasons set forth in the EIR, the Project would have a less-than-significant impact relating to this issue. (Draft EIR, pp. 3.13-33 through 3.13-34.)

R. WILDFIRES

1. Impairment of Adopted Emergency Response Plan or Emergency Evacuation Plan

Threshold: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Findings: Less-than-significant impact. (Draft EIR, p. ES-3.)

Explanation: The Project is not located on a site designated as a very high fire hazard severity zone ("VHFHSZ") by the California Department of Forestry and Fire Protection ("CalFire") and would therefore have a less-than-significant impact relating to this issue. Regardless, as noted above and discussed in the Draft EIR, the Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. (Draft EIR, pp. 3.8-20 through 3.8-21.) For the foregoing reasons and the reasons discussed in the Draft EIR, the Project would not result in a significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. ES-3.)

2. Exacerbation of Wildfire Risks

Threshold: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Findings: Less-than-significant impact. (Draft EIR, p. ES-3.)

Explanation: The Project is not located on a site designated as VHFHSZ by CalFire and would therefore have a less-than-significant impact relating to this issue. Regardless, the Project site is flat, so the Project would not expose Project occupants to fire hazards due to proximity to hilly terrain or landslides due to post-fire conditions. For the foregoing reasons and the reasons discussed in the EIR, the Project would not result in a significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. ES-3.)

3. Infrastructure-Related Wildfire Risks

Threshold: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Findings: Less-than-significant impact. (Draft EIR, pp. 4.16-13 through 4.16-14.)

Explanation: The Project is not located on a site designated as VHFHSZ by CalFire and would therefore have a less-than-significant impact relating to this issue. Moreover, the Project does not require installation of infrastructure that could exacerbate fire risk. For the foregoing reasons and the reasons discussed in the EIR, the Project would not result in a significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. ES-3.)

4. Landslides and Slope Instability

Threshold: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks,

including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Findings: Less-than-significant impact. (Draft EIR, p. ES-3.)

Explanation: The Project is not located on a site designated as VHFHSZ by CalFire and would therefore have a less-than-significant impact relating to this issue. Regardless, the Project site is flat, so the Project would not expose Project occupants to fire hazards due to proximity to hilly terrain or landslides due to post-fire conditions. For the foregoing reasons and the reasons discussed in the EIR, the Project would not result in a significant impact relating to this issue, and no mitigation is required. (Draft EIR, p. ES-3.)

SECTION 2. FINDINGS REGARDING ENVIRONMENTAL IMPACTS MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT

The City Council hereby finds that feasible mitigation measures have been identified in the EIR and this Resolution that will avoid or substantially lessen the following potentially significant environmental impacts to a level of less than significant. The potentially significant impacts, and the mitigation measures that will reduce them to a less-than-significant level, are as follows:

A. AESTHETICS

1. Light and Glare

Threshold: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Findings: Less than significant with mitigation incorporated. (Draft EIR, p. 3.1-41.) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The Project would not create a new source of glare that would adversely affect day or nighttime views in the area, and the Project's impacts relating to glare would be less than significant. (Draft EIR, p. 3.1-34.)

The Project would introduce new light sources into an area that is currently undeveloped, and this could potentially impact nighttime views absent mitigation. To ensure that any aesthetic light-related impact of the Project is mitigated to a level of less than significant, the following mitigation measure has been identified:

> ***AES-1****: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting*

is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.

Implementation of MM AES-1 would ensure that light introduced to the Project site would not adversely affect day or nighttime views in the area by minimizing spillover light and limiting up cast light. With implementation of MM AES-1, the Project's potential direct and cumulative impacts relating to new lights introduced to the Project site would be reduced to a level of less than significant. (Draft EIR, p. 3.1-41.)

B. BIOLOGICAL RESOURCES

1. Special Status Species

Threshold: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.4-43 through 3.4-49.) Changes or alterations have been required in, or incorporated into the Project that avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: No federal or state-listed wildlife species have the potential to occur on the Project site. Only a small number of special-status wildlife species have the potential to occur onsite—native bats, the white-tailed kite, and nesting and migratory birds. There is low potential for these species to occur on the Project site. Nevertheless, absent mitigation, the Project could have a potentially substantially adverse effect on these species.

Native bats. The Project is not anticipated to result in any direct impacts to roosting bats. Roosting habitat, such as rock outcrops, trees, caves, and human-made structures, are absent from the Project site. Additionally, the pallid bat is unlikely to roost on or near the Project site due to frequent human disturbance. Moreover, the Project would avoid potential roost sites within the vicinity of the Project site, such as the trees along the southeastern margin of the site.

Absent mitigation, the Project could potentially have indirect impacts on native bats. If bats were to roost in the area during construction, they could be indirectly impacted by construction-related noise. Indirect impacts to roosting bats could also result from increased light, glare, and activity associated with operation of the Project. To ensure that any potential impacts

relating to roosting bats are mitigated to a level of less than significant, the following mitigation measures have been identified:

> ***BIO-1:*** *A qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony.*

> ***AES-1****: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.*

Implementation of MM BIO-1 would ensure that measures be taken to avoid any potentially significant impact to roosting bats during construction of the Project. Additionally, implementation of MM AES-1 would address indirect impacts to native bats relating to spillover light, which can affect some species. With implementation of these required mitigation measures, potential direct, indirect, and cumulatively considerable impacts to native bats would be reduced to a level of less than significant. (Draft EIR, pp. 3.4-46 through 3.4-48.)

White-tailed kites. No white-tailed kites have been observed on or near the Project site during the 2011, 2015, 2018, or 2019 biological surveys of the site. Moreover, no tree removal is proposed as part of the Project, so no direct impacts (such as mortality and/or injury to nesting kites) are anticipated as a result of the Project. However, if white-tailed kites were to be breeding near the site before Project initiation, construction-related activities could potentially cause an adult kite to abandon an active nest that is in close proximity to the construction area, potentially leaving eggs or chicks vulnerable to predation or without provisions. In addition, increased lighting and glare associated with the Project's operation could result in indirect impacts to the white-tailed kites' nesting habitat. As explained below, mitigation is necessary to ensure that any potentially significant impact relating to white-tailed kites is mitigated to a level of less than significant.

Nesting and migratory birds. No active nests for nesting or migratory birds were documented on or near the Project site during the 2011, 2015, 2018, and 2019 biological surveys. However, trees, shrubs, grassland, and vineyards on or adjacent to the Project site provide potential nesting habitat for bird species protected under the Migratory Bird Treaty Act ("MBTA") and California Fish and Game Code section 3500. Direct impacts to nesting birds could result from vegetation clearing and site grading during Project construction. Potential indirect impacts to birds nesting near the Project site during construction would essentially be identical to those described above for white-tailed kite.

To ensure that any potential impacts relating to white-tailed kite and nesting and migratory birds are mitigated to a level of less than significant, the following mitigation measures have been identified:

> ***BIO-2:*** *If construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds:*
>
> - *Preconstruction surveys by a biologist of all potential nesting habitats within 500-feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim.*
>
> - *If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department.*

- *If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.*

***AES-1**: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.*

Implementation of MM BIO-2 would ensure that measures be taken to avoid any potentially significant impact concerning white-tailed kite, nesting birds, and migratory birds during the avian nesting season. Additionally, implementation of MM AES-1 would address indirect impacts to white-tailed kite, nesting birds, and migratory birds relating to spillover light, which can affect some species. With implementation of these required mitigation measures, potential direct, indirect, and cumulatively considerable impacts to white-tailed kite, nesting birds, and migratory birds would be reduced to a level of less than significant. (Draft EIR, pp. 3.4-46 through 3.4-48.)

For the foregoing reasons and the reasons discussed in the EIR, impacts relating to this issue would be less than significant with the incorporation of MM BIO-1, MM BIO-2, and MM AES-1. (Draft EIR, pp. 3.4-43 through 3.4-49.)

2. Wetlands

Threshold: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Findings: Less than significant with mitigation incorporated. (Draft EIR, p. 3.4-49.) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The Project site supports 0.07 acres of wetlands, 870 linear feet of other waters, consisting of four seasonal wetlands and two agricultural ditches. Construction activities would result in the fill of the four wetlands, and construction of a retaining wall on or near the property line may potentially impact agricultural ditches by filling or otherwise altering the structure or flow of these features. (Draft EIR, p. 3.4-49.) To ensure that any potential impacts of the Project relating to wetlands are mitigated to a level of less than significant, the following mitigation measure has been identified:

> ***BIO-3:*** *Wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.*

Implementation of MM BIO-3, through the permitting process for waters of the state and waters of the U.S., compensation would be required for a loss of wetlands that can be avoided or replaced on-site. Compensation may be in the form of off-site replacement or purchase of approved mitigation banking credits. With implementation of MM BIO-3, potential direct, indirect, and cumulatively considerable impacts to wetlands would be reduced to a level of less than significant. (Draft EIR, p. 3.4-49.)

3. Wildlife Movement and Nesting/Migratory Birds

Threshold: Would the Project interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.4-50 through 3.4-51.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The Project site does not function as a wildlife movement corridor due to the surrounding development, lack of connectivity with other undeveloped areas, and existing and

historic uses of the site. Moreover, the Project site does not provide suitable aquatic habitat for native resident or migratory fish species, and the Project site does not provide an essential habitat linkage or migratory corridor functions for resident or migratory wildlife. Additionally, existing permitting requirements and conditions of approval (e.g., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation and to meet water quality standards, rendering potential indirect impacts to any native resident or migratory fish via construction runoff in the Napa River less than significant.

Absent mitigation, the Project could potentially impede the use of native wildlife nursery sites. Although the annual grassland onsite does not provide adequate cover or nursery sites for many mammal species, trees along the edge of the site could provide suitable habitat for nesting birds and roosting bats. In addition, some birds may use the grassland for nesting when sufficient (i.e., tall) vegetation is present. Moreover, because the riparian corridor along the Napa River is located approximately 500 feet north of the Project site, absent mitigation, lighting and increased usage of the site by humans may result in indirect effects to local wildlife using the riparian corridor for nursery sites or as a migratory corridor. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measures have been identified:

> ***AES-1****: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.*
>
> ***BIO-1:*** *A qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during*

construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony.

BIO-2: *If construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds:*

- *Preconstruction surveys by a biologist of all potential nesting habitats within 500-feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim.*

- *If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department.*

- *If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.*

Implementation of MM AES-1 would ensure that lighting associated with the Project would adhere to guidelines and standards that reduce glare and spillover light and would ensure that indirect impacts to wildlife relating to light would be reduced to a level of less than significant. Implementation of MM BIO-1 would avoid any potentially significant impact to roosting bats

during construction of the Project, while implementation of MM BIO-2 would avoid any potentially significant impact concerning white-tailed kite, nesting birds, and migratory birds during the avian nesting season. With implementation of MM AES-1, BIO-1, and BIO-2, potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, p. 3.4-50.)

C. CULTURAL RESOURCES

A. Historical Resources

Threshold: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.5-26 through 3.5-29.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The Project site is undeveloped and there are no buildings present on the Project site that could be considered historical resources under CEQA; therefore, the Project would not have an impact any historical buildings. There are archaeological resources, however, on the Project site that qualify as a historical resource under CEQA. Notably, the Project site is intersected by CA-NAP-406, which is a small site on which 5,711 pieces of lithic debitage, 17 bifaces, one core, seven edge-modified flakes, one hammerstone, 101 charcoal fragments, seven pieces of baked clay, and 40 historical-era artifacts were found. CA-NAP-406 has been determined to be eligible for inclusion in the National Register of Historic Properties ("NRHP") and the California Register of Historic Properties ("CRHP"). Previous investigations evaluating CA-NAP-406, however, were restricted to portions of this resource located west of the Project site. Phase 1 and Phase 2 archaeological excavations, as well as a ground-penetrating radar ("GPR") investigation, were conducted on the Project site, and based on this evidence, no intact deposits or features associated with CA-NAP-406 appear to extent to within the Project site. It is likely that the upper layer of fill present on a majority of the Project site is comprised largely of redeposited and otherwise disturbed cultural deposits associated with CA-NAP-406. Soils identified below the fill were not found to contain cultural deposits or substantial frequencies of cultural material. However, because there is the potential to unearth unknown resources during Project construction, there could be a potentially significant impact to subsurface archaeological resources, absent mitigation. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure has been identified:

> ***CUL-1:*** *The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for*

a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present in depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material.

The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the Project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City, in consultation with the Tribe this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.

Compliance with Mitigation Measure CUL-1 would ensure that proper procedures and protocol are in place in the event a resource is identified. The procedures require work to stop in the event a resource is discovered and require an archaeologist and/or Native American

representative to be contacted to determine the appropriate course of action depending on the resource. For the reasons discussed herein and the reasons discussed in the EIR, compliance with MM CUL-1, along with Public Resources Code section 5097.98, California Health and Safety Code section 7050.5, and State CEQA Guidelines section 15064.5(e), would ensure that potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, pp. 3.5-26 through 3.5-29.)

B. Archaeological Resources

Threshold: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Findings: Less-than-significant impact with mitigation incorporated. (Draft EIR, pp. 3.5-29 through 3.5-30.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: A Cultural Inventory Report and Extended Phase I and Phase II Reports were prepared for the Project, which explain that three archeological sites were previously identified within the Project site (CA-NAP-406, CA-NAP-843, and CA-NAP-1008), two of which (CA-NAP-843 and CA-NAP-1008) were determined not to be NRHP/CRHR eligible. The Cultural Inventory Report determined that impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect, although appropriate mitigation to account for unanticipated impacts would be required. Resource CA-NAP-406 has been determined to be eligible for CRHR (Criterion 4) and NRHP (Criterion D) listing. The Phase I and Phase II archaeological excavations and GPR investigation did not identify any intact deposits or features associated with CA-NAP-406 within the Project site. However, the Project could result in a potentially significant impact relating to this issue absent mitigation, due to the sensitivity of the site for unknown archeological resources that may be present subsurface that could be unearthed during construction activities. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure will be implemented:

> ***CUL-1:*** *The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have*

potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present in depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material.

The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the Project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City, in consultation with the Tribe this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.

Compliance with Mitigation Measure CUL-1 would ensure that proper procedures and protocol are in place in the event a resource is identified. The procedures require work to stop in the event a resource is discovered and require an archaeologist and/or Native American representative to be contacted to determine the appropriate course of action depending on the resource. For the reasons discussed herein and the reasons discussed in the EIR, compliance with MM CUL-1, along with Public Resources Code section 5097.98, California Health and Safety Code section 7050.5, and State CEQA Guidelines section 15064.5(e), would ensure that potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, pp. 3.5-29 through 3.5-30.)

C. Human Remains

Threshold: Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Findings: Less-than-significant impact with mitigation incorporated. (Draft EIR, pp. 3.5-30 through 3.5-31.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: A substantial level of archaeological investigation work was conducted to analyze the potential impacts of the Project, including a Cultural Inventory Report, Extended Phase I and Phase II Reports, and a GPR investigation that looked for any subsurface anomalies to a depth of approximately 26 feet below the surface. No human remains have been documented or have been found during the archaeological investigation work conducted for the Project. Nevertheless, due to the high archeological sensitivity of the area around the Project site, it is possible to inadvertently uncover human remains during ground-disturbing Project activities, such as grading and excavation. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure will be implemented:

> ***CUL-2:*** *In the event any human remains are unearthed during site disturbing activities, Section 7050.5(b) of the California Health and Safety Code and Section 15064.5(e) of the CEQA Guidelines specifies protocols to follow in the event human remains are discovered. The Code mandates stopping work within 100 feet of the find and contacting the County Coroner to determine the origin of the remains. If the remains are determined to be Native American the Coroner shall contact the Native American Heritage Commission within 24 hours to request that the Commission determine the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent shall be provided with the opportunity to make recommendations regarding the means of treating or disposing of the remains with appropriate dignity. Project-related ground disturbance in the vicinity of the find shall not resume until all statutory requirements have been met and evidence of completion has been submitted to the City, in consultation with the Tribe.*

Implementation of MM CUL-2 provides specific procedures to follow in the event human remains are identified. The procedures require work to stop and the County Coroner contacted to determine the origins of the remains. For these reasons and the reason set forth in the EIR, compliance with MM CUL-2 and with section 7050.5 of the California Health and Safety Code would ensure that the Project's potentially direct, indirect, and cumulative impacts relating to this issue would be reduced to a level of less than significant.

D. GEOLOGY AND SOILS

1. Seismic-Related Ground Failure and Liquefaction

Threshold: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?

Findings: Less-than-significant impact with mitigation incorporated. (Draft EIR, pp. 3.6-21 through 3.6-23.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: Seismic ground shaking is an unavoidable hazard for nearly all man-made facilities (buildings and structures) in the region. The geologic setting means proposed facilities are likely to experience ground shaking from at least one major earthquake (e.g., greater than moment magnitude 6.7) sometime during the operational life of a project. The Project site is also underlain by soils that if not properly engineered during construction site preparation, could be subject to secondary effects such as seismically induced liquefaction, differential settlement or compression. If future development of the site is not constructed in a manner that protects residents from geologic and seismic hazards, the Project could have a significant impact. The City General Plan includes policies to address geological impacts, as does the Municipal Code. Initial geotechnical work for the Project site has identified issues related to liquefaction and identified recommendations to avoid or reduce risks due to liquefaction. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure will be implemented:

> ***GEO-1:*** *Prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City of St. Helena Building Department for review and approval in accordance with adopted City standards. The structural designs shall adhere to the currently adopted version of the California Building Code. The report shall identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction. Specifically, the following requirements for the geotechnical and soils report shall be met:*
>
> - *Analysis presented in the geotechnical report shall conduct a detailed evaluation of liquefaction in accordance with California*

Department of Conservation Special Publication 117A: Guidelines for Evaluating and Mitigating Seismic Hazards in California.

- *Additional subsurface soil borings shall be completed as necessary to represent the full range of site conditions, including the southern portion of the parcel mapped as alluvial fan.*

- *Analysis presented in the geotechnical report shall include recommendations for building foundations and improvements, including sidewalks, parking lots, and subsurface utilities, that take into consideration the potential effects of settlement, collapse, and expansive or corrosive soils. This includes the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond) due to anticipated settlement.*

- *All design criteria and specifications set forth in the design-level geotechnical report shall be implemented as a condition of project approval. This report shall be completed as a condition of approval of the final tentative map.*

Implementation of MM GEO-1 and compliance with the California Building Code would ensure that impacts to relating to seismic ground shaking and liquefaction would be reduced to a level of less than significant. With implementation of MM GEO-1, potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, p. 3.6-23.)

2. Expansive Soils

Threshold: Would implementation of the Project occur on weak, compressible, and/or expansive soils that could result in adverse impacts on habitable structures?

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, pp. 3.6-24.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The preliminary geotechnical report prepared for the Project indicated that engineered fill was placed on top of a 3-foot layer of soft, weak natural soil with high moisture content across the Project site, and above uncompacted fill in a former pond area. Over-excavation, moisture-conditioning, and recompaction of the recent fill and the underlying weak soils was recommended to avoid future settlement after development. It is anticipated that placement of engineered fill for use as structural building pads, roads, and within utility trenches (including) over excavation and recompaction would remove and/or otherwise address the preexisting

potential for expansive or corrosive soils. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure will be implemented: (Draft EIR, pp. 4.6-24.)

> ***GEO-1:*** *Prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City of St. Helena Building Department for review and approval in accordance with adopted City standards. The structural designs shall adhere to the currently adopted version of the California Building Code. The report shall identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction. Specifically, the following requirements for the geotechnical and soils report shall be met:*
>
> - *Analysis presented in the geotechnical report shall conduct a detailed evaluation of liquefaction in accordance with California Department of Conservation Special Publication 117A: Guidelines for Evaluating and Mitigating Seismic Hazards in California.*
>
> - *Additional subsurface soil borings shall be completed as necessary to represent the full range of site conditions, including the southern portion of the parcel mapped as alluvial fan.*
>
> - *Analysis presented in the geotechnical report shall include recommendations for building foundations and improvements, including sidewalks, parking lots, and subsurface utilities, that take into consideration the potential effects of settlement, collapse, and expansive or corrosive soils. This includes the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond) due to anticipated settlement.*
>
> - *All design criteria and specifications set forth in the design-level geotechnical report shall be implemented as a condition of project approval. This report shall be completed as a condition of approval of the final tentative map.*

Implementation of MM GEO-1 would ensure that impacts to relating to weak, compressible, and/or expansive soils would be reduced to a level of less than significant. MM GEO-1 requires compliance with California Department of Conservation Special Publication

117A, which ensures that unstable soils would be addressed. With implementation of MM GEO-1, potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, p. 3.6-24.)

3. Paleontological Resources

Threshold: Would implementation of the Project directly or indirectly destroy a unique paleontological resource or site?

Findings: Less than significant impact with mitigation incorporated. (Draft EIR, pp. 3.6-24 through 3.6-25.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: there are no records of fossil finds within the City, and the Holocene alluvium mapped at the surface has a low potential for paleontological resources. However, there is a slight chance deeper excavations on-site for underground utilities, for example, could encounter Pleistocene age alluvium with the potential for fossils. To ensure that any such potential impacts are mitigated to a level of less than significant, the following mitigation measure will be implemented:

> ***GEO-2:*** *In the event that known or suspected paleontological resources (e.g., fossils) are unearthed during grading or trenching, the area of discovery shall be roped off by the construction contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist. The Project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines, who shall be tasked with assessing the significance of the fossil find, including documenting the nature, location, and taxa of the find. The qualified paleontologist shall use his/her professional judgement as to the significance of the find, and whether the find should be preserved in a museum repository. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Documentation of the fossil find, including appropriate salvage and recovery of fossil specimens and of transfer of to an appropriate repository (e.g., University of California Museum of Paleontology) shall be submitted to the City of St. Helena as evidence of compliance with this mitigation measure.*

MM GEO-2 identifies the appropriate steps if paleontological resources are uncovered during site disturbance. With implementation of MM GEO-2, potential direct, indirect, and cumulatively considerable impacts relating to this issue would be reduced to a level of less than significant. (Draft EIR, p. 3.6-25.)

E. HAZARDS AND HAZARDOUS MATERIALS

1. Upset and Accident Conditions

Threshold: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.8-16 through 3.8-19.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: Due to the historic use of a portion of the site for agricultural uses, specifically an orchard in the late 1940s, there is a potential for contaminated soils to be encountered during construction activities. While the Phase I ESA concludes that it is unlikely that residual levels of pesticides would be present in significant concentrations, the absence of contaminants of concern such as OCPs and arsenic has not been confirmed through on-site soils testing. While potentially significant impacts are not likely, to ensure that any Project impact concerning hazardous materials are mitigated to a level of less than significant, the following mitigation measure has been identified:

> ***HAZ-1:*** *As a condition of approval for construction and grading permits for the Project site, the Project applicant shall ensure the following subsurface soils testing and follow-up analysis shall be performed prior to obtaining a grading permit:*
>
> - *A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, engineer, or similar qualification) for the portions of the Project site historically used for agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval.*
>
> - *The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall*

be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary endangerment assessment guidance manual).

- *The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight.*

- *In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project.*

- *The soil testing report, and if applicable, the human health risk assessment and Operations and Maintenance Program, shall be subject to review and approval by the City of St. Helena Department of Public Works, the Napa County Division of Environmental Health and/or other regulatory oversight agencies.*

Implementation of MM HAZ-1 would ensure that if soils located within the Project site contain pesticides that exceed CHHSLs for residential development and occupancy, such soils would be removed and/or remediated prior to any site disturbance or occupancy. With implementation of MM HAZ-1, a preliminary soil screening survey would ensure that soils on the Project site would comply with CHHHLs for residential development and occupancy ensuring the impact is mitigated to less than significant. With implementation of MM HAZ-2 and compliance

with all applicable federal, state, and regional regulations regarding hazardous materials, potential impacts related to upset and accident conditions involving the release of hazardous materials into the environment would be reduced to a level of less than significant. (Draft EIR, p. 3.8-18).

F. NOISE

1. Local Noise Level Standards

Threshold: Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.11-14 through 3.11-20.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: The Project would not result in significant operational noise impacts in excess of applicable standards. The EIR includes analysis of stationary and mobile (transportation) noise impacts to nearby sensitive receptors. The analysis concluded that the Project's operational activities would not result in a substantial noise increase that would exceed applicable City noise standards noise.

Construction of the Project would generate noise that could expose nearby receptors (residences) to elevated noise levels. The City's Health and Safety Code (Chapter 8.24 of Title 8, the Health and Safety Code) requires noise generating construction activities (including demolition, excavation, and building construction), be restricted to the hours between 8:00 a.m. and 5:00 p.m., Monday through Saturday, and prohibited on Sunday and holidays (City of St. Helena Chapter 8.24). This ensures that sensitive receptors are not disturbed by early morning or late night activities. However, the City's 1993 General Plan includes Implementing Policy 8.3.11, which states "Require construction operations to use noise suppression devices and techniques and limit noisy construction activities to the least noise sensitive times (8 a.m. to 5 p.m., Monday through Friday)." Due to the proximity of residences to the Project site and the potential for construction noise to be an annoyance, the impact is considered potentially significant unless City policies and ordinances are implemented. To ensure that short-term construction noise does not have a significant impact upon residential receptors, the following mitigation measure has been identified:

> ***NOI-1:*** *The Project applicant or its contractors shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted.*

Administrative Controls – At all times during site preparation and construction:

- *Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods,*
- *Minimize idling time of onsite equipment, and*
- *Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible, or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors.*

Engineering Controls – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and

Install Sound Abatement – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the exterior of a residence (either offsite or onsite), do the following:

- *Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or*
- *Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.*

Implementation of MM NOI-1 would substantially lessen construction noise upon adjacent residences by requiring administrative controls, engineering controls, and/or installation of sound abatement. Installation of an effectively placed storage container or a temporary plywood or blanket barrier on a portion of the site boundary that blocks line-of-sight between the source(s) of noise emission and the receptor of concern (e.g., residence) would be expected to provide a minimum of 3-5 dBA of noise reduction. By way of examples, doubling the distance of an operating generator from a receptor would be expected to yield a 6 dB reduction in noise. Proper engine mufflers installed on construction equipment helps ensure that source sound emission levels are further reduced. Implementation of MM NOI-1 would help minimize construction noise impacts to less than significant. (Draft EIR, p. 3.11-16.)

G. TRIBAL CULTURAL RESOURCES

1. Resources Eligible for Listing in Register of Historical Resources

Threshold: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature,

place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.5-31 through 3.5-32.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: Based on a review of the Cultural Resources evaluation conducted for the Project site and letters provided by the Tribes in response to letters sent by the City pursuant to AB 52, there are no known tribal cultural resources (TCRs) present, as defined in PRC Section 21074, on the Project site or in its immediate vicinity. Due to the sensitivity of the site for unknown archeological resources that could be unearthed during construction activities, it was determined there would also be potential for unknown tribal cultural resources to be encountered during Project. Therefore, implementation of the following mitigation measure has been identified:

> ***CUL-1:*** *The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present in depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material.*
>
> *The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the Project and pertinent appendices to*

inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City, in consultation with the Tribe this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.

While no known TCRs have been identified that may be affected by the Project, implementation of MM CUL-1 would require construction work to stop and a Native American representative contacted (if not already conducting on-site monitoring) if any TCRs are unearthed and appropriate measures to be implemented to evaluate the significance of the find. Compliance with MM CUL-1 would ensure potential impacts would be less than significant. (Draft EIR, p. 3.5-32.)

2. Resources Determined by the Lead Agency

Threshold: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Findings: Less than significant with mitigation incorporated. (Draft EIR, pp. 3.5-31 through 3.5-32.) Changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effects as identified in the EIR. (State CEQA Guidelines, § 15091(a)(1).)

Explanation: Based on a review of the Cultural Resources evaluation conducted for the Project site and letters provided by the Tribes in response to letters sent by the City pursuant to AB 52, there are no known tribal cultural resources (TCRs) present, as defined in PRC Section 21074, on the Project site or in its immediate vicinity. Due to the sensitivity of the site for unknown

archeological resources that could be unearthed during construction activities, it was determined there would also be potential for unknown tribal cultural resources to be encountered during Project. Therefore, implementation of the following mitigation measure has been identified:

> ***CUL-1:*** *The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present in depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material.*
>
> *The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the Project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City, in consultation with the Tribe this buffer may be adjusted by the Tribe and the*

archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.

While no known TCRs have been identified that may be affected by the Project, implementation of MM CUL-1 would require construction work to stop and a Native American representative contacted (if not already conducting on-site monitoring) if any TCRs are unearthed and appropriate measures to be implemented to evaluate the significance of the find. Compliance with MM CUL-1 would ensure potential impacts would be less than significant. (Draft EIR, p. 3.5-32.)

SECTION 3. FINDINGS REGARDING ENVIRONMENTAL IMPACTS NOT FULLY MITIGATED TO A LEVEL OF LESS THAN SIGNIFICANT

The City Council hereby finds that, despite the incorporation of mitigation measures outlined in the EIR and in this Resolution, the following impacts from the proposed Project and related approvals cannot be fully mitigated to a less-than-significant level and a Statement of Overriding Considerations is therefore included herein:

A. TRANSPORTATION

1. Air Quality Management Plan Consistency

Threshold: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?

Findings: Significant and unavoidable impact. (Draft EIR, pp. 3.14-40 through 3.14-46.) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. (State CEQA Guidelines, § 15091(a)(3).) Impacts would remain significant and unavoidable. The Project's significant and unavoidable impact relates to vehicle miles traveled (VMT).

Explanation: The Project's significant and unavoidable impact relates to VMT. The City is using the threshold for residential land uses recommended by the Governor's Office of Planning Research (OPR) in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018). OPR recommends that a residential project that exceeds a level of 15% below existing VMT per capita would have a potentially significant transportation impact. Existing VMT may be defined as the average for the jurisdiction, or regionally. The City has selected the City of St. Helena as the appropriate basis of comparison. The City's average VMT per capita is 11.34, as estimate by the Solano Napa Activity-Based Model (SNABM). The Project VMT per capita, estimated by SNABM based on the Project location, is 11.37. Based on the applied threshold of significance, a Project VMT above 9.64 is considered significant.

Key factors for VMT are location and regional land use patterns. In other words, VMT correlates to how far residents must travel for work, shopping, and other services. Potential mitigation measures include neighborhood/site design to encourage walking and cycling, transportation demand management (TDM) strategies to reduce commute trips. As discussed in the Draft EIR, the Project includes pedestrian and bicycle network improvements. Generally, employment and retail opportunities are not close enough to the Project site to realize large reduction in automotive travel. It is estimated that the project design may reduce VMT by up to 2.0%. TDM strategies are generally geared towards employment uses, where employers can encourage and incentivize alternative means of commuting. As a residential development, the Project is limited in such measures. The EIR estimates such measures would realize a less than 0.5% reduction in VMT. The Project site is not currently served by the local transit operator. Per the City's 2019 General Plan, transit usage across the City is only 1%. Therefore, even if extension of transit to the Project site were to occur, VMT reduction would be negligible.

For these reasons and the reasons set forth in the EIR, the Project's effect on VMT is a significant and unavoidable impact on both a direct and cumulatively considerable basis. (Draft EIR, p. 3.14-46.)

SECTION 4. FINDINGS REGARDING CUMULATIVE ENVIRONMENTAL IMPACTS

Consistent with CEQA's requirements, the EIR for the Project includes an analysis of cumulative impacts. The City Council hereby finds as follows:

A. AESTHETICS

As discussed in the EIR, cumulative impacts to aesthetic resources would be less than significant. (Draft EIR, pp. 3.1-41 through 3.1-42.) the cumulative context for aesthetics includes the area that comprises the viewshed in which the Project site is visible. There were no cumulatively significant aesthetics impacts identified in the 1993 General Plan EIR or the 2019 General Plan EIR. It was determined that the City's design review process, in combination with General Plan policies would maintain the high-quality visual character of existing and future development, would limit impacts to agricultural lands, and would primarily contain growth within the Urban Limit Line, ensuring that cumulative aesthetic impacts would be less than significant. Thus, there is no existing cumulative impact related to visual character or scenic quality. At a localized level, there are no approved or reasonably foreseeable projects that would be visible from the Project site, with the exception of a single-family residence, accessory dwelling unit and barn under construction to the west of the Project site, which would not result in a cumulative impact.

The Project, along with existing and future development within the City, would contribute to the existing ambient light in the Project vicinity by introducing streetlights, landscape lighting, and interior and exterior buildings lights. The 1993 General Plan EIR found lighting to be a potentially significant impact, which would be reduced to less than significant through compliance with General Plan policies and the design review process. These requirements are incorporated

into MM AES-1, which would ensure that the Project's contribution to a cumulative lighting impact would be less than considerable.

B. AGRICULTURAL AND FORESTRY RESOURCES

As explained in the EIR, the Project will not have a cumulatively considerable impact. Based on the land use conversion table prepared by the California Department of Conservation, between 2014 and 2016, 35 acres of the 30,654 acres of County's Prime Farmland were converted to urban and built-up land. However, overall, Important Farmland in the County increased by 149 acres. The Project site contains less than 6 acres of Prime Farmland and less than 1 acre of Farmland of Statewide Importance that were determined to not be of high quality due to a number of factors detailed in the EIR. In addition, the Project site has long been designated for urban use. The St. Helena 1993 General Plan and also the current 2019 General Plan contains policies regarding the preservation of agricultural lands. For these reasons, the Project would contribute to a cumulative impact related to agricultural resources. No mitigation is required. (Draft EIR, pp. 3.2-13 through 3.2-14.)

C. AIR QUALITY

As explained in the EIR, emissions associated with the Project would not result in a cumulatively considerable contribution to cumulative air quality impacts because the Project's construction-related emissions would not exceed the SCAQMD significance thresholds for criteria pollutants. (Draft EIR, p. 4.2-25.)

The cumulative context of an air pollutant is dependent on the specific pollutant being. Ozone (O_3) precursors are a regional pollutant; therefore, the cumulative context would be existing and future development within the entire SFBAAB. This means that O_3 precursors generated in one location do not necessarily have O_3 impacts in that area. Instead, precursors from across the region can combine in the upper atmosphere and be transported by winds to various portions of the air basin. Consequently, all O_3 precursors generated throughout the air basin are part of the cumulative context.

The geographic scope for the cumulative analysis is Napa County and surrounding areas, which are located within the SFBAAB for O_3. The SFBAAB includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, as well as the southern half of Sonoma County and the southwestern portion of Solano County. The BAAQMD establishes emissions thresholds for regional emissions.

Particulates (fugitive dust and DPM) and TACs would result in localized impacts in close proximity to pollutant sources. There are no other active cumulative projects in the immediate vicinity of the Project site that are anticipated to contribute to localized TAC exposure.

Therefore, the Project would not contribute to a cumulative air quality impact.

D. BIOLOGICAL RESOURCES

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to biological resources with the incorporation of specified mitigation measures. (Draft EIR, p. 3.4-51.)

The geographic context for the analysis of cumulative biological impacts includes the areas contained within the Napa Valley and adjacent foothills (identified as the region), but primarily focused on the area within the city limits. Present and probable future projects within the region (which include, but not limited to, development in the city of St. Helena, Napa County, cities of Calistoga and Napa) are anticipated to permanently remove plant and wildlife resources, which could affect both common and special-status species and their habitat.

The 2019 General Plan Draft Environmental Impact Report (City of St. Helena 2018) notes that development in the City and elsewhere in the cumulative analysis area could cause significant cumulative impacts to nesting raptors and other special-status species; however, these cumulative impacts would be mitigated by compliance with General Plan policies. The Project site is located within an area that has been developed for residential and agricultural purposes and development of this site would not result in the reduction of available habitat, migration corridors, or other essential elements required by special-status species in the region. No special-status species have been documented at the Project site. While the Project would convert approximately 9 acres of potential foraging habitat for raptor species, the area has been disturbed in the past and provides only marginal habitat for burrowing mammal species that are the preferred prey for many resident raptor species. The existing disturbance at the site also greatly limits availability of insect prey for special-status bat species. Additionally, agriculture and natural lands in the vicinity of the city provide greater function and value as foraging habitat for these species. Due to the lack of biological value provided by the Project site, the Project's contribution to any effects on biological resources would be considered negligible. Implementation of MMs BIO-1 through BIO-7, would further reduce the Project's cumulative contribution to regional biological resources impacts. For these reasons, the Project's contribution to any existing cumulative impacts is not considerable.

E. CULTURAL RESOURCES

For the reasons discussed herein and in the EIR, the Project would not contribute to cumulative impacts relating to cultural resources with the incorporation of specified mitigation measures. (Draft EIR, pp. 3.5-32 through 3.5-33.)

The geographic scope of the cumulative impact analysis for the evaluation of potential cumulative impacts on cultural resources is the City of St. Helena.

The 1993 General Plan EIR concluded that the 1993 General Plan could result in substantial adverse changes in the significance of historical resources and would have a significant and unavoidable impact to prehistoric archaeological sites that may contain human remains with religious significance to local Native American groups (City of St. Helena 2010). The 1993 General Plan states that there are a number of historic resources in the City (dating from the mid-nineteenth to mid-twentieth century) vulnerable to incompatible alterations and demolition.

However, the Project site does not include any known historic resources from this time period. The 2019 General Plan EIR concluded that impacts on cultural resources, including historic, archeological and prehistoric associated with buildout of the city would not result in a significant impact. The EIR notes that compliance with 2019 General Plan Policy HR1.5 would minimize or avoid potential impacts on any resources known or not known at this time and that may be encountered in the future. In addition, there are numerous laws, regulations, and statutes, on both the federal and state levels, that seek to protect cultural resources. These would apply to development within and outside the city. However, because the Project site contains a high p for the discovery of unknown subsurface historical or prehistoric resources, the Project's contribution to the cumulative loss of cultural resources is considered potentially significant absent mitigation.

Implementation of MM CUL-1 provides specific procedures to follow in the event a resource is identified. Compliance with this measure, along with PRC Section 5097.98, Section 7050.5 of the California Health and Safety Code, and Section 15064.5(e) of the CEQA Guidelines, would ensure that Project's incremental contribution would be reduced to less than significant and no additional mitigation is required.

F. ENERGY RESOURCES

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative energy impacts. (Draft EIR, pp. 3.15-20 through 3.15-21.)

Other development projects within the region would result in incremental increases in long-term energy consumption similar to the Project through the introduction of new population to the region. Each of these projects, however, would be required to comply with local and state regulations for reducing energy consumption and increasing energy efficiency during operation. Nonetheless, the overall increase in demand for energy resources is a potentially significant cumulative impact. Similar to the Project, cumulative projects would be subject to CALGreen or stricter local regulations which provides energy efficiency standards for commercial and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the Project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set forth in the AB 32 Scoping Plan (CARB 2017), which would seek to make all newly constructed residential homes zero net energy consumers by 2020, and all new commercial buildings Zero-Net-Energy consumers by 2030. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects. In summary, with adherence to the increasingly stringent building and vehicle efficiency standards the Project would reduce energy consumption and would not contribute to a cumulative impact to the wasteful or inefficient use of energy.

G. GEOLOGY AND SOILS

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to geology and soils. (Draft EIR, p. 3.6-25.)

The geographic scope for the analysis of cumulative geologic and soils-related impacts consists of the Project site, as these impacts depend on the site-specific conditions and features on the Project site, such as soil composition and topography. These site-specific impacts would not combine to create cumulative impacts with other projects occurring elsewhere in the City. Therefore, the Project would not have the potential to contribute to an existing cumulative impact.

The geographic scope for the analysis of cumulative paleontological impacts consists of development slated to occur within the City or Napa County on Pleistocene age alluvium. Cumulative impacts on paleontological resources consider whether the impacts of the Project together with other related projects substantially diminish the number of paleontological resources within the same or similar context or property type.

As discussed in the EIR, the chance of encountering paleontological resources at the site is considered low because there are no records of fossil finds within the City, and the Holocene alluvium mapped at the surface has a low potential for paleontological resources. However, there is a slight chance deeper excavations on-site for underground utilities could encounter Pleistocene age alluvium with the potential for fossils. It is possible that construction of the Project in combination with other cumulative projects in undeveloped areas in the City and County underlain by Pleistocene age alluvium could disturb multiple unknown unique paleontological resources, although unlikely to occur. Due to the size of the Project site and the low likelihood of unearthing any fossils, the Project's contribution to a cumulative paleontological impact would not be considerable.

H. GREENHOUSE GAS EMISSIONS

GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. As discussed above, the Project-related GHG emissions would be less than significant. As such, the Project would not result in a potentially significant cumulative GHG impact. (Draft EIR, p. 3.7-37.)

I. HAZARDS AND HAZARDOUS MATERIALS

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to hazards and hazardous materials. (Draft EIR, pp. 3.8-22 through 3.8-23.)

The cumulative context for the analysis of potential hazardous materials impacts (including hazardous materials usage during construction, exposure to potentially contaminated soils) is generally site-specific, rather than cumulative in nature. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis

would be required for all projects within the City. Therefore, these issues are not addressed in the cumulative impact analysis.

Hazardous materials incidents or accidents would also typically be site-specific and would involve accidental spills or inadvertent releases. The effects of such incidents, then, would not be additive to effects from other, similar incidents occurring elsewhere. Associated health and safety risks generally would be limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Therefore, these issues are not addressed in the cumulative impact analysis.

The cumulative context for the use, handling, storage, and transport of hazardous materials is buildout of the City. This geographic scope is selected because (1) cumulative hazardous effects generally require proximity, and (2) City personnel are the first responders to hazardous accidents within the vicinity of the Project site.

The City's 1993 General Plan determined that the routine use and transport of hazardous materials would be a potentially significant impact. However, the City's 2019 General Plan Draft EIR (City of St. Helena 2018) was reviewed and it concluded that the routine use and transport of hazardous materials, hazardous materials use near schools, emergency response, and wildfire hazards were less than significant based on the implementation of existing and applicable laws and regulations.

Therefore, compliance with applicable hazardous materials management laws and regulations adopted at the federal, state, and local level would ensure the Project's contribution to cumulative impacts would be less than considerable.

J. HYDROLOGY AND WATER QUALITY

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to hydrology and water quality. (Draft EIR, pp. 3.7-47 through 3.7-49.)

The cumulative context for the analysis of potential water quality impacts related to surface water is the Upper St. Helena Reach subwatershed. This is because stormwater discharges originating from this area could combine with those of the Project to result in an increase in non-point source pollution discharging into the Napa River upstream of Sulphur Creek. Such increases could result from a combination of construction activities, greater use intensity, increased coverage of impervious surfaces and/or increased use of routine household cleaners and landscape chemicals. New development and/or redevelopment projects in these locations have the potential to generate impacts related to the violation of water quality standards, Basin Plan water quality objectives, and/or TMDLs established for the Napa River.

For groundwater resources, the cumulative context is the Napa Valley Groundwater Subbasin (Subbasin) Development of past, present and reasonably foreseeable projects within this area that results in an increase in groundwater demand could result in impacts related to depletion

of the underlying aquifer, regional lowering of the groundwater table level, or depletions of interconnected surface waters.

Due to the residential nature of the Project and compliance with mandatory existing state and local requirements to ensure protection of water quality in the subwatershed and the Subbasin, the Project's contribution to this potentially significant cumulative impact is less than considerable.

As discussed in the EIR, the rates of groundwater pumping have not exceeded the sustainable yield of the Subbasin. The City has implemented actions to ensure the groundwater Subbasin continues to operate within its sustainable yield. The City's 2011 Water Neutral Policy for Development requires all new development to be water-neutral, through a combination of on-site water conservation measures, off-site retrofitting and use of well water, as allowed. Future development in the City is not expected to result in an increase in total water demand because new development is required to offset new demand with water conservation retrofits of existing facilities, or in-lieu payments to the City to carry out any retrofit projects. In addition, as discussed in the EIR, the on-site agricultural well is expected to yield 350 gpm (as reported by the Project applicant) and demonstrated an ability to pump at a rate of 40 gpm over a 24-hour period with negligible drawdown, which is far more capacity than the 10.6 gpm the Project would require for on-site irrigation. Based on the findings of the well capacity and sustainability test, this rate of pumping would have a highly localized radius of influence, if any, and would be greatly overshadowed by the radius of influence associated with the agricultural and municipal supply wells in the surrounding vicinity. Therefore, given Napa County's active management of the Subbasin under the Sustainable Groundwater Management Act, available information, and the City's implementation of a water neutral development policy, the Project's contribution to a cumulative impact with regard to groundwater is not considerable

As the Project does not have impacts with regard to flooding (since the potential impact is eliminated through use of the off-site detention basin), it would not contribute to any cumulative flooding impacts in the subwatershed.

For the reasons above and explained in the EIR, the Project would not have a considerable contribution to cumulative hydrology and water quality impacts.

K. LAND USE

The Project would not physically divide an established community, and it would not have any incremental impact towards physically dividing an established community; the Project would have no cumulative impacts in this regard. Moreover, the Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Again, the Project would have no cumulative impacts in this regard. For these reasons and the reasons discussed in the EIR, the Project would not have significant cumulative impacts relating to land use. (Draft EIR, pp. 3.18-19.)

L. MINERAL RESOURCES

The Project would not impact any mineral resources, as no mineral resources have been identified in or around the Project site, and none of the Project site's previous uses relate to mining activities or mineral processing. (Refer to Notice of Preparation issued March 6, 2018).) The Project would not have any significant cumulative impacts on mineral resources.

M. NOISE

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to noise. (Draft EIR, pp. 3.11-20 through 3.11-21.)

Construction activities associated with proposed or future development within the area would contribute to cumulative noise levels, but in a geographically limited and temporary manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

Non-transportation noise sources (e.g., those associated with Project operation, which for residential properties include HVAC equipment and landscape maintenance activities) and construction noise impacts are typically project-specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). These noise sources do not significantly contribute to cumulative noise impacts.

The cumulative context for traffic noise is the traffic volume increases resulting from the Project along with buildout of the 1993 General Plan, and the anticipated increase in traffic volumes along local roadways. The traffic analysis assumed a cumulative context of transportation impacts resulting from the Project along with buildout of the 2019 General Plan. The evaluation concluded that roadway traffic levels would not reach significant levels when compared against existing roadway traffic noise levels. Therefore, the Project's contribution to existing cumulative noise would not be considerable

N. POPULATION AND HOUSING

The Project would not induce substantial unplanned population growth in the area and would not contribute to a cumulative growth impact. While the Project does entail residential development and would result in population growth, the population growth is not unplanned. The Project site was designated for future residential development in the City's 1993 General Plan and 2019 General Plan, and the Project site is located within the City's Urban Limit Line with access to existing utilities. The Project would not demolish existing housing or displace residents and would not contribute to a cumulative impact. (Draft EIR, pp. 4-3 through 4.6.)

O. PUBLIC SERVICES AND RECREATION

Development of the Project would contribute to a cumulative increase in demand for public services and parks and recreational facilities. New fire and police personnel and facilities as well new schools and parks and recreation facilities may be required for 1993 General Plan buildout conditions. This could result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. However, future development within the City would be required to comply with policies set forth in the City's 1993 General Plan (and now the updated 2019 General Plan) and pay applicable development impact fees as specified in Chapter 3.32, Development Impact Fees, of the City's Municipal Code.

The City recently updated its General Plan in 2019, and the 2019 General Plan EIR notes that the SHFD and the SHPD does not anticipate the need to increase staffing levels or construct any new facilities in order to provide service for future population growth. The projected addition of residents and employees by 2040 (including development of the Project site) would likely increase the demand for emergency fire and police response and preventive services; however, the increase is modest and not expected to create a need for new or expanded fire or police protection facilities and impacts were determined to be less than significant. Therefore, the Project's contribution would not be considerable.

The 2019 General Plan notes that the projected addition of residents and employees by 2040 (including development of the Project site) would likely increase the need for more parks and recreation facilities; however, the impact was determined to be less than significant. As discussed above, the Project would comply with all applicable City goals and policies and pay applicable fees. The Project's incremental contribution to the cumulative increase in demand is considered less than considerable. (Draft EIR, pp. 3.12-17 through 3.12-18.)

P. TRANSPORTATION

As set forth in the EIR, the Project will have a significant and unavoidable cumulative VMT impact. (Draft EIR, pp. 3.14-51 through 3.14-52.)

The VMT analysis considers both existing conditions, and cumulative year 2040 conditions. The analysis concluded that the Project would result in both a direct (existing plus Project) and cumulative (year 2040 Buildout plus Project) impact. For the reasons discussed above, feasible mitigation measures are not available that would reduce this impact to less than considerable. This cumulative impact is significant and unavoidable.

Q. TRIBAL CULTURAL RESOURCES

For the reasons discussed herein and in the EIR, the Project would not contribute to cumulative impacts relating to tribal cultural resources with the incorporation of specified mitigation measures. (Draft EIR, pp. 3.5-33 through 3.5-34.)

The geographic scope of the cumulative impact analysis for the evaluation of potential cumulative impacts on tribal cultural resources is the City of St. Helena.

The 1993 General Plan EIR determined that there would be a significant and unavoidable impact to prehistoric archaeological sites that may contain human remains with religious significance to local Native American groups. However, the City of St. Helena General Plan Update EIR identified that development under the City's 2019 General Plan would result in less-than-significant impacts to TCRs. Policy HR1.5 in the 2019 General Plan would minimize or avoid potential impacts on any resources known or not known at this time that may be encountered in the future and would promote coordination with Native American tribes if any tribal resources are discovered at development sites. The impact on Native American tribal cultural resources was therefore determined to be less than significant.

Numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect cultural resources. These would apply to development within and outside the city. In addition, General Plan policies are designed to safeguard cultural resources from unnecessary impacts. Because all significant tribal cultural resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Although unlikely, there is the potential the Project could adversely affect significant tribal cultural resources that are unique and non-renewable members of finite classes if discovered contributing to a potentially considerable contribution. Therefore, the Project's incremental contribution to the cumulative loss of cultural resources is considered potentially significant.

Implementation of MM CUL-1 provides specific procedures to follow in the event a resource is identified. Compliance with this measure, along with PRC section 5097.98, section 7050.5 of the California Health and Safety Code, and section 15064.5(e) of the CEQA Guidelines, would ensure that Project's incremental contribution would be reduced to less than considerable additional mitigation is required.

R. UTILITIES

The Project would not contribute considerably to a cumulative utilities impact. (Draft EIR pp. 3.13-35 through 3.13-37.)

The cumulative context for utilizes is buildout of the General Plan. Both the 1993 General Plan EIR and the 2019 General Plan EIR determined that cumulative impacts associated with buildout of the City related to utilities would be less than significant.

In order to ensure that the City's future water demand is met by its supplies, the City established a water-neutral policy, which requires all new development to completely offset its water use. With the implementation of this water-neutral policy and other water conservation measures in the City, the City has determined that future water demand is not expected to exceed the 1,950 acre-feet annual use policy limit set by the Safe Yield Committee. As discussed in the EIR, the Project would comply with the City's water-neutral policy by completing offsetting its

water use from the City through the use of water conservation measures and the on-site well for landscape irrigation. Additionally, future development in the City would be required to pay for public improvements related to water projects.

As discussed in the EIR, the City's wastewater treatment plant ("WWTP") has capacity to accommodate Project wastewater flows for treatment. The City has concluded that WWTP should be expanded to accommodate projected 2030 flows. The Project, and other cumulative projects, pay development fees to fund this planned expansion. The Project would pay its fair share of the planned expansion and would contribute a minimal portion of projected flows.

As discussed in the Final EIR, the existing wastewater collection system has a peak wet weather flow capacity issue to the south of the Project site, which results in some overflow of the wastewater system during wet weather events, due to inflow and infiltration. The Project would contribute only 0.5% of peak wet weather flows to this impacted section of the collection system (Carollo Engineers, June 24, 2022). This amount would not considerably increase the existing cumulative inflow and infiltration issue. The system can accommodate the Project during average dry weather flows. The City's Wastewater Master Plan has identified a capital project to address this existing issue, known as WWGM-6. The Project, through required development fees would contribute its fair share to fund capital improvement projects.

The Project includes a stormwater detention basin that has been sized to accommodate runoff resulting from development of the Project site. As described in the EIR, the Project's contribution of stormwater would not contribute to a cumulatively considerable impact on stormwater and drainage facilities within the City.

The Project would not contribute to a cumulative impact for solid waste disposal. The Clover Flat Landfill has enough capacity to remain open until 2047. As described in the EIR, the Project would generate approximately 0.55 tons per day during the 6-year construction period, which is less than 0.1% of the landfill's average unused daily capacity, and 0.225 tons per day of solid waste during operation, which is 0.04% of the average unused daily capacity of the Clover Flat Landfill.

For the reasons discussed herein and in the EIR, the Project would not have significant cumulative impacts relating to utilities.

S. WILDFIRE

The Project is not located in or near a state responsibility area or on land classified as a very high fire hazard severity zone. For these reasons and the reasons discussed in the EIR, the Project would not have a significant cumulative impact relating to wildfires. (Draft EIR, p. ES-3.)

SECTION 5. FINDINGS REGARDING SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2 (d) of the CEQA Guidelines requires a discussion of any significant irreversible environmental change that would be caused by a project. Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area);
- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines Section 15126.2(d));
- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the Project would result in the long-term commitment of resources of the Project site to urban land use. These irreversible impacts, which are unavoidable consequences of urban growth, are described in the EIR. (Draft EIR, pp. 4-2 through 4-3.) Future development of the Project site would likely result in or contribute to the following irreversible environmental changes:

- Conversion of undeveloped land currently partially used as a vineyard. Approximately 16.9 acres of undeveloped land would be converted to urban uses, thus precluding other alternate land uses in the future.
- Irreversible consumption of energy and natural resources associated with the future use of the site.

Development of the Project would result in the commitment of the Project site to urban development, thereby precluding other uses for the lifespan of the Project. Restoration of the site to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

Resources that would be permanently and continually consumed by Project implementation include water, electricity, natural gas, and fossil fuels. Wood products, asphalt, and concrete would be used in construction along with gas and diesel fuel. With respect to

operational activities, compliance with all applicable state and local building codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that resources are conserved to the maximum extent possible. The Project would incorporate a number of sustainable practices that reduce the consumption of energy and water. Nonetheless, construction activities related to the Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline and diesel for automobiles and construction equipment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the Project. While the Project would result in the use, transport, storage, and disposal of minor amounts of hazardous materials during Project construction and operation, as described in the EIR, all such activities would comply with applicable local, state and federal laws related to the use, storage and transport of hazardous materials, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage. The Project itself does not include any uniquely hazardous uses that would require any special handling or storage. Further, the Project does not contain any industrial uses that would use or store acutely hazardous materials.

Implementation of the Project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts include the use of non-renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products and water resources during construction activities. Operations associated with future uses would also consume natural gas and electricity.

SECTION 6. FINDINGS REGARDING GROWTH-INDUCING IMPACTS

As required by section 15126.2(e) of the CEQA Guidelines, an EIR must discuss ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or General Plan amendment approval), or economic expansion or growth occurs in an area in response to the project (e.g.,

changes in revenue base, employment expansion). These circumstances are further described below.

Elimination of Obstacles to Growth: This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity (e.g., constructing new roads or extending public utilities), or removes regulatory constraints that could result in growth unforeseen at the time of project approval.

Economic Effects: This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth. Because the Project site is located within the City's Urban Limit Line and existing services are stubbed to the site, elimination of obstacles to growth is not a factor for this Project.

Removal of Infrastructure Limitations or Provision of Capacity

The elimination of physical obstacles to growth is considered a growth-inducing effect, although not necessarily a significant one. The physical constraints to growth in the vicinity of the Project site include existing residential development to the south, southwest, west and southeast, which would preclude development immediately to the south, southwest, and southeast of the site, and existing office uses to the west, which would preclude inducing growth to the west of the site. Utility infrastructure is also stubbed to the site so no off-site connections would be required. The connection to existing City infrastructure to serve the Project site would not induce growth in this area. Due to the location of the Project site within the City's Urban Limit Line and access to utilities, the Project would not eliminate any constraints that are currently obstacles to growth in this portion of the City that would hasten development of this area.

The City's Residential Growth Management System is no longer enforceable due to the passage of SB 330 (see Gov't Code sec. 66300) otherwise known as the Housing Crisis Act of 2019. This act prevents cities from establishing or implementing any provision that imposes a limit

on the number of housing units that can be approved or constructed annually or for some other period. Therefore, the City can no longer limit residential growth to approximately two percent per year (no more than nine building permits for market rate housing could be issued each year), while providing for both market rate and affordable housing units (Municipal Code Chapter 17.152).

Economic Effects

Implementation of the Project would affect the local economy through the construction of new residences that would require construction workers during the short-term and would encourage people to either relocate or move to the City to take advantage of proximity to local shops, restaurants, and other amenities in nearby downtown.

Additional local employment can be generated through the multiplier effect. The multiplier effect tends to be greater in regions with larger, diverse economies due to a decrease in the requirement to import goods and services from outside the region.

Two different types of additional employment are tracked through the multiplier effect. *Indirect* employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with the Project. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates *induced* employment. Induced employment follows the economic effect beyond the expenditures of the residents within a project area to include jobs created by the stream of goods and services necessary to support residences within the Project site. When a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered *induced* employment.

For example, when an employee of the Project goes out to lunch, the person who serves the employee lunch holds a job that is *indirectly* related to the Project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered *induced* employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees and residents who support the employees of the Project.

Increased future employment generated by employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the City, Napa County, and beyond.

Impacts of Induced Growth

The growth induced directly and indirectly by the Project could contribute to the environmental impacts, in the City and the County, as well as the greater regional area. Any such environmental effects, however, are too diffuse and speculative to predict or describe with any particularity.

Indirect and induced population growth in the City would further contribute to the loss of open space because it would encourage the conversion of undeveloped land to urban uses for additional housing and infrastructure. However, it is assumed this new growth would occur within areas of the City designated and zoned for development or planned for potential future urban development. The City has designated areas for future development in order to protect areas of active agriculture, also within the incorporated City but outside of the Urban Limit Line. Again, however, the particular open space that might get converted cannot be predicted with any certainty, all such conversions to urban land use would occur within areas planned for growth designated in the City's General Plan. Development of the property to the north of the Project site is outside of the City's Urban Limit Line and would require a general plan amendment and compliance with CEQA to evaluate potential impacts.

In summary, although the Project can be said to induce growth, the consequences of such growth-inducement are too speculative to meaningfully predict and, furthermore, due to the designation of the Project site for future residential development in the City's 1993 General Plan and 2019 General Plan[1], implementation of the Project would not be considered growth inducing. (Draft EIR, pp. 4-3 through 4-6.)

SECTION 7. FINDINGS REGARDING ALTERNATIVES

The EIR analyzed three alternatives to the Project as proposed and evaluated these alternatives for their ability to avoid or reduce the Project's significant environmental effects while also meeting the majority of the Project's objectives.

A. PROJECT OBJECTIVES

The following objectives have been established for the proposed Project:

- Subdivide the site consistent with the City's General Plan and Zoning for the site to accommodate residential development.
- Provide opportunities to develop a variety of housing types, including multi-family, single-family, and accessory dwelling units, affordable to a range of incomes including, very low, low and moderate-income households.

[1] Also known as the "St Helena General Plan Update 2040," the 2019 is referred to in this EIR by the year of its adoption.

- Provide opportunities to contribute to the provision of workforce and affordable housing consistent with the City's adopted Housing Element and the Regional Housing Needs Assessment (RHNA) approved by the Association of Bay Area Governments (ABAG).
- Minimize traffic-related environmental impacts, such as noise, air quality and greenhouse gases by lowering commute patterns for St. Helena workers by providing more local housing opportunities.
- Support alternative transportation by providing a pedestrian and bicycle linkages through St. Helena, eventually connecting the regional Vine Trail from Calistoga to the Vallejo Ferry.
- Exceed the City's green building ordinance (Municipal Code Chapter 15.53) and incorporate sustainable design features including water conservation measures, drought resistant landscaping with low flow watering systems, south and west side tree placement to reduce reliance on air conditioning units, and pre-wiring for photovoltaic systems.
- Implement the General Plan Circulation Element by completing the planned extension of Starr Avenue and the partial planned extension of Adams Street from where Adams Street terminates to connect to the Project site.
- Minimize City water use by continuing the use of an existing on-site water well for irrigation of Project landscaped areas.

B. ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

One of the requirements for an alternatives analysis that is set forth in the CEQA Guidelines is identification of alternatives that were considered by the lead agency but rejected as infeasible during the scoping process. As stated in section 15126.6(c) of the CEQA Guidelines, the EIR should briefly explain the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are:

1. Failure to meet most of the basic project objectives,
2. Infeasibility, or
3. Inability to avoid significant environmental impacts (CEQA Guidelines section 15126.6(c))

Section 15126.6(f)(1) of the CEQA Guidelines states that, "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or

otherwise have access to the alternative site (or the site is already owned by the proponent)." However, as stated in this subsection, no single factor establishes a fixed limit on the scope of reasonable alternatives.

An alternate site or off-site alternative was determined to be infeasible for the Project because the Project applicant owns the Project site and it would not be feasible to acquire, control or otherwise have access to a new property within the City large enough to accommodate the Project. Therefore, an off-site or alternate Project location was dismissed from further evaluation.

A reduced density alternative was considered but dismissed because it does not avoid or reduce any potentially significant impacts and would not avoid any health and safety concerns required for the City to make findings under section 15041 of the CEQA Guidelines and Government Code section 65589.5(j). In addition, a reduced density alternative is discouraged by Public Resources Code section 21159.26, if other feasible alternatives exist.

Lastly, a mixed-use alternative that includes commercial uses in addition to residential was also considered and dismissed because it would not be consistent with the underlying land use designation and zoning and would require a General Plan Amendment and rezone. An alternatives analysis is not required to consider alternatives that would require changes to the applicable General Plan. Therefore, this alternative was considered but ultimately dismissed from further review. (Draft EIR, pp. 5-3 through 5-4.)

C. ALTERNATIVES SELECTED FOR ANALYSIS IN THE EIR

1. No Project/No Development Alternative

Description: Alternative 1: No Project/No Development Alternative ("No Project Alternative") The No Project/No Development Alternative considers the effects of forgoing the Project entirely and leaving the Project site in its current undeveloped condition. Under the No Project/No Development Alternative, the Project would not be approved or constructed. This alternative serves to compare the environmental effects of the Project with an alternative that would leave the property in its existing state. (Draft EIR, p. 5-6.)

Impacts: The No Project/No Development Alternative would produce no changes on the Project site, because the site would remain in its current undeveloped condition, effectively eliminating the Project impacts discussed in the EIR. (Draft EIR, pp. 5-6 through 5-7.)

Objectives and Feasibility: The No Project Alternative would not achieve any of the Project's objectives. (Draft EIR, p. 5-6.)

Finding: The City Council rejects the No Project/No Development Alternative on the following grounds: (1) this alternative fails to meet any of the Project objectives; and (2) potentially conflicts with the Housing Accountability Act (Gov't Code section 65589.5) which was enacted to increase the approval and construction of new housing for all economic segments of California's communities by meaningfully and effectively curbing the capability of local

governments to deny, reduce the density for, or render infeasible housing development projects that are consistent with objective local development standards and contribute to meeting housing need. Therefore, the No Project/No Development Alternative is eliminated from further consideration.

2. No Project/General Plan Alternative

Description: Under this alternative, it is assumed the Project would be developed consistent with the underlying MDR land use designation and MR zoning which allows development of the Project site with residential uses up to a maximum density of 12 dwelling units/acre (du/ac) under the 1993 General Plan MDR designation which was revised to 16 du/ac under the 2019 General Plan consistent with the MR zoning, which permits a maximum density of 16 du/ac. For the purposes of this alternative a density of 9 du/ac was assumed for a total of 152 single-family residential units. Based on the number of units this alternative would result in a population of 372 residents, an increase of 159 residents as compared to the Project. It is assumed Starr Avenue and Adams Street would both be extended to connect to the Project site and the street and lot layout would be very similar to the Project with the exception of the 3.4-acre portion of the site currently designated for multifamily units (Lot 52). This portion of the Project site would be configured to accommodate single-family residences. (Draft EIR, p. 5-7.)

Impacts: Due to the denser development and increased number of residential units, it is anticipated that impacts associated with air quality, greenhouse gases, energy, public utilities, population and housing, and noise would be increased. It is anticipated the same mitigation measures for impacts to nesting birds and bats (biological) and the potential to unearth any previously unknown historic, archeological, or paleontological resource (cultural, geology and soils), potential soil contamination from agricultural chemical residues (hazards), and noise from construction equipment would be still be required. No potentially significant impacts associated with the Project would be avoided or reduced. (Draft EIR, pp. 5-7 through 5-11.)

Objectives and Feasibility: The No Project/General Plan Alternative would develop the site consistent with the underlying land use designation and zoning assuming ag a density of 9 du/ac and would complete the planned extensions of Adams Street and Starr Avenue. However, this alternative would not achieve the Project objective of developing a variety of housing types, including multifamily housing and ADUs. Housing would be less affordable to a range of incomes since development would be limited to single-family homes. This alternative would not minimize traffic-related environmental impacts due to the increase in units and residents. Overall, this alternative would not meet most of the Project objectives. (Draft EIR, p. 5-11.)

Finding: The City Council rejects the No Project/General Plan Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) this alternative does not avoid the Project's significant and unavoidable impacts on the environment; and (2) this alternative meets the Project objectives to a lesser extent than the

Project. Therefore, the No Project/General Plan Alternative is eliminated from further consideration.

3. Park/Open Space Preserve Alternative

Description: The Park Preserve/Open Space Alternative includes an approximately 1-acre park/open space that would preserve a majority of the on-site wetlands to help lessen impacts to seasonal wetlands (Impact 3.4-2), as shown on Figure 5-1, Park Preserve Alternative. To accommodate the park three lots would need to be removed (Lots 44, 45, 46) and vegetated swales to capture runoff would be located adjacent to developed areas. It is anticipated the park would be landscaped with native plants and may include a small tot lot or be left as passive open space. The remaining approximately 16-acres would be developed with approximately the same number of residential units as the Project and would maintain a density of 5.1 du/ac. The single-family lots would be slightly smaller than the Project and there could be an increase in the number of multifamily units. Site access and internal roads would essentially be the same as the Project. The same number of residents, 213, is conservatively assumed under this alternative, the same as the Project. (Draft EIR, p. 5-11.)

Impacts: With implementation of this alternative, the impact to seasonal wetlands would be less severe than the Project. The Park Preserve/Open Space Alternative includes an approximately 1-acre park that would preserve two of the larger wetland features to help reduce the impacts to jurisdictional waters. The area of impacted wetlands would be reduced to .006 acres rather than 0.07 acres from the Project. All other impacts are anticipated to be similar to the Project. No significant and unavoidable impacts would be avoided. (Draft EIR, pp. 5-12 through 5-13.)

Objectives and Feasibility: The Park Preserve/Open Space Alternative would still manage to achieve all stated Project objectives. The main changes from this alternative would be a small decrease in the residential footprint and the avoidance of seasonal wetlands at the Project site. This alternative would still subdivide the site consistent with the underlying land use designation and zoning, complete the planned extensions of Adams Street and Starr Avenue, provide a variety of housing types, including affordable housing, and provide more local housing opportunities. (Draft EIR, pp. 5-13 through 5-14.)

Finding: The City Council rejects the Park Preserve/Open Space Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) this alternative does not avoid the Project's significant and unavoidable impacts on the environment; (2) maintenance of isolated wetlands/open space represents an ongoing financial burden on the City; and (3) isolated wetlands offer little habitat value, whereas off-site mitigation may result in higher value habitat with greater connectivity being preserved. Therefore, the Park Preserve/Open Space Alternative is eliminated from further consideration.

4. Increased Density/Affordable Housing Alternative

Description The Increased Density/Affordable Housing Alternative includes the approximately 1-acre park to preserve a majority of the on-site seasonal wetlands with the remaining approximately 16-acres designated for up to 180 affordable housing units, assuming a density of 11.3 dwelling units per acre (du/ac) under the existing Medium Density Residential (MDR) land use designation (current zoning allows for a maximum density of 16.0 du/ac). The units would be attached housing (duplex or triplex) and would be 100% affordable. It is assumed buildings would be no taller than 30-feet, consistent with the underlying MR zoning. Under the technical guidance issued by OPR, a 100% affordable housing project is exempt from the requirement to calculate VMT. Site access and internal roads would essentially be the same as the Project. Using the City's persons per household factor of 2.45 people per unit for medium/higher density residential land uses this alternative would generate 441 residents, an increase of 194 residents as compared to the Project. (Draft EIR, p. 5-14.)

Impacts: Due to the increase in residents, it is anticipated the increase in air pollutants and GHG emissions associated with operation would be slightly higher than the Project due to the increase in vehicle trips, as well as the demand for water supply, wastewater conveyance and treatment, schools, solid waste disposal, and energy. Construction and footprint-related impacts associated with biological, cultural, and geological resources, hazardous materials, and noise would essentially be the same as the Project, as these impacts would be less-than-significant with mitigation. It is anticipated the same mitigation measures for impacts to bats, and nesting birds (biological) and the potential to unearth any previously unknown historic, archeological, or paleontological resource (cultural, geology and soils), and potential soil contamination from agricultural chemical residues (hazards) would be still be required. This alternative would minimize impacts to on-site seasonal wetlands with inclusion of the 1-acre park, similar to the Park Preserve/Open Space Alternative. As a 100% affordable housing project, this Alternative would avoid the significant and unavoidable impact related to VMT. (Draft EIR, pp. 5-14 through 5-17.)

Objectives and Feasibility: The Increased Density/Affordable Housing Alternative would subdivide the site consistent with the underlying land use designation and zoning, would complete the planned extensions of Adams Street and Starr Avenue, and would contribute to the provision of workforce and affordable housing objective. However, this alternative would not achieve the Project objective of developing a variety of housing types, including single-family and ADUs. The housing would be affordable to a range of incomes including, very low, low and moderate-income households, but would not include any single-family or market rate homes. This alternative generally meets a majority of the Project objectives but not all of the objectives. (Draft EIR, p. 5-20.)

Finding: The City Council rejects the Increased Density/Affordable Housing Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) maintenance of isolated wetlands/open space represents an ongoing financial burden on the City; (2) isolated wetlands offer little habitat value, whereas off-site mitigation may result in higher value habitat with greater connectivity being preserved; and (3) the Alternative

does not meet the Project objectives to provide a variety of housing types, including single family, and accessory dwelling units. Therefore, the Park Preserve/Open Space Alternative is eliminated from further consideration.

D. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Development alternative is the environmentally superior alternative. It would avoid all Project-related environmental impacts. CEQA Guidelines section 15126.6(e)(3)(A) requires that when the No Project alternative is environmentally superior, another alternative be selected as the environmentally superior alternative. The environmentally superior alternative would be the Park Preserve alternative. This alternative would reduce Impact 3.4-2 by developing a passive park surrounding three out of four of the site's jurisdictional wetlands. However, this alternative would not avoid all of the significant impacts associated with the Project and all of the identified mitigation would still be required.

SECTION 8. DRAFT STATEMENT OF OVERRIDING CONSIDERATIONS

The City Council hereby declares that, pursuant to the State CEQA Guidelines section 15093, the City Council has balanced the benefits of the Project against any unavoidable environmental impacts in determining whether to approve the Project. Pursuant to the State CEQA Guidelines, if the benefits of the proposed Project outweigh the proposed Project's unavoidable adverse environmental impacts, those impacts may be considered "acceptable."

Having reduced the adverse significant environmental effect of the Project to the extent feasible by adopting the Mitigation Measures contained in the EIR, the Mitigation Monitoring and Reporting Program ("MMRP"), and this Resolution, having considered the entire administrative record on the Project, and having weighed the benefits of the Project against its unavoidable adverse impact after mitigation, the City Council has determined that each of the following social, economic and environmental benefits of the Project separately and individually outweigh the Project's potential unavoidable adverse impacts and render those potential adverse environmental impacts acceptable based upon the following overriding considerations:

A. The Project provides needed housing to the City, particularly affordable housing.

B. The City, per the adopted 2015 Housing Element, has a jobs to housing ratio above the County average, indicating a need for additional housing. As of the most recent Housing Element Progress Report (April 2022), the City had not met its regional housing needs allocation for very-low or moderate income housing.

C. The Project would implement the City's General Plan. The Project site is identified as a housing site in the City's current General Plan, the current Housing Element, and the previous two iterations of the City's General Plan dating back to the 1975 General Plan.

D. The significant and unavoidable impact is related to VMT. Ultimately VMT per capita will be reduced by providing necessary housing in jurisdictions with a high number of jobs. As stated previously, the City of St. Helena currently has a jobs housing imbalance which the Project will help address.

E. The Project will pay development fees which will assist in needed infrastructure improvements in the City, including wastewater treatment and collection systems.

F. The Project would construct the extension of Starr Avenue and the partial extension of Adams Street consistent with the General Plan Circulation Element.

The City Council hereby declares that the foregoing benefits provided to the public through the approval and implementation of the Project outweigh the identified significant adverse environmental impact of the Project that cannot be mitigated. The City Council finds that each of the Project benefits separately and individually outweighs all of the unavoidable adverse environmental effects identified in the EIR and therefore finds those impacts to be acceptable.

EXHIBIT B: MITIGATION MONITORING AND REPORTING PROGRAM

Hunter Subdivision Project

Mitigation Monitoring and Reporting Program

SCH No. 2018032014

City of St. Helena

October 2022

Introduction

Public Resource Code (PRC) Section 21081.6(a)(1) requires a lead agency that approves a project where an environmental impact report (EIR) has been prepared that identified significant environmental effect to adopt a mitigation monitoring a reporting program (MMRP) for the mitigation measures or conditions of approval adopted to mitigate or avoid significant effects on the environment. The City of St. Helena is the lead agency for the EIR prepared for the Hunter Subdivision Project EIR (SCH # 2018032014) and is therefore responsible for the adoption and implementation of this MMRP. The EIR prepared for the Hunter Subdivision Project has identified mitigation measures to avoid or lessen Project impacts.

This MMRP has been prepared pursuant to PRC Section 21081.6 and provides the following:

- Verifies completion of the required mitigation measures;
- Provides a methodology to document implementation of the required mitigation;
- Provides a record of the monitoring program;
- Identifies monitoring responsibility;
- Identifies timing for completion of the mitigation measure.

This MMRP describes the procedures used to implement the mitigation measures and methods to monitor each action. If, during Project implementation, any of the mitigation measures cannot be successfully implemented, the City shall immediately inform any affected responsible agencies. The City, in coordination with the responsible agency, will then determine if modifications to the Project are required, or if an alternative mitigation is appropriate.

The following provides a monitoring table listing all the Project impacts and mitigation measures, method to verify compliance, timing of verification, entity responsible to verify compliance and date of verification completion.

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
3.1 Aesthetics/Visual Resources					
AES-1: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.	Project applicant shall prepare lighting and design guidelines for review by the City.	Prior to Design Review hearing	Community Development Dept.	No building permit will be issued	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
3.3 Biological Resources					
BIO-1: A qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to	Project applicant shall retain a qualified biologist to conduct nesting/roosting bat habitat assessment; map and describe any potential roosting features in a survey letter report. If bats are detected the CDFW shall be contacted and bats avoided during construction, otherwise a bat mitigation and monitoring plan shall be prepared for CDFW review and approval.	Perform study two weeks prior to site clearing/grading. City reviews and approves study before issuing permits for any clearing or grading.	Community Development Dept. & Public Works Dept.	No grading permit will be issued	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
commencement of construction that could impact the roosting bats or maternity colony.					
BIO-2: If construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds: • Preconstruction surveys by a biologist of all potential nesting habitats within 500-feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no	Project applicant shall retain a qualified biologist to conduct preconstruction nesting bird surveys a minimum of 14 days if construction occurs between February 1 through August 31. A survey report shall be prepared documenting results of the survey. If nesting birds are present buffers shall be created around the trees.	Perform study two weeks prior to site clearing/grading. City reviews and approves study before issuing any permits for clearing, grading, or construction.	Community Development Dept. & Building Dept.	No grading permit will be issued	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
new nesting has occurred in the interim. • If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department. • If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.					
BIO-3: Wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.	Obtain required wetland permit to fill the onsite wetland from the agency with jurisdiction.	Prior to site clearing or grading.	Community Development Dept. & Public Works Dept.	No grading permit will be issued	
3.5 Cultural and Tribal Cultural Resources					
CUL-1: The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present	The project applicant or their contractor shall retain an archeological monitor during all ground disturbing activities. The City shall determine, in consultation with the local tribe, if a Native American tribal monitor is also required to be onsite	During all ground disturbing activities.	Community Development Dept. & Building Dept.	Construction shall cease until compliance has been verified	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present at depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based	during ground disturbing work.				

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material. The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City in consultation with the Tribe, this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.					
CUL-2: In the event any human remains are unearthed during site disturbing activities, Section 7050.5(b) of the California Health and Safety Code and Section 15064.5(e) of the CEQA Guidelines specifies protocols to follow in the event human remains are discovered. The Code mandates stopping work within 100 feet of the find and contacting the County Coroner to determine the origin of the remains. If the remains are determined to be Native American the Coroner shall contact the Native American	If human remains are unearthed the contractor shall stop all work within 100 feet and contact the County Coroner and the City.	During all ground disturbing activities.	Community Development Dept. and Public Works Dept.	Construction shall cease until compliance has been verified	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
Heritage Commission within 24 hours to request that the Commission determine the person or persons it believes to be descended from the deceased Native American. The most likely descendant shall be provided with the opportunity to make recommendations regarding the means of treating or disposing of the remains with appropriate dignity. Project-related ground disturbance in the vicinity of the find shall not resume until all statutory requirements have been met and evidence of completion has been submitted to the City, in consultation with the Tribe.					
3.6 Geology and Soils					
GEO-1: Prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City of St. Helena Building Department for review and approval in accordance with adopted City standards. The structural designs shall adhere to the currently adopted version of the California Building Code.	The project applicant shall prepare a design-level geotechnical report that meets the California Department of Conservation Special Publication 117A: *Guidelines for Evaluating and Mitigating Seismic Hazards in California.* The report shall be reviewed and approved by the City's building dept. The report	Prior to grading or building permits	Community Development Dept. & Building Dept.	No grading permit will be issued	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
The report shall identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction. Specifically, the following requirements for the geotechnical and soils report shall be met: • Analysis presented in the geotechnical report shall conduct a detailed evaluation of liquefaction in accordance with California Department of Conservation Special Publication 117A: *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. • Additional subsurface soil borings shall be completed as necessary to represent the full range of site conditions, including the southern portion of the parcel mapped as alluvial fan.	shall contain specific site preparation methods, grading practices, foundation designs and recommendations.				

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
• Analysis presented in the geotechnical report shall include recommendations for building foundations and improvements, including sidewalks, parking lots, and subsurface utilities, that take into consideration the potential effects of settlement, collapse, and expansive or corrosive soils. This includes the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond) due to anticipated settlement. • All design criteria and specifications set forth in the design-level geotechnical report shall be implemented as a condition of project approval. This report shall be completed as a condition of approval of the final tentative map.					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
GEO-2: In the event that known or suspected paleontological resources (e.g., fossils) are unearthed during grading or trenching, the area of discovery shall be roped off by the construction contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist. The Project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines, who shall be tasked with assessing the significance of the fossil find, including documenting the nature, location, and taxa of the find. The qualified paleontologist shall use his/her professional judgement as to the significance of the find, and whether the find should be preserved in a museum repository. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Documentation of the fossil find, including appropriate salvage and recovery of fossil	If paleontological resources are unearthed during grading or trenching, the contractor shall stop all work within a 50-foot radius and contact a qualified paleontologist to assess the find and the City. If it is a fossil the paleontologist shall determine the appropriate steps.	During grading and trenching.	Community Development Dept., Dept. & Public Works Dept.	Construction shall cease until compliance has been verified	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
specimens and of transfer of to an appropriate repository (e.g., University of California Museum of Paleontology) shall be submitted to the City of St. Helena as evidence of compliance with this mitigation measure.					
3.9 Hazards and Hazardous Materials					
HAZ-1: As a condition of approval for construction and grading permits for the Project site, the Project applicant shall the ensure following subsurface soils testing and follow-up analysis shall be performed prior to obtaining a grading permit: • A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, environmental engineer, or similar qualification) for the portions of the Project site historically used for	The project applicant shall retain a qualified individual to prepare a soils testing work plan in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties to be submitted to the County and City for review and approval. The plan shall address the proper steps to follow if any contaminated soils are identified.	Prior to grading permits	Public Works Dept. and the Napa County Division of Environmental Health and/or other regulatory oversight agencies	No grading permit will be issued	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval. • The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary endangerment assessment guidance manual). • The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight. In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the Project. The soil testing report, and if applicable, the human health risk assessment and Operations and Maintenance Program, shall be subject to review and					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
approval by the City of St. Helena Department of Public Works, the Napa County Division of Environmental Health and/or other regulatory oversight agencies.					
3.11 Noise and Vibration					
NOI-1: The Project applicant or its contractors shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation, and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted. *Administrative Controls* – At all times during site preparation and construction: • Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods,	During construction activities the contractor shall demonstrate compliance with Comply with Chapter 8.24 of the Municipal Code. All onsite construction equipment shall be located as far away from any residences but if within 25 ft of an occupied residence shall be shielded to block noise.	During site clearing, grading and building	Police Dept.	Work shall cease until compliance has been verified	

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
• Minimize idling time of onsite equipment, and • Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible, or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors. *Engineering Controls* – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and *Install Sound Abatement* – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the					

Hunter Subdivision Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Procedure	Timing of Monitoring	Monitoring Responsibility	Non-Compliance Sanction/Activity	Monitoring Compliance (Initial/Date)
exterior of a residence (either offsite or onsite), do the following: • Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or • Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.					

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CITY COUNCIL RESOLUTION NO. XXXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. HELENA APPROVING A TENTATIVE SUBDIVISION MAP TO SUBDIVIDE AN EXISTING 16.9-ACRE PROPERTY INTO 51 LOTS FOR SINGLE FAMILY HOMES, ONE PARCEL FOR MULTI-FAMILY DEVELOPMENT, AND TWO LETTERED LOTS, LOCATED AT THE EASTERN TERMINUS OF ADAMS STREET IN THE CITY OF ST. HELENA, CALIFORNIA, APN 009-030-057

PROPERTY OWNER: Ben and Kelly Van Zutphen **APN:** 009-030-057

WHEREAS, the property owner requests adoption of a tentative subdivision map in order to accommodate the subdivision of a 16.9-acre parcel into 51 parcels for single family homes; one 3.13-acre parcel for multi-family homes and two parcels for landscaping and an onsite water well on a property located at the eastern terminus of Adams Street in the Medium Density Residential (MR) zoning district.; and

WHEREAS, a public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and

WHEREAS, the Planning Commission on February 7, 2023, held a public hearing to consider a recommendation to the City Council on the approval of the Tentative Map; and

WHEREAS, following the conclusion of the public hearing, the Planning Commission adopted Resolution PC2023-002, recommending that the City Council approve the Tentative Map; and

WHEREAS, on June 26, 2023, the City Council adopted Resolution _____ Certifying the Environmental Impact Report (State Clearinghouse # 2018032014) for the Hunter Subdivision Project; Adopting Findings Pursuant To The California Environmental Quality Act; Adopting A Statement Of Overriding Considerations; and Adopting a Mitigation Monitoring and Reporting Program; and

WHEREAS, the findings made in this Resolution are based upon the information and evidence set forth in the certified Final EIR and upon other substantial evidence that has been presented at the hearings and in the record of the proceedings. The documents, staff reports, technical studies, appendices, plans, specifications, and other materials that constitute the record of the proceedings on which this Resolution is based are on file for public examination during normal business hours at the Planning Division located at City of St. Helena City Hall, 1088 College Avenue, St. Helena CA; and

WHEREAS, the City Council has considered the findings identified in Municipal Code Section 16.16.080(A) to support the recommended approval of the Tentative Parcel Map, and determined based on the evidence in the record before the Planning Commission as follows:

1. That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of the St. Helena Municipal Code; and

2. That the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ST. HELENA DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1: The City Council finds:

(a) That it has reviewed the proposed tentative map and the evidence and testimony received in conjunction with the public hearing on the proposed tentative map, and that the proposed subdivision as conditioned by the proposed conditions of approval attached to this Resolution as Exhibit A, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of the St. Helena Municipal Code; and

(b) That design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council.

SECTION 2: Based on the aforementioned findings, the City Council does hereby approve the Hunter Tentative Subdivision Map, subject to the conditions of approval attached to this Resolution.

SECTION 3: The documents and materials that constitute the records of proceedings on which this Resolution has been based are located at the City of St. Helena City Hall at 1088 College Avenue. St. Helena, CA. The custodian for these records is the City of St. Helena City Clerk.

SECTION 4: The City Clerk shall certify to the adoption of this resolution.

I HEREBY CERTIFY that the City of St. Helena City Council approved the foregoing at a Special Meeting of the St. Helena City Council on June 26, 2023, by the following vote:

Mayor Dohring: _____

Vice Mayor Hall: _____

Councilmember Chouteau: _____

Councilmember Hardy: _____

Councilmember Summers: _____

APPROVED: ATTEST:

_____ _____

Paul Dohring, Mayor Cindy Tzafopoulos, City Clerk

ADOPTED AND APPROVED the 26th day of June, 2023.

EXHIBIT A: PROPOSED CONDITIONS OF APPROVAL

HUNTER SUBDIVISION CONDITIONS OF APPROVAL 6-26-23

Tentative Subdivision Map TM 2022-001
APN 009-030-057

These conditions shall apply to City approval of Tentative Subdivision Map TM 2022-001. However, the only conditions herein that constitute preconditions to the approval of the Final Map are those that explicitly state that they constitute such preconditions, and such conditions may be satisfied through substantial completion, as determined by the City Engineer, by execution of a Subdivision Improvement Agreement, in a form acceptable to the City Engineer, or a combination thereof. Either substantial completion or execution of a Subdivision Improvement Agreement or a combination of both, shall enable the City Engineer to make a determination of substantial compliance with these condition and the Tentative Subdivision Map TM 2022-001.

Planning Division: General Conditions

1. This specific approval is limited to the Tentative Subdivision Map TM 2010-40, and is not intended to serve as an approval of the overall project description that was submitted with the tentative map application.

2. This approval is based upon all conditions of approval set forth herein, including mitigation measures and specified plans and agreements included by reference, as well as all applicable City rules and regulations. Any deviations from the conditions must be reviewed and approved by the City for conformity with this approval. Deviations may require approved changes to these approvals and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

3. Except as specifically authorized in these conditions of approval, the grading, development, use, and maintenance of the property; the size, shape, arrangement, and location of the structures, parking areas and landscape areas; and the protection and preservation of resources shall be subject to Planning Commission approval and shall conform to the conditions of approval below. Notwithstanding the foregoing, the associated grading and construction of infrastructure for the project shall be permitted without Design Review approval if the design of such infrastructure has otherwise been approved by means of the Tentative Map or Final Map. All plans and agreements (such as landscape maintenance plans) required pursuant to these conditions of approval must be submitted for review and approval and shall be implemented as approved by the City.

4. The use and/or construction of any structures or improvements authorized by this approval shall not commence until all necessary planning and building permits pertaining to the use or construction in question are obtained. Before any grading or building permit will be issued by the City, the Owner/Applicant must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Applicant has satisfied all pre-construction conditions.

5. The Owner/Applicant's acceptance of this permit and/or commencement of use, construction and/or operations under this approval shall be deemed acceptance of all conditions of this approval by the Owner/Applicant.

6. The Owner/Applicant shall ensure that potential contractors are aware of City requirements. The Owner/Applicant shall notify all contractors and subcontractors in writing of the site rules, restrictions, and Conditions of Approval and submit a copy of the notice to the Planning Department.

7. Pursuant to the Municipal Code, Section 16.16.100, the Tentative Map approval is valid for a two (2) year period ending May 1, 2025, unless later extended by operation of state law. The Final Map shall be filed by this date or an extension of time shall be requested prior to the expiration date.

8. Pursuant to St Helena Municipal Code, any request for an extension of the Tentative Map must be justified in writing and received by the Planning Department at least twenty (20) days prior to expiration. The time at which such map expires may be extended by the City Council for one year, and on further application twenty (20) days before the expiration of the one year extension, the subdivider may request a second one-year extension, and on further application twenty (20) days before the expiration of the second one-year extension may request a third one-year extension. No extension shall be permitted beyond the third one-year extension.

9. Prior to recordation of the Final Map and subject to City approval as to form and content, the Owner/Applicant shall include all of the mitigation measures and conditions of approval associated with or required by this Project approval on a separate informational sheet(s) to be recorded with the Final Map. All applicable conditions and mitigation measures for the Project shall be printed on grading and/or building plans.

10. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases not later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.

11. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.

12. This Tentative Parcel Map shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.

13. If the Tentative Map is proposed to be revised, including revisions to these conditions of approval, the revisions shall be approved pursuant to and in accordance with Section 16.16.130 of the St. Helena Municipal Code.

14. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The owner/applicant is responsible for meeting with the Building Official/Fire Inspector to review compliance with Building and Fire Codes, including fire protection systems and the accessibility standards of Title 24.

15. All required fees, including planning fees, development impact fees, park impact fees, and building permit fees shall be paid prior to issuance of building permit unless such payment has been modified by adopted mitigation measures or conditions of approval. Fees shall be those in effect at the time of the issuance of the building permit.

16. This authorizes the creation of a tentative subdivision of a 16.92-acre parcel (APN 009-030-057) located at the north/east terminus of Adams Street into 52 lots. In addition, two lettered lots are created: Parcel A (0.06 acres) is an open space lot adjacent to an internal roadway; Parcel B (0.04 acres) will contain a private water well to be used for irrigation of landscaped areas.

17. All uses of the property shall be in compliance with the MR: Medium Density Residential zoning district regulations.

18. The applicant shall be responsible for compliance with all mitigations measures adopted as part of this project and listed in the Environmental Impact Report and Mitigation Monitoring and Reporting Program (MMRP) adopted as part of this project.

19. All conditions of approval shall be clearly identified and included on all plans submitted for future permit review and issuance.

20. Prior to applying for building permits, proposed future development on any of the newly created lots or parcels shall require the approval of a Design Review application and Use Permit application as applicable, subject to discretionary review by the Planning Commission.

21. The Applicant shall be responsible for all City plan check and inspection costs as described in the St. Helena Comprehensive Fee and Rate Schedule.

Planning Division: Final Map Conditions

22. The owners of the 51 single family residences and the multi-family development on parcel 52 shall be members of a homeowner's association, or another funding mechanism acceptable to the City, dedicated to the maintenance of the project’s common areas, the internal irrigation system (fed by the well on Parcel B), and the well on Parcel B.

23. Prior to recordation of the final map and concurrent with the Subdivision Improvement Plan, the applicant shall submit CC&R's (Codes, Covenants and Restrictions) to the City Attorney, Public Works Director and Community Development Director for review and approval. CC&R's shall be recorded at time of recordation of final map. CC&R's shall include all

restrictions and maintenance regulations pertaining to, landscaping and common areas; shall include all restrictions and maintenance agreements pertaining to roads and access easements; and all restrictions and maintenance agreements pertaining to the irrigation well and internal irrigation water distribution system. The CC&Rs must be recorded prior to issuance of any building permit for any structure on the project site.

24. Pursuant to Section 16.20.090, upon approval of the final map by the City Council, the City Clerk shall execute the appropriate certificate on the certificate sheet and shall, subject to the provisions of Section 66464 of the state Subdivision Map Act, transmit the map, or have an authorized agent forward the map, to the county recorder prior to the issuance of a building permit.

25. Prior to issuance of a Certificate of Occupancy, all overhead utilities on the site shall be undergrounded.

Planning: Misc. Conditions

26. Prior to issuance of building permits, the applicant shall develop a building construction plan to be approved by the Planning Director and Building Official to insure that the homes meet or exceed Title 24 Energy Efficiency Standards and receive a green rating under either the LEEDS, Green Points Checklist, or other acknowledged rating system for energy conservation and green building practices. The latest version of the City of St. Helena green building standards will apply at the time of building permit submittal.

27. All City, state, federal and other applicable local ordinances, rules, regulations and policies in effect at the time of issuance of a grading or building permit shall be complied with.

28. Prior to approval of the Final Map, the applicant shall enter into an Affordable Housing Agreement with the City of St. Helena, which agreement shall be subject to review and approval by the St. Helena City Council. The Affordable Housing Agreement shall be recorded in the Official Records of Napa County, and shall ensure that the project complies with the requirements of Municipal Code section 17.146.050, Residential development project, inclusionary/in-lieu fee requirements. The Affordable Housing Agreement shall demonstrate how the project satisfies the minimum density requirement of the General Plan to construct a minimum of 87 dwelling units, including single family, multifamily, and accessory dwelling units.

Planning: Flooding Conditions

29. Prior to issuance of building permits, the occupant shall prepare a statement that has been approved by the Public Works Director for inclusion in the disclosure documents provided to purchasers of homes which describes the flood risk present at this location and notifies the buyer of the availability of low-cost Preferred Risk Policy flood insurance.

Planning: Landscape Conditions

30. City of St. Helena Community Development Department shall review the final landscape and fencing plan as part of a Design Review approval and prior to issuance of building permits for

construction on the property to ensure compliance with Mitigation Measures. Landscaping shall be native, drought tolerant, compatible with oak trees and requiring minimal irrigation.

31. Landscape plans shall comply with the State of California Model Water Efficient Landscape Ordinance and Section 17.112.140 of the St Helena Municipal Code. Plans shall be designed and verified by a landscape professional and shall include drought tolerant landscaping and low water irrigation systems. Landscaping shall not block vision from exits or at street intersections.

Planning: Construction Activities Conditions

32. Mechanical equipment, including heating and air conditioning units and spa equipment, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBa, Ldn. This condition of approval implements Mitigation Measure NOI-1 from the project environmental impact report, Chapter 8.24 of the St Helena Municipal Code, and noise-related policies of the St Helena General Plan, including policy 8.3.11 from the 1993 General Plan and policy PS2.4 from the 2019 General Plan.

33. The applicant and/or construction manager shall notify all contractors and subcontractors that no trespassing is allowed on adjoining properties.

34. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3)other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

35. This property in the vicinity of an agricultural district. All future purchasers of homes or renters living in the project shall be notified of the expectation of legal, normal agricultural activities on the adjacent land, including day or night disbursement of chemicals, and creation of dust, noise, or fumes, and of the City's Right to Farm ordinance.

Public Works: General Conditions

36. Prior to recordation, the Final Map shall be designed per City standards to the satisfaction of the Public Works Director to accommodate the following facilities in the right of way of both Starr Avenue and Adams Street:

    - Curb and Gutter in accordance with City Standard #310 for a 24" gutter.

- Sidewalks, either attached to the curb or detached from the curb, on both sides of the street along Starr Avenue, and only on the south side of Adams Street, in accordance with City Standard #315
- Parking lane on both sides of the street in accordance with City Standard #301 for a "Collector" street.
- Class II on-street bike lane on both sides of the street in accordance with Caltrans' Highway Design Manual Index 1003.2 but not less than 5 feet wide.
- Two vehicle travel lanes in accordance with City Standard #301 for a "Collector" street.
- Striping to delineate parking, bike, and travel lanes.

37. All public improvements utility connections shall be designed in accordance with the City of St. Helena's Construction Standards (SHMC 16.32.230).

38. The City has adopted the latest edition of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. Applicant is responsible for conformance construction plans in accordance with the BASMAA Manual, SHMC Section 13.32 et. Seq., and the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). Approval of project by Planning Commission does not constitute compliance with storm water regulations nor a right to develop per approved plans unless this condition of approval is fully satisfied.

39. Grading plans, public improvement plans and connections to public utilities shall be prepared by a California Licensed Civil Engineer.

40. An Encroachment Permit is required prior to starting work within City right of way.

41. All public facilities damaged by construction activities shall be the responsibility of the Applicant and shall be repaired per City standards to the satisfaction of the City at the Applicant's expense.

42. During water shortage emergencies, all construction water used for the project shall be obtained from a source other than a City of St. Helena potable water sources (SHMC 13.04.221).

43. Unless exempted, any ADU or JADU constructed with a new single-family home shall have a separate utility connection directly between the ADU or JADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required SHMC 17.116.030(G)(2).

44. Developer shall design and construct all improvements and facilities shown on any approved tentative map, site plan, or other documents submitted for permit approval, in accordance with the St. Helena Municipal Code (SHMC), and the City of St. Helena Design and Construction Standards. Approval of a tentative map depicting improvements that do not conform to the SHMC or City standards does not constitute approval of an exception to the SHMC or City standards unless explicitly stated herein or in another City resolution.

45. The developer shall be responsible for all City plan check, map check and inspection costs. The developer shall deposit funds with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual plan check and inspection costs.

46. If any of the improvements which the applicant is required to construct or install is to be constructed or installed upon land in which the applicant does not have title or interest sufficient for such purposes, the applicant shall do all of the following at least 60 days prior to the filing of the final or parcel map for approval pursuant to Government Code Section 66457:

    a) Notify the City of St. Helena (hereafter "City") in writing that the applicant wishes the City to acquire an interest in the land which is sufficient for such purposes as provided in Government Code Section 66462.5;

    b) Supply the City with (i) a legal description of the interest to be acquired, (ii) a map or diagram of the interest to be acquired sufficient to satisfy the requirements of subdivision (e) of Section 1250.310 of the Code of Civil Procedure, (iii) a current appraisal report prepared by an appraiser approved by the City which expresses an opinion as to the current fair market value of the interest to be acquired, and (iv) a current Litigation Guarantee Report;

    c) Enter into an agreement with the City, guaranteed by such cash deposits or other security as the City may require, pursuant to which the applicant will pay all of the City's cost (including, without limitation, attorney's fees and overhead expenses) of acquiring such an interest in the land.

47. Prior to the issuance of a Certificate of Occupancy, all proposed utilities, both on-site and along project frontages, shall be placed underground. This does not include surface mounted transformers, pedestal mounted terminal boxes and meter cabinets.

48. Except for the existing well on Lot 19 of the Tentative Map that will be providing irrigation water to this development, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Health. If applicant determines that there are none, prior to the issuance of a grading permit, the project engineer shall provide a letter describing the scope of the search done to make this determination and demonstrating, in a manner consistent with City standards and proper engineering practices and to the reasonable satisfaction of the City Engineer, that there are no other existing wells, septic tanks and/or underground fuel storage tanks within the boundaries of the Tentative Map.

Public Works: Fees

49. Public Works engineering and inspection fees for Improvement Plan and Final Map review shall be due and payable at the time of making the first submittal in connection with the Improvement Plans or the Final Map, as applicable.

50. All Public Works Development Impact fees shall be due and payable at the time of issuance of building permit(s) for the improvements to which they are applicable, unless otherwise authorized by the City.

Public Works: Improvement Plan and Construction Conditions

51. Improvement plans shall be prepared and submitted by a California Registered Civil Engineer for the construction of all necessary and required on-site and off-site improvements including grading, water, sanitary sewer, storm drain facilities, roadway improvements, curbs, gutters, sidewalks, parkway strips and streetlights. All design and construction shall conform to the City of St. Helena Design and Construction Standards, as applicable.

52. Per Mitigation Measure GEO-1, a detailed Soils Investigation/Geotechnical Report (the "Soils Report") shall be prepared and submitted for review with the submittal of the improvement plans. The report shall address, at a minimum, potential for liquefaction, expansive soils, seismic risk, recommendations for roadway structural sections, foundation, and other items as mentioned in the Mitigation Measure. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report and acknowledgement of inclusion of any recommendations in the soils report applicable to improvements within this development shall be included on a signature line for the Geotechnical Engineer on the cover sheet of the improvement plans. The signature line should include a statement that the Geotechnical Engineer has reviewed the plans and that the plans have incorporated recommendations as outlined in the Soils Report.

53. All private water mains, sewer mains and storm drains shall be clearly labeled "Private" on the improvement plans.

54. Improvements plans shall include a storm water pollution prevention plan. Erosion control measures shall be included within the improvement plans and the projects WDID number shall be included on the cover sheet of the improvement plans.

55. The improvement plans shall include the following note per the *Engineering Controls* portion of Mitigation Measure NOI-1: "All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order."

56. Roadway Improvements:

    a. The structural section of all road improvements shall be designed based upon a geotechnical investigation that provides the basement soils R-value and expansion pressure test results. A copy of the geotechnical report shall also be submitted with the first set of improvement plan check-prints.

    b. Where new roadway improvements abut existing paving and sidewalk, curb and gutter, the existing pavement and concrete curb and gutter section shall be saw-cut and reconstructed to provide a smooth conforms conform. The limits of such reconstruction shall be as determined by the City Engineer.

c. Pavement markings and signage shall be provided on all streets as necessary and as required by the City Engineer. Signage restricting parking and red painted curbing shall be installed where appropriate. Speed limit signs and other regulatory and informational signs shall be installed at locations determined by the City Engineer.

d. Street lighting shall be designed to provide to meet safety requirements and minimize glare. Street light standard and luminaries of the design, spacing, and locations shall be approved by the City Engineer. All lighting must have shields.

e. Ramps for disabled persons meeting the most recent standards shall be provided at all intersections and at the limits of the improvements where they do not adjoin existing sidewalk improvements. Sidewalk warps shall be provided as necessary to allow a clear four-foot-wide walkway at all locations, including areas where mailboxes, streetlights, and fire hydrants obstruct sidewalks.

57. In accordance with mitigation measure BIO-1 of the approved environmental document, a qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony. A written report of the findings shall be provided to the City prior to grading.

58. In accordance with mitigation measure BIO-2 of the approved environmental document, if construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), prior to commencement of construction the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds:

- Preconstruction surveys by a biologist of all potential nesting habitats within 500 feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim.

- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department.

- If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.

59. In accordance with mitigation measure BIO-3 of the approved environmental document, wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.

60. Prior to the commencement of grading, the developer shall provide evidence that an archaeological monitor has been retained to be present on the site during all ground-disturbing activities per mitigation measure CUL-1.

61. Per mitigation measure CUL-2 of the approved environmental document, if human remains are unearthed during grading operations, work must stop within 100 feet of the find and the county Coroner shall be contacted immediately.

62. Per mitigation measure GEO-2 of the approved environmental document, if known or suspected paleontological resources are unearthed during grading or trenching operations, the area of discovery shall be roped off by the contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist.

63. Per mitigation measure HAZ-1 of the approved environmental document, the Project applicant shall ensure the following subsurface soils testing and follow-up analysis be performed prior to obtaining a grading permit:

    - A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, environmental engineer, or similar qualification) for the portions of the Project site historically used for agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval.

    - The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary

endangerment assessment guidance manual). • The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight. In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the Project.

64. Per mitigation measure NOI-1 of the approved environmental document, the contractor shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation, and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted.

Administrative Controls – At all times during site preparation and construction:

- Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods,
- Minimize idling time of onsite equipment, and
- Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors.

Engineering Controls – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and

Install Sound Abatement – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the exterior of a residence (either offsite or onsite), do the following:

- Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or

- Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.

Public Works: Improvement Plan and Construction Conditions

65. Starr Avenue: Prior to the issuance of a Certificate of Occupancy, Starr Avenue shall join the existing Starr Avenue at Hunt Avenue and shall be improved to include the facilities listed in condition of approval #35. The structural section of the street shall be per recommendations contained in the Soils Report.

66. Adams Street: Prior to the issuance of a Certificate of Occupancy, Adams Street shall join the existing section of Adams Street (currently a dead end) and be extended into the subdivision. The street shall be improved per condition of approval #35. At the northerly terminus of Adams Street, a conform shall be constructed with Class 2 aggregate base to connect to the existing walking path/access road/levee. A gate shall be included at the terminus of the road and connection to the walking path/access road that has appropriate signage indicating it is not a through road for vehicles. The gate shall be constructed per direction from the Fire Chief and shall include a Knox box. The structural section of the street shall be per recommendations contained in the Soils Report.

67. Street A: Prior to the issuance of a Certificate of Occupancy, Street A shall be improved to include two 10 ft. travel lanes, two 8 ft. parking lanes, curbs, gutters, a 6 ft. planter strips and 4 ft. sidewalk on the south side of the road and a 10-foot distance from the face of curb to the right-of-way line on the west side of the road. The total right-of-way width shall be 56 feet. The area between the curb and the right-of-way line on the west side of the street shall be graded such that it can be passable by pedestrians (cross slopes should not exceed 5%). The structural section of the street shall be per recommendations contained in the Soils Report.

68. Streets B and C: Prior to the issuance of a Certificate of Occupancy, Streets B and C shall be improved to include two 10 ft. travel lanes, two 8 ft. parking lanes, curbs, gutters, 6 ft. planter strips and 4 ft. sidewalks within an overall 56 ft. right-of-way. The cul-de-sac associated with Street C shall be constructed per City Standard 304. The knuckle at the intersection of Streets B and C shall be constructed per City Standard 305. The structural section of the street shall be per recommendations contained in the Soils Report.

~~69. EVA: From Street A to levee: Prior to the issuance of a Certificate of Occupancy, the emergency vehicle access road (EVA) shall be improved to provide an all-weather access road (paved) from Street A up to the existing levee road to the north. The width of the EVA shall be a minimum of 21 feet from face of curb to face of curb within an overall 25 ft. wide dedicated EVA. The EVA shall accommodate emergency vehicles (must provide for turning radii to accommodate fire vehicles as per the Fire Department requirements.) Turning templates shall be provided with the improvement plans during the plan check process to ensure the EVA can accommodate Fire Department apparatus.~~

70. Access from Lot 52 to Starr Avenue shall be for EVA and pedestrian purposes. Ownership of this parcel shall be the same as Lot 52, or the access point shall be made part of Lot 52.

71. Adjacent to Lot 51 there is a portion of existing right-of-way that needs to be vacated by the City prior to the recordation of the final map. The applicant shall provide all descriptions and plats to the City for vacation of this right-of-way. The vacation of the right-of-way by the City of St. Helena shall either be done prior to or concurrently with the recordation of the final map.

72. Per Mitigation Measure AES-1, all streetlights shall include shields and downward focused to reduce glare and spillover light and to minimize effects on wildlife and to retain the rural ambience of the development.

Public Works Water and Sanitary Sewer Improvements Conditions

73. As detailed in the Final EIR for the project, the Developer is required to off-set the Project's water demand of 37.04 AFY. The Project's landscape water demand is estimated at 17.16 acre-feet per year, which is within the capacity of the existing on-site well. Due to the new potable water demand on the City system in the amount of 19.8 AFY, the Developer shall implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the SHMC and/or Appendix J of the EIR. The required improvements to offset water demand are as follows: Identify and implement offsite improvements that reduce water loss from the public water distribution system and/or identify and implement offsite improvements that result in a net increase in potable water availability equivalent to 19.8 AFY, or a combination of these. No building permit may be issued until the City has confirmed that the Developer has completed the approved measures and such measures have been accepted by the City, or Developer has entered into a public improvement agreement with the City to ensure the completion of such improvements and provided security in one of the forms described in Government Code section 66499 in an amount equal to the estimated cost of construction of the proposed offsite improvements as determined, or reviewed and approved, by the City Engineer. Any public improvements shall be constructed to St. Helena Public Works Construction Standards whenever applicable.

74. Any modifications to the existing well other than the installation or maintenance of pumping and storage equipment and connection to the onsite irrigation water distribution system, shall require a permit per section 13.16.060 of the St Helena Municipal Code.

75. The Final Map shall include easements to provide for the installation of the private onsite water system connected to onsite well.

76. All homes and the proposed multi-family parcel shall be served by the onsite well for landscaping and other outdoor water use. Only interior fixtures may be served by City of St. Helena domestic water.

77. All parcels must be connected to the internal irrigation well for outside uses, including landscape irrigation and exterior hose bibs.

78. The Applicant shall make written application to the City of St. Helena in conformance with Chapter 13.04 of the St. Helena Municipal Code for Water Service to the new parcels.

79. The applicant/owner shall be required to install water mains and service lines to serve the project parcels with City water. All water mains and lines within the public right of way shall be constructed in conformance with City standards.

80. The applicant/ owner shall make written application to the City of St. Helena for annexation to the Sewer District and for Sewer Service to the new parcels in conformance with Chapter 13.20.070 of the St. Helena Municipal Code.

81. All public water and sewer mains must be located in public right-of-way wherever possible. Where public water and sewer mains must be located on private property, all necessary easement dedications must be made part of the final map or by separate document (if outside of the boundaries of the final map) prior to final acceptance of the improvements by the City.

82. Sewer grades must be designed such that ultimate finished floors are a minimum of 12" above upstream manhole or clean-out rim elevations. Inadequate elevation differentials or grade on private laterals, as determined by the City, must be mitigated by either raising finished floor elevation(s) or installing privately owned and operated sewer lift station(s) with grinder/ejector pump(s) on site.

83. All water improvements shall conform to the City standards.

84. The existing 10 ft. public waterline easement shall be abandoned by separate document once the relocated water line has been built and is operational.

85. Prior to the first Certificate of Occupancy, the existing 12-inch waterline running through the development shall be relocated to Starr Avenue by the applicant/developer. At the westerly end of Starr Avenue, the line shall be reconnected to the existing 12-inch waterline outside north of Lot 46.

86. The proposed well and appurtenances (pump, etc.) for this development shall be owned and operated by the Homeowner's Association for this development. The well shall supply irrigation water for all landscaping of common areas and on all lots within the subdivision to limit use of domestic water produced by the City. Signage shall be provided on each lot warning of the use of well water and that the well water shall not be used for domestic purposes. Piping for all irrigation water from the well shall be purple pipe (same as used for recycled water). Also, disclosure statements (either through disclosures as required by the Department of Real Estate or on the final map) shall be provided to all property owners notifying them about use of well water and statements warning that well water should not be used for domestic purposes. If the City's reclaimed water system becomes available at the project site, the onsite irrigation system shall be connected to the reclaimed water system and the well shall be permanently closed.

87. The sewer easement on lot 21 shall be a minimum of 15 feet wide and shall be located entirely within Lot 21. Statements shall be included on the final map precluding any permanent structures from being constructed within this easement. The sewer line shall be connected to the existing sewer main in Paseo Grand Drive.

Public Works Drainage Improvements Conditions

88. Prior to the issuance of the first building permit, all City-required **in-tract drainage** improvements **as shown on the proposed Tentative Map** ~~related to storm water for the project~~ shall be installed by the project developer at ~~it's~~ **the developer's** expense. Drainage improvements shall be designed ~~and funded by the developer~~ in accordance with the Design Criteria utilizing the rationale method and any applicable adopted City drainage plans.

89. Prior to the issuance of the first building permit, the applicant shall submit for review and approval, drainage plans and hydraulic calculations prepared by a Registered Civil Engineer. The drainage plans and calculations shall indicate the following conditions before and after development:

    - Quantities of water, water flow rates, major water courses, drainage areas and patterns, diversions, collection systems, flood hazard areas, sumps and drainage courses.

90. Post-Development storm water discharge from parcel 009-030-057 shall not exceed the pre-development discharge including the projected build-out, expressed as a 30% undeveloped pervious and 70% impervious drainage watershed. Applicant shall prepare an analysis to show compliance with this COA. Refer to COA #~~90~~ **#91** for additional requirements of the analysis.

91. Prior to building permit issuance, the applicant shall provide to the City an analysis of the capacity and condition of existing drainage facilities downstream of the development (including any detention/retention ponds), including recommendations for offsite drainage improvements, which shall be constructed prior to the issuance of the first certificate of occupancy. Site grading and drainage improvements shall be shown on the improvement plans. In the unlikely event that the downstream facilities require improvements, the applicant **and the City** shall enter **into** a Funding Agreement ~~as a means of reimbursement from~~ **whereby the applicant is reimbursed for said improvements by** ~~from~~ the City.

92. The 100-year overflow and pipeline easement on Lot 25 shall be dedicated on the final map and language shall be included on the final map prohibiting any permanent structures (including garages, sheds, swimming pools, etc.) from being constructed within the easement, as well as provisions (including requirement regarding grading) that ensure that Lot 25 remain in a condition such that it allows relief for the 100-year storm overflows.

93. Prior to Final Map recordation, the developer shall obtain a construction easement from the City over Parcel 009-030-019 to construct the drainage improvements, wall, and fence on lots 5-20. The drainage ditch on Lots 5-20 shall be privately owned and maintained.

Public Works Final Map Conditions

94. A final map, as defined in the State Subdivision Map Act, shall be prepared by a licensed surveyor or civil engineer, showing all parcels, rights-of-way, and easement(s) shall be filed with the City Engineers Office. The final map shall be substantial conformance with the

approved Tentative Map and all applicable conditions of approval. The final map is not valid until it has been approved and recorded.

95. Prior to building permit issuance, the developer shall secure all necessary rights-of-way and easements for both onsite and offsite improvements. Rights-of-way and easements shall be dedicated on the map or provided by separate instrument. The developer shall prepare all necessary legal descriptions and deeds. Offers of dedication shall be either via easement or fee title).

96. The applicant shall transmit by certified mail a copy of the conditionally approved Tentative Map together with a copy of Section 66436 of the State Subdivision Map Act to each public entity or public utility that is an easement holder of record. Written compliance shall be submitted to the City of St. Helena

97. The final map shall not be approved prior to approval of the Subdivision Improvement Plans.

98. Prior to approval of the final map, the developer shall either complete required improvements in accordance with the approved improvement plans or enter into a Subdivision Improvement Agreement with the City. A certificate of occupancy shall not be issued for any structure until required improvements are completed consistent with City standards to the satisfaction of the City Engineer.

99. Abandonment of existing 10-foot public water easement crossing the property shall be included on the final map or by separate document.

100. The unnumbered lot between Lots 3 and 4 as shown on the Tentative Map shall be included as part of Lot 52 and shall not be a separate lot.

Public Works Construction Conditions

101. No grading or other construction shall be performed until the improvement plans have been approved and signed by the City Engineer. Encroachment Permits and Building Permits will not be issued prior to the approval of the improvement plans. An Encroachment Permit is required for any work within the City's rights of way.

102. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.

103. Prior to the issuance of a grading permit, the developer shall provide evidence that a Notice of Intent has been submitted and received by the Regional Water Quality Control Board for a General Construction Activity Storm Water Permit. A copy of the project Storm Water Pollution Protection Plan shall be submitted to the City.

104. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Napa County Environmental Health Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

105. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

106. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

107. Prior to placing the final lift of asphalt, all public sanitary sewer lines shall be video inspected at the expense of the contractor/developer. All video tapes shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

108. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired per City standards to the satisfaction of the City at the Developer's expense.

109. The applicant shall submit a proposed haul route for all trucking associated with this project to the City Engineer for review and approval prior to issuance of a grading permit.

110. Dust control must be maintained per City standards to the City's satisfaction.

111. A certificate of occupancy shall not be issued for any structure until required improvements are completed per City standards to the satisfaction of the City Engineer.

Public Works Subdivision Final and/or Release of Securities Conditions:

112. All public improvements shown on the Improvement Plans shall be completed and accepted by the City prior to release of any security posted.

113. All punch-list work shall be completed, and any outstanding inspection fees or other charges shall be paid prior to issuance of any certificate of occupancy or prior to acceptance of the improvements, at the discretion of the City.

114. Video inspections shall be made of all storm drain and sewer lines installed by developer as set forth in the approved improvement plans to ensure that they are clean of dirt, rocks, debris or other material. Contractor/developer shall be responsible for cleaning and flushing all storm drain lines prior to acceptance by the City. If flushing of the storm drain system is required, the contractor/developer shall put sufficient plugs/filters in place to ensure that any debris, mud or other material is not washed beyond the piping system in the subdivision nor

into any natural water course. A copy of the DVD of all storm drain lines shall be delivered and reviewed by the City prior to acceptance. This condition shall be satisfied prior to issuance of any certificate of occupancy or prior to acceptance of the improvements, at the discretion of the City.

115. Developer shall provide sufficient security guaranteeing the public improvements for a period of one year.

116. A complete set of As-Built or Record improvement plans showing all substantial changes from the original plans shall be certified by the Civil Engineer of record and submitted to the City Engineer prior to acceptance of the public improvements.

117. Prior to acceptance of the public improvements, the developer shall provide a written statement signed by his or her engineer certifying that they observed the work during construction and that site grading and all private site improvements have been completed in accordance with the improvement plans approved by the City Engineer.

118. Prior to acceptance of the public improvements, the developer shall provide a written statement signed by his or her geotechnical engineer certifying that they observed the work and reviewed testing results, and that all of work was performed in accordance with the recommendations included in the Soils Report or other recommendations necessitated by field conditions.

Fire Department Conditions

119. Prior to the issuance of a Certificate of Occupancy, the developer is responsible for fire hydrants to be included and installed within the development in compliance with City standards (number, location and spacing) to the satisfaction of the Fire Department. Locations of the fire hydrants shall be approved by the Fire Department prior to approval of the final map.

120. Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.

121. Prior to issuance of future building permits, all construction plans for homes and other structures shall include fire sprinklers as required by the City of St. Helena Fire Department.

122. One hour minimum fire-resistant construction on all exterior walls within 10’ of property boundary is required. Fire resistant construction of interior walls shall be determined by type of occupancy.

123. Any gates installed to control vehicular access to a property are required to be setback 30-feet from the property line and/or edge of pavement, whichever is greater. No vehicle gates may be installed without Fire Department and Public Works Department review and explicit approval.

~~124. Access to the levee road is restricted for public use and only granted to emergency vehicles and emergency egress for Vineyard Valley Mobile Home Park residents. Signage prohibiting~~

~~its use by the public is recommended. Public access will be granted at the discretion of the Authority Having Jurisdiction during emergencies/evacuations.~~

CITY COUNCIL REPORT

Meeting of May 1, 2023

FILE NUMBER: PL10-040 and TM2022-001

SUBJECT: Request by Ben and Kelly Vanzutphen to subdivide a 16.9-acre parcel to establish 51 single-family residential lots, 11 of which are proposed with accessory dwelling units on approximately 13.4 acres. A 3.13-acre parcel will be established to accommodate a 25-unit multi-family housing development. Two additional remnant parcels (Parcel A; 0.06 acres) and (Parcel B; 0.04 acres) will remain with no plans for future development. A total of 87 units are intended to be built. The currently vacant project site is located north of Hunt Avenue and east of the future extension of Adams Street within the Medium Density Residential (MR) Zoning and (MDR) General Plan districts.

PREPARED BY: Eric Norris, Planning Consultant

REVIEWED BY: Maya DeRosa, Community Development Director

APPROVED BY: Maya DeRosa, Community Development Director

APPLICATION FILED:09/09/10 **ACCEPTED AS COMPLETE:**03/25/11

LOCATION OF PROPERTY: North of Hunt Avenue, east of the future extension of Adams Street

APN: 009-030-057

GENERAL PLAN/ZONING: Medium Density Residential (MDR/MR)

APPLICANT: Ben and Kelly Van Zutphen **PHONE:** 707-431-8582

PLANNING COMMISSION ACTION

On February 7, 2023, the Planning Commission of the City of St Helena held a duly noticed public hearing to consider the Hunter project's Environmental Impact Report and the proposed Tentative Map. At the conclusion of the February 7 meeting, the Planning Commission voted 4-0 (member Rothfeld was absent) to 1) approve Planning Commission Resolution PC2023-001, recommending that the City Council certify the Final Environmental Impact Report for the proposed project and adopt a Statement of Overriding Considerations, and 2) approve Planning Commission Resolution PC2023-002, recommending that the City Council approve Tentative Map TM2022-001.

BACKGROUND

The following is a discussion of the project's setting and background.

1993 General Plan

The subject property has been designated since at least 1993 for development with Medium Density Residential homes. The 1993 General Plan land use map designates the property for Medium Density Residential (MDR), which is described as follows in the 1993 General Plan:

The MDR designation provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. Residential densities shall be in the range of 5.1 to 12.0 dwelling units per gross acre. The MDR designation is the predominant residential designation, occurring throughout large areas of the City. The wide distribution of this designation is intended to maintain a development pattern in newly developing areas that is consistent with historic development patterns.

As discussed later in this report, the proposed subdivision was submitted and accepted as a complete application (that is, ready for staff review and analysis) in 2011, when the 1993 St Helena General Plan was in effect. Although the 1993 General Plan was replaced in 2019 by the current General Plan (the "2019 General Plan"), the 1993 General Plan is used in this report because state law regulating the review of subdivision maps mandates the use of the Plan that was in place when an application was filed. A discussion of the proposed subdivision's consistency with the General Plan adopted in 2019 is included later in this report for informational purposes.

Zoning

At the time that application for the proposed subdivision was accepted as complete, the zoning for the site, as shown on the City's Zoning Map, was Medium Density Residential (MR). The current zoning designation is the same. The Zoning Map as it existed in 2011 and in its current form are both attached to this report.

The MR zoning district provides for single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses.

The Zoning Code (both at the time of application completeness and today) describes the MR zoning district as follows:

"The MR district is established for consistency with the medium density residential general plan designation. The district provides for single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses. Residential densities shall not be less than 5.1 dwelling units per acre nor more than sixteen (16) dwelling units per acre." [Zoning Code 17.40.010]

Municipal Code Section 17.40.060 (Development Standards) establishes the standards for lots:

- Minimum lot area: 7,000 square feet
- Minimum lot width and frontage: 70 feet
- Minimum density: 5.1 units per acre

The parcels proposed for single-family residential lots range in size from 7,000 square feet to 12,814 square feet. All proposed lots meet the minimum depth and width requirement of 70 feet.

The MR district allows a minimum density of 5.1 dwelling units per acre up to a maximum of 16 dwelling units per acre. The Tentative Map would accommodate at least 87 units on a 16.9-acre site resulting in a proposed density of 5.15 dwelling units per acre in compliance with the MR district minimum density requirement.

All other applicable standards related to the siting and development of the proposed structures, including lot coverage, floor area ratio, and structure height and setbacks, will be reviewed for compliance when the proposed dwelling units are submitted to the City for design review and a conditional use permit (for the multi-family homes).

PROJECT PROCESSING HISTORY

It is important to note that although this site has remained an undeveloped parcel, it has been designated for residential development since at least 1993 (see General Plan discussion).

2010: Application Submitted

On September 9, 2010, the applicants, Ben and Kelly Van Zutphen, applied to the City to subdivide an approximately 17-acre parcel of land in the eastern area of the city, east of the existing terminus of Adams Street. The proposed subdivision would create lots for 51 single-family homes and 11 accessory dwelling units, and a 52nd lot on which at least 25 multi-family housing units would be built. Several rounds of review and revisions transpired over the course of the next six months.

2011: Application Complete/1st EIR Process Begins

On March 25, 2011, a completeness letter was issued by the City to the applicants along with a request for additional information related to the existing well and site drainage. The Planning Commission held a “pre-scoping” meeting on July 19th to review the Initial Study and gather public comments. On August 6th, the Planning Commission held a second “pre-scoping” meeting and directed the Planning Department to issue a Request for Proposals (RFP) for the project’s Environmental Impact Report. On December 6th, the Planning Commission held a public scoping meeting for the project EIR.

2012: Draft EIR #1 Released for Public Review

On March 19, 2012, the Notice of Preparation for the Draft EIR #1 was circulated. The Draft EIR was released on March 29th for public and agency review with the initial comment period scheduled to end on July 13th, then extended an additional 45 days to end on September 4th, with a Draft EIR public comment meeting held on August 28th.

2013: Planning Commission Considers Draft EIR #1

Urban Planning Partners (consultants contracted to prepare the Draft EIR) commenced preparation of responses to comments in January of 2013. On September 17, 2013, the Planning Commission considered certification of the Final EIR. The item was presented to the Planning Commission then continued to a future date but was not acted on.

Following the Planning Commission meeting and continuance of the item, additional information was submitted to the City that included a re-design of the intersection of Pope Street and the Silverado Trail. This re-design resulted in the requirement for additional CEQA analysis of the project EIR.

2014 - 2015

No significant progress was documented for the project or the project EIR in the years 2014 to 2015.

2016: Draft EIR #1 Revised
Urban Planning Partners completed revisions to the Draft EIR and resubmitted to the City in approximately the middle of 2016. DEIR revisions resulted in request for information regarding water use and affordable housing provisions for the Tentative Map. On October 3rd, City staff requested additional information and funding from the applicant. Staff met with the applicant on December 20th to discuss the details of the request for additional information and funding.

2017: Draft EIR Consultant Quits; New EIR Consultant
On April 21, 2017, the project applicant provided some requested information but did not provide additional funding until May 2017. On May 19th, Urban Planning Partners declined to complete the project EIR and officially confirmed resignation on June 29th. City staff sent requests for consultation services to three planning consulting firms on the City's approved Master Services Agreement list. None of the firms replied to the request for services and on September 14th, the City issued a Request for Proposals soliciting proposals from qualified environmental consultants for the preparation of an EIR for the project. On December 12th, Dudek is contracted to complete the project EIR.

2018: Preparation of EIR #2 Begins/Revised Map and Info Submitted
On March 6, 2018, the city issued a new Notice of Preparation, and the public comment period is initiated, followed by a public scoping meeting held on March 12th. The public comment period ends on April 13th. On August 3rd, the applicant submitted a revised tentative map and supporting documentation, with the subdivision design remaining largely unchanged.

2019: Revised Map and Info Submitted
On February 1, 2019, the applicant submitted an updated tentative map, a proposed Affordable Housing Agreement, and additional technical studies. The applicant was contacted on September 4th and informed that further work on the project application and EIR will not commence until unpaid balances are remitted to the City. On November 26th, the City approved an augmented budget for Dudek to complete additional technical work for the project EIR following payment from the applicant.

2020: EIR Preparation Continues
On March 16th, augmentation of the Dudek budget was approved for the completion of a Vehicle Miles Travelled (VMT) study, General Plan Goals and Policies update, and Wildfire analysis to include in the project EIR.

2021: Draft EIR #2 Circulates for Public Review/Response to Comments Begins On February 9, 2021, the Dudek budget was approved for augmentation again to include a second Administrative Draft EIR, second Screen-check DEIR, and Final EIR preparation. On April 27th, Interwest was contracted by the City to provide planning services and manage the processing of the project. The City held a public comment period on the second Draft EIR from September 23rd to November 8th (45 days); with the comment period later extended to November 30th (67 days total) due to the volume of comments received and requests for additional time from commenters. Dudek began preparation of responses to comments in December.

2022: Response to Comments on EIR #2 Continues/Staff Report Prepared
On April 12, 2022, Dudek requested additional funding to complete the project FEIR. The City prepared a Professional Service Agreement (PSA)to facilitate a sewer line capacity study on April 22nd in response to technical comments raised as part of the Draft EIR public review. The staff report package for Planning Commission is prepared for the November 1, 2022 meeting.

In response to numerous requests from the public for additional time to review the staff report package, the November 1, 2022, Planning Commission meeting was cancelled. The meeting was subsequently rescheduled for February 7, 2023; the staff report package was updated and republished, and new public hearing notices were published and mailed. In response to comments on one aspect of the traffic analysis for the proposed project, a typographical error in the Traffic Impact Analysis was made and the Final EIR was amended to include this change.

PROJECT DESCRIPTION

The proposed project being considered by the Planning Commission at this time is a Tentative Subdivision Map to subdivide an approximately 17-acre parcel of land in the eastern area of the city, east of the existing terminus of Adams Street. The proposed subdivision would create lots for 51 single family homes, and a separate parcel (lot 52) on which multi-family attached housing units would be built. The proposed Tentative Subdivision Map is included as Attachment 3 to this report.

Approval of the tentative subdivision map is the first necessary but not final step for the subdividing of the property; future discretionary applications would define the design of the development that would take place on the lots created by the subdivision.

Including the ADUs, the project as currently envisioned by the applicant would have 87 homes, which is the minimum number of homes that can be built on the site per its existing General Plan and Zoning designations. A summary of the currently proposed residential units is shown below:

Single Family Homes:	51 units
Attached Multi-Family:	25 units
Accessory Dwelling Units:	11 units
TOTAL:	87 units

The overall residential density of the project, including all residential types, is 5.15 units per acre (87/16.9 = 5.15).

Each of the single-family lots would be at least 7,000 square feet in size, with larger corner lots and cul-de-sac lots.

As part of the first phase of construction, infrastructure to support the proposed project would be developed, including:

- Storm drain, and sanitary sewer facilities will be constructed per City standards. All lots have been designed to drain to the street.

- Per the General Plan Circulation Element, Starr Avenue will be extended through the project area across an existing City-owned parcel, and Adams Street will be extended eastward to connect with Starr. Internal roadways would be constructed. All streets have been designed according to the City standards. Starr Avenue and Adams Street will also include on-street bicycle lanes.

An existing well will be preserved on proposed Parcel B and connected to an on-site “purple pipe” water distribution system to provide all landscape irrigation and outdoor needs (car washing, etc.) throughout the project site. The well and onsite water system would be owned and maintained by a homeowners association.

The “panhandle” potion of Lot 52 will be landscaped and maintained by the property owner.

If the proposed Tentative Map is approved, prior to any construction occurring, the project will also require approvals by the City Council of a Final Map, an Affordable Housing Agreement, Design Review approval by the Planning Commission for the proposed single-family homes and a Conditional Use Permit for the development of the proposed multi-family homes. Public meeting notices will be sent for all future hearings. These applications are not being considered at this time but will be submitted and reviewed at a future date.

Also, a small portion of lot #51 (see Attachment 3) is located on City-owned property, currently intended as part of the right of way of Adams Street. A proposed condition of approval requires that this property be vacated and transferred to the applicant prior to recordation of the Final Map.

ANALYSIS

Tentative Maps are governed by Section 16.16 of the St Helena Municipal Code (SHMC), as well as the California Subdivision Map Act. Specifically, Sections 16.16.060 (Planning Commission action) and 16.16.070 (City Council action) require the proposed Map to be first presented to Planning Commission for review and recommendation to City Council. Section 16.16.080(A) defines the findings that must be made for the Planning Commission to recommend approval of a tentative map. While there are a number of concerns that have been expressed by the community, a Tentative Map may only be denied if it is found to be inconsistent with the findings below (from Section 16.16.080 of the St Helena Municipal Code):

A. In recommending approval or conditional approval or in approving or conditionally approving a tentative map, the planning commission and city council shall find:

1. That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of this code; and

2. Except for condominium conversion projects where no new structures are added, that the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council.

In addition, the proposed subdivision is a “housing development project” as defined by State law, and in recent years the State legislature has passed legislation that significantly restricts the grounds pursuant to which a housing development project can be denied. Specifically, Government Code Section 65589.5(j)(1) provides that if a housing development project complies with applicable objective general plan, zoning, and subdivision standards and criteria in effect at the time the application was deemed complete, the City may only deny the project if it finds, based on written findings supported by a preponderance of the evidence in the record that both of the following conditions exist:

1. The housing development project would have a specific, adverse impact upon the public health of safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

2. There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

Other, more general policy considerations not related to these findings or to consistency with the General Plan (such as the other concerns expressed by the public) should not be cited in a recommendation to approve or deny the proposed subdivision.

The following sections describe staff's analysis of each of the findings required for approval of a tentative map, which staff recommends can be made.

1993 General Plan Consistency
Because the application for the proposed subdivision was deemed complete by the City in 2010, at a time when the City's 1993 General Plan was in place, the 1993 General Plan was used to determine "… consistency with the general plan."

Staff's review of applicable policies from the 1993 General Plan is included as Attachment 4 to this staff report. Staff's recommendation is that the proposed subdivision is **consistent** with all applicable 1993 General Plan policies.

Although consistency with the General Plan adopted in 2019 (the "2040 General Plan Update") is not part of the determination of General Plan consistency, an analysis has been prepared by staff and is included as Attachment 5 to this staff report. The conclusion of staff's analysis is that the proposed project is also consistent with the current (2019) General Plan.

Specific Plan Consistency
The proposed subdivision is not located in a Specific Plan area.

Zoning Code Consistency
For the purposes of the proposed subdivision map, consistency with "… other applicable provisions of this code" is determined by reviewing the map in relation to the density and lot standards for the MR zoning designation.

Other portions of the Zoning Code or the St Helena Municipal Code which deal more specifically with development projects (that is, the construction of homes and other structures) are not relevant to the consistency of the subdivision map, which is the only application being considered at this time. Those separate findings, where needed, would be made at the time subsequent applications are submitted to the City.

As noted earlier in this report, Municipal Code Section 17.40.060 (Development Standards) establishes the standards for lots in the MR zoning district:

- Minimum lot area: 7,000 square feet
- Minimum lot width and frontage: 70 feet
- Minimum density: 5.1 units per acre

Based on a review of the proposed subdivision, staff recommends that the map complies with and is consistent with these standards:

- All proposed residential lots[1] are at least 7,000 square feet in size
- All proposed residential lots are at least 70 feet in width
- The overall density of the project, including the proposed 25 multi-family homes on Parcel 52 and the proposed 11 accessory dwelling units, is 5.15 units per acre, which meets the minimum required density.

(1. Non-residential lots, such as the lot containing the existing well, are not subject to the minimum standards and are not included in this analysis.)

Design for Passive or Natural Heating or Cooling

This standard is described as follows in the State of California Subdivision Map Act:

(b) (1) Examples of passive or natural heating opportunities in subdivision design, include design of lot size and configuration to permit orientation of a structure in an east-west alignment for southern exposure.

(2) Examples of passive or natural cooling opportunities in subdivision design include design of lot size and configuration to permit orientation of a structure to take advantage of shade or prevailing breezes.

(c) In providing for future passive or natural heating or cooling opportunities in the design of a subdivision, consideration shall be given to local climate, to contour, to configuration of the parcel to be divided, and to other design and improvement requirements, and that provision shall not result in reducing allowable densities or the percentage of a lot that may be occupied by a building or structure under applicable planning and zoning in effect at the time the tentative map is filed. [CA Govt Code section 66473.1]

Based on an analysis of the proposed subdivision, staff recommends that the map provides, to the extent feasible, opportunities for passive or natural heating or cooling, as discussed below.

- Approximately 40 of the proposed lots would allow a house oriented in an east-west configuration, allowing these homes, if properly designed, to take advantage of solar exposure.
- Approximately 40 of the proposed lots would allow for homes oriented so that, if front and rear doors and windows were opened, the prevailing upvalley breeze would provide for natural cooling.
- There is no existing shade on the property, but future homes would be required to install landscaping, including trees that would provide shade.

CEQA

A Notice of Preparation of a Draft Environmental Impact Report (SCH# 2018032014) was prepared and available for public review and comment during the state-mandated 30-day public review period from March 6, 2018, through April 9, 2018. A public scoping meeting was held on March 12, 2018. Concerns raised from public agencies and the public include impacts to the property from potential flooding, traffic and circulation impacts, increased water demand, and impacts to cultural resources.

A Draft EIR was prepared with a 45-public review period beginning on September 23, 2021 and ending on November 8, 2021. Due to the volume of comments, the public review

period was extended to November 30, 2021, for a total of 67 days.

The Draft EIR is included as Attachment 6 to this report. The proposed Final EIR, which includes comments on the Draft EIR and responses to comments, is included as Attachment 7. The Mitigation Monitoring and Reporting Program is included in the Resolution in Attachment 1.

One comment received after the publication of the November 2022 Planning Commission agenda package called attention to a minor typographical error in Table 7 of the Traffic Impact Analysis (Appendix K to the Draft EIR) which overstated the project's impact to the intersection of Silverado Trail/Pope Street. Due to a typographical error, the TIA published with the Draft EIR incorrectly showed a future level of service of "E" at this location; the corrected version shows a future level of service of "C" (the analysis of delay was correct and showed a "LOS C" level of delay). This change is shown in Chapter 3 of the Final EIR, "Changes to the Draft EIR."

All documents referenced in the EIR are available for inspection upon request.

Topics Addressed in the Draft EIR

The Draft EIR discusses the project's impacts associated with the following topics.

The Draft EIR's conclusions are discussed later in this report; conclusions of the EIR about the significance of impacts for each topic are shown below.

- Aesthetics (Potentially Significant, but mitigation available)
- Agriculture and Forest Resources (Less than Significant)
- Air Quality (Less than Significant)
- Biological Resources (Potentially Significant, but mitigation available)
- Cultural and Tribal Resources (Potentially Significant, but mitigation available)
- Energy (Less than Significant)
- Geology and Soils (Potentially Significant, but mitigation available)
- Greenhouse Gas Emissions (Less than Significant)
- Hazards and Hazardous Materials (Potentially Significant, but mitigation available)
- Hydrology and Water Quality (Less than Significant)
- Land Use and Planning (Less than Significant)
- Mineral Resources (Less than Significant)
- Noise and Vibration (Potentially Significant, but mitigation available)
- Population and Housing (Less than Significant)
- Public Services (Less than Significant)
- Recreation (Less than Significant)
- Traffic and Transportation (Significant and Unavoidable)
- Tribal Cultural Resources (Less than Significant)
- Utilities and Service Systems (Less than Significant)
- Wildfire (Less than Significant)

Alternatives Considered
The EIR evaluated four Alternatives in addition to the proposed project. The four alternatives (described in detail in the Draft EIR) are:

- Alternative *1) No Project/No Development Alternative, described in the Draft EIR as, "… the Proposed Project would not be approved or constructed. Under this alternative, the Project site would retain its current land use designation and zoning consistent with both the 1993 General Plan and the City's current 2019 General Plan.*

- Alternative *2) No Project/General Plan, described as, "… the Project would be developed consistent with the underlying MDR land use designation and MR zoning which allows development of the Project site with residential uses up to a maximum density of 12 dwelling units/acre (du/ac) under the 1993 General Plan MDR designation which was revised to 16 du/ac under the 2019 General Plan consistent with the MR zoning, which permits a maximum density of 16 du/ac. For the purposes of this alternative a density of 9 du/ac was assumed for a total of 152 single-family residential units."*

- Alternative *3) Park/Open Space Preserve Alternative, described as, "… includ[ing] an approximately 1-acre park/open space that would preserve a majority of the on-site wetlands to help lessen impacts to seasonal wetlands … To accommodate the park three lots would need to be removed … and vegetated swales to capture runoff would be located adjacent to developed areas. … The remaining approximately 16-acres would be developed with approximately the same number of residential units as the Proposed Project and would maintain a density of 5.1 du/ac."*

- *Alternative 4)* Increased *Density/Affordable Housing Alternative, which "... includes the approximately 1-acre park to preserve a majority of the on-site seasonal wetlands with the remaining approximately 16-acres designated for up to 180 affordable housing units, assuming a density of 11.3 dwelling units per acre (du/ac) … The units would be attached housing (duplex or triplex) and would be 100% affordable."*

The alternatives are described in detail and analyzed in Chapter 5 of the Draft EIR.

Based on the analysis in the Draft EIR, Alternative 1, the No Project Alternative, would result in the fewest environmental impacts, and is the "environmentally superior alternative." However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Of the alternatives evaluated, Alternative 3, the Park/Open Space Preserve alternative is the environmentally superior alternative. However, according to the Draft EIR, "… this alternative would not avoid all of the significant impacts associated with the Project and all of the identified mitigation would still be required."

Potentially Significant Impacts
Impacts of potential significance requiring mitigation were identified in the following areas:

- Aesthetics
- Biological Resources
- Cultural and Tribal Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Noise and Vibration

The Draft EIR concluded that mitigation was available to reduce all of these impacts to a level of Less Than Significant.

A summary listing of all potentially significant impacts and their associated mitigation measures is included in the Executive Summary in the Draft EIR (Attachment 6 to this staff report). Detailed discussions of impacts and mitigation are provided in Section 3 of the Draft EIR.

Significant and Unavoidable Impact: Vehicle Miles Traveled
Based on the analysis in the Draft EIR, impacts related to Transportation and Traffic (specifically, Vehicle Miles Traveled or "VMT") were found to be significant and unavoidable. This impact relates to the number of miles that will be traveled in motor vehicles by persons living in the proposed subdivision (trips to work, school, shopping, etc.). This impact is discussed in detail in Section 3.14 of the Draft EIR.

State law, effective January 1, 2020, requires the local agencies examine this impact and that the impacts of a proposed project on roadway congestion (historically, the standard used by most California cities and counties) is no longer included in an EIR. (The traffic congestion impacts of the proposed project were examined, but for purposes of determining consistency with General Plan congestion policies, this analysis is not included in the Draft EIR.)

The state's intent in requiring that VMT be projected is to focus efforts statewide on reducing unnecessary vehicle travel, generally by locating homes closer to jobs, shopping, and other daily needs, and by increasing the use of public transit, walking, and bicycling. As discussed in the Draft EIR, reductions in VMT for residential projects like the proposed project in semi-rural areas are difficult to achieve.

Compared to a commercial development, which could implement ride-sharing programs, residential projects have few options available to effectively reduce vehicle travel; none are available to reduce VMT for the Hunter subdivision enough to reduce this impact to a level of Less Than Significant.

For this reason, the Draft EIR concluded that this impact is Significant and Unavoidable.

Statement of Overriding Considerations
State law provides a means for the approval of a project which is identified to have one or more significant impacts. To do so, the local agency must adopt a Statement of Overriding Considerations which provides the reasons why the agency feels that the benefits of the project outweigh (or "override") the potential impacts. A Statement of Overriding Considerations has been prepared (included in Attachment 1 to this report) which provides the following reasons why approving the project is appropriate:

1. The Project provides needed housing to the City, particularly affordable housing.

2. The City, per the adopted 2015 Housing Element, has a jobs to housing ratio above the County average, indicating a need for additional housing. As of the most recent Housing Element Progress Report (April 2022), the City had not met its regional housing needs allocation for very-low or moderate income housing.

3. The Project would implement the City's General Plan. The Project site is identified as a housing site in the City's current General Plan, the current Housing Element, and the previous two iterations of the City's General Plan.

4. The significant and unavoidable impact is related to VMT. Ultimately VMT per capita will be reduced by providing necessary housing in jurisdictions with a high number of jobs. As stated previously, the City of St. Helena currently has a jobs housing imbalance which the Project will help address.

5. The Project will pay development fees which will assist in needed infrastructure improvements in the City, including wastewater treatment and collection systems.

6. The Project would construct the extension of Starr Avenue and the partial extension of Adams Street consistent with the General Plan Circulation Element.

The Statement of Overriding Considerations concludes,

The City Council hereby declares that the foregoing benefits provided to the public through the approval and implementation of the Project outweigh the identified significant adverse environmental impact of the Project that cannot be mitigated. The City Council finds that each of the Project benefits separately and individually outweighs all of the unavoidable adverse environmental effects identified in the EIR and therefore finds those impacts to be acceptable.

Public and Agency Comments on the Draft EIR
A total of 121 Draft EIR comment letters were received from the 2021 public review and Response to Comments were prepared and included in the Final EIR. Notification of the availability of the Final EIR was sent to the agencies, organizations, and individuals that provided comments. Topics addressed in the comments include:

- Concern about the capacity of downstream sewer lines to accommodate additional flows generated by the project.
- Concern about the “high density” of the proposed project.
- Concern about the loss of open space and the ability to walk on informal trails located on the project site.
- Concern about projected water use and the ability of the project to feasibly comply with the City’s water neutrality requirement.
- Concern about future traffic congestion and traffic safety impacts (including for children walking to school).
- Concern about the project’s impact on the ability of residents in the Vineyard Valley mobilehome community to evacuate in the event of an emergency.
- Concern about the ability of the City-constructed levee on the Napa River (built to protect the Vineyard Valley mobilehome community from flooding) to protect new homes in the proposed project.
- Concerns about changes to the appearance of the project site when existing open space and vines are replaced with a suburban neighborhood.
- Concerns about the project’s effect on the City’s plans to construct a new roadway connection to the Silverado Trail.

Responses to all of the comments received during the public review period are included in the Final EIR and Responses to Comments, Attachment 7 to this staff report.

Based on thorough review of the comments by City staff, legal counsel, and the EIR consultant, none of the comments or responses raised any issues which would require recirculation of the Draft EIR. Attachment 7 includes a list of minor errata changes to the Draft EIR which were included in the responses to comments.

Mitigation Monitoring and Reporting Plan
A Mitigation Monitoring and Reporting Program was prepared for the potential impacts

that require mitigation and is contained in the Executive Summary, Section ES.6 of the Draft EIR. Findings for Certification of the Environmental Impact Report and adoption of the Mitigation Monitoring and Reporting Program, and approval of Tentative Map File #PL10-040 are contained in the Resolution prepared for this project.

Revised Conditions of Approval

Following the publication of the November 2022 Planning Commission package, City staff and the applicant have discussed a number of changes to the proposed conditions of approval requested by the applicant. Staff ultimately agreed to some of the requested changes, but disagreed with others, as shown below.

Changes agreed to or rejected by staff are shown below; condition numbers reflect the updated conditions of approval as included in the Resolution approving the Tentative Map (attachment 2 to this report). The updated conditions of approval are included in the proposed Resolution approving the Tentative Map.

On February 7, the Planning Commission was also presented with changes to conditions of approval #85, #89 and #90. The Commission recommended that these changes, discussed below. be included in the final conditions of approval.

Conditions Revised

The following conditions of approval reflect changes requested by the applicant and make minor changes suggested by City staff to reflect standard City procedures. The final conditions are shown below, followed by a discussion of the changes made.

COA 22: The owners of the 51 single family residences and the multi-family development on parcel 52 shall be members of a homeowner's association, or another funding mechanism acceptable to the City, dedicated to the maintenance of the project's common areas, the internal irrigation system (fed by the well on Parcel B), and the well on Parcel B.

COA #22 was revised to require that the owners of Lot 52 are part of a HOA or other funding mechanism, and to allow flexibility in the type of funding mechanism established to maintain common areas, the internal irrigation system, and the well on Parcel B.

COA 26: Prior to issuance of building permits, the applicant shall develop a building construction plan to be approved by the Planning Director and Building Official to ensure that the homes meet or exceed Title 24 Energy Efficiency Standards and receive a green rating under either the LEEDS, Green Points Checklist, or other acknowledged rating system for energy conservation and green building practices. The latest version of the City of St. Helena green building standards will apply at the time of building permit submittal.

COA #26 was revised to show a requirement to "meet or exceed" Title 24 Energy Efficiency Standards (prior version required exceedance, which is not consistent with City practice).

COA 27: All City, state, federal and other applicable local ordinances, rules, regulations and policies in effect at the time of issuance of a grading or building permit shall be complied with.

This is a new condition of approval which is typically applied to development projects and inadvertently not included in earlier versions of the conditions of approval.

COA 32: Mechanical equipment, including heating and air conditioning units and spa equipment, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBa, Ldn. This condition of approval implements Mitigation Measure NOI-1 from the project environmental impact report, Chapter 8.24 of the St Helena Municipal Code, and noise-related policies of the St Helena General Plan, including policy 8.3.11 from the 1993 General Plan and policy PS2.4 from the 2019 General Plan. [Note: Formerly numbered as COA #31; renumbered due to the insertion of COA #27]

COA #32 was revised to add reference to the sources for the requirement to place HVAC units to minimize noise levels.

COA 36: Prior to recordation, the Final Map shall be designed per City standards to the satisfaction of the Public Works Director to accommodate the following facilities in the right of way of both Starr Avenue and Adams Street:

- Curb and Gutter in accordance with City Standard #310 for a 24" gutter.
- Sidewalks, either attached to the curb or detached from the curb, on both sides of the street along Starr Avenue, and only on the south side of Adams Street, in accordance with City Standard #315
- Parking lane on both sides of the street in accordance with City Standard #301 for a "Collector" street.
- Class II on-street bike lane on both sides of the street in accordance with Caltrans'
- Highway Design Manual Index 1003.2 but not less than 5 feet wide.
- Two vehicle travel lanes in accordance with City Standard #301 for a "Collector" street.
- Striping to delineate parking, bike, and travel lanes. [Note: Formerly numbered as COA #35; renumbered due to the insertion of COA #27]

COA #36 was revised to clarify that City Standard #315 (see the second bullet item) allows the sidewalk to be either attached to the curb or separated from the curb by a parkway strip. This COA was also revised to indicate that "City standards" would be used to determine the design of the facilities shown on the Final Map.

COA 41: All public facilities damaged by construction activities shall be the responsibility of the Applicant and shall be repaired per City standards to the satisfaction of the City at the Applicant's expense. [Note: Formerly numbered as COA #40; renumbered due to the insertion of COA #27]

COA 41 was revised to indicate that City standards will be used to determine whether repairs have been completed correctly.

COA 48: Except for the existing well on Lot 19 of the Tentative Map that will be providing irrigation water to this development, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Health. If applicant determines that there are none, prior to the issuance of a grading permit, the project engineer shall provide a letter describing the scope of the search done to make this determination and demonstrating, in a manner consistent with City standards and proper engineering practices and to the reasonable

satisfaction of the City Engineer, that there are no other existing wells, septic tanks and/or underground fuel storage tanks within the boundaries of the Tentative Map. [Note: Formerly numbered as COA #47; renumbered due to the insertion of COA #27]

COA 48 was revised to refer include, "… in a manner consistent with City standards and proper engineering practices" as the standard for verifying compliance with this condition of approval.

COA 66: Street A: Prior to the issuance of a Certificate of Occupancy, Street A shall be improved to include two 10 ft. travel lanes, two 8 ft. parking lanes, curbs, gutters, a 6 ft. planter strips and 4 ft. sidewalk on the south side of the road and a 10-foot distance from the face of curb to the right-of-way line on the west side of the road. The total right-of-way width shall be 56 feet. The area between the curb and the right-of-way line on the west side of the street shall be graded such that it can be passable by pedestrians (cross slopes should not exceed 5%). The structural section of the street shall be per recommendations contained in the Soils Report. [Note: Formerly numbered as COA #65; renumbered due to the insertion of COA #27]

COA #66 has been revised to require two 10-foot-wide travel lanes in Street A, rather than 12-foot-wide lanes. This was done to conform with City standards for local streets.

COA 69: Access from Lot 52 to Starr Avenue shall be for EVA and pedestrian purposes. Ownership of this parcel shall be the same as Lot 52, or the access point shall be made part of Lot 52. [Note: Formerly numbered as COA #68; renumbered due to the insertion of COA #27]

COA #69 has been revised to eliminate specific requirements for the width of Lot 52 while maintaining its use for emergency vehicle access and pedestrian use.

COA #85. The proposed well and appurtenances (pump, etc.) for this development shall be owned and operated by the Homeowner's Association for this development. The well shall supply irrigation water for all landscaping of common areas and on all lots within the subdivision to limit use of domestic water produced by the City. Signage shall be provided on each lot warning of the use of well water and that the well water shall not be used for domestic purposes. Piping for all irrigation water from the well shall be purple pipe (same as used for recycled water). Also, disclosure statements (either through disclosures as required by the Department of Real Estate or on the final map) shall be provided to all property owners notifying them about use of well water and statements warning that well water should not be used for domestic purposes. If the City's reclaimed water system becomes available at the project site, the onsite irrigation system shall be connected to the reclaimed water system and the well shall be permanently closed. [Note: Formerly numbered as COA #84; renumbered due to the insertion of COA #27]

COA #85 has been added to require that the onsite irrigation system be connected to the City's reclaimed water system when it is available at the site, and that the onsite well be closed at that time.

COA 87: Prior to the issuance of the first building permit, all City-required improvements related to storm water for the project shall be installed by the project developer at its expense. Drainage improvements shall be designed and funded by the developer in accordance with the Design Criteria utilizing the rationale method and any applicable adopted City drainage plans. [Note: Formerly numbered as COA #86; renumbered due to the insertion of COA #27]

COA #87 has been revised to clarify the timing of this condition, and to state that the developer is responsible for installing improvements as required by the City and the

developer's expense.

COA 89: Prior to the issuance of the first building permit, the applicant shall submit for review and approval, drainage plans and hydraulic calculations prepared by a Registered Civil Engineer. The drainage plans and calculations shall indicate the following conditions before and after development:

•Quantities of water, water flow rates, major water courses, drainage areas and patterns, diversions, collection systems, flood hazard areas, sumps and drainage courses. [Note: Formerly numbered as COA #88; renumbered due to the insertion of COA #27]

COA #89 includes a minor wording change ("Prior to issuance of the first building permit …") to clarify the timing of this condition.

COA 90: Post-Development storm water discharge from parcel 009-030-057 shall not exceed the pre-development discharge including the projected build-out, expressed as a 30% undeveloped pervious and 70% impervious drainage watershed. Applicant shall prepare an analysis to show compliance with this COA. Refer to COA #90 for additional requirements of the analysis. [Note: Formerly numbered as COA #89; renumbered due to the insertion of COA #27]

COA #90 has been revised to clarify that post-development stormwater "leaving the site" must not exceed specified levels (which assume development of the site) and that the applicant provide an analysis to confirm this level.

COA #91 - Prior to building permit issuance, the applicant shall provide to the City an analysis of the capacity and condition of existing drainage facilities downstream of the development (including any detention/retention ponds), including recommendations for on-site and/or off-site drainage improvement, which shall be constructed prior to the issuance of the first certificate of occupancy. Site grading and drainage improvements shall be shown on the improvement plans. In the unlikely event that the downstream facilities require improvements, the applicant shall enter a Funding Agreement as a means of reimbursement from the City. [Note: Formerly numbered as COA #90; renumbered due to the insertion of COA #27]

COA #91 has been revised to provide for potential reimbursement by the City for the cost of downstream flood control improvements built by the applicant.

COA 93: Prior to Final Map recordation, the developer shall obtain a construction easement from the City over Parcel 009-030-019 to construct the drainage improvements, wall, and fence on lots 5-20. The drainage ditch on Lots 5-20 shall be privately owned and maintained. [Note: Formerly numbered as COA #92; renumbered due to the insertion of COA #27]

COA #93 has been revised to clarify that the City of St Helena is the owner of the parcel over which a construction easement is needed, and that individual homeowners will be responsible for maintaining a future drainage ditch on their lots.

COA 98: Prior to approval of the final map, the developer shall either complete required improvements in accordance with the approved improvement plans or enter into a Subdivision Improvement Agreement with the City. A certificate of occupancy shall not be issued for any structure until required improvements are completed consistent with City standards to the satisfaction of the City Engineer. [Note: Formerly numbered as COA #97; renumbered due to the insertion of COA #27]

COA #98 has been revised to indicate that City standards will be used to determine

whether improvements have been installed correctly.

COA 108: All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired per City standards to the satisfaction of the City at the Developer's expense. [Note: Formerly numbered as COA #107; renumbered due to the insertion of COA #27]

COA #108 has been revised to indicate that City standards will be used to determine whether repairs have been completed correctly.

COA 110: Dust control must be maintained per City standards to the City's satisfaction. [Note: Formerly numbered as COA #109; renumbered due to the insertion of COA #27]

COA #110 has been revised to indicate that City standards will be used to determine whether dust control have been maintained correctly.

COA 111: A certificate of occupancy shall not be issued for any structure until required improvements are completed per City standards to the satisfaction of the City Engineer. [Note: Formerly numbered as COA #110; renumbered due to the insertion of COA #27]

COA #111 has been revised to indicate that City standards will be used to determine whether improvements have been installed correctly.

COA 119: Prior to the issuance of a Certificate of Occupancy, the developer is responsible for fire hydrants to be included and installed within the development in compliance with City standards (number, location and spacing) to the satisfaction of the Fire Department. Locations of the fire hydrants shall be approved by the Fire Department prior to approval of the final map. [Note: Formerly numbered as COA #118; renumbered due to the insertion of COA #27]

COA #119 has been revised to indicate that City standards will be used to determine whether fire hydrants have been placed and installed correctly.

Conditions Not Revised As Requested by the Applicant

The applicant requested the following changes, which were not agreed to by staff:

COA 73: The applicant requested to include a dollar cap on the cost of improvements that will be installed at his expense to achieve water neutrality. Staff's position is that improvements to achieve the required reduction in overall domestic water use must be installed to achieve water neutrality, regardless of cost.

COA 88: The applicant requested deleting this condition. Staff disagreed, but did agree to minor wording changes, as discussed above.

COA 90: The applicant requested that this condition be deleted, and that post-development stormwater flows leaving the site be allowed to increase. Staff disagreed, pointing out that the applicant agreed as part of the settlement of a lawsuit with the City not to protest requirements to install the improvements required by this condition.

COA 91: The applicant requested that this condition be deleted. Staff disagreed; this requirement to provide detailed hydrological analysis of proposed stormwater systems is a standard requirement for all development projects.

Tentative Map Updates
To respond to comments received since the publication of the November 2022 Planning Commission package, the updated proposed tentative map includes the following minor changes:

- Lot 52 now shows conceptual grading and elevation and indicates that the proposed use is “Multi-Family Residential”.
- A note has been added to Sheet 4 including condition of approval #35 in its entirety to clarify changes that must be made to accommodate pedestrian and bicycle facilities in the public right of way prior to recordation of a Final Map.
- The property owner’s name has been updated to “White Fang Properties, LLC,” to reflect a change in ownership that occurred in October 2022.

OTHER PROJECT ISSUES

Based on public input and prior review of the project, the following are issues of concern to the public, but not necessarily related to the approval at hand.

- Water Neutrality
- Trail/Open Space
- Levee/Flooding
- Parking
- Aesthetics
- Sewer Capacity
- “High Density” Nature of the Project
- Traffic/Congestion
- Intersection Design Adams Street/Starr Avenue and Starr Avenue/Street A
- Vacation of City Property

These issues are discussed below.

Water Neutrality
The issue of Water Neutrality and the project’s ability to comply with the City’s requirement for no net increase in demand for domestic water, is addressed in detail in Master Response #2 to the comments on the Draft EIR.

In summary, the Draft EIR concluded that a variety of measures (detailed in Appendix J to the Draft EIR) are available that would either decrease water demand or increase the efficiency of the City’s water system so that the additional demand created by the proposed project would be offset and overall citywide demand would not increase. The Master Response also notes that the use of the onsite water well for irrigation and other outdoor uses is part of the overall strategy to reduce water demand for the project.

A condition of approval is also included requiring the applicant to identify and implement specific water system improvements to achieve water neutrality prior to issuance of any building permits.

Trail/Open Space
Many commenters expressed concern about how the project would affect their ability to use the portion of the existing public Napa River Trail system adjacent to the project site.

As noted in the responses to comments on the Draft EIR on this topic, the Final EIR includes this statement:

The Project does not propose removing the existing trail or levee maintenance road, as explained in Section 3.12, Public Services and Recreation on page 3.12-17 and on page 2-23 in Chapter 2, Project Description.

The trail system is located entirely outside of the proposed project and would not be affected by the proposed project. An illustration of the existing trail in relation to the proposed subdivision is included as Attachment 14 to this staff report.

Levee/Flooding
Many commenters expressed concern about various issues associated with the City-constructed levee adjacent to the project site. These include:

- Questions about the engineering standards and requirements used to design and construct the levee.
- Whether the levee was constructed or inspected by the U.S. Army Corps of Engineers.
- Whether the levee would adequately protect the project site.
- Whether the capacity of the City-owned flood basin adjacent to the project site would be affected by the proposed project to the extent that its capacity would be exceeded.
- Whether the City is properly maintaining the levee, including controlling rodents whose burrows could affect the integrity of the levee.
- Whether climate change could cause changes in flooding that would affect the ability of the levee to protect the project site.

Detailed responses to these concerns are provided in Master Response #3 to comments on the Draft EIR. Very brief summaries of the more detailed information in the Master Response include:

- The levee was designed and built by the City to meet US Army Corps of Engineers (USACOE) standards. Numerous levees throughout the US are built by local agencies in the same; not all levees are built by the USACOE.
- The levee was designed to provide protection from a “200-year” flood on the Napa River (a flood event which would be expected to occur once every 200 years, or with a 1-in-200 chance of occurring in any given year). This exceeds the usual 100-year standard.
- The adjacent flood basin was designed to accommodate storm flows from the subdivision, and assumed more paved and developed area (and, therefore, more

storm flows) than would be expected from the project as now proposed. The basin can handle storm flows from the proposed project.

- The City is properly maintaining the levee, including rodent control. Maintenance records are available online and at city hall.

- Because the levee was designed to accommodate a more severe flooding event than required (200-year vs 100-year), future increases in storm flows in the Napa River (if they occur as a result of climate change) would be handled better than if the levee were designed to minimum 100-year standard.

Additional Levee Comments
Since the preparation of the Master Responses, comments have continued to be received regarding the levee adjacent to the project site and the protection it provides to the project area.

These comments and responses from the Public Works Department are addressed in a "Frequently Asked Questions" document included as Attachment 23 to this staff report.

The City has also received comments asserting that the City would be "strictly liable" for any flooding that could occur either due to overtopping or failure of the levee. Those comments are addressed in a separate memo sent to the City Council by the City Attorney, and included with this staff report as Attachment 32.

Parking
Several commenters expressed concern that the new homes in the subdivision would cause parking on local streets to increase. While the responses to the comments from the perspective of the Draft EIR note that parking is not a CEQA issue which needs to be examined in the environmental document, staff offers the following responses from a planning perspective:

- Any development which takes place in the subdivision will be subject to detailed review to ensure that City parking standards are met. These include required parking for single and multi-family homes, both of which require a combination of covered and uncovered onsite parking.

- Parking on public streets is available to anyone; except where specifically signed, the City does not limit parking on public streets in the vicinity of the proposed subdivision.

- Because the project does not contain any features that would tend to attract large numbers of people on a regular basis, staff does not foresee any unusual increases in on-street parking in the vicinity as a result of the proposed project.

Aesthetics
Many commenters expressed concern about the change in appearance of the project site that would occur if homes replaced the existing open fields and vines.

The Draft EIR examines impacts to aesthetics in detail in section 3.1, "Aesthetics/Visual Resources." A brief summary of the Draft EIR's conclusions:

- The St Helena General Plan does not designate any specific views that are to be protected, but does provide general policies which seek to, "… [protect] views from streets, parks, and open spaces to vineyards, agriculture, and hillsides."

- The proposed project orients its major streets so that views of surrounding hillsides

and open space areas will be retained.

- Future development will be reviewed through the Development Review process, at which time specific home designs and placements will be reviewed by City staff and the Planning Commission to ensure that it complies with City standards.

Sewer Capacity
Many commenters expressed concern about the impact of the proposed project on the capacity of sewer lines downstream of the project, and especially in the Vineyard Valley mobilehome community, where the existing sewer system occasionally overflows during heavy rains (when rainfall essentially "leaks" into the City's sewer system and therefore increases flows and causes overflows).

This issue is examined in detail in Master Response #4 in the Final EIR, which includes the results of a detailed analysis of sewer capacity. A summary of the detailed Master Response #4:

- Due to the unwanted infiltration of rainwater into the sewer system during storms, the capacity of the sewer lines downstream of the project is occasionally exceeded, causing overflows. This is referred to a "Peak Wet Weather Flows" or "PWWF."

- During dry weather, flows in the sewer lines do not include rainwater, and the capacity of the lines is not exceeded.

- This lack of capacity during PWWF conditions is known to the City, and a future increase in the size of a sewer line downstream of the proposed subdivision has been identified to correct this problem.

- During dry weather conditions, there is sufficient capacity in the downstream sewer line to accept flows from the proposed project without overflowing.

- During PWWF conditions, flows from the proposed project would represent 0.5% of the flows in the line. While overflows can be expected in the downstream line until improvements are constructed, adding flows from the proposed project would not increase either the number or the severity of the overflows.

- Capacity is available at the City's sewage treatment plan to handle flows from the proposed project.

The proposed project, the EIR concludes, would not have an adverse impact on the City's sewer system.

"High Density" Nature of the Project
Several commenters expressed concern about placing a "high density" residential project adjacent to the existing Vineyard Valley mobilehome community. These commenters were apparently opposed to the project.

Staff notes that the Vineyard Valley community, with an overall density of approximately 5.4 dwelling units per acre (based on a review of aerial photography), is slightly more dense (a "higher density") than the proposed subdivision (5.1 dwelling units per acre).

As noted earlier in this report, the proposed project is at the lowest allowable density in the Medium Density Residential land use category, which ranges from 5.1-12.0 units per acre (1993 General Plan) and 5.1-16.0 units per acre (2019 General Plan).

Based on staff's analysis, the commenters who expressed concern about a "high density" project are expressing an opinion that is not supported by the actual project density. These commenters may be supporting a lower planned density of development for the project site, but the project must comply with the minimum density of 5.1 units per acre.

Traffic/Congestion
Many commenters expressed concern about increased traffic congestion as a result of the proposed project. While this impact is not examined the Draft EIR (because changes in state environmental law have removed discussion of traffic congestion from environmental documents), the traffic analysis prepared for the proposed project included an analysis of traffic and congestion impacts.

A brief summary of the results of the traffic analysis is provided in Attachment 15 to this report. The full text of the analysis is in Appendix K to the Draft EIR (Attachment 6 to this report).

Intersection of Adams Street/Street A/Starr Avenue
During staff's review of the proposed subdivision, concerns were expressed that because the intersections of Adams Street/Starr Avenue and Starr Avenue/Street are relatively close to each other, drivers could face difficulties negotiating the combination of these intersections. A modified design was developed that would end Street A at a cul-de-sac which would be open only to emergency vehicles, eliminating one of the intersections and simplifying the traffic movements.

However, a review of the City's roadway standards concluded that there is no clearly defined objective standard for intersection spacing, and that the proposed design meets all of the City's roadway design standards.

Therefore, staff did not recommend that the subdivision be revised to include the alternative roadway design (a cul-de-sac at Starr Ave/Street A).

Vacation of City Property
A small portion of proposed Lot 51 (at the southwest corner of Adams Street and Starr Avenue) is located on City-owned property which is currently proposed as part of the future right-of-way of Adams Street. This has been reviewed and found to be acceptable by the Public Works department (the portion of Lot 51 is not needed as future right-of-way), but approving the lot as proposed will require that the City vacate this property.

A proposed condition of approval is included to require the applicant to take appropriate steps to transfer this piece of City property to the applicant.

2019 GENERAL PLAN CONFORMANCE

An analysis of the proposed project's conformance with applicable policies of the current 2019 St Helena General Plan is included as Attachment 5 to this staff report. Based on staff's analysis, the project conforms with all applicable policies, including the proposed type and density of residential density proposed.

Note: As discussed earlier in this report, the 1993 St Helena General Plan, which was in effect at the time the application for the proposed subdivision was accepted as complete in 2011, is used in the official determination of consistency with the "General Plan." The analysis of conformance with the current 2019 General Plan is provided for informational purposes only.

ISSUES

Project issues include the significant and unavoidable impacts, public comments received in the Draft EIR, and other issues not related to the approval of the tentative map, as noted above.

PLANNING COMMISSION HEARING 2-7-2023 CORRESPONDENCE

The City has addressed three specific letters received as part of the public testimony from the last Planning Commission hearing (see attachments 17,18 and 20):

- Letter from the law firm of DP&F, dated 10-31-22, titled, "RE: Hunter Subdivision Project Environmental Impact Report, File #PL10-040" (Attachment 16a)

- Letter from the law firm of DP&F, dated 10-31-22, titled, "RE: Hunter Subdivision Project Tentative Map No. 2022-001, File #PL10-040" (Attachment 16b)

- Letter from the Napa County Bicycle Coalition, dated 11-1-22, titled, "Public Comment Re: Item 5.1: Hunter Subdivision Project EIR" (Attachment 19)

The following letters were received immediately prior to the February 7, 2023 Planning Commission meeting:

- Letter from the law firm of Holland & Knight (representing the applicant), dated 2-2-23, titled, "Re: City of St. Helena, Unlawful Conditions on Hunter Subdivision Project"

Response: Staff and the city attorney have reviewed the letter. In response to the first point raised in the letter, city staff is recommending a change to a condition to reflect the settlement.

The City is not persuaded by any of the other arguments raised. There is no improper exercise of discretion when conditions must be completed to the satisfaction of the city engineer because the city engineer's decision rests on established objective industry and city standards. The engineer is satisfied if the applicant satisfies objective engineering standards. Nor is this a valid basis for an unconstitutional-taking claim since the owner will be left with plenty of economic use even if the owner doesn't get everything that it is asking for.

- Letter from the law firm of DP&F, dated 2-6-23, titled, "RE: Hunter Subdivision Project Environmental Impact Report, File #PL10-040" (Attachment 26 to this report)

Response: The response to this letter is Attachent 28 to this report.

- Letter from the law firm of DP&F, dated "RE: Hunter Subdivision Project Tentative Map No. 2022-001, File #PL10-040" (Attachment 27 to this report)

Response: The response to this letter is Attachment 29 to this report.

- Letter from the Napa County Bicycle Coaltion, dated 2-7-23, titled, "Public Comment Re: Item 5.1: Public Hearing - Hunter Subdivision Project" (Attachment 30 to this report)

Response: The response to this letter is Attachment 31 to this report.

CITY COUNCIL HEARING 5-1-2023 CORRESPONDENCE

Responses to letters received after publication of this staff report will be attached to the agenda.

RECOMMENDED ACTION

After considering the project, staff report, supporting documents, technical studies and all testimony, written and spoken, the Planning Commission of the City of St. Helena

recommends that the City Council:

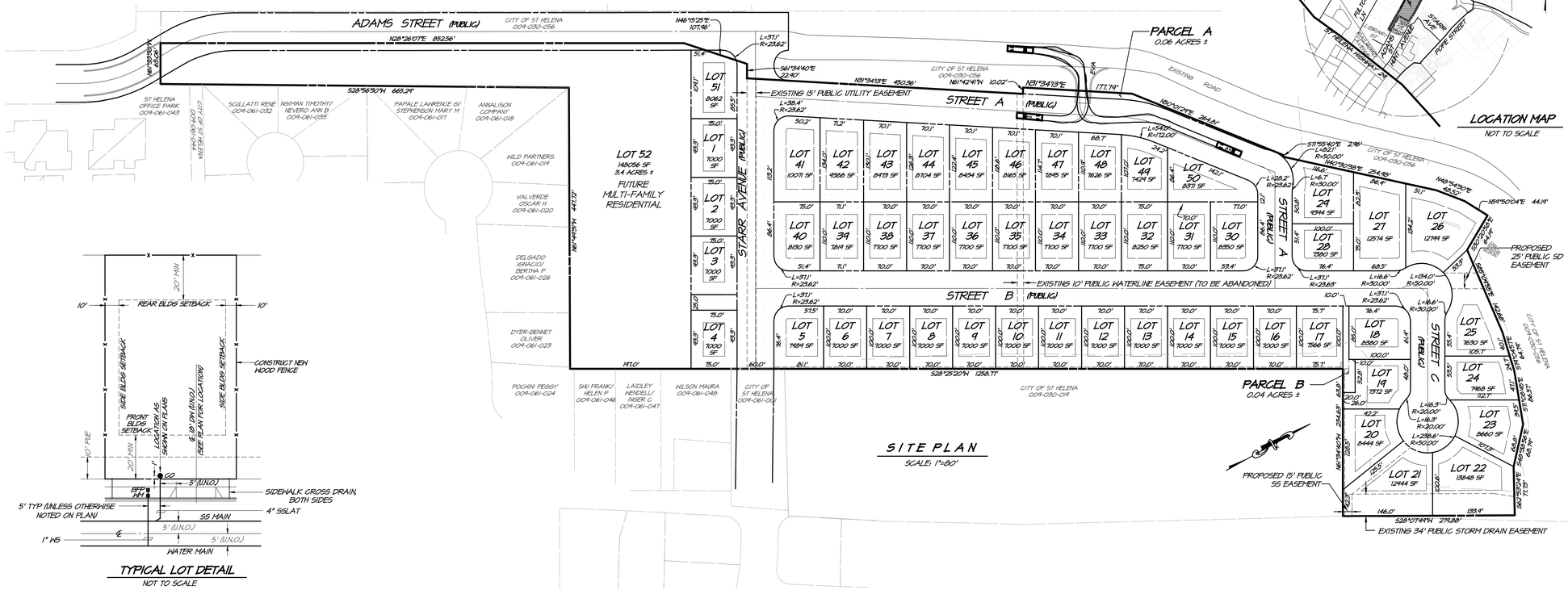
1. Adopt a Resolution certifying the Final EIR, and approving a Mitigation Monitoring Program, Findings of Fact and Statement of Overriding Considerations; and

2. Adopt a Resolution approving the requested Tentative Map No. 2022-001, File #PL10-040 for the Hunter Subdivision project.

ATTACHMENTS

Att 1 Hunter FEIR CC Resolution
Att 2 Hunter Subdivision CC Resolution
Att 3 Tentative Map 1-24-23
Att 4 1993 General Plan Consistency Analysis
Att 5 2019 General Plan Consistency Analysis
Att 6a Hunter Draft EIR
Att 6b APP A_NOP and Comments Received
Att 6c APP B_LESA Model
Att 6d APP C_CalEEMod Results
Att 6e APP D_Biological Resources Reports
Att 6f APP E_ Confidential Hunter Cultural XPI_Ph2 Report_5.15.2020_App B, C, D
Att 6g APP F_Geotechnical Engineering Report
Att 6h APP G_Phase I ESA
Att 6i APP H_Hydrology Report
Att 6j APP I_Noise Model Outputs
Att 6k APP J_Water Neutral Report
Att 6l APP K_HunterSubdivision_TIS_04.06.21a_revNov2022
Att 7 Final EIR for the Hunter Subdivision Project 1-2023
Att 8 Project Site Location Map
Att 9 Project Site Aerial Photo 2022
Att 10 1993 General Plan Land Use Map
Att 11 2000 Zoning Map
Att 12 2018 Zoning Map
Att 13 Project Site Aerial Photo Oct 2009
Att 14 Trail System Map
Att 15 Hunter Subdivision Traffic Analysis Summary 10-10-22
Att 16a Attorney Letter EIR 10-31-22
Att 16b Attorney Letter TM 10-31-22
Att 17 Response to CEQA Comments 1-19-23
Att 18 Response to Subdivision Map Comments 1-26-23
Att 19 Letter from Napa County Bicycle Coalition 11-1-22
Att 20 Response to Bicycle Coalition Comments 1-19-23
Att 21 Hunter Public Comment from 11-1-22 Meeting Combined
Att 22 Hunter Public Comment from 2-7-23 Meeting Combined
Att 23 FAQs About the Napa River Levee
Att 24 FAQs About the Hunter Project
Att 25 Holland & Knight Letter, 2-2-23
Att 26 DP& F Letter, Project EIR 2-6-23
At 27 DP&F Letter, Proposed Tentative Map
Att 28 Response to DP& F Letter on the Project EIR
Att 29 Response to DP&F Letter on the Proposed Subdivision
Att 30 Letter from Napa County Bicycle Coalition 2-7-23
Att 31 Response to Napa County Bicycle Coalition Letter of 2-7-23
Att 32 Memo re Flood Liability

TENTATIVE MAP
HUNTER SUBDIVISION
ST HELENA CALIFORNIA



SITE PLAN
SCALE: 1"=80'

TYPICAL LOT DETAIL
NOT TO SCALE

SYMBOL LEGEND

EXISTING		PROPOSED	
EX SD	EDGE OF PAVEMENT	SD	EDGE OF PAVEMENT
EX SD	STORM DRAIN LINE	SD	STORM DRAIN LINE
EX SS	SANITARY SEWER LINE	SS	SANITARY SEWER LINE
EX W	WATER LINE	W	WATER SERVICE LINE
EX SSMH	SANITARY SEWER MANHOLE	SSMH	SANITARY SEWER MANHOLE
EX SDMH	STORM DRAIN MANHOLE	SDMH	STD STORM DRAIN MANHOLE
	BANK/SLOPE		2:1 SLOPE, UNLESS OTHERWISE SHOWN
	CURB AND GUTTER		STD CURB AND GUTTER
CB	CATCH BASIN	CB	STD CATCH BASIN
	SIDEWALK		STD SIDEWALK
EX FH	FIRE HYDRANT	FH	STD FIRE HYDRANT
EX WV	WATER VALVE	WV	STD WATER VALVE
EX SL	STREET LIGHT	SL	STREET LIGHT
CO	CLEANOUT	DI	DROP INLET
	WATER METER AND BACKFLOW PREVENTION DEVICE		RIGHT OF WAY / PROPERTY LINE
	TREE TO REMAIN		RETAINING WALL
-X-X-	FENCE		100-YEAR OVERLAND RELEASE PATH
	JOINT POLE W/ GUY		EXISTING RUNOFF DIRECTION
	DRIVEWAY		STANDARD DRIVEWAY
235	CONTOUR LINE		REMOVE EXISTING TREE
+235.5	SPOT ELEVATION		
EX OHE	OVERHEAD ELECTRIC		

ABBREVIATIONS

AB	AGGREGATE BASE	NW	NORTHWEST
AC	ASPHALT CONCRETE	OHE	OVERHEAD ELECTRIC
BVC	BEGINNING OF VERTICAL CURVE	P	PROPERTY LINE
CB	CATCH BASIN	PUE	PUBLIC UTILITY EASEMENT
CL	CLASS	PVI	POINT OF VERTICAL INTERSECTION
℄	CENTERLINE	R	RADIUS
CO	CLEANOUT	RCE	REGISTERED CIVIL ENGINEER
CONC	CONCRETE	ROW	RIGHT OF WAY LINE
DI	DROP INLET	S	SLOPE ; SOUTH
E	EAST	SD	STORM DRAIN
ELEV	ELEVATION	SDCB	STORM DRAIN CATCH BASIN
EP	EDGE OF PAVEMENT	SDJB	STORM DRAIN JUNCTION BOX
EVC	END OF VERTICAL CURVE	SDMH	STORM DRAIN MANHOLE
EX	EXISTING	SL	STREET LIGHT
EXP	EXPIRES	SS	SANITARY SEWER
FC	FACE OF CURB	SSLAT	SANITARY SEWER LATERAL
FF	FINISH FLOOR ELEVATION	SQ FT	SQUARE FEET
FG	FINISH GRADE	SSE	SANITARY SEWER EASEMENT
FH	FIRE HYDRANT	SSMH	SANITARY SEWER MANHOLE
FL	FLOW LINE	STA	STATION
GB	GRADE BREAK	STD	STANDARD
GF	GARAGE FLOOR ELEVATION	SW	SIDEWALK
GNV	GROUND NOT VISIBLE	T	TRASH ENCLOSURE
GP	GUEST PARKING	TC	TOP OF CURB ELEVATION
HP	HIGH POINT	TW	TOP OF WALL ELEVATION
INV	INVERT ELEVATION	TYP	TYPICAL
JP	JOINT POLE	VC	VERTICAL CURVE
L	LENGTH	W	WATER ; WEST
LF	LINEAL FOOT/FEET	WM	WATER METER
LP	LOW POINT	WUE	WATER UTILITY EASEMENT
MAX	MAXIMUM	WV	WATER VALVE
N	NORTH		
NCR	NAPA COUNTY RECORDS		
NO	NUMBER		

SHEET INDEX

TM1	COVER SHEET
TM2	EXISTING CONDITIONS
TM3	GRADING PLAN
TM4	GRADING SECTIONS & DETAILS
TM5	UTILITY PLAN

BASIS OF BEARINGS:
THE BEARING OF N28°25'20"E BETWEEN THE FOUND MONUMENTS AS SHOWN ON 26 RS 64, MAP NO. 4182

PROJECT BENCHMARK:
USC&GS NO. 410 BRASS DISK ON NORTH WALL OF VASCONI PHARMACY.

ELEVATION 256.58' NGVD 1929

GRAPHIC SCALE
80 0 80 160
(IN FEET)
1 inch = 80 FT

NOTES:

1. ALL FEATURES SHOWN HEREON REPRESENT CONDITIONS OF THE PROJECT AREA AS COMPILED FROM AN AERIAL SURVEY CONDUCTED JANUARY 4, 2010 BY AEROMETRICS SURVEYS AND A SUPPLEMENTAL FIELD SURVEY BY RSA+ IN JUNE OF 2018. NO ATTEMPT HAS BEEN MADE TO DETERMINE THE EXTENT OR EXISTENCE OF UNDERGROUND UTILITIES OR OTHER FEATURES NOT SURFACE VISIBLE, EXCEPT AS SHOWN HEREON.
2. BOUNDARY INFORMATION SHOWN IS FROM A BOUNDARY SURVEY PERFORMED JULY 2010 BY BROOKS AND ASSOCIATES.
3. THE CITY OF ST HELENA COMPREHENSIVE FLOOD PROTECTION PROJECT IS COMPLETE. SUBJECT PROPERTY IS NO LONGER SUBJECT TO INNDATION BY FLOOD WATERS AND DOES NOT LIE WITHIN THE 100 YEAR FLOOD PLAIN.
4. THIS MAP SHOWS ALL CONTIGUOUS PROPERTY OF THE OWNERS.
5. THERE ARE NO EXISTING STRUCTURES ON THE SUBJECT PROPERTIES.
6. ALL EXISTING AND PROPOSED EASEMENTS ARE SHOWN.
7. ALL EXISTING AND PROPOSED UTILITIES ARE SHOWN. EXISTING UNDERGROUND UTILITIES AS SHOWN WERE DRAWN FROM RECORD SOURCES ONLY. BURIED PIPES WERE NOT VERIFIED, NOR WAS ANY SUBSURFACE EXPLORATION CONDUCTED.
8. ALL EXISTING UTILITY POLES AND OVERHEAD LINES ARE SHOWN.
9. CONTOUR LINES AS SHOWN ARE AT 1 FOOT INTERVALS.
10. THERE IS NO PHASING PLANNED FOR THIS PROJECT.

GENERAL NOTES

OWNER:	WHITE FANG PROPERTIES, LLC PO BOX 2357 HEALDSBURG, CA 95448
DEVELOPER:	BEN AND KELLY VANZUTPHEN 237 LORRAINE COURT HEALDSBURG, CALIFORNIA 95448 (707) 431-8582
ARCHITECT:	FARRELL-FABER AND ASSOCIATES 1022 MENDOCINO AVENUE SANTA ROSA, CALIFORNIA 95401 (707) 574-3811
CIVIL ENGINEER:	RSA+ 1515 FOURTH STREET NAPA, CALIFORNIA 94559 (707) 252-3301
PARCEL NO:	APN 004-030-057
PARCEL AREA:	18.92 ACRES
EXISTING USE:	VACANT/AGRICULTURE
PROPOSED USE:	RESIDENTIAL
WATER:	CITY OF ST HELENA
SEWER:	CITY OF ST HELENA
EXISTING ZONING:	MR (MEDIUM DENSITY RESIDENTIAL)
PROPOSED ZONING:	MR (MEDIUM DENSITY RESIDENTIAL)
GENERAL PLAN DESIGNATION:	MEDIUM DENSITY RESIDENTIAL

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OFFICE (707) 252-3301
www.RSAcivil.com
RSA+ CONSULTING CIVIL ENGINEERS + SURVEYORS + 1980

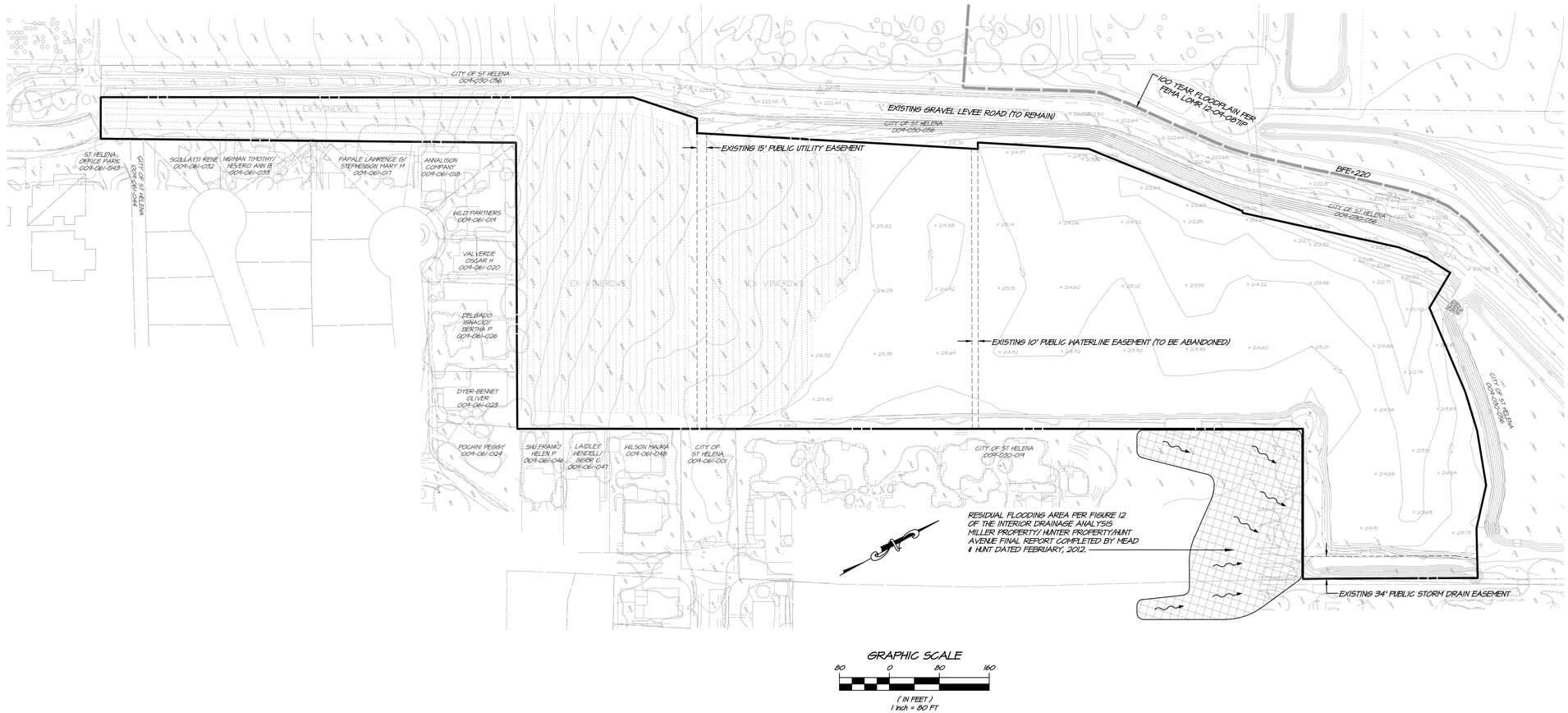
HUNTER SUBDIVISION
COVER SHEET
ST HELENA CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JEREMY NICK HILL
No. 73257
Exp. 12.31.2022
STATE OF CALIFORNIA

DATE	JANUARY 23, 2023
DRAWN	DEL
DESIGNED	BTF
CHECKED	JNS
JOB NO.	4102047.0

SHEET NO.
TM1
1 OF 5 SHEETS

R:\2020\4102047.0_Hunter_Subdivision\Design_CAD\Maps\Cover Aug 03\12023 - RSA.dwg, Plotted: 1/23/2023 - 10:43PM, Plotted by: Jeremy Nick Hill, Xrefs: C3PO.dwt, Rebars Xplode 4 Xrefs



GRAPHIC SCALE

80 0 80 160

(IN FEET)
1 inch = 80 FT

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HUNTER SUBDIVISION
EXISTING CONDITIONS
ST HELENA CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JAIME NOEL GILL
No. 73257
Exp. 12.31.2022
CIVIL ENGINEER
STATE OF CALIFORNIA

DATE	JANUARY 23, 2023
DRAWN	DEL
DESIGNED	BTF
CHECKED	JNG
JOB NO.	4110047.0

SHEET NO.
TM2
2 OF 5 SHEETS

R:\2004\4004710.Mktg_SAA\Mod\Civil\dgn_CSD\TM\TM2.dwg 01/23/2023 2:35:46PM Planner, COPYRight Reserved Section 1 Access.

EROSION CONTROL

CONSTRUCTION BMP'S
FIBER ROLLS
STORM DRAIN INLET PROTECTION
STABILIZED CONSTRUCTION ENTRANCE/EXIT
OUTDOOR MATERIAL STORAGE AREAS
CONCRETE WASTE MANAGEMENT
PROPER VEHICLE AND EQUIPMENT MAINTENANCE
SLOPE PROTECTION

POST-CONSTRUCTION BMP'S
INLET LABELS "DRAINS TO RIVER"
PRIVATE STREET SWEEPING
DOWNSPOUTS TO LANDSCAPE SWALES
VEGETATED SWALES
HOMEOWNER EDUCATION ON STORM WATER POLLUTION PREVENTION
HYDRODYNAMIC OIL, WATER & SOLID SEPARATOR

NOTE:
THOSE AREAS DRAINING INTO THE EXISTING STORM DRAIN SYSTEM (DIRECTLY DISCHARGING TO THE NAPA RIVER) WILL BE TREATED BY HYDRODYNAMIC SEPARATORS PRIOR TO ENTERING INTO THE EXISTING SYSTEM. THE REMAINING SITE WILL DRAIN INTO THE DETENTION POND (PER THE CITY OF ST HELENA COMPREHENSIVE FLOOD PROTECTION PROJECT) WHICH WILL TREAT THE RUNOFF PRIOR TO BEING DISCHARGED INTO THE NAPA RIVER.

LEGEND

- CURB INLET SEDIMENT BARRIER (1/TM4)
- FIBER ROLL SEDIMENT BARRIER (2/TM4)
- EX TREE TO REMAIN
- EX TREE TO BE REMOVED
- (A) = TYPE 'A' LOT GRADING (SEE SHEET TM4 FOR DETAILS)
- EX 100 YEAR OVERLAND RELIEF ROUTE

APPROXIMATE RAW EARTHWORK QUANTITIES*

CUT	FILL
10,202 CY	24,350 CY

* DOES NOT INCLUDE COMPACTION AND CONSOLIDATION LOSSES OR TRENCH, PAD OR FOUNDATION SPOILS.

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 inch = 50 FT

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HUNTER SUBDIVISION
GRADING PLAN
ST HELENA CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. 73257
Exp. 12.31.2022
CIVIL
STATE OF CALIFORNIA

DATE	JANUARY 23, 2023
DRAWN	DEL
DESIGNED	BTF
CHECKED	JNS
JOB NO.	4110047.0

SHEET NO.
TM3
3 OF 5 SHEETS

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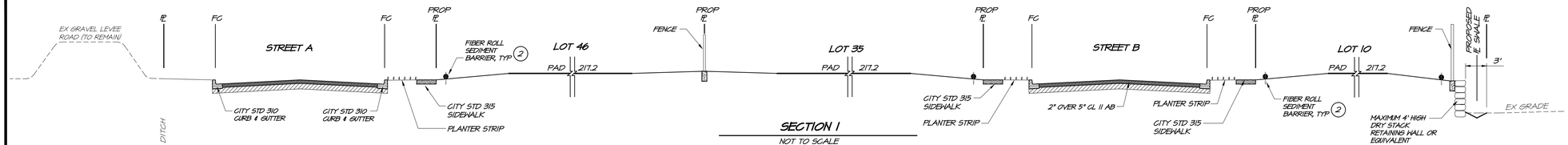
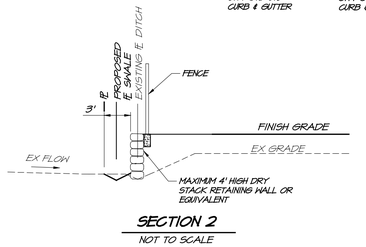


SECTION 1
NOT TO SCALE



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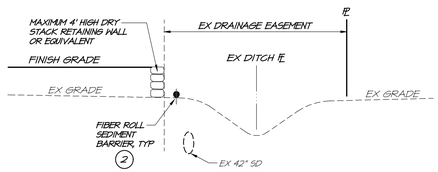

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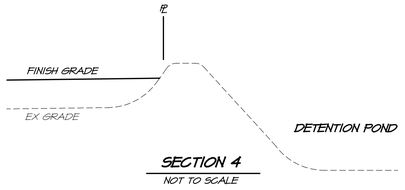

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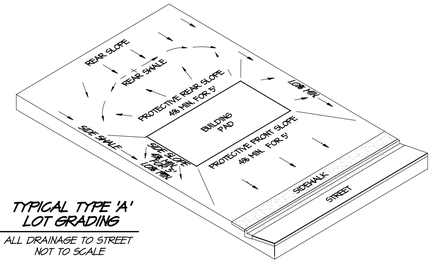
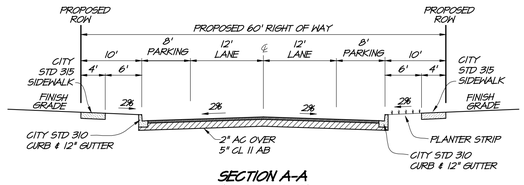
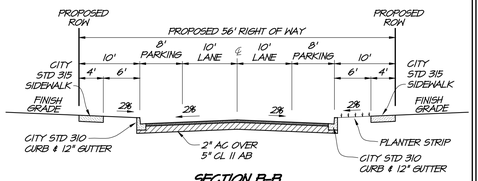


TYPICAL TYPE 'A' LOT GRADING
ALL DRAINAGE TO STREET
NOT TO SCALE



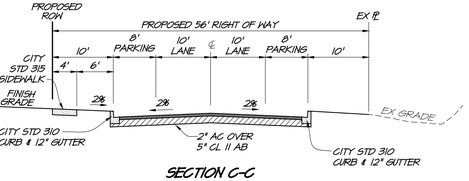
SECTION A-A
(STARR AVENUE)
NOT TO SCALE



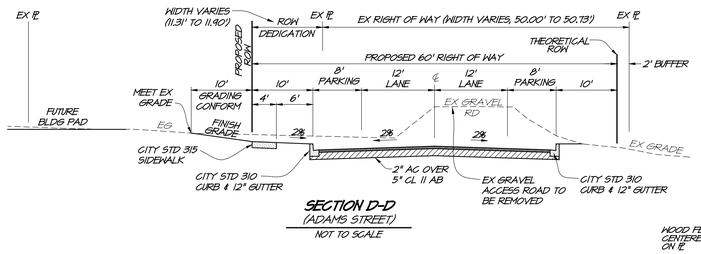
SECTION B-B
(STREET 'B')
NOT TO SCALE

NOTE: PRIOR TO RECORDATION, THE FINAL MAP SHALL BE DESIGNED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR TO ACCOMMODATE THE FOLLOWING FACILITIES IN THE RIGHT OF WAY OF BOTH STARR AVENUE AND ADAMS STREET:

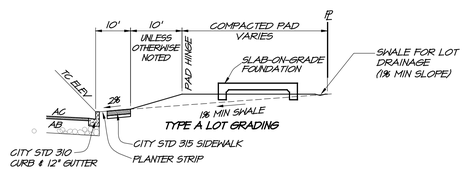
- CURB AND GUTTER IN ACCORDANCE WITH CITY STANDARD #310 FOR A 24" GUTTER.
- SIDEWALKS, EITHER ATTACHED TO THE CURB OR DETACHED FROM THE CURB, ON BOTH SIDES OF THE STREET ALONG STARR AVENUE, AND ONLY ON THE SOUTH SIDE OF ADAMS STREET, IN ACCORDANCE WITH CITY STANDARD #315
- PARKING LANE ON BOTH SIDES OF THE STREET IN ACCORDANCE WITH CITY STANDARD #301 FOR A "COLLECTOR" STREET.
- CLASS II ON-STREET BIKE LANE ON BOTH SIDES OF THE STREET IN ACCORDANCE WITH CALTRANS' HIGHWAY DESIGN MANUAL INDEX 1003.2 BUT NOT LESS THAN 5 FEET WIDE.
- TWO VEHICLE TRAVEL LANES IN ACCORDANCE WITH CITY STANDARD #301 FOR A "COLLECTOR" STREET.
- STRIPING TO DELINEATE PARKING, BIKE, AND TRAVEL LANES.



SECTION C-C
(STREET 'A')
NOT TO SCALE

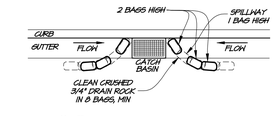


SECTION D-D
(ADAMS STREET)
NOT TO SCALE

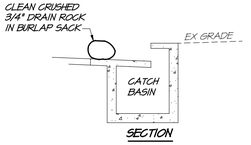


TYPICAL TYPE A LOT GRADING

TYPICAL STANDARD LOT SECTION
NOT TO SCALE

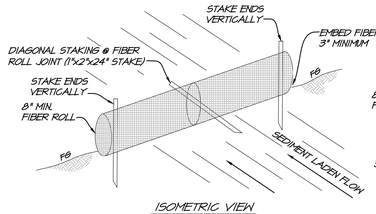


NOTE. GRAVEL BAG MATERIAL PER SE-6 OF CASQA.

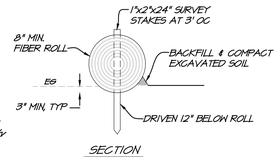


SECTION

1 CURB INLET SEDIMENT BARRIER
NOT TO SCALE



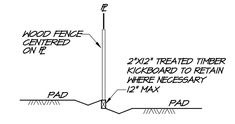
ISOMETRIC VIEW



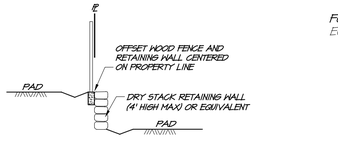
SECTION

NOTE:
PLACE FIBER ROLLS INTO THE KEY TRENCH AND STAKE ON BOTH SIDES OF THE ROLL WITHIN 6 FEET OF EACH END AND THEN 4 FEET WITH 1" x 2" STAKES OR AS SUGGESTED BY MANUFACTURER.

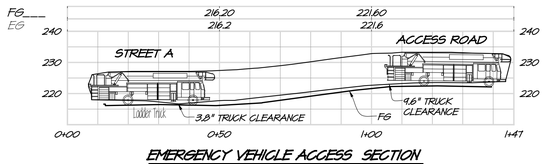
2 FIBER ROLL SEDIMENT BARRIER
RSA EC0000-04 NOT TO SCALE



TYPICAL SIDE YARD GRADING
NOT TO SCALE



TYPICAL SIDE YARD GRADING WITH RETAINING WALL
NOT TO SCALE



EMERGENCY VEHICLE ACCESS SECTION
SCALE: 1" = 20'

NO.	DATE	REVISIONS	BY	APPD

RSA+
515 FOURTH STREET
SANTA ROSA, CA 95401
OFFICE (707) 252-3301
www.RSAcivil.com
RSA+ CONSULTING CIVIL ENGINEERS + SURVEYORS

HUNTER SUBDIVISION
GRADING SECTIONS AND DETAILS
ST HELENA CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JASON E. NOEL HILL No. 73257 Exp 12.31.2022 CIVIL STATE OF CALIFORNIA

DATE	JANUARY 23, 2023
DRAWN	DEL
DESIGNED	BTF
CHECKED	JNS
JOB NO.	4110047.0

SHEET NO.
TM4
4 OF 5 SHEETS

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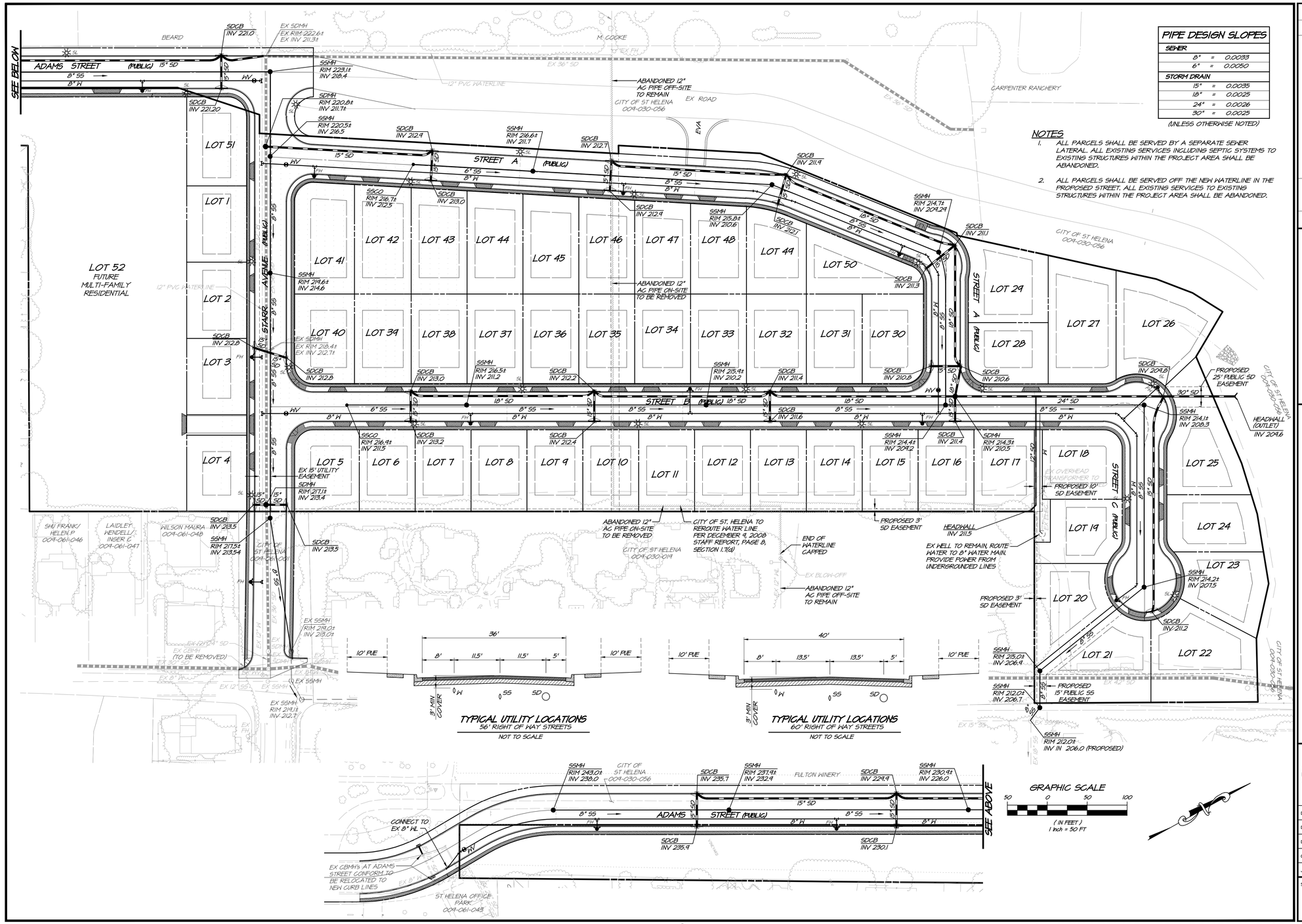
PIPE DESIGN SLOPES	
SEWER	
8"	= 0.0033
6"	= 0.0050
STORM DRAIN	
15"	= 0.0035
18"	= 0.0025
24"	= 0.0026
30"	= 0.0025

(UNLESS OTHERWISE NOTED)

NOTES

1. ALL PARCELS SHALL BE SERVED BY A SEPARATE SEWER LATERAL. ALL EXISTING SERVICES INCLUDING SEPTIC SYSTEMS TO EXISTING STRUCTURES WITHIN THE PROJECT AREA SHALL BE ABANDONED.
2. ALL PARCELS SHALL BE SERVED OFF THE NEW WATERLINE IN THE PROPOSED STREET. ALL EXISTING SERVICES TO EXISTING STRUCTURES WITHIN THE PROJECT AREA SHALL BE ABANDONED.



TYPICAL UTILITY LOCATIONS
56' RIGHT OF WAY STREETS
NOT TO SCALE

TYPICAL UTILITY LOCATIONS
60' RIGHT OF WAY STREETS
NOT TO SCALE

GRAPHIC SCALE
50 0 50 100
(IN FEET)
1 inch = 50 FT

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HUNTER SUBDIVISION
UTILITY PLAN
ST HELENA CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JEAN NOEL SILL
No. 73257
Exp. 12.31.2022
CIVIL
STATE OF CALIFORNIA

DATE	JANUARY 23, 2023
DRAWN	DEL
DESIGNED	BTF
CHECKED	JNS
JOB NO.	4110047.0

SHEET NO.
TM5
5 OF 5 SHEETS

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City Hall has Moved to 1088 College Avenue - Click here for Pictures and Details

Contact Information

Hours: 8:00 a.m. to 5:00 p.m.
View City Directory to contact department directly.

View Full Contact Details

PRESS RELEASE | City Response to Online Misinformation About the Hunter Subdivision

PRESS RELEASE

TODAY'S DATE: May 26, 2023

RELEASE DATE: Immediate

TITLE: City Response to Online Misinformation About the Hunter Subdivision (Press Release 2023-45)

CONTACT: Maya DeRosa, Community Development Director

mderosa@cityofsthelena.org , (707) 967-2783

ST. HELENA, CA – The City of St. Helena is committed to ensuring accurate information is available to the public, particularly in matters pertaining to community development and planning. In response to recent online misinformation regarding the Hunter Subdivision project, the City of St. Helena is re-releasing the Frequently Asked Questions (FAQ) documents to provide accurate details to the community.

The Hunter Subdivision project, which had its most recent public hearing during a special meeting of the St. Helena City Council on May 1, 2023, aims to provide additional housing options within the City of St. Helena, helping the City meet its state-mandated housing needs. The Hunter Subdivision project includes 87 homes, comprised of 51 single family homes, 25 multi-family units and 11 accessory dwelling units (ADUs).

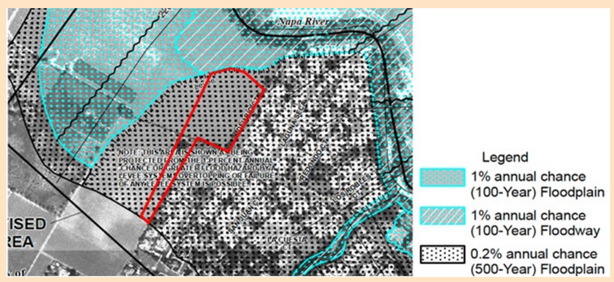
Unfortunately, the project has been subject to misleading information disseminated through various online channels, most recently on NextDoor and with a petition on Change.org that includes an outdated FEMA flood map and other incorrect information. Recognizing the need to counter this misinformation, the City continues to take proactive measures to ensure residents have access to accurate and up-to-date information. This includes providing information on a special page of its website at cityofsthelena.org/planning/page/hunter-subdivision.

Among the factual errors in the text of the Change.org petition is a statement that, "FEMA no longer uses the concept of '100-year flood zones.'" This is incorrect, as noted on FEMA's own website regarding their new "Risk Rating 2.0" process. Under the heading of "What's Not Changing Under Risk Rating 2.0" is a statement that FEMA's flood insurance rate maps (which show 100- and 200-year flood zones, along with other flooding information). This section states that "... critical flood mapping data is necessary and essential for communities. It informs floodplain management building requirements and the mandatory purchase requirement."

The Change.org petition also mischaracterizes FEMA's Risk Rating 2.0 process, suggesting that FEMA has concluded that, "... the risk of catastrophic floods and failing levies in certain high-risk areas is so volatile as to be unpredictable." This is not the case. In fact, the Risk Rating 2.0 is a program that uses modern technology covering a wide range of factors to more accurately set the price of flood insurance. According to FEMA, "FEMA is now able to equitably distribute premiums across all policyholders based on home value and a property's flood risk, and set rates that are fairer and more equitable."

"It is important for the community to understand that FEMA's 'Risk Rating 2.0' system is simply a more holistic way of looking at flood risk," said Joseph Leach, PE, Director of Public Works for the City of St. Helena. "Before version 2.0, the rating system was based on two primary factors, the elevation of the property and the elevation of flood water. With Risk Rating 2.0 many other factors are now included. These include flood frequency, types of flooding and the cost to rebuild. These factors and others are then used to set insurance rates. The system does not move away from flood zones, which are still mapped by FEMA and used to set flood insurance rates. This new system is much like how vehicle insurance policy prices are set. Those policies do not just look at the vehicle driven, but take a more holistic approach by considering the driver's age, their driving record, the type and age of the car, how many miles per year are driven, etc. Risk Rating 2.0 is very much the same, but for flood insurance."

Another misrepresentation on the Change.org website is the FEMA map which uses an outdated FEMA map and shows conditions before the new flood control levee on the Napa River was installed. Additionally, it shows the Hunter Subdivision project boundary incorrectly and in the wrong location on the map. The city is republishing the correct map below which shows the most recent FEMA data (after the construction of the Napa River levee). It shows the Hunter Subdivision project as having a 0.2% or lower annual flood risk (a 1-in-500 chance in any given year) due to the presence of the levee.



More information about FEMA's "Risk Rating 2.0" can be found at fema.gov/es/node/467888.

The FAQ documents for the Hunter Subdivision Project serve as a comprehensive resource, addressing common questions and concerns raised by residents. The FAQs provide clear and concise information on various questions, including:

- Is the Hunter Project in a Floodplain?
- How will the Hunter Project Comply with Water Neutrality Requirements?
- Will the Hunter Project affect emergency evacuation?
- Will we lose access to trails and open space?
- Will the Hunter Project provide affordable housing?
- Will the Hunter Project create traffic congestion?

The City of St. Helena encourages residents to consult the re-released FAQ document as a reliable source of information on the Hunter Subdivision project. It can be accessed on the City's official website at cityofsthelena.org/planning/page/hunter-subdivision. In addition to the FAQ document, the page also provides an FAQ on the levees, a tentative project map and a video presentation.

The City suggests that persons concerned with the potential for flooding on the Hunter Subdivision site refer to the correct, updated FEMA maps, and the correct information on the Risk Rating 2 program, available online at fema.gov/flood-insurance/risk-rating

The City Council is scheduled to have the final public hearing on this item on June 7, 2023 at 6 pm, at Vintage Hall.

Additional questions about the project can be directed to Eric Norris, Principal Planner, at enorris@interwestgrp.com or Maya DeRosa, Community Development Director, at mderosa@cityofsthelena.org.

The City of St. Helena remains committed to upholding transparency, community involvement and accurate information dissemination. By re-releasing the Hunter Subdivision FAQ document and providing platforms for public engagement, the City continues to welcome an informed and inclusive decision-making process.

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Please do not reply to this message. The email cannot accept inquires.
For more information about contacting the City of St. Helena, please visit our Contact Page: https://www.cityofsthelena.org/contact

WATER AUDIT CALIFORNIA

A PUBLIC BENEFIT CORPORATION

952 SCHOOL STREET #316 NAPA CA 94559
VOICE: (707) 681-5111
EMAIL: GENERAL@WATERAUDITCA.ORG

May 1, 2023

Via Email:

publiccomment@cityofsthelena.org

Mayor Paul Dohring, pdohring@cityofsthelena.org
Vice Mayor Eric Hall, ehall@cityofsthelena.org
Council Member Anna Chouteau, achouteau@cityofsthelena.org
Council Member Lester Hardy, lhardy@cityofsthelena.org
Council Member Billy Summers, bsummers@cityofsthelena.org

City Manager Anil Comelo, acomelo@cityofsthelena.org

Community Development Director Maya DeRosa, mderosa@cityofsthelena.org

COMMENT re: Resolution to approve Tentative Map No. 2022-001 and certify the Environmental Impact Report - File #PL10-040 for the Hunter Subdivision project.

Water Audit California, an advocate for the public trust, objects that the Environmental Impact Report ("EIR") does not comply with due process, the procedural requirements of the California Environmental Quality Act ("CEQA"), or public trust duties, and does not contain sufficient evidence of adequate supply of water. Further, the EIR does not consider a reasonable and environmentally preferable alternative.

(A) The EIR does not comply with due process or CEQA.

Public notice requires a reasonable opportunity to consider the business being considered. Notice shall be given of a meeting of a legislative body and that specifies the "business to be transacted or discussed." This EIR has failed in that fundamental duty.

The agenda package for the subject EIR was posted on the CSH website late on the day on Friday, April 21, 2023. On Tuesday, April 25, 2023, at 7:13 p.m., Water Audit staff downloaded a reference copy of 3768 pages. Minutes later, on April 25, 2023 7:21 p.m., a

second copy was downloaded with a total of 3780 pages. This comment references a third copy downloaded on Wednesday, April 26, 2023, at 10:16 p.m., which also consisted of 3,780 pages. Reference was made throughout this comment to the page numbers assigned to the April 26 documents.

On Sunday, April 30, 2023, at 9:22 a.m. Water Audit staff noted that the agenda packet had increased to 4,318 pages, with the additional pages inserted, not appended. For example, the Dudek Well Completion Table that was on page 625 of 3780 on April 26 version is now page 1163 of 4,318 in the April 30 version. Accordingly, the page numbering in this comment do not relate to the packet currently before council.

This conduct renders comments unintelligible, deprives the public of the ability to comment and is a violation of due process.

(B) Without a finding of sufficient water, this project cannot be built.

Water supply resiliency is a threshold of significance for land use change or development projects. An EIR must answer the question posed by *CEQA, Section G, XVIII Utilities and Service Systems (d).*: "Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

(a) The CSH water supply has proven inadequate for present needs

CSH relies on surface water runoff and groundwater from three sources to supply municipal water needs. All are vulnerable to water shortages during periods of sustained low rainfall.

The EIR asserts that this project is within the CSH "Safe Yield" declaration of 2,150 acre-feet ("AF"). The definition of "safe yield" is:

> "The safe annual yield of the St. Helena water supply system is that quantity of water which can be reliably delivered on an annual basis through most rainfall years, including a Dry Year (rainfall of 22" to 25.9") without undue hardship on water customers through water shortage restrictions. **It is recognized that the safe annual yield, as so defined, could place significant hardship on water customers in a Critically Dry Year (rainfall at 21.9" or less) or in periods of two or more consecutive Dry Years.**"

In making this determination, the CSH is departing from the principle that sufficient water must be available even in the event of multiple dry years. The California Constitution allows a city to make and enforce ordinances and regulations that do not conflict with the state's own general laws. However, where there is direct conflict between municipal and state law, the state law prevails.

While the City may chose to inflict upon its own citizens the burden of inadequate water by adroit definition, to pass CEQA muster the applicant and the City must establish that

objectively there is sufficient water, even in multiple dry years. The facts and the EIR do not and cannot carry this burden. [1]

(i) State Water Project transfer from City of Napa.

CSH was originally entitled to purchase 1,000 AF of water from the State Water Project North Bay Aqueduct through the Kern County Water Agency, but the mechanism for delivery of the water allotment did not exist. CSH was reluctant or unable to install the necessary engineering works. In 2006, the City of Napa purchased the City's 1,000 AF entitlement in exchange for agreeing to deliver to the City 400 AF. *EIR 728* A December 2011 Amendment increased CSH allocation from 400 acre-feet to 600 acre-feet.

However, these are nominal amounts. The actual deliveries are determined by the Department of Water Resources ("DWR") depending on each year's hydrologic conditions. The full entitlement amount would typically only be available during very wet years. The Department of Water Resources estimates that 62% of SWP contractors' entitlements would be available in a normal year, 29% would be available during a single-dry year, and 5% available during a multi-year dry period. *EIR 729*

Fortunately, because of extraordinary water management by the City of Napa, CSH has been able to skirt catastrophe in drought conditions. See the CSH Water Reports., which show Napa transfers in excess of 600 AF in 2019 and 2020, drought years.

(ii) Surface water collection at Bell Canyon Reservoir

Beginning in the 1960s, Bell Canyon reservoir has been the City's main water source, by collecting rainfall from a watershed to the northeast. While in the past the Bell Canyon Reservoir has been able to produce the largest portion of the City's water supply, recently that has not been the case. Bell Canyon production at 379 AF in 2022 was less than half of 2019 at 836 AF. In 2022, both the water transfer from the City of Napa (392 AF) and Stonebridge (467 AF) were greater than Bell Canyon's contribution (379 AF).

These figures are drawn from CSH's published public Water Reports. The EIR 725 does not cite to a record and are not in full accord with the facts. For example, the EIR states Stonebridge 2020 production to be 302 AF, while the Water Report is 363 AF. More significantly, the EIR omits entirely the years of 2021, 2022 and 2023.

Given climate driven change, historical reference to Bell Canyon production in the safe yield calculation is of little practical use.

(iii) Groundwater extraction by Stonebridge

The City owns and operates two groundwater wells, collectively known as the Stonebridge Well Complex (herein "Stonebridge"). The City sees Stonebridge as a flexible water source in the system, using groundwater to balance system flows based on availability of water in Bell Canyon.

[1] In Exhibit H it is asserted that an average sufficient supply is 100 gallons per person per day. Under Phase II restrictions CSH residents have been rationed to 65 gallons per person per day.

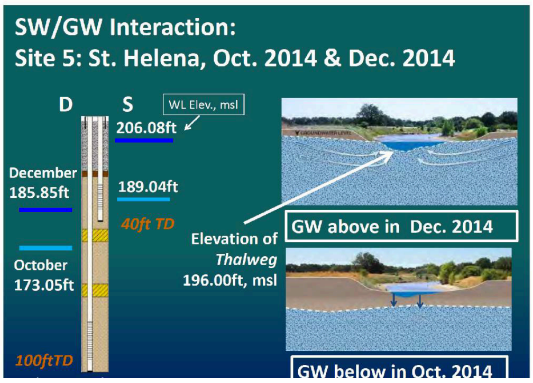
The EIR states: “The City currently restricts the use of groundwater from these wells with the goal of limiting extraction to 450 AF per year for long term sustainability.” *EIR 729* “In an agreement with the environmental advocacy group Water Audit California, the City is monitoring water levels with a goal of limiting extraction to 450 AF per year on average. (Napa Valley Register, 2021)” *EIR 730* It is true that CSH agreed with Water Audit that it would measure water levels, however, when the City failed to perform, Water Audit sued. The inability to report the current cumulative proximate groundwater extractions required by this EIR is evidence of the City’s continuing failure.

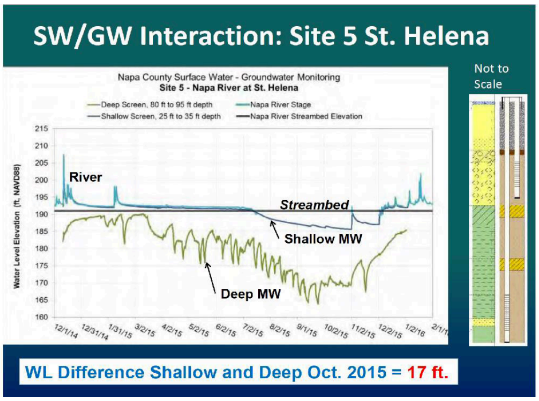
See also: “Furthermore, the City’s groundwater would only account for a minimal amount of water use on the Project site, as the City currently limits the use of groundwater from the City’s wells in an agreement with the Water Audit.” *EIR 750*

Without citation to the record, the EIR asserts: “The Water Audit’s complaint does not ask for changes to existing water uses.” *EIR 2579*

There was and is no agreement between Water Audit and CSH regarding Stonebridge production of 450 AF per year, and there is no Napa Register article to that effect. Water Audit’s position is that the City shall do no harm to the public trust, and the City was unwilling to agree.

The litigation made clear reference to the injury caused to the public trust by CSH groundwater extraction. For example, it cited LSCE graphics presented to the Watershed Information Council in 2015:





At paragraph 46 of the litigation:

> In 2016, LSCE recommended that Napa County install additional monitoring of groundwater/surface water interactions in areas where data was lacking. No additional monitoring was installed. Although the CSH knew that its operation of the Pope Street wells was causing dewatering of the Napa River, no effort to mitigate injury to the public trust was undertaken. Further, the CSH permitted and authorized additional 31 groundwater extraction proximate to the recognized salmonid habitats of Bell Canyon, York, and Sulphur creeks without consideration of the potential impacts on the public trust, including but not limited to the Farmstead project and wells for Anomaly Wines, Beckstoffer and the St. Helena Public Cemetery.

At paragraph 47, Water Audit avowed: "Consultants hired by the CSH to prepare an Environmental Impact Report (EIR) for the proposed Hunter Subdivision twice falsely cite an agreement with Water Audit. No such agreements exist."

Nevertheless, these false assertions persist.

Among the numerous Prayers for Relief was: "CSH must modify its operation of the Pope Street wells to reasonably mitigate injury to the public trust." Clearly the litigation sought to diminish current excessive extraction.

Water Audit dismissed the CSH litigation at the request of prominent local leaders in the hope the City would change its conduct without continuing legal compulsion. The dismissal was made "without prejudice," a legal term meaning that Water Audit can file renewed litigation if CSH does not comply with its public trust duties.

(b) CSH has been in a persistent state of water emergency.

In 2011 CSH adopted a policy and mechanism for dealing with a potential "water emergency." A Phase I emergency was to be declared when storage reached 60%; Phase II was declared with storage reached 39%. Minimum permissible "Fire Storage" is 25%, so when a Phase II emergency is declared, the useful volume remaining is only 14%.

By way of incomplete but illustrative example of the impact on residents, during a Phase I emergency citizens may not add any water consuming appliances and must have City

approval for any appliances replaced. Replacing an existing residential dishwasher during a Phase 1 emergency is subject to City approval.

In October 2020[2] the City declared a Water Shortage Emergency, because the water in the Bell Canyon, the supply capacity of the Stonebridge wells and the water available from the City of Napa was not sufficient to meet the City's projected demands. In November 2020, when Bell Canyon storage reached 39%, the state of emergency was elevated to Phase II. The city did not downgrade from Phase II to Phase I until a year later, at the end of December 2021. During a Phase II emergency residents are limited to 65 gallons per person per day, a third of the community's pre-emergency unconstrained consumption.

As of the date of this comment, CSH has announced it anticipates dropping the Phase I emergency restrictions in July 2023, well over two years[3] after they were first imposed. "The current water rate structure includes a drought period surcharge that begins once the City implemented the Phase I Water Regulations. … Drought rates are 6% higher than non-drought rates."

This hearing is being held while CSH residences may not replace a dishwasher without approval and while they are already paying a premium due to the state of water emergency. Prima facie there is insufficient water in CSH for new development.

Emphasizing the current fragility of the City's water system, in the recent past the City has been unable to take delivery of water from the City of Napa in sufficient volume because the Rutherford pump station deferred maintenance led to a system failure. For months the Bell Canyon water treatment plant has had to rely upon contract workers because the City is unable to attract qualified staff. In February 2023 the City lost from 10-15% of its capacity when a Stonebridge well pump failed without a spare in inventory. Citing "significant deferred maintenance," Public Works Director Joe Leach said "Our water system continues to pose challenges." Truer words were never spoken.

Until the existing challenges are overcome, the City *cannot* commit to any additional demand.

(v) The 1976 well is legally deemed abandoned, and cannot be used for this project.

Although the EIR proposes to use site pumped groundwater, "the Project does not require obtaining a well drilling permit." EIR 2580, *3762.* "[T]here is an inactive groundwater well located in the northern portion of the Project site that may have been historically used to provide construction water for the City's Flood Protection Project and was used in the past for agricultural irrigation. The Project proposes to use this well for the irrigation of public and private landscaping and all other outdoor uses, which are estimated to require 17.16 AF per year. *EIR 2580, EIR 627*

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[2] Otherwise reliably stated to have been *de facto* imposed on July 1, 2020 – See staff notes to 2022 Water Report

[3] By some measures, three years.

See also: “The Project site contains an inactive groundwater well adjacent to proposed Lot 19 in the northern portion of the property identified as Parcel B … This well may have been historically used to provide construction water for the earth moving activities associated with the City’s Flood Protection Project and may have been used in the past for agricultural irrigation. The existing condition of the well is considered inactive; however, as it was not being used at the time the Notice of Preparation was released. The Phase I Environmental Site Assessment completed for the Proposed Project noted that the well was inoperable at the time of the site visit (Appendix G).” *EIR 623* For the sake of clarity, this engineering work will be referred to as the “1976 well.”

A well analysis is referred to in the EIR as “Appendix L.” However, “Appendix L” was not appended to the DEIR in the Agenda Packet iterations. Reference herein is to Appendix L from the Draft EIR posted on the City’s CEQA webpage.

Appendix L narrative asserts that the 1976 well was tested by 24-hour pumping. That assertion was false. By referencing the pumping report, one can see that while pumping took place over the course of a day, the pumping was not continuous. <<>> It remains unknown how the well would perform under 24-hour sustained load.

Appendix L fails to acknowledge[4] that the wetlands survey did not include the well, as it was on a different property at the time the survey was performed (land then owned by the City.) If, as logic and topography imply, the 1976 well is in a wetland, then there are special concerns that have not yet been considered. A well should be located outside areas of flooding. This well in located proximate to a drainage ditch and collection pond, the latter intended to flood in high water. Good practice requires that the top of the well casing shall terminate above known levels of flooding caused by drainage or runoff from surrounding land. For community water supply wells, this level is defined as the:"...floodplain of a 100-year flood..." or above "...any recorded high tide...", (Section 64417, *Sitting Requirements, Title 22 of the California Code of Regulations*.) Surface drainage from areas near the well shall be directed away from the well. If necessary, the area around the well shall be built up so that drainage moves away from the well. Appendix L does not consider this subject.

Appendix L states that the screening on proximate monitoring wells is “unknown,” while a previous report by the same consultant was able to confidentially state the facts. It is only in the absence of that information that the consultant was then able to assert that the 1976 well does not draw from the Napa River. Had the proper reference been made, the only conclusion that could have been made was that water extracted from the volcanic rock zone in this location does deplete surface water flows.

Finally, Appendix L fails to acknowledge that by state law and municipal ordinance, the 1976 well is deemed to be abandoned, and the failure to destroy it is a continuing misdemeanor. Given the proven connectivity to Stonebridge, this is a serious matter of public health. Abandoned water wells can act as conduits for surface and subsurface pollution to enter groundwater supplies. Once polluted, groundwater is no longer drinkable.

CSH Ordinance 13.16.020 (E) states: “The city desires to require the location, construction and repair of water wells and other water systems to conform to California State

[4] In fact, the Applicant implies the contrary.

Department of Water Resources Standards as noted in DWR Bulletin Numbers 74-81 and 74-90 and as required in California Water Code Section 13801."

Water Code 13801 states in part that each city shall "adopt [an] abandonment ordinance that meets or exceeds the standards contained in Bulletin 74-81. The DWR publishes Combined Bulletins 74-81 and 74-90 (Water Well Standards). Part III, Section 21 reads: "A well is considered 'abandoned' or permanently inactive if it has not been used for one year, unless the owner demonstrates intention to use the well again." Part III Section 22 states "All "abandoned" wells and exploration, or test holes shall be destroyed. The objective of destruction is to restore as nearly as possible those subsurface conditions which existed before the well was constructed taking into account also changes, if any, which have occurred since the time of construction."

Health and Safety Code § 115700 provides that a well is considered 'abandoned' or permanently inactive if it has not been used for one year, unless the well owner properly maintains an inactive well as evidence of the intention for future use. Proper maintenance required to keep a well from becoming abandoned includes *a notice to the local health officer of an intent for future use*. No such notice has been given. The well site has not been kept clear of weeds and brush and has not been protected from flooding or run-off from adjacent lands.

Whether the well is capable of operation is irrelevant. By the process of law the 1976 well is deemed abandoned and it must be destroyed forthwith. Until this is done, the owner is guilty of a misdemeanor, and the City is acquiescent in the crime.

Assuming that the pump production rates are valid, it would seem an easy matter for the Applicant to simply drill a new well. That would pose a problem, however, as a new water availability study would have to consider its impact on the adjacent water course and the cumulative extractions of proximate wells as a matter of law. It is unlikely that a permit would be granted to drill a new well, even in permissive CSH.

Consultant RSA+ acknowledged in 2019 that a well interference study was necessary for the EIR, asserting that "It is assumed this has been performed under Dudek." It had not.

The Dudek "well completion" analysis is prima facie inadequate. Although it makes narrative reference to "well completion reports," no such records are appended or referenced. Wells discussed are not identified by their DWR number. The extraction from numerous large proximate wells are not considered, including but not limited to the Stonebridge wells. The narrative cites no sources.

(vi) Contemporaneous LSCE reports contradict earlier works of sustainability.

The EIR repeatedly asserts that increasing groundwater extraction by this project will be of no consequence as the SGMA process has deemed the status quo groundwater condition is stable and sustainable. In support of this proposition the EIR makes reference on thirty-two occasions to LSCE works published for the County and GSA in 2013, 2014, 2016 and 2017. (for limited example, at EIR 515, 523, 539, 621 & 622).

Fortunately, it is unnecessary to challenge each citation (although for the record, such challenge is made) because the most critical facts are those that were not presented. Omitted in its entirety is the most recent and pertinent of LSCE's work, the *Groundwater Sustainability Annual Report – 2022 (March 2023)* ("LSCE 2023").

In order to assess the groundwater condition, it is necessary to establish objective criteria. LSCE 2023 states that undesirable results for chronic lowering of groundwater levels occur when groundwater levels at (1) 20 percent of the groundwater levels at (2) representative monitoring sites are (3) below the defined minimum threshold (4) in the fall (September through October) (5) for three consecutive *non-drought years.* Note that this is a far more lenient standard than water insufficiency in drought years.

LSCE 2023 states that CSH and four other sites have fallen below the minimum threshold in non-drought years. The recurring and extended states of emergency speak adequately to the groundwater condition during drought.

LSCE 2023 asserts that there is injury to groundwater dependent ecosystems as a result of excess groundwater pumping and illustrates problem by illustrating the adverse surface water / groundwater interface caused by Stonebridge pumping.

LSCE 2023 admits that earlier representations that groundwater pumping was in sustainable balance were in error and now acknowledges that for five of the last seven years the sub-basin was over drafted beyond its sustainable limit, resulting in cumulative water storage loss.

LSCE 2023 concludes that one of the undesirable results of ground water depletion is injury to groundwater dependent ecosystems protected by the public trust. It concludes with multiple plans to remediate the injury, none of which contemplate the effects of further depletions of surface flows by additional extraction. Amongst government agencies, only CSH is considering such counter-productive conduct.

(C) The EIR fails to consider a reasonable and environmentally preferable alternative.

It is a distinction without a difference in terms of environmental injury whether water is extracted on the Hunter site or extracted at Stonebridge. The Stonebridge wells are hydrologically connected to the Hunter wells. To draw an analogy, Stonebridge and Hunter are but two different straws among many other straws sucking from the same glass of water. While there has been inadequate cumulative impact analysis, it is manifestly evident that the metaphorical glass is empty, and the public trust is dying.



The Napa River proximate to the Pope Street wells, June 2021
Image by Dr. Amber Manfree for Water Audit California

In January 2023 Water Audit proposed to the City an alternative to dewatering the Napa River: a transfer of surplus waters in the Rector Reservoir equal to the extraction from Stonebridge. See attached correspondence. An engineering working group from several jurisdictions, including water department staff from CSH, have been diligently considering the proposal (together with other components of resiliency) for the last several months. They have tentatively concluded that there are no significant technical obstacles to the process.

CDFW has opined that the transfer would be environmentally preferable to continued groundwater extraction and agreed that the owner of Rector could have environment credit for that facility's environmental obligations.

The primary obstacle is political intransigence. CSH has never acknowledged this alternative in public, instead continuing to extract from overdrawn public trust resources. This project merely exacerbates the problem.

It is submitted that it is a failure of CEQA process and an abuse of discretion to not consider this environmentally preferable alternative.

In conclusion, the EIR should not be certified. The project should be rejected as being incapable of conforming to CEQA water requirements, or at a minimum, the substantial deficiencies discussed above require remediation and recirculation following the Applicant's submission of all of the necessary information for consideration of the whole of the Project**.**

Respectfully,

/S/ William McKinnon

William McKinnon
General Counsel
Water Audit California

cc: Ethan Walsh, City Attorney, Ethan.Walsh@bbklaw.com
Cindy Tzafopoulos, City Clerk, cityclerk@cityofsthelena.org

Water Audit California <general@wateraudita.org>

Re: [External] Potential water transfer agreement

2 messages

Paul Dohring <PDohring@cityofsthelena.org>
To: Water Audit California <general@wateraudita.org>
Cc: "Gerard, David@CalVet" <David.Gerard@calvet.ca.gov>, "Freeman, Brendon" <bfreeman@napa.lafco.ca.gov>, "Weightman, Craig@Wildlife" <Craig.Weightman@wildlife.ca.gov>, Anil Comelo <A
Joseph Leach <jleach@cityofsthelena.org>

Hi Bill,
I enjoyed talking to you recently and leaning more about the general concept of a potential transfer of water to increase St. Helena's water supply. Just to be clear, I conveyed my general interest i are always looking to augment our water supply. I don't have the benefit of many important details at this juncture, and I do not have the authority to formally "engage in a conversation regarding pur offset the City's Stonebridge wells production." Of course I would like to learn more about the process, conveyance possibilities, logistical challenges, engineering issues, and cost details going forw general proposal to our City Manager and Public Works Director, and I will leave it up to them to consider its merits and viability and make recommendations to our city council. I certainly want to exp for our city, and wish to keep communications open, but I do not want to get too far out in front of our city staff or city council. Thank you.
Paul

Paul J. Dohring I St. Helena Mayor
PDohring@cityofsthelena.org
Tel: (707) 942-1298

Sent from my City of St. Helena Issued iPad

On Jan 18, 2023, at 10:47 AM, Water Audit California <general@wateraudita.org> wrote:

Greetings, David

It's hard to believe, but almost two years have passed since we last communicated. I hope you and yours are well.

Some things are different now, but unfortunately some things remain the same. Rector Reservoir is full, but the City of St Helena still dewaters the Napa River by its operation of the Stonebridg of the Rector Dam remains a losing reach, stubbornly resistant to rewetting. Expert opinion is that rewetting more than two miles of the mainstem Napa River would be of greater impact than a the Rector reach.

Please consider the following. Let me assure you at the outset, Water Audit will in no way profit from this transaction, although if this works it would be nice to get a producer's credit for the reco

I have spoken to City of St Helena Mayor Paul Doring, (copied on this email) and he would like to engage in conversation regarding purchasing water from DVA to offset the City's Stonebridge **understanding is that this would be a paper transaction only, and that there would be no engineering or construction work involved.** The City of Napa's Mayor Scott Sedgley has, in t community's interest, agreed to allow a senior member of his staff, Joy Eldredge, Napa's Deputy Utilities Director, to take lead on technical issues. She is known to your and CSH engineering systems, and her opinion on water transfer valuation is well respected. CDFW have agreed to participate and have endorsed the concept of the water transfer as a substitute for bypass into th the dam.

Assuming that CSH agrees to reduce Stonebridge operations proportionately, Water Audit is prepared to stipulate that the transfer would constitute DVA bypass pursuant to FGC 5937 and defe period (matching the term of the transfer agreement) any litigation regarding the Rector or Stonebridge reach. My understanding is that present good practice is to plan the quantum of deliverie time after consideration to the water available. Put another way, it will be a fundamentally different agreement than with the Town of Yountville and the Veterans Home.

The net effect is that DVA would be able to generate market rate revenue from its environmental releases to offset the costs of its monitoring programs as well as simultaneously satisfying its F Additionally, the DVA will be brought into the evolving process of coordinated regional water management, which offers the agency substantial peer benefits in changing climatic and regulatory this be a prototype effort, with continuous monitoring, review and revision as lessons are learned.

The Rector system was inspected, reviewed and reported in the spring of 2018 by Guy J. Schott, P.E., Associate Civil Engineer, State Water Resources Control Board Division of Drinking Wate are available on request. Consistent with / part of his reporting:

Rector Reservoir

Owned by State of California Department of Veterans Affairs

Safe yield: 1,670;
Existing Deliveries: DFW <575 AF; Veterans Home & Yountville 740 AF
Nominal surplus to safe yield: 355 AF
***Maximum delivery surplus**: 2,200 AF*

Stonebridge extractions: 400-600 AF

1.) Photos of Rector Reservoir (2018)

2.) SWRCB 1970 Water license.
5.55 cfs direct diversion (X365); 1,767 AF to storage each year, diversion 10.01 to 05.31; total permitted deliveries (dir.&indir) 3,518 AF; maximum storage 4,400 AF

3.) Rector water distribution network showing intertie to Napa/Conn pipeline. Shows raw water distribution to County yard and CDFW Silverado.

4.) December 2000 Department of Water Resources Yield study.
Bathymetric study AF; dead pool 487 AF; carry over storage 2,768 AF; safe yield 1,670 AF. The (unauthorized) raising of spillway elevation offset 54 years of infill on storage capacity.

5.) Storage capacity curve, NET of dead pool.
DVA should have real-time monitoring from 2018.

6.) Veterans Home and Town of Yountville Consumption etc. 1989-2000
Total production during reporting period <740 AF. Note the following is more recent.

7.) ALL DELIVERIES
Note "system losses" ranged up to 22%. Since Water Audit litigation they have been in mid to low single digits.

8.) WATER USED BY CDFW FROM RECTOR RESERVOIR 2005-2017
NOTE: Low CDFW demands from June to October annually. 2017 is an anomaly caused by experimental flows made as part of DVA study. Otherwise <575 AF.

Attachments • Scanned by Gmail

I hope that I have persuaded you to meet and discuss the possibilities. Brendon Freeman, the Executive Director of LAFCO, (Local Area Formation Commission) is completely neutral in this pro

available to all parties to secure answers to any questions and to coordinate scheduling. He is copied on this email, and his telephone contact numbers are 707.259.8645 (office) and 707.363

Let's do a good thing here.

Bill

William McKinnon
General Counsel
Water Audit California
Legal@WaterAuditCA.org
530.575.5335

WATER AUDIT CALIFORNIA - *A California Public Benefit Corporation*
952 School Street #316, Napa, CA 94559 / phone: (707) 681-5111

Water Audit California <general@waterauditca.org> Fri, Jan 20, 2023 at 3:03 PM
To: Paul Dohring <PDohring@cityofsthelena.org>
Cc: "Gerard, David@CalVet" <David.Gerard@calvet.ca.gov>, "Freeman, Brendon" <bfreeman@napa.lafco.ca.gov>, "Weightman, Craig@Wildlife" <Craig.Weightman@wildlife.ca.gov>, Anil Comelo <AComelo@cityofsthelena.org>, Joseph Leach <jleach@cityofsthelena.org>, ssedgley@cityofnapa.org, "Eldredge, Joy" <jeldredge@cityofnapa.org>
<Attorney/client information redacted>

Good afternoon Paul

Thank you for your email.

As we discussed, this activity does not fall within my usual practice, so please forgive me if I inadvertently do not properly follow protocol. For the record, I do not have authority to speak for anyone. I do not have the authority to compel an agreement. In fact, one could argue that Water Audit should have nothing to do with solving CSH water problems, but as a matter of corporate philosophy we prefer to proffer reasonable solutions when we see them. We appreciate you considering our idea.

I have had preliminary collegial conversations with Ms. Eldredge about this proposition, and from those conversations have some been given some comfort about its viability. "It's not a mad idea," would be a fair characterization. She properly advised that she could not formally participate without her supervisors' instruction, so I went to see Mayor Sedgley, who agreed to take care of whatever was necessary for her to provide temporary guidance to this project. I am most grateful to both of them for being willing to go above and beyond to help solve this problem. Given my understanding of the engineering works, the City of Napa may be a necessary party to any deal here. For the record, by his courtesy Mayor Sedgley in no way bound the City of Napa to any further agreement of any kind. Assumably your staff will engage in appropriate conversations, and technical questions will be resolved. Respectfully, that is not the first order of business.

My communications with DVA on this topic have been professional, and as indicated in my January 18th email, my last was almost two years ago. While acknowledging some merit to this idea, as you have, naturally their first question was "Do you speak for CSH?" Clearly and obviously, I did and do not. At the time CSH counsel was unwilling to discuss the topic. Understandably, for that and other good reasons at the time, the possibility died on the vine. Time has passed, CSH has new leadership, and yet the problem of Stonebridge wells persists, so we are trying again to daylight this prospect for consideration with as little controversy as possible.

Please note: unless you have a willing seller in the DVA the deal is a "non-starter" without further discussion. Respectfully, everything else follows.

As no one should ever characterize my conversation with you as in any way binding on CSH, similarly, no one should ever characterize my communications with DVA as binding on that agency. It would seem efficient for DVA and CSH representatives, without the authority or intent to bind anyone, to meet and see if there's any possibility to be pursued. If not, then there is no waste of time. If so, staff can do what needs to be done to assess logistical, conveyance and engineering matters. I have great faith in engineers to find solutions.

A different order of business seems unfair to Ms. Eldredge and the City of Napa. While CSH may wish to pursue the matter, unless the DVA is onboard the exercise is a waste of time.

Thank you for getting this ball rolling.

Bill

[Quoted text hidden]

Response to Water Audit California's Comments on Hunter Project Subdivision EIR

Water Audit California ("Commenter") submitted a May 1, 2023 letter regarding the environmental impact report ("EIR") for the Hunter Subdivision Project ("Project"). However, a review of the letter confirmed that, in primary part, the letter does not concern the Project EIR. The City has prepared the following response to those comments in the letter that do concern the Project EIR.

Comment #1

Commenter asserts that, due the Agenda packet's length and the timing of its posting online the Commenter was not given a "reasonable opportunity to consider" the Agenda packet for the City Council's May 1, 2023 hearing regarding the Project and EIR.

Response #1

Compliant with State law, the Agenda and supporting material for the City Council's May 1, 2023 hearing were posted on no later than Friday, April 28 2023 – at least 72 hours before the meeting. As to Commenters concerns about the length of the supporting materials for the Agenda, the City notes that these materials were primarily copies of the Draft and Final EIR – which had been available on the City website since September 2021 (Draft EIR) and October 2022 (Final EIR).

Comment #2

Commenter contends that the well pumping information in Appendix L to the Draft EIR "false" because the pumping was not continuous and thus it is "unknown how the well would perform under 24-hour sustained load."

Response #2

Regardless of the validity of Commenter's claims (which are unsupported by any explanation), even if correct, Commenter does not provide any substantial evidence as to why it would be relevant to the EIR's analysis if the on-site well could operate continually for 24 hours.

Comment #3

Commenter suggests that the on-site well is located in a wetland and thus further study is required.

Response #3

First, Commenter's speculation is incorrect. Second, even were it correct the on-site well is existing and such that any impacts of its construction, decades ago, are not impacts of this Project.

Comment #4

Commenter asserts that "water extracted from the volcanic rock zone [from the on-site well] does deplete surface water flows."

Response #4

Commenter provides no substantial evidence, only lay-opinion and speculation. Nothing in this comment provides a basis for revising the EIR's expert analysis of the use of the on-site well for a portion of the Project's water demands.

Comment #5

Commenter asserts that the on-site well is abandoned. Further, Commenter claims that the water from the on-site well is polluted.

Response #5

In addition to being a legally permitted well, substantial evidence in the EIR regarding the pump test, which is acknowledged by the Commenter, confirms that the on-site well is operational. Further, Commenter provides no evidence that the well is abandoned. Indeed, the original application for the project, filed with the City in 2010, not only mentions the then-current use by the City of water from the on-site well, but also expressly calls for the use of the on-site well to provide landscaping water for the project. Accordingly, the record confirms the ongoing intent to continue use of the legally permitted on-site well. Further, as detailed in the EIR, no water from the on-site well is proposed for consumption. Rather, as has always been the case for use of the water from the well, it is to be used for landscaping/irrigation.

Comment #6

Commenter opines that the "Dudek 'well completion' analysis is prima facie inadequate" without reference to "well completion reports" based on a Department of Water Resources ("DWR") "number." Commenter further asserts that the "extraction from numerous large proximate wells are not considered, including but not limited to the Stonebridge wells."

Response #6

The County Well Permit is included in Appendix L of the DEIR. CEQA requires an EIR to consider the environmental conditions as they currently exist. Whether or not there is a DWR identification number for the on-site well is not an environmental concern under CEQA. The well is permitted, and is not abandoned (see **Response to Comment #5, above**). The EIR's groundwater impact analysis (see Impact 3.9-2, beginning on page 3.9-41 of the DEIR) considers impacts to the groundwater sub-basin as a whole, including the Stonebridge Complex wells.

Comment #7

Commenter objects to the EIR's citation to "LSCE works published for the County and GSA in 2013, 2014, 2016 and 2017" and asserts that the EIR should have discussed LSCE's March

2023 Groundwater Sustainability Annual Report. Commenter then states that analysis of the March 2023 Report would have led the City to reach a different conclusion as to the Project's potential impact on groundwater.

Response #7

Other than providing Commenter's non-expert summary of what the Commenter contends is in the March 2023 Report, Commenter provides no substantial evidence as to why the EIR's determinations regarding groundwater in any way call into question by the March 2023 Report. The 2022 water year sustainability report for Napa County, which was published in March of 2023, does not disclose any information not already disclosed in the EIR, namely that 2020 and 2021 were very dry years and in 2022 rainfall was average. Given this pumping from County wells was high in the last 3 years but subsidence is within acceptable limits (less than 0.2 feet).

Further, March 2023 Report is only a snapshot and does disclose the current status of groundwater in the County. Specifically, on May 30, 2023 the Napa County Board of Supervisors voted to end the State of Local Emergency due to drought conditions in Napa County, thus terminating the emergency powers of county officials set forth in Resolution No. 2022-29. Since October 1, 2022, Napa has received nearly 32 inches of rain, exceeding average annual rainfall. Despite a particularly wet winter, eight of the past 10 years have been characterized as dry to very dry conditions. The wetter winter of 2022-2023 has achieved a notable recovery in groundwater levels since 2022. As well, in February of 2023, the City approved a Resolution (1) Memorializing the Termination of the Phase II Water Emergency in November 2021, effective December 2021; and (2) Confirmation of Staff's Proposal to Provide a Recommendation for the Termination of the Phase I Water Emergency at a Council Meeting in July 2023.

FIRE DEPARTMENT
1480 Main Street
St. Helena, CA 94574
Phone: (707) 967-2880

www.cityofsthelena.org

City of St. Helena

"We will conduct city affairs on behalf of our citizens using an open and creative process."

June 6, 2023

RE: Hunter Project EVA from Levee Road to Road A

Upon recent examination of the Hunter Subdivision project, the St. Helena Fire Department has determined that the proposed EVA connecting the Levee Road to Road A is no longer required.

In 2018 the EVA was a proposed recommendation by a former Fire Prevention staff member who believed that additional egress for the residents of the Hunter Subdivision and additional access for emergency vehicles would be necessary. However, we have determined that the current tentative map provides adequate egress and emergency vehicle access without an EVA.

Post 2018, the one-lane levee road became a designated evacuation route for tenants of Vineyard Valley. For this reason, the proposed EVA would be inaccessible for emergency vehicles during an evacuation. Emergency Vehicle access to the levee road is still present at the end of Adams St.

Additionally, the EVA provides no benefit to the residents of the Hunter subdivision, as Roads A and B provide better egress to either Pope St. or Adams St. via Starr Ave.

Based on the updated designation for the levee road, it is the Fire Department's determination that the proposed EVA connecting Road A to the Levee Road is not required.

Best regards,

John Sorensen
Fire Chief

Alec Vidler
Fire Inspector

HUNTER SUBDIVISION

Request by Ben and Kelly Vanzutphen to subdivide a 16.9-acre parcel to establish 51 single-family residential lots and one parcel for future multi-family development

(Tentative Map #2022-001)

City Council

June 26, 2023

Presentation Summary

- Project Description
- Location and Setting
- Changes to Conditions of Approval
- Brief overview of issues addressed in the staff report
- Planning Commission Recommendation

Final Public Hearing

Reminder that tonight's City Council is the final public meeting for the proposed Hunter subdivision.

State law imposes a limit of five public hearings on housing projects. Tonight's City Council meeting is the fifth public meeting.

Project Description

The proposed project being considered by the City Council is a **Tentative Subdivision Map** to subdivide a 16.9-acre parcel of land in the eastern area of the city, east of the existing terminus of Adams Street.

The proposed subdivision would create 51 lots for single family homes, and a separate parcel (lot 52) on which multi-family attached housing units would be built.

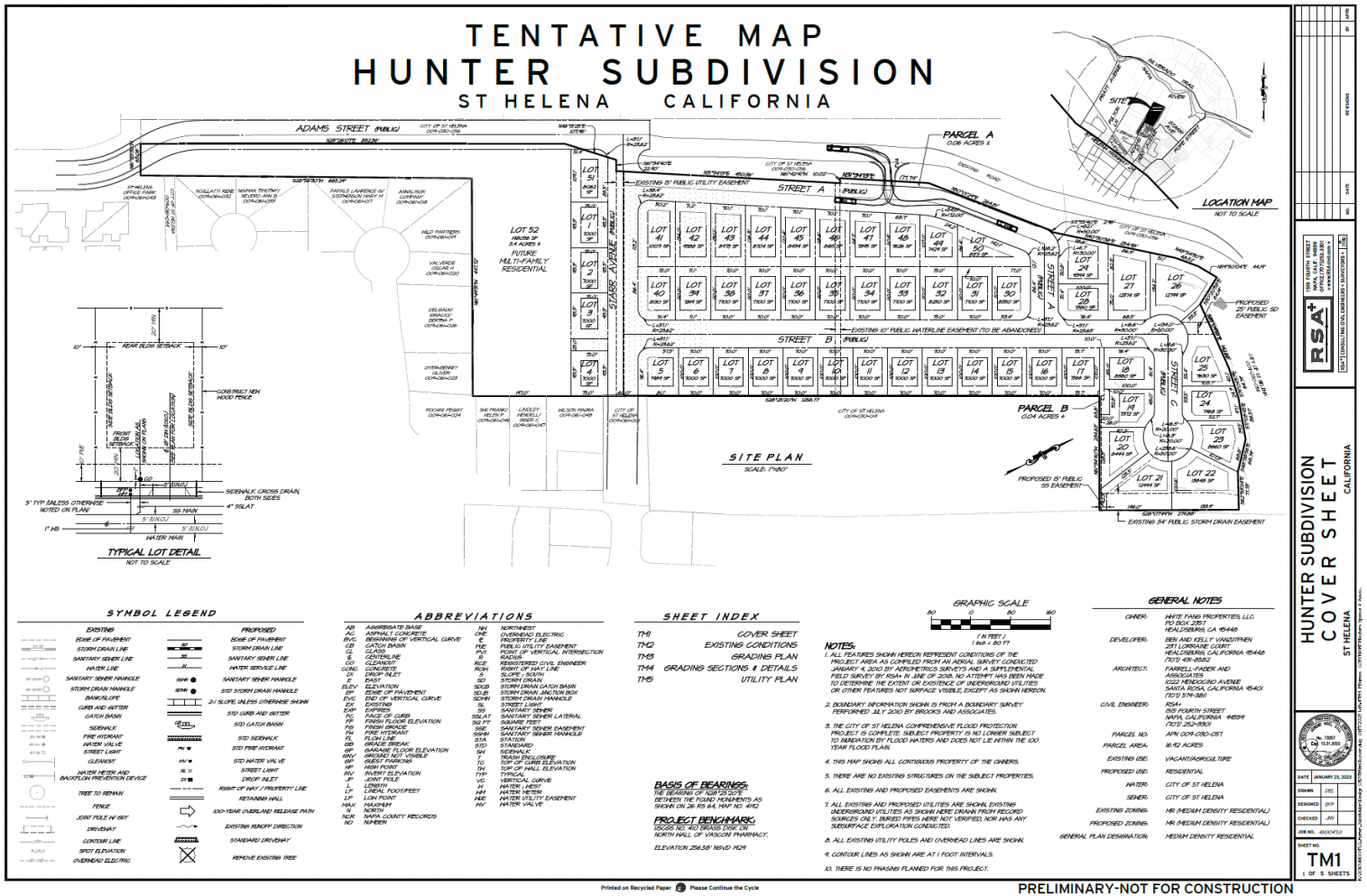
Project Description

The Applicant proposes to construct a total of 87 single- and multi-family homes and accessory dwelling units:

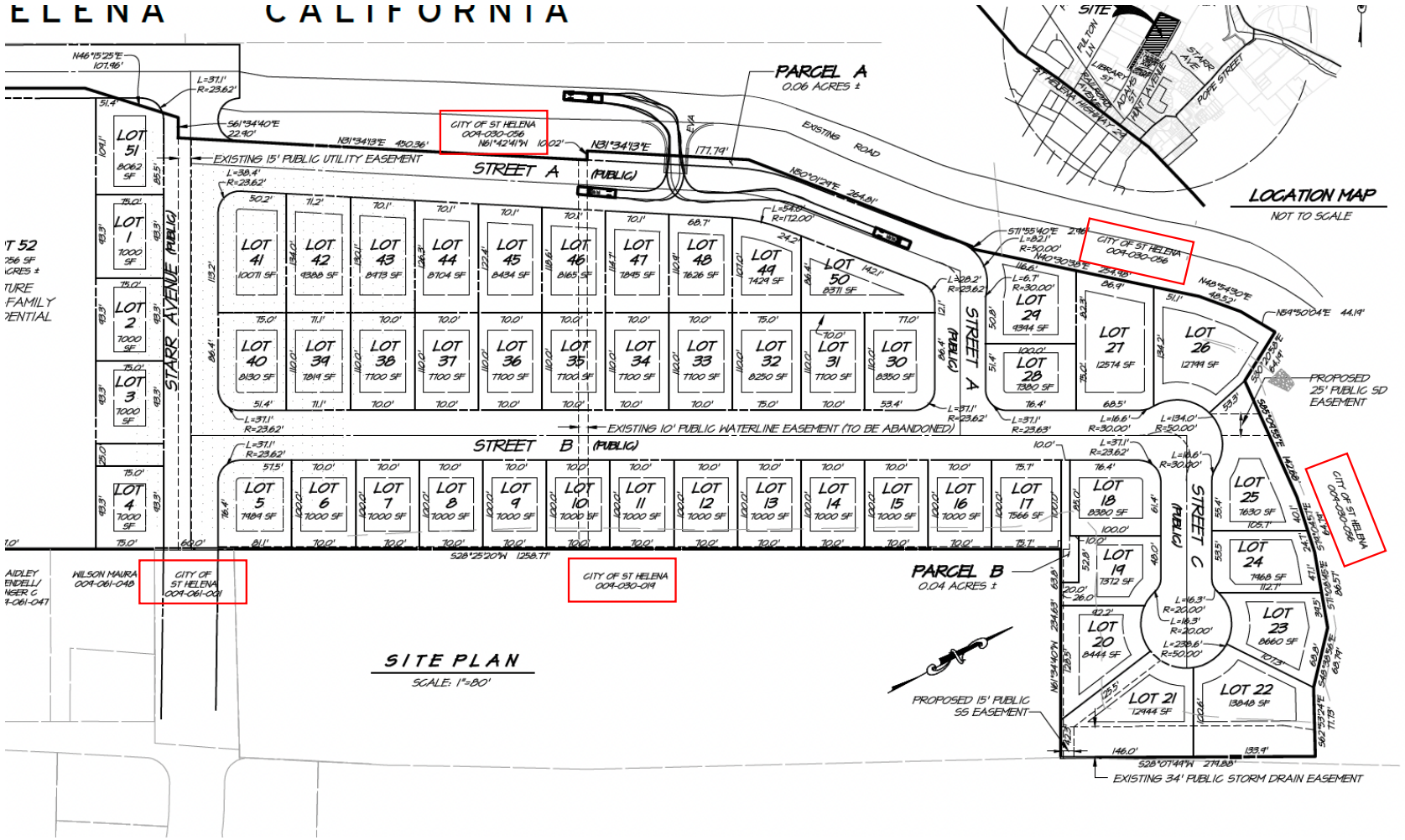
- Single Family Homes: 51 units
- Attached Multi-Family: 25 units
- Accessory Dwelling Units: 11 units
- TOTAL: 87 units

The overall residential density of the project, including all residential types, is 5.15 units per acre (87/16.9 = 5.15).

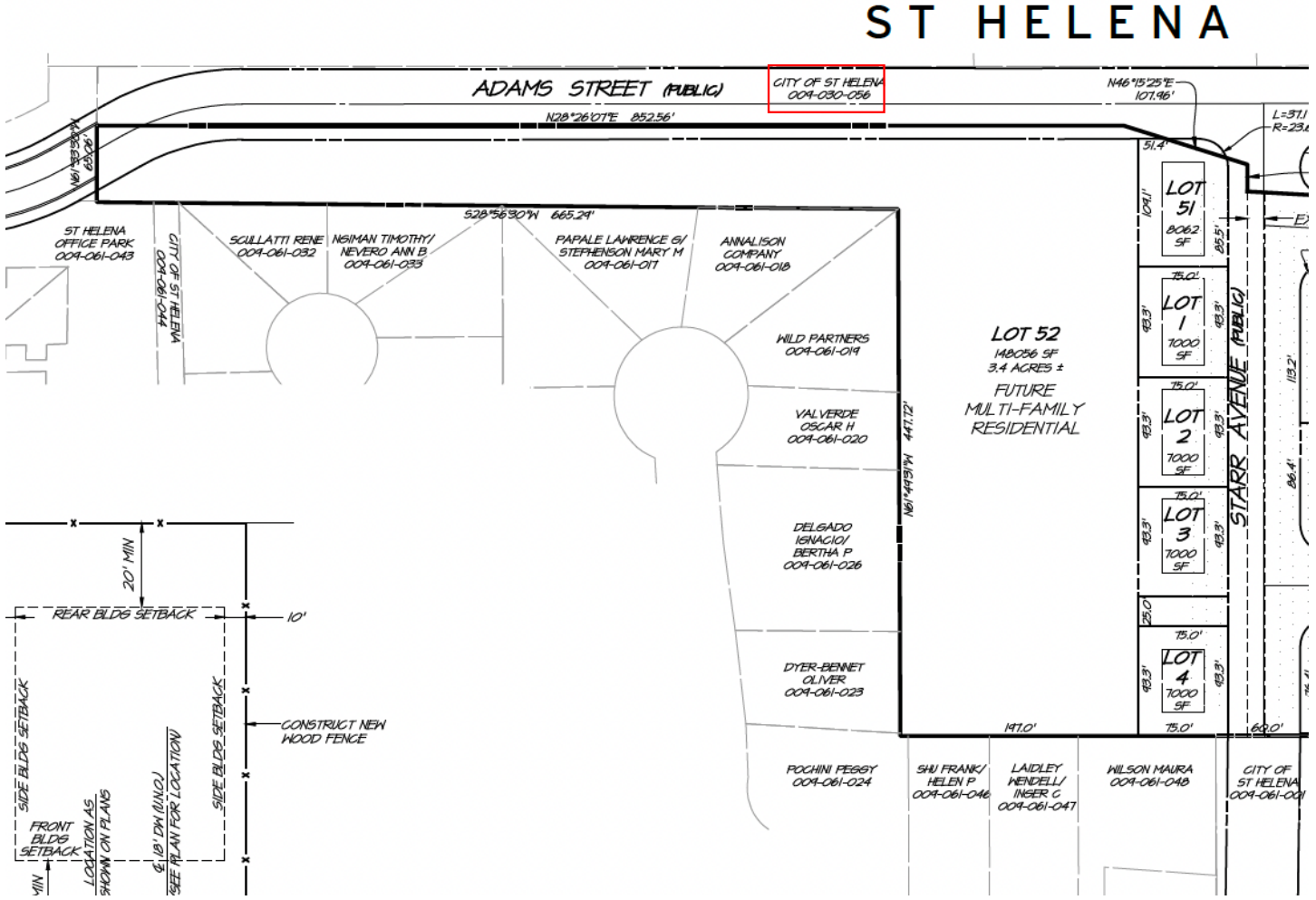
Project Description



Project Description



Project Description



Future Required Approvals

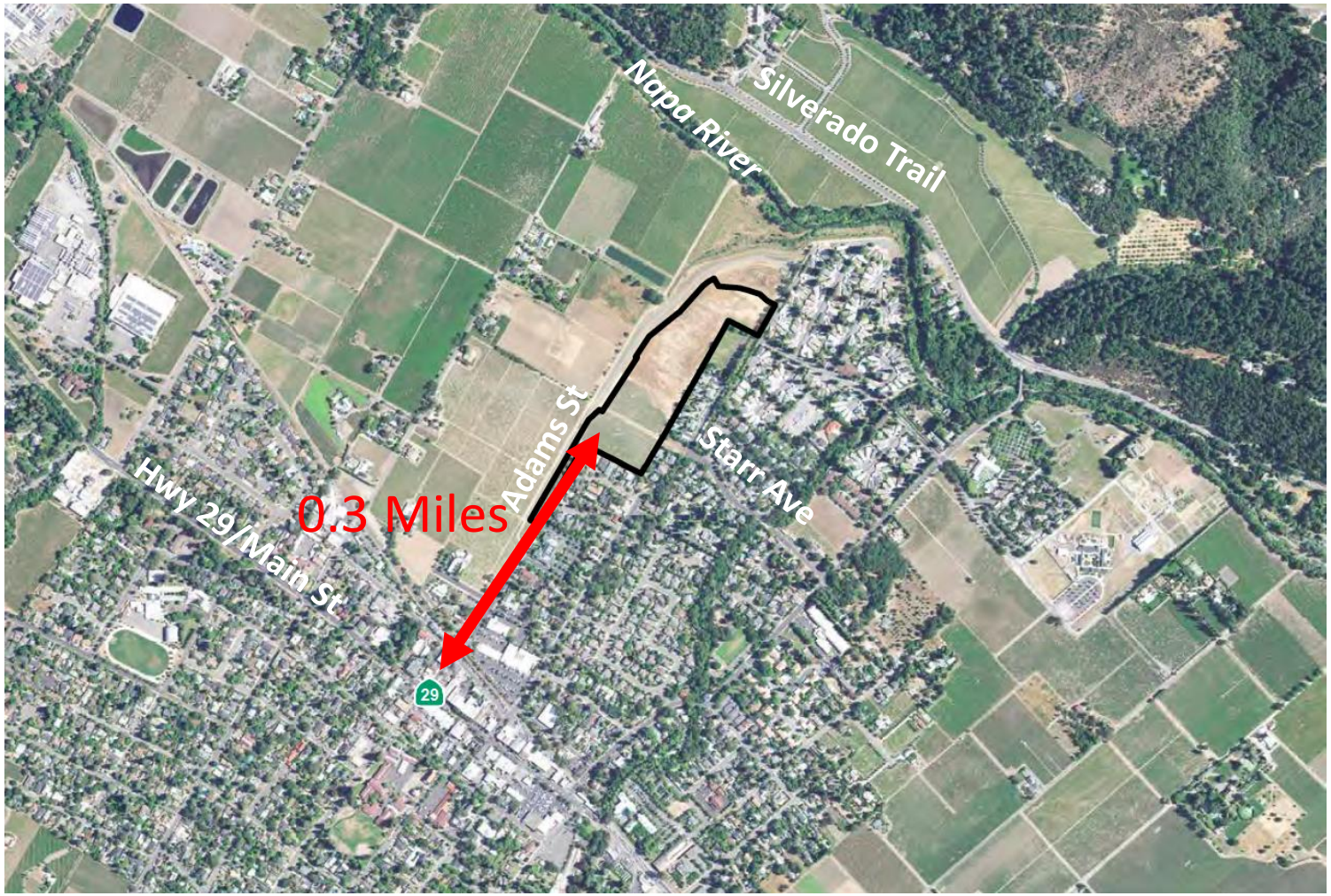
Several future applications would be needed to be approved:

- Affordable Housing Agreement (City Council)
- Approval of Final Map/Subdivision Improvement Agreement (City Council)
- Design Review (Planning Commission)
- Conditional Use Permit for Multi-Family Housing (Planning Commission)

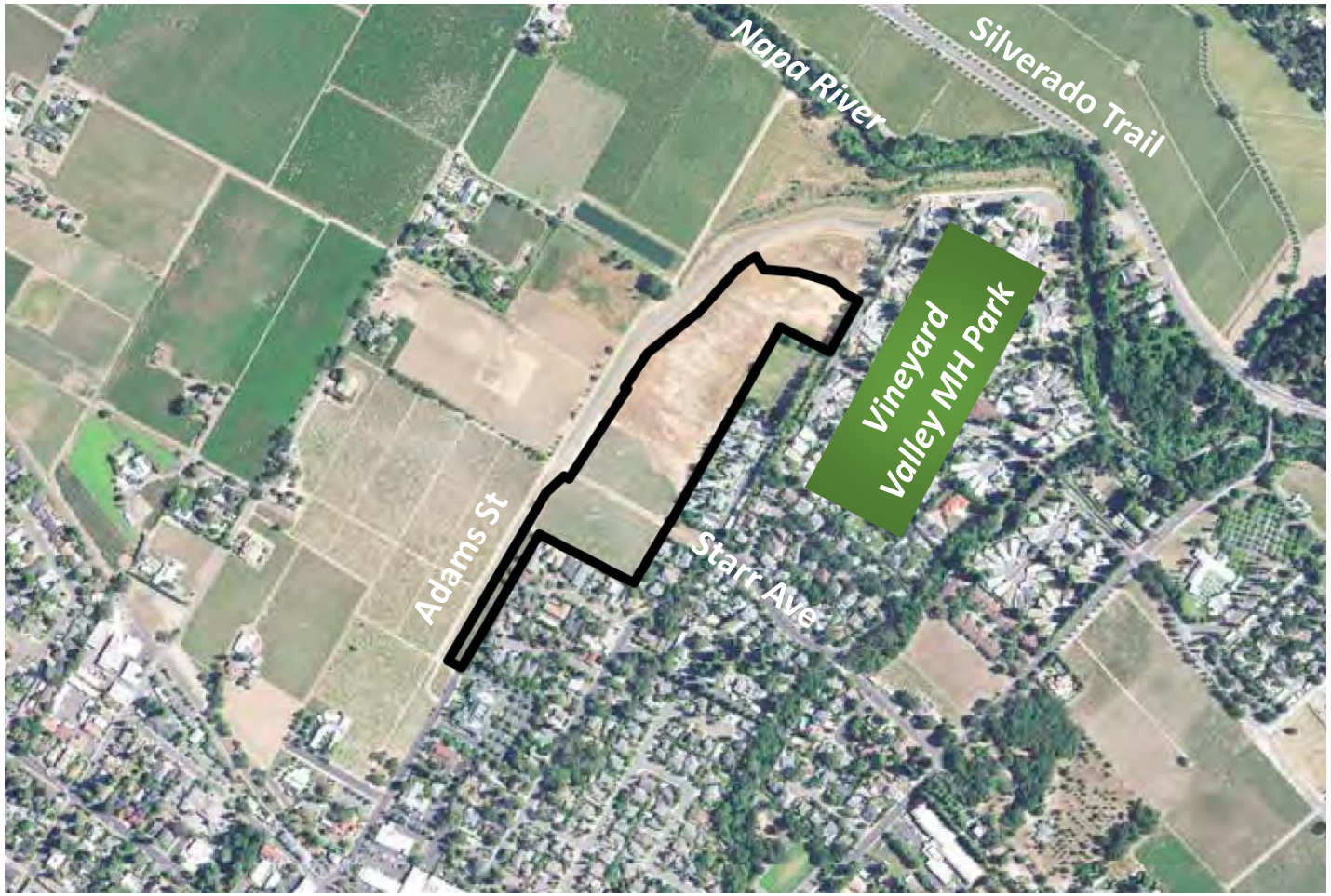
The public will be notified of the above items and invited to the hearings.

The only application before the Commission at this time is the Tentative Subdivision Map and the Final EIR.

Project Location & Land Use



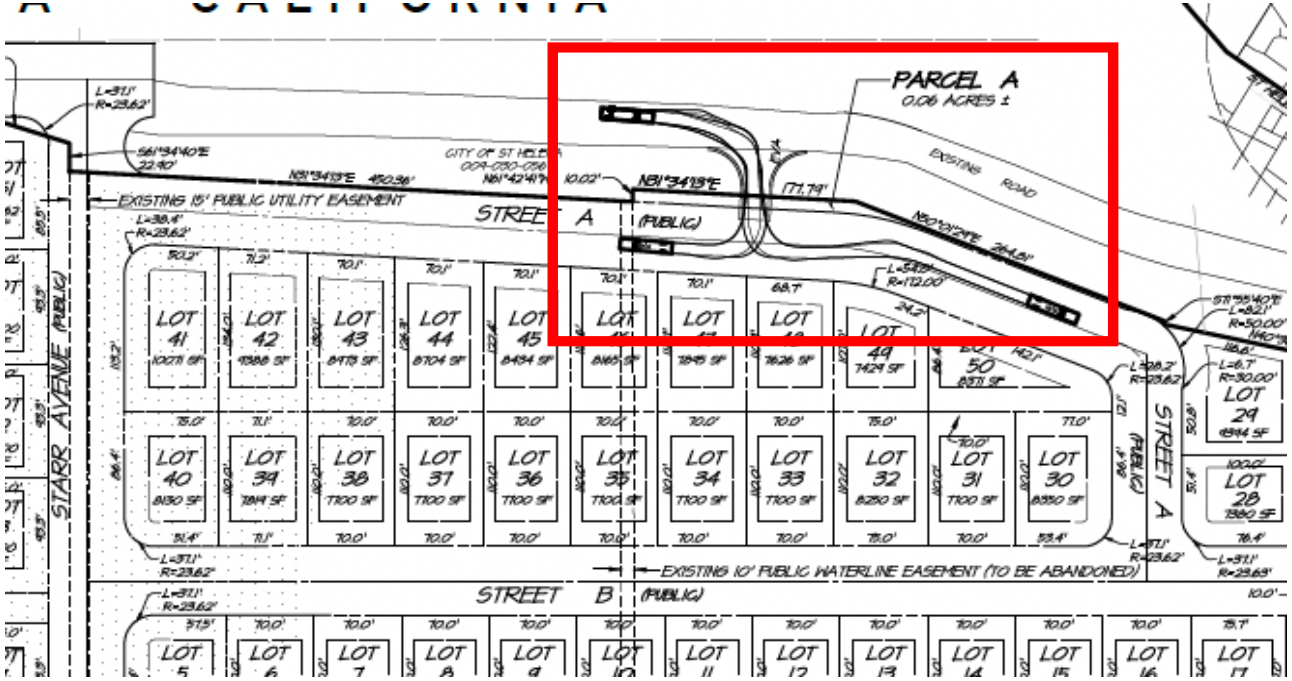
Project Location & Land Use



Changes to Conditions of Approval

Emergency Vehicle Access

Staff recommends deleting the proposed levee access road from Street A to the road atop the levee:



Emergency Vehicle Access

The Fire Department has reviewed the need for the EVA and determined that it is not needed:

1) The EVA is not needed for emergency vehicles

2) Residents of the Hunter subdivision will use public streets to evacuate

3) Post 2018, the levee road has been a designated evacuation route for the Vineyard Valley mobilehome community

Changes to Conditions of Approval

Staff recommends deleting the following condition:

~~*69. EVA: From Street A to levee: Prior to the issuance of a Certificate of Occupancy, the emergency vehicle access road (EVA) shall be improved to provide an all-weather access road (paved) from Street A up to the existing levee road to the north. The width of the EVA shall be a minimum of 21 feet from face of curb to face of curb within an overall 25 ft. wide dedicated EVA. The EVA shall accommodate emergency vehicles (must provide for turning radii to accommodate fire vehicles as per the Fire Department requirements.) Turning templates shall be provided with the improvement plans during the plan check process to ensure the EVA can accommodate Fire Department apparatus.*~~

Changes to Conditions of Approval

Staff recommends revising the following conditions:

88. Prior to the issuance of the first building permit, all City-required ***in-tract drainage*** *improvements* ***as shown on the proposed Tentative Map*** ~~*related to storm water for the project*~~ *shall be installed by the project developer at* ~~*it's*~~ ***the developer's*** *expense. Drainage improvements shall be designed* ~~*and funded by the developer*~~ *in accordance with the Design Criteria utilizing the rationale method and any applicable adopted City drainage plans.*

Changes to Conditions of Approval

Staff recommends revising the following conditions:

90. Post-development flows storm water discharge from parcel 009-030-057 shall not exceed the pre-development discharge including the projected build-out, expressed as 30% undeveloped pervious and 70% impervious drainage watershed. Applicant shall prepare an analysis to show compliance with this COA. Refer to COA ~~#90~~ ***#91*** *for additional requirements of the analysis.*

Changes to Conditions of Approval

Staff recommends revising the following conditions:

91. Prior to building permit issuance, the applicant shall provide to the City an analysis of the capacity and condition of existing drainage facilities downstream of the development (including any detention/retention ponds), including recommendations for offsite drainage improvements, which shall be constructed prior to the issuance of the first certificate of occupancy. Site grading and drainage improvements shall be shown on the improvement plans. In the unlikely event that the downstream facilities require improvements, the applicant ***and the City shall enter a Funding Agreement*** ~~*as a means of reimbursement from*~~ ***whereby the applicant is reimbursed for said improvements by*** *the City.*

Changes to Conditions of Approval

Staff recommends deleting the following condition:

~~*124. Access to the levee road is restricted for public use and only granted to emergency vehicles and emergency egress for Vineyard Valley Mobile Home Park residents. Signage prohibiting its use by the public is recommended. Public access will be granted at the discretion of the Authority Having Jurisdiction during emergencies/evacuations.*~~

Changes to Conditions of Approval

Staff recommends adding the following condition:

125. Prior to Final Map approval, remove the designated emergency vehicle access from Street A to the levee road.

The Fire Department's memo (attachment 13 to the staff report) explains why the emergency access is no longer needed.

The removal of the EVA does not affect the validity of the EIR. The EVA was not assumed to be part of the evacuation system for residents of the Hunter subdivision.

Issues Discussed in the Staff Report

Issue 1: Emergency Evacuation

- Commentors expressed concern that the addition of new homes in the area would hinder the evacuation of persons in the area (and particularly in the Vineyard Valley mobilehome community) during an emergency.

This issue has been raised many times in public comments on the Draft EIR and the proposed project. Staff understands the concerns expressed by residents. However, staff's conclusion, based on consultation with the St Helena Police and Fire departments, is that the addition of new homes will not negatively affect the ability of the area to evacuate in time of emergency.

See Final EIR Master Response #1, "Emergency Evacuation"

Issue: Levee Safety

- Commentors expressed concern about the design and maintenance of the adjacent levee. Commentors have suggested that the levee's integrity is being compromised by the presence of gopher burrows, which they assert results from what they believe is an inadequate program of inspection and maintenance.

Detailed responses to these and other comments related to the levee and its design and maintenance are included in Attachment 3, Final EIR Master Response #3, "Napa River Flood Protection/Levee."

Records of levee inspections verifying that the levee has been inspected for rodent burrows are available on the City's web site.

Issue: Affordable Housing

- Commentors expressed concern that housing in the proposed project “will not be affordable.”

The project is conditioned to comply with the Inclusionary Housing Ordinance requirements. As required by the St Helena Municipal Code, 20 percent of the homes in the project will be affordable to very low, low, and moderate income households. There will be no restrictions on the price of the remaining units or on the proposed ADUs.

By providing both market-rate and affordable units, the proposed Hunter Project represents about one-third of the 256 housing units allocated to the City in the current 6th Cycle Regional Housing Needs Allocation (RHNA).

Issue: Letters from Attorneys

- The City received two letters on April 30, 2023, from a law firm (DP&F) representing opponents of the proposed project commenting on the Tentative Map and the EIR. The letters are provided as Attachment 4 to this staff report.

Staff's response is that none of the comments provide any substantial evidence as to the adequacy of the EIR for the Hunter project or the ability of the City Council to approve the Tentative Map.

Issue: Spanish Language Outreach

- Some commentors and City Council members expressed concern that there was no specific Spanish-language outreach associated with the Hunter project.

The City currently does not have a policy requiring that public notices for development projects be provided in any language other than English. All noticing and materials for the Hunter project comply with current City requirements. However, in an effort to reach the broadest audience, the legal notice materials and mailed notices were bilingual for the June 26th meeting.

Issue: Status of the Onsite Well

- Commentors, including attorneys representing project opponents and Water Audit California, have suggested that the existing onsite well is not available to be used as proposed to irrigate outdoor landscaping in the proposed project.

Based on a review of the correspondence and relevant state law and the historic use of the onsite well, it is staff's understnaidng that the onsite well has never been abandoned. The well is fully operational, and was verified in 2021 to be able to be pumped at levels exceeding the proposed usage.

Issue: Statement of Overriding Considerations

- Councilmembers asked on May 1 what would happen if the Statement of Overriding Considerations (SOC) were not adopted, and whether the project's benefits in fact outweigh its impact on Vehicle Miles Traveled.

If the SOC is not adopted, arguably the project approval could not proceed, the tentative map would not be approved, and development of housing at the project site would not occur. This could in turn lead to a number of potentially adverse outcomes, including legal challenge of the Council's decision and issues with the State of California Department of Housing and Community Development (which enforces compliance with state housing law).

Issue: Future Applications

- Councilmembers asked at the hearing on May 1, 2023 about future applications which will need to be approved before the project can be developed, and whether additional information is available about these applications.

If the Hunter Tentative Subdivision Map is approved, additional approvals are required before homes can be built:

- Affordable Housing Agreement (CC)
- Final Map/Subdivision Improvement Agreement (CC)
- Conditional Use Permit for Multi-Family (PC)
- Design Review of Homes (PC)

Issue: Extension of Adams Street

- Commentors asked why the applicant is not required to either build or contribute to the extension of Adams Street to Silverado Trail.

The extension of Adams Street to Silverado Trail is one of two alternatives included in the General Plan to connect downtown to Silverado Trail.

To date, a special study has not been undertaken and the City Council has not made a choice about the appropriate route to connect downtown to Silverado Trail.

The Hunter project is not required to provide the connection to Silverado for several reasons, as discussed in the staff report.

Issue: Water Neutrality/Water Use

- Commentors have expressed concern that the Hunter project will negatively affect the City's water system by adding demand for City-provided water. These include questions about projected water use and the ability of the project to achieve water neutrality.

The issue of the City's Water Neutrality requirements has been considered and is the subject of extensive discussion in prior staff reports, the project's Draft EIR, and the Final EIR.

Staff's conclusion is that the onsite well can be used as proposed, providing about half of the water savings needed to fully offset the project's water use. Conditions of approval require the installation of water-conserving projects elsewhere in St. Helena to achieve the rest of the required water savings.

Issue: Proposed Accessory Units

- Commentors asked whether the City would require that the proposed Accessory Dwelling Units (to be built with 11 of the single family homes) are to be rented to low-income households.

The proposed Accessory Dwelling Units (ADUs) will not be counted toward the project's required affordable housing. Because the ADU units will not be part of the required affordable units, the City will not require that these units are rented to low-income households (consistent with City practice for other ADUs). The use of the ADUs will be up to the owners of the homes with which they are built.

Issue: Water Use Projections Too Low

- Comment asked whether the City would ensure that water use does not exceed projections.

The City meters water use per household, but to date has not implemented any type of program which would flag homes with excessive water use. The projected per-person water use for the project is about three times higher than the statewide average. The likelihood that water use will exceed projections is very low.

Issue: Will City Monitor Water Use?

- Comment asks whether an in-lieu fee to offset projected water use is too low and would not achieve enough mitigation. The comment also asks if an in-lieu fee would be adjusted if water use was higher than projected.

The proposed conditions of approval do not allow the payment of an in-lieu fee to offset the project's water use. Condition of approval #73 requires that the developer build and bring on line one or more projects that would reduce water use in the city or provide additional supply.

Water use projections for the project are conservative and not likely to be exceeded. There is no current process in place to provide for penalties or fees if water use projections are exceeded.

Issue: In-Lieu Fee for Water?

- Comment asserts that an in-lieu fee to offset projected water use is too low and would not achieve enough mitigation. The comment also asks if an in-lieu fee would be adjusted if water use was higher than projected.

The proposed conditions of approval do not allow the payment of an in-lieu fee to offset the project's water use. Condition of approval #73 requires that the developer build and bring on line one or more projects that would reduce water use in the city or provide additional supply.

Water use projections for the project are conservative and not likely to be exceeded. There is no current process in place to provide for penalties or fees if water use projections are exceeded.

Issue: Change.Org Petition

- In late April, 2023, an online petition in opposition to the Hunter project was posted on the web site Change.org.

After reviewing the information in the petition, staff prepared and circulated a press release correcting several factual errors. The press release is included in the attachments to the June 26 staff report.

Issue: Water Audit CA Comment Letter

- On May 1, 2023 (the date of the previous City Council hearing), Water Audit California delivered a letter commenting on and raising concerns about the CEQA process which has been followed for the Hunter project and the adequacy of the analysis of water use and water neutrality.

Staff's response is included in the attachments to the June 26 staff report. Based on staff's review, none of the comments raise any valid concerns about the adequacy of the EIR for the Hunter project or the noticing of the project.

Recommended Council Actions

1. Adopt a Resolution certifying the Final EIR, and approving a Mitigation Monitoring Program, Findings of Fact and Statement of Overriding Considerations; and
2. Adopt a Resolution approving the requested Tentative Map No. 2022-001, File #PL10-040, for the Hunter Subdivision project, and **adding** condition of approval #125 as presented at this hearing.

Questions?

Cindy Tzafopoulos

From: Henry Gundling <henry.gundling@gmail.com>
Sent: Sunday, May 28, 2023 9:33 PM
To: cityclerk
Subject: [External] Hunter Project and RHNA

Please distribute this to city council members:

The Hunter Project and RHNA

In 1968 Napa County citizens had the wisdom and foresight to implement the first Ag Preserve in the nation. Probably no one dreamt that it would be so successful, becoming both an agricultural oasis and the backbone of the local economy. To further protect the rural and agricultural nature of the county, and to more effectively manage regional development mandated by ABAG through its "black box" Regional Housing Needs Assessment process, the County and ALL of the cities in the County formed a "Sub RHNA" entity in 2014 through NCTPA (Napa County Transportation and Planning Agency) to gain local control over the allocation process. It enabled the County and its cities to determine amongst themselves the most appropriate locations for development within the county. As a consequence, in the 2015-2023 RHNA 5th Cycle, Saint Helena's allocation dropped to 31 units. In the spirit of the Napa County Ag Preserve and the Greenbelt Alliance there was a general recognition that it made the most sense to accommodate development in the larger urban areas and relieve pressure on smaller towns in the ag heartland. Sub RHNA was enormously successful.

Fast forward to a recent Saint Helena City Council that, out of incompetence, poor guidance or ulterior motive, voted to exit the Sub RHNA collaboration with the County and all its other cities. Incredible! As a direct consequence, Saint Helena's RHNA allocation jumped to 254 units for the 2023-2029 RHNA 6th Cycle. While it is true there is a need for more low income and work force housing in the county, it is manipulative to use this self inflicted higher RHNA number as a lever to build more million dollar plus single family homes in Saint Helena on what is otherwise prime ag land. With Sub RHNA, there was no government mandated Saint Helena housing crisis, and certainly no mandate for a Hunter Project. Instead, as with the original Ag Preserve, better angels had prevailed. In consultation with the County and its smaller municipalities, our larger cities assumed a greater development burden for the sake of us all; for ag preservation and open space, and to protect our economic foundation long term. Let us hope that a future Saint Helena City Council won't make the same blunder as the recent one.

Separately, also regarding the proposed Hunter Project and its "Water Neutrality", who can seriously say with a straight face that sucking half of the project's water needs out of the ground just a few hundred yards upstream from the City's existing groundwater wells WON'T have an impact long term on water availability for current residents. Ludicrous.

Henry Gundling
Saint Helena

From: Joyce Armington
To: Erika Opp
Subject: [External] Statement re Hunter Project from Joyce Armington, 6 Del Monte Court, St. Helena
Date: Monday, May 15, 2023 3:32:55 PM



May 15, 2023 at 2:17 PM — Shared

On July 31, 2019, The New York Times gave its readers an excruciatingly detailed view from the heart of a multi-fatality wildfire as it swept through Paradise, California.

The article notes that Paradise had a robust disaster plan. "But it had prepared merely for disasters, and this was something else. In a matter of hours, the town's roads were swamped, its emergency plans outstripped. Nine of every 10 homes were destroyed and at least 85 people were dead. Many were elderly, some were incinerated in their cars while trying to flee and others apparently never made it that far."

In my experience, money and clout decide development disputes. Democracy is invited to be grateful for gestures when the people try to speak up. However futile, there is one factor in this land decision that compels me to speak: the blocking of realistic escape routes from Vineyard Valley. I'm sorry the Hunter contingent made a bad business decision, but I and many others are not willing to give our lives for it in the face of the certain fires of the future.



Cindy Tzafopoulos

From: Kristi Pennington <kristipennington@gmail.com>
Sent: Tuesday, June 6, 2023 9:51 AM
To: Public Comment
Subject: [External] Objection to Hunter Project

I own a home at 1360 Grove Court and object to the proposed Hunter development in its entirety.
My objections are based primarily on (1) the recurring water shortages/restrictions which already compromise quality of life/green areas, and which would inarguably worsen under the burden of 50-80 additional households; (2) loss of green space within the city - the area in question is part of the largest, most tranquil and iconic park in St Helena - losing it would be an irrevocable tragedy; (3) related to the foregoing, increased fire danger due to loss of that green-space, our most effective in-town, open-space fire break; (4) the frightening traffic impact given 100 or more additional vehicles, the Pope Street bridge and the already extremely congested traffic in and through downtown. This would be a daily hardship and potentially tragic in the event of any evacuation.
For all these reasons, I strenuously object to the proposed Hunter development and trust City Council act responsibly toward those people it represents and vote this project down.
Please work to change the state housing mandates along with other California community. Do not allow this project at the expense of the quality of life of current residents.
Kristi Nelson Pennington
1360 Grove Court
St Helena
707-548-5711

Sent from my iPhone

Cindy Tzafopoulos

From: Elizabeth Green <green05@sbcglobal.net>
Sent: Wednesday, May 31, 2023 7:32 AM
To: Paul Dohring; Eric Hall; Anna Chouteau; Lester Hardy; Billy Summers
Cc: Anil Comelo; Maya DeRosa; Cindy Tzafopoulos; April Mitts; Erika Opp
Subject: [External] The Final Shoe

Greetings Mayor Dohring, Vice-Mayor Hall, and City Council members: Please consider the following:

Excerpt from St. Helena, California: Dealing with a Field-of-Dreams Levee, Residual Risk, and a Flood of Controversy Posted on July 17, 2016 by UC Davis Center for Watershed Sciences by Nicholas Pinter The final shoe – probably the most problematic element of the St. Helena flood-control debate – is now dropping, five years after the levee's completion. The current issue results from the unusual pathway of the levee, which sweeps well north and west of the neighborhoods previously flooded and includes 16.9 acres of undeveloped vineyard land. Undeveloped until now, that is. Just 17 days before the passage of Measure A, the mechanism that funded large-scale flood engineering throughout Napa County, much of the empty floodplain land behind the St. Helena levee was purchased by a private developer. On Sept. 8, 2010 the developer submitted plans to convert the empty agricultural land behind the levee into high-density residential development, including 87 new residential units[5]. ***This despite an explicit provision in Measure A that "none of these projects are intended or designed to encourage population growth."***

Please listen to the voices of the citizens of St. Helena. No one wants this development built for so many crucial and far-reaching reasons. You have heard them all. I realize you are all under a great deal of pressure from several places, and as Council Member Summers stated in the last meeting, this is a "political chess game". That may be, but what is most important for St. Helena and the people that live here is NOT to build this development. We will ALL suffer the consequences.

Please do the right thing and vote NO.

Respectfully,

Elizabeth Green
Vineyard Valley

Cindy Tzafopoulos

From: Elizabeth Green <green05@sbcglobal.net>
Sent: Tuesday, May 30, 2023 7:32 AM
To: Maya DeRosa
Cc: Paul Dohring; Eric Hall; Lester Hardy; Anna Chouteau; Billy Summers; Anil Comelo; April Mitts; Cindy Tzafopoulos; angziv@gmail.com
Subject: [External] Rebuttal to Press Release re Misinformation on Hunter project

FYI: Please note the rebuttal of last week's Press Release by the author of online petition Angela Zivkovic which opposes the Hunter project and is now registering 983 signatures from the citizens of St. Helena.

"The city of St. Helena recently sent out a press release regarding alleged “misinformation” in the change.org petition (https://www.change.org/p/save-the-city-of-st-helena-urge-city-council-to-vote-no-on-the-hunter-eir), which has now been signed by 971 people. The press release states that the change.org petition is presenting non-factual and misleading information about the levee, flood risks, FEMA maps and new FEMA Risk Rating 2.0. I thank the city for providing the links to these resources and documents to all St. Helena residents. I am glad that we are finally having a real discussion about this. Here are the facts: 1) we are proposing to build a development behind a levee in a flood zone, which means there is a non-zero risk of flooding that could damage those homes, 2) regardless of whether you choose to believe the % risk rating based on the 100-year flood approach, there is a non-zero risk that a flood event that overwhelms the levee will occur, 3) levees fail, 4) there is not a documented risk score for this levee (see discussion below), and 5) in the event of a flood that damages homes those homeowners have a right to sue the city and state, and based on historical legal precedent, they will likely win. First, I would like to directly address the allegation that the petition provides misinformation because in it is stated that the concept of “100-year floods” is now out of date. That is simply a reasonable interpretation of what is stated in the Risk Rating 2.0 Here is the actual language from the https://www.fema.gov/sites/default/files/documents/FEMA_Levees-in-Risk-Rating-2.0_2_22.pdf
On page 1: “Risk Rating 2.0 allows FEMA to calculate premiums more consistently for all policyholders, based on the value of their home and their property’s individual flood risk, by moving toward a graduated risk approach that expands beyond the binary depiction of flood risk centered around the 1%-annual-chance (100-year) flood event.” In other words, it was necessary to devise a more accurate system of assessing risk which “expands beyond” the %-annual-risk approach. The Risk Rating 2.0 system uses real data on screened levees to determine “overtopping frequency.” But for levees where this information was not available, assumptions were made in the following way (page 13, section 3.7.3): “Assumptions for overtopping frequency were required for levee systems that did not have available or reliable information from the LST, NLD, or Fathom. One of two assumptions was applied in these cases. First, if a levee system was identified as accredited on a FIRM, the assumed overtopping frequency was a 1% annual exceedance probability (AEP) flood event. In situations where Fathom data estimated a more frequent overtopping for an accredited levee system, the 1% AEP overtopping frequency was still assumed. However, if Fathom estimated levee overtopping to be less frequent than the 1% AEP for an accredited levee, then the overtopping frequency derived from Fathom was used. Second, FEMA assumed the levee overtopping frequency as a 2% AEP flood event for the remaining 57% of levees (and associated 10% of buildings in leveed areas).” In other words, the 1% or 0.5% risk of flooding is just a default assumption, not an actual assessment of real risk based on real data specific to the levee, in the case of unscreened levees. So the question then is, is the St. Helena levee one of the screened levees? The answer is no. According to the entry for our levee in the National Levee Database (NLD): https://levees.sec.usace.army.mil/#/levees/system/150005212841/summary

our levee (system ID 150005212841) is one of 80% of national levees that have not been screened. Thus, under the Levee System tab the entries are “No Data Entered” or “Unknown” for all of the following fields: Overview, Levee Performance and Potential Lost Benefits, and Incipient Overtopping Annual Exceedance Probability (AEP, or annual probability of the flood event that would load the Levee System to the top). In other words, there is no data available for the AEP for our levee. In the document
https://www.fema.gov/sites/default/files/documents/FEMA_Levees-in-Risk-Rating-2.0_2_22.pdf
on page 7 it is clearly stated that even for those 20% of levees that have been screened: “The NLD reports that these screened levees mitigate the risk for approximately 60% of all buildings behind levees.” So: our levee has not been screened, we do not have a probability rating of the levee overtopping, and even for a screened levee for which probability of overtopping has been established one can only count on risk mitigation for about 60% of homes behind the levee. So where does this leave us? It is up to each individual citizen to decide for themselves. The publicly available National Levee Database and FEMA Appendix D Rating Factor Tables have no risk ratings and probability data for levee failure for the St. Helena Flood Protection Project. We are being asked to take the city’s word for it that we know what amount of residual risk we are taking on by building more homes behind this levee. This “trust us” approach is also what is being asked of us when it comes to safety regarding evacuations during emergency situations. The FEIR does not provide a clear demonstration that every single resident of St. Helena could safely evacuate under a worst-case scenario situation (e.g. multiple fires start simultaneously, in the middle of the night, spread quickly due to high winds, with the power out (i.e. no functioning traffic lights), evacuations ordered for both Calistoga and St. Helena, and the Silverado Trail not a viable egress route). In my opinion, among the questions that must be answered in order to be able to vote on approving the safety of this development in an emergency evacuation are the following: A) How many vehicles can be safely evacuated from the entire city of St. Helena per minute? B) Which specific neighborhoods/streets will have the slowest egress because they are the farthest from Highway 29 and/or because they have special obstacles to making it to Highway 29 (e.g. several left turns into high-traffic streets, high-density apartment building)? C) How long will it take the LAST vehicle from these slow egress neighborhoods to evacuate down to a certain “safe” point on Highway 29? D) What are the projections and numbers for A-C) above if there were the current number of residents in town? E) And what are the projections and numbers for A-C) above if there were 400 more vehicles in the Hunter development needing to funnel into the traffic onto Hunt and Pope Streets? F) Exactly how many officers/volunteers would you need directing traffic to ensure that anyone already on Highway 29 from north of town actually stops and allows vehicles trying to turn onto Highway 29 from Spring Street, Madrona, Hunt, Pope, etc.? G) How quickly would this kind of traffic control need to be implemented and how much risk is there of a major collision blocking ALL egress in the time it takes to mobilize and coordinate the traffic control? H) What mitigations would be necessary to ensure that the LAST vehicle from a slow egress neighborhood makes it down to a specific “safe” point on Highway 29 south of town (e.g. How much could egress rates or egress time be improved if Highway 29 was widened/modified to accommodate the high traffic congestion in the worst-case scenario?). Given that there is a non-zero risk (whatever the number might be) of a flood event that damages homes and becomes a liability for the city, and that we have no clear assessment of how the development would actually affect evacuations during an emergency, why exactly should the citizens of St. Helena believe that this development project does not threaten our public health and safety? Why are we so desperate to build homes in a flood zone behind a levee? It just doesn’t make any sense." Angela Zivkovic

Respectfully,

Elizabeth Green
Vineyard Valley

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

June 8, 2023

Mayor Paul Dohring
Vice Mayor Eric Hall
Council Members Anna Choteau, Lester Hardy, and Billy Summers
City of St. Helena
1088 College Avenue
St. Helena, CA 94574

Dear Mayor Paul Dohring, Vice Mayor Eric Hall
Council Members Anna Choteau, Lester Hardy, and Billy Summers:

RE: City of St. Helena – Letter of Support and Technical Assistance

The purpose of this letter is to assist the City of St. Helena (City) with its decision-making regarding the Hunter Subdivision Project (Project). As you are aware, the State of California is in a housing crisis, and the provision of housing is a priority of the highest order. The California Department of Housing and Community Development (HCD) recognizes the challenge of interpreting ever-changing housing and land use laws and appreciates the opportunity to provide technical assistance that may lead to better housing outcomes for the state, as well as the City of St. Helena.

HCD understands the City Council will consider the Project at the June 26, 2023 public hearing. HCD understands Ben and Kelly Banzutphen (Applicant) are seeking approval of a tentative subdivision map and certification of an environmental impact report to allow 1.) Development of 51 single-family residential lots with 11 accessory dwelling units on a vacant, approximately 16.9-acre parcel; and 2.) 25 multifamily residential units on 3.13-acres. The Project also includes an anticipated 20 percent of the proposed units will be set aside for lower-income households.

Housing Element Commitments

As the City is aware, the City Council adopted St. Helena's 6th Cycle Housing Element (2023-2031) on May 9, 2023. Under that Housing Element, the City must accommodate a Regional Housing Needs Allocation (RHNA) of 256 total units comprising 104 very low-income units, 59 low-income units, 26 moderate-income units, and 67 above moderate-income units. The adopted Housing Element identifies the Project as essential to meeting the 256 units required by the 6th Cycle RHNA. The approval of the Project would contribute significantly toward meeting the City's RHNA obligations. Further, the Project is consistent with the goals, policies, and implementation programs

outlined in the City's Housing Element. Specifically, the objectives in Implementation Program H-A state that the City will commit to approving and streamlining the Project. Not meeting the objectives in Implementation Program H-A will require the City to identify alternative housing sites to meet its RHNA obligations.

It is important to note that the adopted 6th Cycle Housing Element is currently under review by HCD for substantial compliance with State Housing Element Law and that HCD will continue to monitor the City's progress toward implementation of the programs contained within the Housing Element to ensure the City meets its RHNA requirements.

Housing Accountability Act

In addition, the City should be aware that the Project meets the definition of a "housing development project" under the Housing Accountability Act (HAA). Therefore, the City must consider its obligations under the HAA (Gov. Code, § 65589.5). The HAA limits a local government's ability to deny, reduce the density of, or make infeasible housing development projects that are consistent with objective local development standards that contribute to meeting housing needs. Please see the Housing Accountability Act Technical Assistance Advisory available on HCD's website.[1]

In sum, HCD supports the approval of the Project during this critical housing crisis and appreciates the opportunity to assist the City in meeting its statutory obligations in the decision-making process. If you have any questions regarding the content of this letter or would like additional technical assistance, please contact Jessica Evans at jessica.evans@hcd.ca.gov.

Sincerely,



Shannan West
Housing Accountability Unit Chief

[1] https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/hcd-memo-on-haa-final-sept2020.pdf

ST.HELENA CITIZENS FOR A SUSTAINABLE FUTURE

RECEIVED
JUN 0 2 2023
CITY CLERK'S OFFICE
CITY OF ST. HELENA

June 2, 2023

Paul Dohring, Mayor
Eric Hall, Vice Mayor
Lester Hardy, Councilman
Anna Chouteau, Councilwoman
Billy Summers, Councilman
Anil Comelo, City Manager
Maya DeRosa, Community Development Director
1088 College Avenue,
St. Helena, Ca 94574

Dear Members of the City Council, Anil Comelo,City Manager & Maya DeRosa, Community Development Director

,Attached is a petition requesting public comment on the Planning Commissioners final report to the City Council in reference to the Hunter Project.

Respectfully,

Maria Villegas, Chairperson

St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

The City Council has set a fifth (5th) and final hearing date of June 7, 2023. That hearing is illegal and contrary to City Code. The Planning Commission was required to file its report and recommendation with the City Council ***prior*** to setting a hearing on the tentative subdivision map. (SHMC § 16.16.070, ("At the next regular city council meeting **following the filing of the planning commission's report with it,** the city council shall fix the hearing date at which the tentative map will be considered by it, which date shall be within thirty (30) days thereafter.") **That did not happen.** Instead, a fourth (4th) hearing was scheduled on May 1, 2023. No Planning Commission report and recommendation was prepared separate from the Staff Report prepared by Interwest Consulting Group provided with the public agenda for the previous fourth (4th) hearing on May 1, 2023, Special Meeting and the June 7, 2023 Special Meeting.

This failure to proceed as required by law has deprived the public of the opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The May 1, 2023, Special Meeting and scheduled June 7, 2023, Special Meeting thus are contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.

5-19-23

See Attac
California
Certifi

Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

CALIFORNIA ACKNOWLEDGMENT CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Napa }

On 5/19/23 (Date) before me, F.J. Carrillo Carlos, notary public (Here Insert Name and Title of the Officer)

personally appeared Maria D Villegas (Name(s) of Signer(s))

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

F. J. CARRILLO CARLOS
Notary Public - California
Napa County
Commission # 2441926
My Comm. Expires Mar 21, 2027

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Signature of Notary Public)

Place Notary Seal and/or Stamp Above

OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: Petition Summary & Background Hunter Project

Document Date: 5/19/23 Number of Pages: 1

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer – Title(s): _____	☐ Corporate Officer – Title(s): _____
☐ Partner – ☐ Limited ☐ General	☐ Partner – ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer is Representing: _____	Signer is Representing: _____

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St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

Petition summary and background	The Planning Commission was required to file its report and recommendation with the City Council prior to setting a hearing on the tentative subdivision map (SHMC § 16.16.070 ("At the next regular city council meeting following the filing of the planning commission's report with it, the city council shall fix the hearing date …which date shall be within thirty (30) days thereafter.")
Action petitioned for	**We, the undersigned, are concerned citizens who urge our leaders to act now to allow the public an opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The June 7, 2023 Special Meeting is contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.**

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Janice L Oddy	Janice L Oddy	1176 Meadowcreek Circle, St Helena CA	5/20/2023
Bernard L Buckley	Bernard L Buckley	1179 MEADOWCREEK, SAINT HELENA CA	5-22-2023
MARTHA ANGUS	Martha Angus	1180 Meadowcreek Circle S.H.	5-22-2023
SANDRA McCORKLE	Sandra McCorkle	1178 Meadowcreek Cir St Helena	5-22-2023
Anne OFFORD	Anne Offord	28 Redondo Ct. St Helena	5-23-2023
Robert Shiells	Robert Shiells	1182 Starr Ave, St Helena	5/22/23
Jeanne Shiells	Jeanne Shiells	"	"
Melissa Jones	Melissa Jones	"	"
Arlene Corsetti	Arlene Corsetti	1401 Spring St, St. Helena,	5-23-23
Richard Corsetti	Richard Corsetti	"	"
Kelly Wheaton	Kelly Wheaton	1335 Inglewood Ave St. Helena	5-23-23
Garry Rabe	Garry Rabe	1753 Vineyard Avenue S.H	5/23/23
Thomas Belt	Thomas Belt	1520 Hillview Place S.H.	5/23/23
Terence FORD	Terence Ford	1806 spring Mt. Court SH	5-26-23
Betsy Holzhauer	Betsy Holzhauer	17 Los Robles Ct S.H	5-24-23
Barbara Shurtz	Barbara Shurtz	1600 Dean York Lane SH	5-24-23
Valerie Preston	Valerie Preston	932 Mariposa Ln SH	5-24-23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Linda Brown	[signature]	791 Stralla Crt, SH	May 24, 23
Verna Walden	Verna Walden POA Carol Eaton	7 Laguna Seca Ct. SH	May 24, 2023
Neil Walden	Neil Walden	7 Laguna Seca Ct SH	May 24, 2023
PATRICIA WELSH	[signature]	28 Redondo Court STH	MAY 24 2023
Kathleen Guneratne	[signature]	1370 Grove Court, St Helena	May 24, 2023
JOE ASHLEY	[signature]	3 La Canada	May 25
Maria Villegas	[signature]	1166 Meadowcreek Cir. SH	5-24-23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
John C. Milliken	John C. Milliken	1256 Hudson	5/22/23
Beth Novak Milliken	Beth Novak Milliken	1256 Hudson Ave. St. Helena	5/22/23
Sean Welsh Milliken	Sean Welsh Milliken	1256 Hudson Ave.	5/23/23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Sandra B. Lowry	Sandra B. Lowry	1175 Starr Ave, S. H.	5/23/2023
Angela Zivkovic		1180 Starr Ave, SH	5/23/23
JOHN SCHOOF	John W Schoof	1188 MEADOWCREEK CIRCLE, SH	5/23/2023
Pat Schoof	Pat W Schoof	1188 Meadowcreek Circle, SH	5/23/23
Katherine Herber	Katherine Herber	1175 Meadowcreek Circle, SH	5/23/23
Roderick Nuvé		613 Harvest Lane	5/23/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
RICHARD BEITO		707 HUNT AVE. S.H. 94574	5-21-2023

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
GREG REYNOLDS		16 SAN LUCAS CT	6/1/23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

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Petition #: 4

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
BETTE ANTOR	Bette Antor	3 Del Rio Court SH	5/22/2023
LAUREL GIULIANI	Laurel Giuliani	22 REDONDO CT. ST. H	5/22/23
Elizabeth Green	Elizabeth J. Green	2 Laguna Seca SH	5/23/23
RODNEY GREEN	Rodney Green	2 LAGUNA SECA CT SH	5/23/23
Ellen Cotten	Ellen Cotten	1 Del Rio Ct. SH	5/23/23
John West	John West	3 LAGUNA SECA CT, S.H.	5/23/23
Mary T. West	Mary T. West	3 LAGUNA SECA CT S.H	5/23/23
ANEVERO		58 Laguna Seca Ct SH.	5/23/23
TIM NIEMAN		58 Laguna Seca Ct. SH	5/23/23
David Walser		57 Laguna Seca Ct SH	5/23/23
Denise Nelson	Denise Nelson	59 Laguna Seca Ct. SH	5/23/23
Greg Nelson		59 Laguna Seca Ct. SH	5/23/23
# FRANCES B GRIDLEY	Frances B Gridley	6 Laguna Seca ST HL	5/23/23
FRANK DIFEDE		3475 St. Helena Hwy N., S.H	5/23/23
Shelly DiFede	Shelly DiFede	3475 St. Helena Hwy N, SH	5/23/2023
STEVE MCNABB		4 Del Rio St Helena	5/23/2023

Petition #: 4

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Marianne Sylvia	Marianne Sylvia	8 Del Rio Ct. Saint Helena	05-23-23
JAMES WAYSON	James Wayson	8 Del Rio Ct. St. Helena	5-23-23
JAMES McTIERNAN	James McTiernan	15 LAGUNA SECA CT, ST. HELENA	5/23/23
CAROL HAVENS	Carol Havens	21 LAGUNA SECA ct. ST HELENA	5/23/23
GRACE D. KUSTNER	Grace D. Kustner	25 SAN JUAN COURT ST. HELENA	05/23/23
Priscilla J. DELL	Priscilla J. Dell	25 San Juan Court - ST. Helena	05/23/23
Marina Lavagnino	Marina Lavagnino	15 Del Rio Ct. St. Helena	5/23/23
Jenna Lavagnino	Jenna Lavagnino	15 Del Rio St. Helena	5-23-23
Chris Killion	Chris Killion	11 La Cuesta Ct. St. Helena	5-24-23
Thomas Pickering	Thomas Pickering	11 La Cuesta Ct. St. Helena	5-24-23
LYDIA PLOTKIN		27 REDONDO CT. ST. HELENA	5/24/23
MAUREEN BARTON	M Barton	2 DEL RIO CT ST HELENA	5/26/23

Petition #: 4

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

The City Council has set a fifth (5th) and final hearing date of June 7, 2023. That hearing is illegal and contrary to City Code. The Planning Commission was required to file its report and recommendation with the City Council ***prior*** to setting a hearing on the tentative subdivision map. (SHMC § 16.16.070, ("At the next regular city council meeting **following the filing of the planning commission's report with it,** the city council shall fix the hearing date at which the tentative map will be considered by it, which date shall be within thirty (30) days thereafter.") **That did not happen.** Instead, a fourth (4th) hearing was scheduled on May 1, 2023. No Planning Commission report and recommendation was prepared separate from the Staff Report prepared by Interwest Consulting Group provided with the public agenda for the previous fourth (4th) hearing on May 1, 2023, Special Meeting and the June 7, 2023 Special Meeting.

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

Petition summary and background	The Planning Commission was required to file its report and recommendation with the City Council prior to setting a hearing on the tentative subdivision map (SHMC § 16.16.070 ("At the next regular city council meeting following the filing of the planning commission's report with it, the city council shall fix the hearing date …which date shall be within thirty (30) days thereafter.")
Action petitioned for	**We, the undersigned, are concerned citizens who urge our leaders to act now to allow the public an opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The June 7, 2023 Special Meeting is contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.**

Petition #:5

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Dorothea Gingerelli	Dot Gingerelli	50 Laguna Seca Ct. St. Helena 94574	5-23-2023
James Verrechia OS	James Verrechia	50 Laguna Seca ct. St. Helena 94574	5-23-2023
PAUL PIAZZA	Paul Piazza	49 LAGUNA SECA CT STH 94574	5-23-2023
Judy Lenchner	JUDY LENCHNER	5 Redondo Ct St Helena 94574	5-23-23
JUDITH A. HANLEY	Judith A. Hanley	4 SAN JUAN CT. SH. 94574	5/23/2023
Jerri K Patton	Jerri K. Patton	15 SAN JUAN CT, SH 94574	5/23/2023
JOHN E PATTON	John E Patton	15 SAN JUAN CT SH 94574	5/23/2023
Phipps Y. Moran	PHIPPS Y. MORAN	18 San Juan Ct. St. Helena 94574	5/23/23
Thomas L. Moran	THOMAS L. MORAN	18 San Juan Ct. St. Helena 94574	5/23/23
Thomas Conor Moran		18 San Juan Ct. St. Helena CA 94574	5/23/23
Silvia Segura	Silvia Segura	1 Laguna Seca ct. St Helena	5/24/23
Miguel Segura	Miguel Segura	1 Laguna Seca ct. St. Helena St. Helena	
Denise Marks	Denise D. Marks	25 San Lucas Ct. 94574	5/24/23
Bruce Marks	Bruce E Marks	25 San Lucas CT St Helena	5/24/23
CARROLL COTTEN	Carroll C. Cotten	6 DEL RIO CT. ST. HELENA	5/24/23
Hank Brok	Hank Brok	15 REDONDO Ct St Helena	5/24/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Janet Schmidt	Janet Schmidt	12 Del Campo Ct.	5-24-23
Joyce Cahill	Joyce Cahill	34 Redondo ct	524.23
Ines Chiarello		11 San Lucas Ct	5-24-23
Cameron Fraser	Cameron Fraser	6 Redondo Ct.	5-24-23
Carl Myers Copy Myers	Carl K. Myers	3 San Ardo Ct	5-24-23
Patricia Myers	Patricia A. Myers	3 San Ardo Ct.	5/24/23
Gino Papale		6 San Ardo Ct	5/24/23
Charles Stiefel		16 Los Robles Ct	5/24/23
Mary Alice Stiefel	Mary Alice Stiefel	16 Los Robles Ct	5/24/23
Inger C. Laidley	I C. Laidley	11 del Campo ct.	5/30/23
Wendell Laidley		11 del Campo Ct.	5/30/23
Judith Atchley	Judith Atchley	14 Del Campo	5/30/23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

Petition summary and background	The Planning Commission was required to file its report and recommendation with the City Council prior to setting a hearing on the tentative subdivision map (SHMC § 16.16.070 ("At the next regular city council meeting following the filing of the planning commission's report with it, the city council shall fix the hearing date …which date shall be within thirty (30) days thereafter.")
Action petitioned for	**We, the undersigned, are concerned citizens who urge our leaders to act now to allow the public an opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The June 7, 2023 Special Meeting is contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.**

Petition #:6

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Batcheler, Genlee		11 Redondo Ct St. Helena	5/25/23
Kridarlynn, Katelin		12 Redondo Ct St Helena	5/25/23
Jen Salata		1330 Madrona St Helena	5.25.23
Carla Karpuk		950 Vintage Ave, St. Helena	5-25-23
Susan Stark		29 REDONDO CT. ST. HELENA	5.28.23
Ed Stark		29 Redondo Court	5/29/23
JANGEN di RIENZO		10 REDONDO CT St Helena	5/29/23
CARL MYERS		3 San Ardo Ct St Helena	5/29/23
Patricia Myers	PATRICIA MYERS	3 San Ardo Ct. St Helena	5/29/23
DARYL T. MYERS		3 San Ardo Ct, 95474	5/29/23
Roberta Acquistapace	Roberta Acq	27 San Lucas Ct	5/29/23
Robert DISTATO	Robert Distato	5 del Monte ct. St. Helena	5/29/2023
Linda D Messenger	LINDA D. MESSENGER	5 Del Monte Court	5/29/2023
Donald Pestana	DONALD PESTANA	5 DEL RIO CT. St Helena	5/30/23
Vera Pestana	Vera Pestana	5 Del Rio Ct. St Helena	5/30/23
MIRIAM HESS	Miriam Hess	8 LAGUNA SECA Ct. St Helena	5/30/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date 5-30-23
RON Naines	Ron Naines	10 Laguna Seca ct.	
Linda Titus	Linda Titus	38 Laguna Seca Ct,	5/30/23
DIANA LAVAGNINO	Diana Lavagnino	7 LOS ROBLES CT.	5/30/23
Elle Wheeler	Elle Wheeler	54 Laguna Seca Ct	5/30/23
~~Andrea~~ Andrea Bryan.	Andrea Bryan.	39 Laguna Seca Court.	5/30/23
NANNETTE HEYE	Nannette Heye	5 LAGUNA SECA COURT	5/30/23
JAMES HEYE	James Heye	5 LAGUNA SECA COURT	5/30/23
ANNELIESE HAAS	Anneliese Haas	2360 VALLEJO ST.	5/30/23
Thomas C. Haas	Thomas C. Haas	2360 Vallejo St.	5/30/23
SANDRA DelCastle	S DelCastle	214 Rosebud ~~Ave~~ #C	5/30/23
Carla Holm	Carla Holm	8 San Juan Court	5/30/2023
SHERATTAN DOWNIE	Sherie Downie	14 DEL RIO CT,	5/30/2023
Vivian Robison	Vivian Robison	35 Redondo Ct	5/30/23
Kenneth Robison	Kenneth Robison	35 Redondo Ct	5/30/23
Barbara Ringenberg	Barbara Ringenberg	9 Los Robles Ct.	5/30/23
Thomas Ringenberg	Thomas Ringenberg	9 Los Robles Ct.	5-30-23
CHERYL OLSEN	Cheryl Olsen	19 Laguna Seca Ct	5-31-23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

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Action petitioned for	**We, the undersigned, are concerned citizens who urge our leaders to act now to allow the public an opportunity to review and comment on the legally mandated Planning Commission report and recommendation prior to the project being set for a hearing. The June 7, 2023 Special Meeting is contrary to law and must be rescheduled properly pursuant to SHMC § 16.16.070.**

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Steven Herber	Steven Herber	1175 Meadowcreek circle	5/23/23
NATALIE KLUG	N K	1440 WALLIS CT	5/23/23
Kathleen Keeling	Kathe	1710 Crinella Dr	5/23/23
Janeille G. Bradley	Janeille G Bradley	817 Charter Oak Ave	5/23/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
LAURETTA CECCHINO		5 Los Robles Ct. St Helena	5/24/2023
Lalah Anton	Lalah Anton	9 La Cuesta ct. St. Helena	5/24/2023
Richard Wood	Richard Wood	34 Redondo Ct St Helena	5/24/2023
MARSHA MAXCY	Marsha Maxcy	31 Redondo Ct St Helena	5/24/23
Vivian Pirchner		8 La Cuesta Ct.	5/24/2023
Terry Maurer	Terry Maurer	#19 Redondo Ct.	5/26/23
Mary Ann Maurer	Mary Ann Maurer	#19 Redondo Ct	5/26/23
STEPHANIE L. BURNS	Stephanie Burns	4 Del Campo Ct	5-26-2023
Mike Greensill		2 Redando Ct.	5/26/23
Marilyn Coy	Marilyn Coy	1221 Spring Brook Ct	5/27/23
Sharon Slayton	Sharon Slayton	12 Del Monte Ct	5/28/23
Jeanette Aiello	Jeanette Aiello	7 Del Monte Ct	5/28/23
Liz Alderman		702 Hunt Ave	5/28/23
Ben Alderman		702 Hunt Ave	5/28/23
John Collins		621 Harvest LN SH, CA	5/28/23
Susan Collins		621 HARVEST LN SH, CA	5/28/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
KAY BETTINELLI	Kay Bettinelli	12 La Cuesta	5-28-2023
Ann Camacho	Ann Camacho	18 Del Rio Ct	5-28-23
FRED CAMACHO	Fred Camacho	18 Del Rio ct	5-28-23
Lori Vrabel	Lori Vrabel	17 Del Rio Ct	5/28/23
Heleman Dingess	Heleman Dingess	17 Del Rio Ct.	5-28-23
Nancy Carlson	Nancy Carlson	2 La Conada Ct	5/28/23
Bob Childs	Bob Childs	2 La Canada Ct	5/28/23
Mariam Hansen	Mariam Hansen	5 San Lucas	5-28-23
Dennis Hansen	Dennis Hansen	5 San Lucas Ct.	5/28/23
Thomas Nixon	Thomas Nixon	1 La Cuesta Ct	5/28/23
Jeanette Cheeseman	Jeanette Cheeseman	36 Laguna Seca CT	5/28/23
Mark Willey	Mark Willey	36 Laguna Seca CT	5/28/23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

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Maria Villegas, Chairperson
St. Helena Citizens for a Sustainable Future

St. Helena Citizens for a Sustainable Future

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Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

To: Paul Dohring, Mayor Eric Hall,Vice Mayor Lester Hardy, Councilman Anna Chouteau, Councilwoman Billy Summers, Councilman

Petition summary and background	The Planning Commission was required to file its report and recommendation with the City Council prior to setting a hearing on the tentative subdivision map (SHMC § 16.16.070 ("At the next regular city council meeting following the filing of the planning commission's report with it, the city council shall fix the hearing date …which date shall be within thirty (30) days thereafter.")
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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
GALE FERMINDELO		9 REDONDO Ct. St. Helena	5/24/2023
JOHN URBANIK		1538 CHABLIS CIR SH	5/26/23
William Savidge		7 San Lucas, SH	5-26-23
Michael S Griffin		1624 PARK ST	5-26-23
LOUIS P COY		1221 SPRING BROOK CT S.H	5-26-23
Jerry Decker		2134 WALNUT ST	5/26/23
Lana Ivanoff		1533 Pine St. SH	5/26/23
Daray Dunlap		1510 Pine St. SH	5/26/23
DAVID BEATTY		8 DEL CENTRO CT SH	5/26/23
DOUGLAS SCHMIDT		12 DEL CAMPO Ct	5/26/23
JEAN MARTIN		5 SAN JUAN CT	5/26/23
JOHN PATTON		15 SAN JUAN CT	5/26/23
JOICE ARMINGTON		6 DEL MONTE CT	5/26/23
DAVE ARMINGTON		6 DEL MONTE CT	5/26/23
Jerri Patton	Jerri K Patton	15 San Juan Ct	5/26/23
Betsy Holzhauer	Betsy Holzhauer	17 Los Robles Ct	5/26/23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Cynthia Warren	Cynthia Warren	1317 allyn SH	5/27/23
Jeffrey Warren		1317 Allyn SH	5/27/23
Shannon K Reilly	Shannon K. Reilly	823 Chiles Ave S.H.	5/27/23
Maria Gina Musser		56 Laguna Seca Ct. S.H.	5/27/2023
Bonnie K Schock	Bonnie K Schock	52 Laguna Seca Ct S.H	5/27/2023
SUZANNE JAMES	Suzanne James	32 Redondo ct SH	5/27/23
DEBRA AUSTIN	Debra Austin	1 San Juan Ct	5/27/23
CRAIG AUSTIN		1 San Juan Ct	5-27-23
MYRNA CARATO	Myrna Carato	3 San Juan Ct	5-27-23
MEGAN WILSON		3 Del Campo Ct	5-27-23
Pierrette Simpson	PIERRETTESIMPSON	2 Del Campo ct	5.27.23
VICTOR SIMPSON	Victor Simpson	2 DEL CAMPO CRT.	5-27-23

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

Petition Summary and Background
Hunter Project

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St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
JOLENE ENGEL		1176 Stark Ave St. Helena 94574	6-2-23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with law.

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Hunter Project

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St. Helena Citizens for a Sustainable Future

Petition to Reschedule the June 7, 2023 St. Helena City Council meeting because it does not comply with the Law

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St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
Sandra B. Lowry	Sandra B. Lowry	1175 Starr Ave, S. H.	5/23/2023
Angela Zivkovic		1180 Starr Ave, SH	5/23/23
JOHN SCHOOF	John W Schoof	1188 MEADOWCREEK CIRCLE, SH	5/23/2023
Pat Schoof	P L N Schoof	1188 Meadowcreek Circle, SH	5/23/23
Katherine Herber	Katherine Herber	1175 Meadowcreek Circle, SH	5/23/23
Roderick Muré		613 Harvest Lane	5/23/23
Laurence Schlatter		1183 Starr Ave, SH	5/23/23
Lisa Filipps		1210 Spring Brook Ct. S.H	5/23/23
ANTHONY FILIPPS		1210 SPRING BROOK CT SH	5/23/23
YOLANDA SOLANI DE RUYBAL	Yolanda Solani de Ruybal	1181 MEADOWCREEK CIR. St. Helena	5/24/23
Mary Gundling	Mary Gundling	1185 Meadowcreek Cir. St. Helena	5-24-23
Henry Gundling	H N. Gundling	1185 Meadowcreek Cir. St Helena	5-24-23
GLORIA C. BATH	Gloria C. Bath	1660 Mitchell Drive SH	5-24-23
CYNTHIA AFFORD		1177 Starr Ave SH	5-24-23
ANDI BROWN		1174 Meadowcreek Cir SH.	5-24-23
DAVID BROWN		1174 Meadowcreek cir	5-24-23

St. Helena Citizens for a Sustainable Future

Printed Name	Signature	Address	Date
DAVID VALENTINE		1194 MEADOWCREEK CIRCLE, S.H.	5-25-23
Edwin Fish		1711 Tainter St, St Helena	5-25-23
Dianne Fraser		2612 Colombard Ct., S.H.	05-25-23
ISOBEL LURIA		1173 STARR AVE, S.H	5/26/23
CHRISTOPHER SMITH		1171 STARR AVE S.H	5/26/23
KEVIN WILLIAMS		1171 STARR AVE S.H.	5/26/23
Rebecca Palmisano	Rebecca Palmisano	1177 Meadow Creek Ct	5-26-23
David Palmisano		1177 Meadowcreek Ct	5-26-23
William Polacheck		709 Hunt Ave St. Helena	5-30-23
KATHI POLACHECK	K Polacheck	709 Hunt AV ST Helena	5.30.23
GALE GREYSON		1181 STARR AVE ST HELENA	5.30.23
MEHDI EFTEKHARI		1176 Starr Ave St. Helena	6-2-23

June 25, 2023

To: Mayor Paul Dohring, Vice Mayor Eric Hall, Council members Chouteau, Hardy, and Summers. City Manager Anil Comello.

From: Pat Dell

I have sent my comments on the Hunter Development EIR to the Planning Commission previously so I will not repeat myself. I have concentrated my efforts in this letter on communicating with the City Council and City Manager on Affordable Housing, City fulfilling the FEMA requirements for maintenance and management of the components of the St. Helena Comprehensive Flood Control and River Restoration Project, safe evacuation in case of a natural disaster for Vineyard Valley residents as well as the persons who would be living in the Hunter development. The Planning Commission kicked the can down the road to you because they said it met the requirement from the state for affordable housing.

THIS IS NOT AN AFFORDABLE HOUSING PROJECT. It is a development of homes for above moderate-income people. The City is required to build only 66 units of above moderate-income houses in the 6th cycle which is 8 years. Are you going to allow Mr. Hunter to fill that entire requirement and deny other builders based on having fulfilled your RHNA requirement? No attention has been given to the inclusionary housing ordinance which is crucial. I have watched this City avoid, fail, drag its feet, do surveys ad nauseum and not do a thing except help Our Town St. Helena to build the only housing for low income and working people that has happened in the 23 years that I have lived here. The City did have an Affordable Housing Committee several years ago whose members were authorized to issue an RFP for Affordable Housing Developers to submit a plan for about 35 units for the Adams Street Property. The Committee received several excellent proposals, the PC liked all of them but the mayor at that time refused to have any of them presented. This is not a primary issue for any City Council member or City Manager or something would be happening. Our Town St. Helena has between 40 and 60 units of affordable housing in the pipeline. You own with no mortgage the entire Adams Street property, the railroad property, the Main Street property. I have not heard or read of any action on your part to build affordable housing on any of those properties. You should have a St. Helena Housing Agency with staff that understands housing and you should be developing an association with an affordable housing builder such as Burbank Housing who know how to get financing.

I have reviewed the FEMA requirements for the City in the LOMR. I have reviewed the inspections of the components of the flood control project from 2015 to the present time. This is attached as an addendum because it is three pages long. I am also attaching the FEMA language in the LOMR. The flood project was completed in 2011 and certified in 2012. It took until 2015 to start inspections. When they were begun there were no emergency procedures, no operations or inspection records present. No refresher training. That remained true in 2016. When reading this I felt sorry for the staff member doing the inspection and submitting the report. He was crying out for help and getting none. I have attached a full review to this report so I will only say that although the project was built to FEMA and ACOE standards the City was and still is negligent in the maintenance of the project.

My comments regarding safe evacuation from Vineyard Valley and the Hunter Project are based on my experience as well as the MASTER RESPONSE section of the EIR in the library. This is a response to comments submitted by people who are concerned about the project. The St. Helena Police Department has made a judgement call pertaining to evacuation based on an emergency drill September 20, 2021.

This was not an adequate drill and no one in the SHPD is a traffic engineer. First of all, it was not a surprise. We were all informed ahead of time. Secondly and most importantly, it only included half of the homes in Vineyard Valley. The residents living on the east side went out over the levy. There are 125 homes on the east side of VV The homes on the west side were told to go out on Pope Street. There are 115 homes on the west side of VV. These people did not have the experience of driving out over the levee. If the emergency is at night there would need to be lights and temporary barriers to prevent people from driving off the levee. If the emergency requires evacuation of the east side of St. Helena it will be bumper to bumper. You have Stonebridge apartments, Silverado Orchards and Vineyard Valley, all high-density communities all trying to get in line on Pope St. Not to mention the people on Star, Meadowcreek etc. who will also need to get out. This is not a simple evacuation exercise solution to a very serious problem. Apparently the SHFD and SHPD recognized the danger was great enough that it required some emergency accommodation. However, none of them are qualified to determine whether there will be damage to the levee by building an onramp for access. This is a disaster waiting to happen and you must deny the building of this project.

Make Mr. Hunter an offer he can't refuse and leave that property agriculture or a proper park for the east side of St. Helena.

Sincerely, Pat Dell

MAINTENANCE OF FLOOD PROJECT COMPONENTS

FLOOD PROJECT COMPLETEDC June 2011

FEMA ISSUED LETTER OF MAP REVISION (LOMR) IN JUNE 2012

FEMA requirements for maintenance of flood project components are as follows:

A. NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, Responsibility for maintenances of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainages structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.
B. FEMA further states "State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

The above is to emphasize how important it is to have qualified people do required inspections and that the deficiencies noted are addressed in a timely manner. I do not find this to be the case in my review of inspection reports since they were started in 2015 three years after the LOMR from FEMA. The same deficiencies were reported year after year and up until the present.

I am satisfied that the City of St. Helena hired very capable people in the Mead and Hunt Engineering firm as well as Mitch Swanson as Geomorphologist. The project was built using the highest standards. It was not built by the ACOE because the City of St Helena would have been required to wait approximately ten years to even start the process. This information was provided to me by Eric Sklar who was on the City Council at the time of the development and construction of the project and he was most the most involved CC member working on the development and construction. The following are my observations after reviewing inspection reports from 2015 to 2023.

10-30-15 Josh Shaw and signed by Ste3ve Palmer

A. Erosion of levee embankment at top of outlet behind concrete.
B. Corrosion and rust on metal components
C. No operations or inspection records present. No refresher training.
D. Areas where ground is eroding toward base of structure – foundation concrete structure.

10-26-16 Josh Shaw and signed by Steve Palmer

A. Still no emergency procedures. No operations
B. Erosion by Sulphur creek by outlet gate.
C. Gophers present. Burrows control program not effective or non existent.
D. Concrete structure tilting and sliding.
E. Joint material erosion.
F. No operations or inspection records present. No refresher t raining.

G. Ground eroding at base of structure. (I assume this is the flood wall.)

10-17-17 Josh Shaw with signature of Steve Palmer.

A. No emergency procedures.
B. Trash, debris, weeds and small trees along levee.
C. Gopher holes present.
D. Areas of tilting, sliding and settlement. Needs repair.
E. Joint material eroding
F. Evidence of active seepage.

09-24-18 - Darren Gardell Signed by Steve Palmer

A. No emergency procedures.
B. Trash and debris on levee
C. Minor slope stability problem.
D. Erosion occurring on or near levee.
E. Existing animal burrows program needs to be improved.
F. Tilting and sliding that threatens structure integrity.
G. Ground erosion toward base.
H. Joint material deterioration.
I. Evidence of active seepage.
J. Pump station -NO maintenance and inspection records.

12-06-19 Erica Smithers

A. Minimally acceptable.
B. Excessive vegetation and trees too close to floodwall.
C. Dog feces thrown over wall.
D. Floodwall settled 3 inches in many locations.
E. Silicone within joints throughout floodwall failing.
F. Pumps inadequately maintained.
G. Sump pump overgrown with blackberry bushes.
H. A PLAN WILL BE DEVELOPED.

04-10-20 Erica Smithies IDENTICAL REPORT

07-22-20 Erica Smithies IDENTICAL REPORT

11-05-20 IDENTICAL REPORT

12-01 20 Erica Smithies

a. Floodwall settling and polyurethane sealant cracking.
b. Early signs of erosion Creekside of floodwall.

12-01-20 SOME REMEDIATION DONE

a. Weed abatement along floodwall, access points throughout flood project.
b. New generator installed.

c. Contractor has begun cleaning discharge channel, removing invasive trees.
d. Crews will utilize the basil treatment on bushes to mitigate any future issues.
e. Work will be completed in the spring when access is permitted for such work.

03-05-21 Mark Rincon --- No indication of who did the inspection. Hard to believe it is the Department Head.

A. Unwanted vegetation growth along levee embankment, blackberry bushes etc. (Still no permit?)
B. Erosion Creekside of wall. Being addressed as part of CIP-R19-03. (when ?)

07-07-2021

a. Floodwall settled 1.5 inches (was 3 " in 2018)
b. Small trees and bushes encroaching on floodwall. (I guess basil treatment didn't work?)
c. Polyurethane sealant – seams falling apart in wall. (Was supposed to be budgeted for 2021 so why hasn't it been done?)
d. Dog feces and yard clippings again dumped over wall. (Did City notify Vineyard Valley Manager?)
e. Blackberry bushes returned near well pump.

Recommendations from 07-07-21 report

a. Public Works Engineer to obtain quote during 2021 budget to work on surface cracks in wall.
b. Staff will reach out to Vineyard Valley Management about dumping dog feces, fish carcasses and yard clippings over wall.
c. Continuous animal burrowing in place that includes the elimination of active burrowing and filling of the existing burrows. (If this is true then why are there photographs of burrowing still actively taking place.)
d. Floo9d debris buildup at discharge channel from October 21st heavy rain. (This is 9 months later)

09-14-22 Mark Rincon Ibarra

a. Polyurethane cracking in floodwall still happening. Engineer to obtain quotes within the 2022 construction season. (This has gone on for year after year after year.)
b. Debris in discharge channel. Will be removed as part of RMA work. (What is RMA)

02-14-23 Mark Rincon Ibarra - Taylor Hamilton

a. Gives an A to animal control. (This despite continued photographing of holes from burrowing.)
b. Some brush and weed growth along floodwall.
c. Plywood, brush clippings, used cigar etc. being thrown over floodwall.
d. Wall is still offset.
e. Early erosion base of wall at 17 and 19 Los Robles. (This erosion first mentioned in 2016)
f. Joint material deteriorating and cracking at MOST joints around floodwall.

From: Mary Stephenson
To: cityclerk
Subject: [External] Comment on Hunter Project EIR
Date: Friday, June 16, 2023 9:28:21 PM

Hello Cindy - can you please distribute this to the Council members and the appropriate staff? Thanks for your help.

I am writing this letter as a concerned citizen, not on behalf of any organization.

The proposed Hunter Project is an almost 17-acre neighborhood of 51 brand new 3-to-4 bedroom homes that will most likely be valued at or above $3,000,000 each. Right next door, will be a much smaller 3.4 acre neighborhood of 24 two-bedroom homes which will be rented to income-qualified tenants. Even though both neighborhoods are part of the same development, there is a complete separation of the two communities, with no connecting streets. So a housekeeper or gardener living in the small rentals, would need to drive out of his/her community and into the big house community next door to clean the toilets and blow the leaves.

Can you please explain to me how this proposed site plan is consistent with the City of St Helena Municipal Code Chapter 17.146 which states that “affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction as the market rate units in the same residential project”? Or that “affordable housing shall be dispersed throughout the residential project, or subject to approval of the planning commission, may be clustered within the residential project when this furthers affordable housing opportunities”? Has the Planning Commission made a ruling that segregating the affordable housing in the Hunter Project is providing additional affordable housing opportunities? Is there an explanation anywhere in the project documents for this disparity?

The Final EIR for the Hunter Project dated October 2022 on the City’s website advises us to wait for the City to negotiate the inclusionary housing requirements during the Final Map approval process to determine how the 20% affordable housing requirement will be served. But the Tentative Map before the City for approval right now already segregates the smaller and much more densely-packed affordable rental units away from the market rate houses, which basically eliminates any hopes of providing an integrated community during the Final Map negotiations . Unless I am missing something, this appears to be a flagrant abuse of the City’s Municipal Code.

I understand that the City wants to approve this project. But agreeing to this purposeful separation of the haves from the have-nots, without explanation or rationale does not seem right to me. Particularly for a city that proudly professes its “commitment to advancing justice, equity, diversity, and inclusion” [Source: City of St Helena Diversity, Equity and Inclusion Strategy}. Is it possible for the Council and/or staff to address this issue in writing prior to, or include it on the agenda for discussion at the June 26 meeting?

Thank you for your consideration.

Mary Stephenson

707 849 2583

Angela M. Zivkovic, PhD
1180 Starr Avenue
St. Helena, CA. 94574

City of St. Helena City Council
1572 Railroad Avenue
St. Helena, California 94574
(707) 967-2783
publiccomment@cityofsthelena.org

June 21, 2023

Dear Members of the City Council of St. Helena,

I am writing a follow-up letter regarding the Hunter Project Final Environmental Impact Report (FEIR). **I am writing to ask you to VOTE NO on approval of the FEIR.** This FEIR does NOT adequately address the safety of CURRENT St. Helena residents in the event of emergency evacuation due to natural disasters (i.e. flood, wildfire). **This FEIR does NOT provide evidence that the negative impact of the proposed development on public health and safety has been mitigated.**

An update on the petition that I notified you about in the last letter: the petition on **Change.org now has 1,045 signatures**, fully 1/3rd of the registered voters of St. Helena, who agree that this FEIR should not be approved, and that the safety of St. Helena residents is at stake.

I am aware that you have received a letter dated June 8, 2023 from Shannan West, Housing Accountability Unit Chief from the CA Department of Housing and Community Development, "urging" the city council to comply with the Housing Accountability Act. I want to make sure and make it crystal clear that the citizens of St. Helena are aware that the Housing Accountability Act does NOT in fact mandate the building of homes if that development threatens public health and safety. **One of the five legitimate reasons to NOT approve a housing development project is the threat to public health and safety.** I am providing below two critical arguments why this threat to public health and safety clause can be invoked in this case.

With regard to sections H5, H6, P2, P3, R1 and R3 of the FEIR:

- Section H5: Emergency access
- Section H6: Wildland fires
- Section P2: Transportation hazards
- Section P3: Emergency access
- Section R1: Impairment of adopted emergency response plan or emergency evacuation plan
- Section R3: Infrastructure-related wildfire risks
- Section Q2: Sufficient water supplies

The FEIR does not provide a clear demonstration that every single resident of St. Helena could safely evacuate under a worst-case scenario situation.

1) The worst-case scenario situation is a wildfire event that bears features of both the Glass Fire and the 2017 fires that ravaged the area. In this worst-case scenario the fires would all start simultaneously, in the middle of the night, and spread quickly due to high winds, with the power out (i.e. no functioning

traffic lights). Evacuations would be ordered for both Calistoga and St. Helena, and the Silverado Trail would not be a viable egress route due to emergency vehicles fighting the fire on Silverado Trail on the East Side. Among the questions that must be answered in order to be able to vote on approving the safety of this development in an emergency evacuation are the following:

a. How many vehicles can be safely evacuated from the entire city of St. Helena per minute?
b. Which specific neighborhoods/streets will have the slowest egress because they are the farthest from Highway 29 and/or because they have special obstacles to making it to Highway 29 (e.g. several left turns into high-traffic streets, high-density apartment building)?
c. How long will it take the LAST vehicle from these slow egress neighborhoods (e.g. the farthest house within the Vineyard Valley community, a house at the end of a cul de sac) to evacuate down to a certain "safe" point on Highway 29?
d. What are the projections and numbers for a-c above if there were the current number of residents in town?
e. And what are the projections and numbers for a-c above if there were 400 more vehicles in the Hunter development needing to funnel into the traffic onto Hunt and Pope Streets?
f. Exactly how many officers/volunteers would you need directing traffic to ensure that anyone already on Highway 29 from north of town actually stops and allows vehicles trying to turn onto Highway 29 from Spring Street, Madrona, Hunt, Pope, etc.?
g. How quickly would this kind of traffic control need to be implemented and how much risk is there of a major collision blocking ALL egress in the time it takes to mobilize and coordinate the traffic control?
h. What mitigations would be necessary to ensure that the LAST vehicle from a slow egress neighborhood makes it down to a specific "safe" point on Highway 29 south of town (e.g. How much could egress rates or egress time be improved if Highway 29 was widened/modified to accommodate the high traffic congestion in the worst-case scenario?)

2) It is reckless and irresponsible NOT to conduct a more thorough evaluation, with real models and projections about egress times, before approving this FEIR. Whole families could perish if we do not do our job now of evaluating the real risks and hazards involved with adding a development of this size to an area of town that already has traffic congestion, in a town that has limited road infrastructure and high wildfire risk. **The current FEIR does not adequately mitigate the safety concerns during an emergency evacuation. We live in a very unique geographic location that has limitations on the egress routes that can be taken, and at the same time, very high wildfire risks that are increasing with climate change.** We may very well have already reached the maximum safe capacity of this town given the current limitations. It would be like loading more passengers on an airplane than you know can safely exit via the given number of emergency doors. Until we know with some confidence what that maximum capacity is considering the possible egress rates under the current infrastructure, we cannot possibly evaluate the real impact on public health and safety of any development that would add a substantial number of residents and vehicles.
3) Again, I just want to emphasize here that it is absolutely critical that any and all projections about the safety of egress out of town with the new development in place take into account a maximum possible number of additional people and vehicles that could be living there. Given that the proposed development is for 87+ units we must assume that there could be as many as about 400 people, and potentially 400 additional vehicles added to town. The proposed development does not and cannot limit the number of residents or vehicles allowed per household, nor does it limit or prohibit multi-family, or mixed adult households. An example is a household in which there are 2 adults and 5 children, 3 of whom are of driving age. This is actually a real example of a neighbor living close by. They have 5 vehicles and multiple pets, thus they could and probably would drive all 5 vehicles loaded up with personal belongings and companion animals in an emergency situation. Another example is a

house that becomes a rental for 5 adult Culinary Institute students or harvest interns who each drive their own individual vehicle. We cannot bury our heads in the sand and pretend that we know how many people are actually going to choose to live in each household of this development. In addition, the ADU and low-income housing requirements necessitate that there will be more than 87 units constructed in this neighborhood, again, highlighting the need to account for much higher total numbers of residents and vehicles than are being projected in the current FEIR.

4) Finally, I want to reiterate what others have communicated with you already, which is that a large number of home insurance companies have already pulled out of the state of California and will no longer provide insurance for any new homes and developments in the state. This is beyond the long list of insurance companies that already do not cover the city of St. Helena because it is considered to be in a high risk area.

The FEIR does not adequately address public safety with regard to the liability of a flood event. The city has sent out a public notice on this topic supposedly highlighting "misinformation" in my petition and in my letters. I sent in a letter to the editor at the St. Helena Star, and this letter was already forwarded to you. I just want to make sure to highlight the key points again here so that they are not lost:

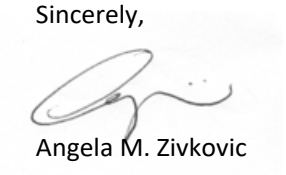
1) As I mentioned in my previous letter, Dr. Nicholas Pinter, Professor in the UC Davis Department of Earth and Planetary Sciences, and Associate Director of the UC Davis Center for Watershed Sciences, wrote a very insightful and informative blog post on the topic of the St. Helena levee. I feel that it is absolutely necessary that each and every city council member read through this blog post carefully. In his blog he explains that **even with a levee constructed to withstand a "200-year flood" there is residual risk**. In other words, there is *at least* a 0.5% chance that a catastrophic flood event that overwhelms the levee will occur, but this could be higher given the unpredictability of climate change and given that we do not have an estimate of that risk because the risk estimation is not based on the current FEMA Risk Rating 2.0 but instead on the outdated risk rating system which FEMA no longer uses. This last statement is indeed correct for the following reason:
    a. The Risk Rating 2.0 system uses real data on screened levees to determine "overtopping frequency." But for levees where this information was not available, assumptions were made as stated on page 13, section 3.7.3 (https://www.fema.gov/sites/default/files/documents/FEMA_Levees-in-Risk-Rating-2.0_2_22.pdf): "Assumptions for overtopping frequency were required for levee systems that did not have available or reliable information ... if a levee system was identified as accredited on a FIRM, the assumed overtopping frequency was a 1% annual exceedance probability (AEP) flood event." In other words, in the case of unscreened levees the % risk of flooding is just a default assumption necessitated by the fact that only a small minority of levees have been screened since the new risk rating took effect, not an actual assessment of real risk based on real data specific to the levee.
    b. The St. Helena levee has NOT been screened. According to the National Levee Database (NLD): https://levees.sec.usace.army.mil/#/levees/system/150005212841/summary our levee (system ID 150005212841) is one of 80% of national levees that have not been screened. Thus, the entries for "Levee Performance and Potential Lost Benefits", and "Incipient Overtopping Annual Exceedance Probability" (AEP, or annual probability of the flood event that would load the Levee System to the top) are "No Data Entered" or "Unknown".
    c. What all this means is that **NO ONE, not even FEMA, has a real number for the % residual risk that exists of overtopping of this levee**. And this is not even taking into account the effects of climate change.

2) It is absolutely critical that the city council members acknowledge and realize that the levee WILL fail at some point. All levies do. It is just a matter of WHEN (not if) it will happen. The city council is responsible for evaluating the real financial risks and obligations that the city is taking on, given this reality. **It is not an optional exercise to build financial projections around the financial liability and risks associated with this development**. Given the implications of Measure A and CA Water Code Section 12748.3, as discussed in points 5) and 8) below, **the city council is obligated to fully account for the legal and financial liability of the development before they take any actions to approve this project.**
3) The city cannot guarantee that the levee has been maintained as required since its completion in 2010. Maintenance records through 2015 demonstrate failures on multiple levels. There are pictures of dozens and dozens of gopher holes on the levee itself. Dr. Pinter will tell you that is a big problem. And there are lots of other levee maintenance issues. Certainly, the burden of proof in any potential legal case would be on the city to demonstrate that the levee was properly maintained, with anything less than a 100% perfect record being a problem. Legal precedent demonstrates that the CA courts are inclined to side with property owners who have suffered damages rather than with municipalities in such cases (again, please read Dr. Pinter's blog post carefully).
4) The city WILL be liable when the catastrophic flood event occurs and the levee fails. As explained in Dr. Pinter's blog, there is already CA legal precedent that municipalities and the state can and have been liable for damages due to floods even when they were *not* involved in the construction of a levee that failed. In this case, the city of St. Helena is entirely responsible for its maintenance, and would therefore, without question, be liable. In other words, what is at stake here is the approval of a development whose residents would in the future have the full legal right and would likely win in a lawsuit against the city to pay for damages. This has already happened in this city before. The residents of Vineyard Valley, which was the first development that should never have been built inside the FEMA flood zone, sued the city of St. Helena after the 1995 flood. The city of St. Helena is still paying for this bad decision decades later, with deferred maintenance endangering the health of its residents and increasing the cost of living.
5) Furthermore, **Measure A, which was passed to approve and finance the construction of the levee, has a specific provision that "none of these projects are intended or designed to encourage population growth,"** meaning that the levies constructed throughout Napa Valley, including the levee in the city of St. Helena, were NOT intended to promote development behind those levies. This further strengthens any future Hunter development resident lawsuit; they can easily claim that the development should never have legally been built behind this levee. It is, in fact, questionable whether building the development behind this levee is legal.
6) I strongly suggest that the city council and mayor invite Dr. Nicholas Pinter to present and offer his expertise on levee safety. Dr. Pinter has previously expressed his expert opinion that construction immediately next to the levee (and in fact using the levee itself during the construction process) jeopardizes the internal integrity of the levee. **Dr. Pinter can be contacted via his UC Davis e-mail: npinter@UCDAVIS.EDU**
7) I would also like to remind the city council members that before approving anything it is critical to ensure that the city has NO increased financial risks if there is a levee failure, topping, or breach. There are a number of CA court cases that say if you don't maintain a levee you are liable for the damage. The recent Pajarro levee failure is a case in point.
8) Finally, **St Helena has agreed to indemnify the state of California when they accepted a grant of $9M.** Below is the statute memorializing that indemnification:
    a. California Water Code Section 12748.3 specifically applies to St. Helena and the flood control project, which includes the levee. It states, in part, "(c) A county or local agency may receive the funds only if it enters into an agreement with the department pursuant to which the city or

> local agency agrees to indemnify and hold and save harmless the state, its officers, agents, and employee for any and all liabilities for damages that may result from the project. (d) For the purpose of this section, 'liability for damages' includes, but is not limited to, liability for damages, relating to the construction or operation of the project or the failure of the project to operate as intended."

The current FEIR fails to adequately address the concerns cited above. The negative impacts of the proposed Hunter development on the health and safety of current St. Helena residents have NOT been mitigated. **The Hunter development would have significant impacts on public health and safety that cannot be mitigated, which is one of five reasons why a housing development can be denied according to the Housing Accountability Act.** It is the city council's responsibility to vote NOT to approve the Hunter development FEIR and to protect the citizens of St. Helena.

Sincerely,



Angela M. Zivkovic

From: Sandra Lowry
To: cityclerk
Subject: [External] This is the letter I meant to send. Please forward to City Staff, City Manager, Planning Commissioners and City Council
Date: Tuesday, June 20, 2023 11:45:15 AM

Since the Hunter project was first brought to the city for approval, two profound events occurred in Napa Valley that changed everything for homeowners, businesses and renters. We had two catastrophic fires in 2017 and 2020, with the fires coming down to the highway at Silverado Trail at Pope Street, much too close to the proposed development. This has resoundingly changed the way homes in St. Helena are now able to be insured, especially for customers with million-dollar properties in high-risk areas. St. Helena is designated a high-risk fire zone.

Most mortgage lenders do require home insurance as a condition of the loan. So, if you have a mortgage on your house, it's safe to assume that fire insurance is mandatory.

Over the past few months, the following insurance companies no longer insure new properties in St. Helena because we are designated a high fire-risk zone. They are as follows: (these come from our local insurance company MIV)

State Farm Travelers — Declined

JE Brown — Declined

Oregon Mutual — Declined

Safeco — Declined

Nationwide — Declined

Chubb — Declined

Hartford — Declined

CIG — Declined

Scottsdale — Declined

Bamboo — Declined

Foremost — Declined

Rivington — Not writing any new business in California

Insurance is outrageously expensive through the California FAIR Plan — if you can even get it. "The FAIR Plan ultimately is intended to be a short-term solution for the marketplace. It is more expensive because the majority of the risks are riskier," said Phil Irwin, public relations representative for the California FAIR Plan.

So why do all the above companies believe St. Helena is a high-risk fire zone and the local fire department and the staff see no negative impact after all we have been through? Why would you build several dozen homes in a high-risk fire zone? How are they going to insure these homes?

“If the SOC is not adopted, project approval could not proceed, the tentative map would not be approved, and development of housing at the project site would not occur. This could in turn lead to a number of adverse outcomes, including potential legal challenge of the Council’s decision, issues with the State of California Department of Housing and Community Development (which enforces compliance with state housing law),

and increase the risk that the City would receive future "builder's remedy" projects (under the Housing Accountability Act, cities that do not have a housing element in substantial compliance with state law cannot deny certain housing projects, even if they are not in compliance with the City's zoning or general plan). For these reasons, staff recommends that the City Council adopt the Statement of Overriding Considerations."

We must resist the rhetoric that the state will force St. Helena, demanding that we build housing in a flood and high-risk fire zone. This is not about compliance to zoning or general plan, it is about safety. We can deal with this demand if and when it becomes an issue. We have perfect legal grounds to back us.

This got me thinking about the staff. I understand they feel under pressure from the state to move forward with this project to fulfill state requirements. They are required to tell us this. Again, the state can't and won't force St. Helena to build housing in an unsafe area.

Don't let these proclamations become a scare tactic that undermines our common sense. Common sense tells us that we should never build a huge development in a flood and high-risk fire zone with one exit over a railroad track with an intersection rated F by Caltrans (this is one of the reasons why the mega-Safeway wasn't built). The thought of all the machinery and supplies and workers coming down Main Street (or even worse, winding their way through small neighborhoods with streets where it is now difficult for two cars to pass). Entering and exiting through Adam Street is inconceivable and unsafe. Fire trucks and ambulances could at best only deliver services in a delayed, sporadic and counterproductive manner.

The response to this project is overwhelmingly negative. I understand the staff interprets the flood zone ruling

one way, while Ms. Zivkovic, a Ph.D. at UC Davis, interprets it another way. I'll put my money on Ms. Zivkovic. Her petition clearly shows how 1,000 citizens are feeling about this project.

I understand the City Council is under pressure from a variety of fronts. Big problems. No great solution.

Above all, as elected officials, I want to re-instill a sense of personal responsibility not only for your safety, but the future safety of your neighbors.

Susan Kenward

St. Helena

JOSHUA S. DEVORE
jdevore@dpf-law.com

June 23, 2023

Via Email:

Mayor Paul Dohring: pdohring@cityofsthelena.org
Vice Mayor Eric Hall: ehall@cityofsthelena.org
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City Manager Anil Comelo: acomelo@cityofsthelena.org

Community Development Director Maya DeRosa: mderosa@cityofsthelena.org

RE: Hunter Subdivision Project, File #PL10-040

Dear Mayor Dohring, Vice Mayor Hall, Council Members, City Manager Comelo, and Community Development Director DeRosa:

As you know, we represent the Saint Helena Citizens for a Sustainable Future, a diverse group of City residents.

In response to our April 30, 2023, letters discussing numerous concerns with the EIR and Tentative Map for the Project, on May 1, 2023, attorneys representing the applicant submitted a last-minute letter to the City. Staff also has recently posted additional responses to those letters in the Agenda Packet for the June 26, 2023, Special City Council meeting.

This letter provides additional information and responses related to the applicant's counsel's May 1 letter, to the City's most recent Staff Report, to points raised at the May 1, 2023, City Council meeting, as well as expands upon the major points raised in our previous letters. The issues covered in this letter are those that we feel warrant additional explanation and comment due to the importance of the issues and the lack of the Project's ability to address your constituents' substantial concerns.

As discussed at length previously, we continue to disagree with the Applicant on numerous issues, particularly that the project has been illegally piecemealed in violation of City law and CEQA, and that the Housing Accountability Act does not change that. Overall, and as stated in our previous letters, it is abundantly clear from the record, the EIR, and the Staff Report that the Project is attempting to evade and ignore City, County, and State requirements to build a luxury housing project under the guise of addressing a statewide affordable housing crisis.

For the reasons articulated below, in addition to those covered in our previous letters, this Project should not be approved. The points covered in this letter are as follows: (1) the City cannot be forced to approve this Project to meet its obligations under its Housing Element or State law, nor does it need to; (2) the

Project has no stated benefits and as a result the City has no basis for adopting a Statement of Overriding Considerations; (3) in response to recent comments and in order to avoid the application of the City's own safety standards, the project has changed again to be even less safe; (4) the City has failed to analyze impacts to groundwater and well resources pursuant to current State and Napa County groundwater requirements; and (5) subsequent environmental review is required to afford the public a chance to review the Project that is actually presented.

1. **The City Council Must Exercise Its Independent Discretion: Approval of the Project is not required in order for the City to meet its obligations under the City's Housing Element.**

The City is being tremendously pressured to approve a project that essentially no one but the developer wants. The record is replete with evidence that neither the current residents, local NGOs that advocate for affordable housing, or even the City's own recent Staff support the project as it fails to comply with the City's general plan, its inclusive housing law, myriad aspects of City code and policy, the Sustainable Groundwater Management Act, Napa County code and policy, and the California Environmental Quality Act. It puts the City and its residents at substantial financial and personal risk. Yet the tentative map under consideration is explicitly stated to provide "no direct fiscal impacts"[1] to the City.

Contrary to the applicant's attempted *fait accompli* that "the City cannot comply with Housing Element Law without approving the Project,"[2], the City is **not** required to approve this Project in order to meet its obligations under Housing Element Law. The Applicant's implication that the City must approve the project is contrary to law. Nothing can force the City Council to do anything other than exercise its own independent judgment as to the sufficiency of the EIR and the compliance of the Project with the City's municipal code and General Plan.[3]

Further, the City's newly adopted Housing Element (approved on May 9, 2023), contains an alternative to the Project: in the event the Project does not move forward "the City has also included surplus capacity of 116 units in the above moderate-income category to ensure capacity to meet the RHNA [Regional Housing Needs Allocation] is sustained throughout the planning period." (Housing Element at 2-180.) This Project is explicitly **not** needed to meet the RHNA requirements.

We recognize that included in the Staff Report for the June 26, 2023 Special City Council Meeting is a letter from the Department of Housing and Community Development ("HCD").[4] But HCD is not a responsible agency for the Project, and in this context is merely advocating what appears to be a position that all housing projects must be good. As stated extensively previously, that is wrong. This Project must still comply with CEQA, the City's code, policies, and water use regulations. As extensively documented, it does not. Further, this Project will not be helpful to the State's housing crisis – if anything, it will take away an opportunity for a more inclusive, affordable, and better housing opportunity for the City.

Although the applicant claims this Project will assist with overall housing demand there remains no proposal for affordable housing. Staff directly rejected the proposal made four years ago which violated

[1] June 26, 2023 Staff Report, at page 11.
[2] May 1, 2023 letter from applicant's counsel Holland & Knight, at pages 1-2.
[3] Prejudging the Project due to outside influence would violate the Brown Act. Gov. Code § 54950 declares that the intent of the Brown Act is to ensure agency "actions be taken openly and that their deliberations be conducted openly."
[4] Item 6.1 of the Staff Report for the June 26, 2023, Special City Council meeting, pages 259-260.

the inclusionary provisions of the City's code. Including a component of affordable housing in a Project that is segregated (in Lot 52) from the rest of the development is discriminatory and expressly illegal without approval of the proposed affordable housing plan by the Planning Commission. Approving the tentative map prior to that decision illegally revokes the delegated authority to the Planning Commission to first consider such a non-inclusionary proposal.

And finally, the Project proposes to include Accessory Dwelling Units ("ADUs") and count those ADUs within the dwelling units to establish the Project meets the minimum density requirement. However, in the latest Staff report, it is finally acknowledged that there will be no requirement to use those ADUs for housing – affordable or otherwise. Rather, it is now expressly conceded that "the use of the ADUs will be up to the owners of the homes with which they are built."[5] By leaving the use of the ADUs up to the homeowners, these ADUs will just be detached offices or game rooms in the backyard of luxury homes, or perhaps an extra bedroom for guests. There is no evidence in the record, substantial or otherwise, that these ADUs will provide meaningful independent dwelling units.[6] And again, as there is no use permit application for Lot 52, there is no evidence of how many units will actually be constructed there.

As such, there is no substantial evidence in the record to support a finding that the Project, as presented now, complies with the City's objective minimum density requirements.

2. The City has not proposed nor made specific findings that the Project is beneficial and as a result has not fulfilled its obligations under CEQA.

There is no evidence in the record as to any benefits for the City resulting from the Project. While there is of course a general need for housing, and substantial external pressure being applied from non-constituents to approve housing of any kind, the duty of the City Council is to the current citizens to find actual real benefits to the project that outweigh the significant unavoidable impact the Project will cause on the City. The City must identify, with reference to substantial evidence in the record, real benefits of the Project in order to adopt a Statement of Overriding Considerations.

CEQA requires "the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits . . . of a proposed project against its unavoidable environmental risks when determining to approve the project."[7] In doing so, the Council is required to document such benefits, by stating "in writing the specific reasons to support its action based on the final EIR and/or other information in the record."[8]

The most recent letter from the applicant attempts to address this issue, but instead of identifying specific, quantifiable benefits of the Project, the letter explains that the project is beneficial because it complies with the Housing Accountability Act.[9] That is not a benefit.

[5] Staff Report for June 26, 2023 meeting at page 8.
[6] Health and Safety Code section 19970 defines "dwelling unit" as "one or more habitable rooms which are occupied or which are intended or designed to be occupied by one family with facilities for living, sleeping, cooking and eating."
[7] CEQA Guidelines section 15093(a).
[8] CEQA Guidelines section 15093(b)
[9] May 1, 2023 letter from applicant at pages 8-9.

Page 15 of the most recent Staff Report concedes that "there are no direct fiscal impacts to the General Fund resulting from the approval of the Tentative Parcel Map." As such, and since the City has piecemealed the approvals, the decision before the City Council now has no fiscal benefit. And again, other than a generic suggestion that 'all housing is good', the City has not presented the public with any specific benefits of the Project that is actually proposed to support adopting a Statement of Overriding Considerations. The draft Statement of Overriding Considerations still contains no specific benefits, only general platitudes. And the Staff Report concedes that any fiscal or housing benefits from the project can only come from future approvals.

Because there is no affordable housing agreement, there is no affordable housing benefit – the Staff Report makes clear that remains undecided. Even the latest housing element update acknowledges that the Project cannot be considered as "affordable" due to the lack of an affordable housing agreement. As such, in conducting the required balancing, there are no tangible benefits to the Project – which at this point is purely a tentative division of land and does not allow the construction of any housing – affordable or otherwise.

Without a complete Project to consider, there is no way to analyze any potential benefits. The applicant's piecemealing of the Project in direct contradiction to the City's Subdivision Code and CEQA renders any potential benefits from future required approvals purely speculative. There is no evidence cited in the proposed findings of anything other than prejudging that future approvals may lead to future benefits. Such speculation lacks substantial evidence to support adoption of a statement of overriding considerations.

3. The EIR's deficiencies support a finding that this project cannot be approved due to the project's impacts on public health and safety under Government Code section 65589.5(d)(2).

In yet the latest post-EIR significant change to the project, it now appears that the Project is going to abandon its previously proposed emergency access to and from the levee maintenance road. This configuration of the Project was not analyzed by the EIR.

The deficiencies in the EIR as to public health and safety, specifically, in relation to wildfire evacuation and response, warrant disapproval of the Project, contrary to the arguments presented in section 5 of the applicant's counsels' letter.[10] Pursuant to the Housing Accountability Act ("HAA"), Government Code section 65589.5(d)(2), a local agency can disapprove a housing development project "if it makes written findings, based upon a preponderance of the evidence in the record" that "the housing development project … as proposed would have a specific, adverse impact upon public health or safety…." As raised by countless commenters, such is the case here, because the Project is located directly adjacent to land classified as a very high fire hazard severity zone ("VHFHSZ") that burned in the Glass Fire, yet was not analyzed as such.

CEQA requires an EIR to analyze "any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating

[10] May 1, 2023 letter from applicant at pages 7-8.

development in areas susceptible to hazardous conditions (e.g., ... wildfire risk areas), including both short-term and long-term conditions...."[11]

The EIR fails to adequately address the direct, indirect or cumulative impacts of the Project's location directly adjacent to a VHFHSZ, and does not analyze the Project that is actually proposed, which no longer has emergency access to the levee evacuation road.

a. The EIR fails to adequately address the Project's impacts to emergency access.

The City points to Final EIR Master Response 1 on the EIR's analysis of emergency access issues (page 71 of the City's Staff Report, June 9, 2023.) In that response, the City refers to its "Draft 2020 Multi-Jurisdictional Hazard Mitigation Plan Update, which has not yet been adopted (DEIR p. 3.8-11)."[12] The EIR therefore does not evaluate the impact of an actually adopted emergency response plan, so the ability to truly analyze this impact is limited. Instead of providing an alternate emergency response plan, the DEIR merely states that there is no adopted plan and vaguely describes what the new plan will include (see DEIR at 3.8-11):

- "The City's Fire Department would review the site plans to determine if any additional road widening or access is recommended." (DEIR at 3.8-20.)
- The EIR also states that the Proposed project "would not interfere with the preparation of the City's emergency response plan or Napa County's Emergency Operations plan," (DEIR at 3.8-20), but does not go on to describe how it would not cause such interference.

Due to the proximity of the Project to a VHFHSZ (see our letter on the Project's EIR dated April 30, 2023), the EIR must at a minimum explore the quantitative impacts to evacuation routes and explain how the population surrounding the Project would be able to get out easily in the event of a fire now that the emergency evacuation route originally included in the EIR has been jettisoned.

In considering "whether a project may interfere with implementation of an emergency response and evacuation plan, [a court is] primarily concerned that the public and decisionmakers understand the impact the project will have on the new residents' ability to evacuate and on emergency personnel's ability to protect and service the residents and their property consistent with the adopted plan."[13] Here, the City neither provided enough information to understand the current emergency response and evacuation plan, nor did it provide the details to evaluate the Project's impact on such plan. Worse, it now, at the last minute, appears to have abandoned a key piece of the plan.

In order to provide adequate and meaning environmental review under CEQA, the City should, for example, conduct a quantitative study to determine how long it would take to evacuate new residents of the Project in the event of a wildfire using the various evacuation routes, and should actually identify such evacuation routes.

[11] CEQA Guidelines, § 15126.2(a); see *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal.App.5th 63.
[12] FEIR at 4-4.
[13] *League to Save Lake Tahoe* at 136.

a. The Applicant claims that there is no flood risk for the Project area despite being directly adjacent to the levee.

The Applicant appears confident that there is no flood risk for the Project, contrary to direct evidence in the EIR. "The Project site is located adjacent to the southside of the Napa River and just upstream of the confluence of the Napa River and Sulphur Creek."[14] The Napa River has a history of flooding, and the Project site itself flooded in 2005.[15] The Project is proposed to be built directly behind the levee which purportedly protects the site from flood impacts. However, as noted in our previous letters, as well as letters from other commenters, the City has repeatedly failed to maintain the levee. And, the City claims that it will continue "regular maintenance" of the levee, but fails to describe the specifics of such maintenance. [16]

Despite the reality of the Project's location, if the Applicant believes there is no flood risk, then it should have no problem procuring insurance for the homes it builds for the costs to replace them in the event the levee fails. Extensive prior commentary, including advice from the City attorneys, discusses that the City may be held liable in the event of flooding around, over, or through the levee. There is no reason for the City to accept that risk. This risk should be borne by the Applicant and the future residents of the Project, not the City and its residents. Given the ease with which developers tend to disappear once projects are completed, the City should add a Condition of Approval that the developer be required to post a bond for the replacement cost of each house at the time of sale, or otherwise guarantee the replacement costs of the houses in the event of a flood that is not contingent on the Applicant still being in business at the time of the disaster.

b. As previously pointed out, the levee maintenance road does not meet the required road and street standards.

As pointed out in our letter on April 30, 2023, the risk of wildfire impact on the City's current residents is worsened by the failure to address the needed road improvements.[17] The Project will obstruct emergency access for existing residents, particularly those in Vineyard Valley. We discussed that there is no evidence that the levee maintenance road is a suitable evacuation road for the Project, and that the levee maintenance road does not meet the City's Fire Department Access Road Standards, which requires a 30-foot paved road with two feet of shoulders.[18] The levee maintenance road does not even meet the lesser Road and Street Standards dictated by Napa County or CAL FIRE for safe evacuation from a property with more than four residences of a paved 20' road with 2' shoulders.[19]

Rather than addressing these needed road improvements, the Applicant has now apparently recognized that the Project as proposed and analyzed in the EIR does not comply with the City's street standards.

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[14] DEIR at 3.9-5.
[15] DEIR at 3.9-5.
[16] Response to Comment #15, Staff Report for the June 26, 2023 City Council meeting at page 73.
[17] Letter from Josh Devore, April 30, 2023, at pages 12-13.
[18] *See* City of St. Helena Street, Storm Drain & Sidewalk Standards, available at: https://www.cityofsthelena.org/sites/default/files/fileattachments/public_works/page/2491/publicworkscitystandards_0.pdf
[19] *See* Napa County Road and Street Standards, 2023 available at: https://www.countyofnapa.org/DocumentCenter/View/20064/Napa-County-Road-and-Street-Standards---2023-PDF

Instead of attempting to meet such requirements, the City has now apparently given the go-ahead to just delete the levee maintenance road for emergency access from the Project site.[20]

Simply deleting the emergency access from the Project is not what was discussed in the EIR and leaves the current residents struggling to grasp what is really being proposed. It leaves the impression that rather than attempting to meet the City's standards, the applicant has in fact now made things worse, as discussed more in detail below.

c. The City has changed its position as to whether the levee maintenance road is to be used for emergency vehicle access and evacuation access, so the public is left guessing what remain as viable evacuation and emergency access routes for the Project.

The DEIR, FEIR, and most recent Staff Report have created confusion over what the proposed emergency vehicle access ("EVA") and evacuation routes are for the Project. The City continues to contradict its previous findings and statements, as evidenced below.

According to the DEIR:

> "The Proposed Project's tentative map is designed with three points of access; the extension of Star Avenue and Adams Street and an emergency vehicle access (see Figure 2-3 in Chapter 2, Project Description) to facilitate the ingress and egress of emergency response vehicles, including the City and County Fire Department's apparatus and Proposed Project residents."[21]

The DEIR goes on to say:

> "As stated previously, the Proposed Project's tentative map is designed with an emergency vehicle access to facilitate the ingress and egress of emergency response vehicles, including the City and Napa County Fire Department's apparatus. The City's Fire Department would ensure the final site plans provide adequate emergency evacuation and would be consistent with the City's emergency response plan, when it is prepared. In the event of a fire, there would be sufficient access for emergency vehicles to reach the Project site, as well as emergency evacuation access for residents. The Napa County Emergency Operations Plan does not include a vehicle evacuation plan, but in the event of a wildfire, City fire and police personnel would coordinate with Napa County to identify evacuation routes and set up temporary shelters for anyone asked to evacuate."[22]

According to the FEIR:

> "Roads that would provide emergency access near the Project site include Pope Street, Hunt Avenue, Starr Avenue, Adams Street, and Silverado Trail as well as the existing levee maintenance road that borders the northwest boundary of the Project site and the

[20] Yet, because the Project does impact and propose alterations to the connection of the access road to the Adams Street extension, the levee road is still part of the Project and subject to the City's Access Road Standards. The levee road thus still needs to be updated to meet the required access standards.
[21] DEIR at page 3.8-20.
[22] DEIR at 3.8-22.

> adjacent City detention basin. The Vineyard Valley development currently has only one access to enter/exit the development from Pope Street. Emergency access is provided via the maintenance road adjacent to the northern boundary. . . If, for some reason, the levee maintenance road is closed residents of Vineyard Valley would exit using the access onto Pope Street."[23]

Yet, according to the June 26, 2023, Staff Report:

> "It should be noted that the City of St Helena Fire Department has determined (as discussed in the June [26], 2023 staff report) that the emergency vehicle access to the levee road is no longer needed and has recommended that it be removed from the proposed tentative map. If the City Council concurs with this recommendation, the easement and permit issues cited by the commenter would become moot."[24]

> "COA #69 is proposed to be deleted. As discussed in the attached memorandum from the City of St Helena Fire Department (Attachment 13 to [the Staff] report), the proposed emergency vehicle access (EVA) from Street A to the levee road is no longer warranted, based in the availability of access to and from the Hunter subdivision on local streets and the designation of the levee road in 2018 as the evacuation route for residents of the Vineyard Valley mobile home community."[25]

The DEIR and FEIR analyzed the Project including use of the levee maintenance road as an evacuation route for the residents of the Project and Vineyard Valley. Despite the repeated discussion in the EIR, staff has apparently now decided that the levee maintenance road is no longer needed as an EVA route. This conclusion is based on a June 6, 2023 memo from the City of St. Helena Fire Department with no supporting evidence.

So there is no ambiguity: residents of Vineyard Valley are genuinely and severely concerned that this Project is going to get them killed. This is not hyperbole. Abandoning an access point at the last minute in a clear effort to avoid the Fire Department's Access Road Standards is nothing short of horrifying to the people that elected you to protect their interests.

Yet, according to the June 6, 2023 memo from the St. Helena Fire Department, the emergency access to the levee is no longer part of the proposed project. A significant change of this sort should be reincorporated into the original EIR (via the preparation of a subsequent environmental document and recirculation) with additional clarity as to the proposed routes for both evacuation and EVA. The confusion that currently exists, for a Project that sits directly adjacent to a VHFHSZ (contrary to Staff's position that the property is "neither immediate nor adjacent" to a VHFHSZ[26]), is unacceptable, and puts the public in the surrounding community at risk.

[23] Master Response No. 1, FEIR, page 4-3.
[24] Response to Comment #13, Staff Report for June 26, 2023 Special City Council Meeting, at page 72.
[25] Staff Report for June 26, 2023 Special City Council Meeting, Agenda item 6.1, page 14.
[26] Response to Comment #11, Staff Report for the June 26, 2023 Special City Council Meeting at page 71.

This is a substantial, last-minute change, apparently designed to avoid improvement of the levee maintenance road to meet the City's own fire access road standards. It puts the City's current residents in even further jeopardy just to benefit the developer.

The Project would have specific, adverse impacts on public safety due to the Project's failures to address EVA and identifying evacuation routes.

4. The EIR's analysis of the project's impacts on groundwater are insufficient and do not comply with current Napa County groundwater requirements.

As stated in our previous letters, but important enough to note again, pursuant to CEQA Guidelines section 15125(a)(1), the environmental setting for an EIR, "shall not include hypothetical conditions." (CEQA Guidelines section 15125(a)(3))[27]. The DEIR rightly used a baseline existing water use of zero, stating repeatedly that the well on the Project site was not in operation.

Staff has now attempted to retroactively change that analysis, with no evidence to do so except a late-contrived hypothetical calculation of what might have been past groundwater use.[28] Staff and the applicant's counsel now claim that the existing well on the property is actually operable[29] – but that is not what the EIR says, and in any event irrelevant both legally and factually.

There continues to be no evidence whatsoever that the applicant or Staff has consulted with the responsible agency for groundwater use. Staff continue to ignore the numerous public pronouncements of Napa County groundwater standards. In separate correspondence, Water Audit has also made clear that the project plainly fails to meet current groundwater legal requirements.

We also must regrettably note that at the May 1, 2023, meeting, counsel for the City misstated the Napa County standards for well abandonment. "A well is considered to be abandoned when it has not been connected for service to any structure and/or not used for a period of one year."[30] The Project site well was not used for substantially more than one year, as discussed in the EIR. While at the May 1 meeting, the City's attorney noted some items that might suggest an intention not to abandon a well, those conditions only apply where the well owner has provided formal notice of the intent not to abandon the well. That did not happen.

> The well will not be considered abandoned if **all** of the following occur: (1) **the owner declares his or her intention to the director, in writing, to use such well again for supplying water or for other approved purposes**, (2) the well has no defects in construction which would cause pollution or contamination to the ground water by surface water, (3) the well is covered with a safe well cover, (4) the well is marked so as

[27] The Supreme Court has stressed the importance in CEQA of not using hypothetical conditions as a baseline: "An approach using hypothetical allowable conditions as the baseline results in 'illusory' comparisons that 'can only mislead the public as to the reality of the impacts and subvert full consideration of the actual environmental impacts,' a result at direct odds with CEQA's intent." (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 322, quoting *Environmental Planning Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 358.)
[28] Response to Comment #1, Staff Report for June 26, 2023 City Council meeting at page 66.
[29] Response to Comment #2, Staff Report for the June 25, 2023 City Council meeting at page 67.
[30] Napa County Code § 13.12.460(A).

to be clearly seen, and (5) the ground area surrounding the well is sloped away from the casing and kept clear of brush and debris. [31]

Legally, the well is abandoned.

But there is no reason to be caught up in such technicalities, as the relevant standard for analysis under CEQA is simply the existing water use. The EIR analyzed that as zero. The project's own consultant said that any increase is capped at Napa County's allocation of groundwater.[32] The current Napa County standard is 0.3 acre-feet per acre.[33] There is no evidence in the record to the contrary. The Project simply is out of compliance.

The failure to consult with Napa County and failure to identify Napa County or its Groundwater Sustainability Agency as a responsible agency in reviewing the EIR is a clear failure to proceed as required by law and an abuse of discretion. Until Napa County reviews, provides input on, and approves the groundwater use for the Project, there is no competent evidence in the record to support a finding that the groundwater use as proposed is permissible.

Given that the Project plainly violates the groundwater limitations, at the very least, Condition of Approval 86[34] requiring the Project to connect to the City's reclaimed water system "if" it becomes available should be revised to require the Project to complete that system to the Project site and connect to it promptly.

5. Subsequent environmental review, allowing for sufficient public comment on all changes to the Project and the EIR, pursuant to Public Resources Code section 21166 is required to incorporate the new information described above.

The changes described above, specifically, in relation to groundwater analysis and emergency access to the Project site warrant subsequent environmental review pursuant to Public Resources Code section 21166 and CEQA Guidelines sections 15162 and 15163. The water baseline and groundwater/well analysis has substantially changed since the EIR was circulated to the public. In addition, in a last-minute change, the deletion of the levee maintenance road as an emergency access route, eliminating access to the Project from the east and north, is a substantial change to the Project, therefore warranting subsequent environmental review of this change.

The EIR should be revised and recirculated, so as to "allow the public a meaningful opportunity to comment" on the changes to the Project and possible additional impacts flowing from such changes.[35]

6. Conclusion

The Applicant's failure to address the major concerns expressed above, yet again, continues to leave the public confused and at risk of suffering from the pitfalls of constantly changing and inadequate

[31] Napa County Code § 13.12.460(B).
[32] DEIR Ex. L.
[33] https://www.countyofnapa.org/DocumentCenter/View/25906/Well-Permit-Standards-FAQs---15-July-2022. See also the extensive discussion in our prior letters.
[34] Condition of Approval No. 86, Staff Report for June 26, 2023 Special City Council meeting at page 197.
[35] CEQA Guidelines sec. 15088.5(a).

environmental review. The City must proceed as required by the current, operative law, and must comply with CEQA in all aspects of the Project.

This is likely the most consequential decision on the long-term future of the City that this Council will make during its tenure. There are no benefits to the tentative map that outweigh the Project's significant impacts on the environment, and it present a specific and grave threat to the public and the City as a whole.

All that said, perhaps most practically, given that the Applicant has failed to apply for any of the other approvals necessary to actually proceed with the Project – including an affordable housing agreement, use permit for multifamily housing, and design review – there would be no prejudice to the Applicant in denying certification of the EIR and rejecting approval of the tentative map at this time.

As is made clear in the Staff Report, no houses can be built until all the other required approvals are obtained. The Applicant can come back for approval of its map and environmental documentation once it is actually ready to proceed with the Project. Until that time, any potential housing benefit is illusory. The tentative map standing alone is merely a Trojan Horse attempt to tie the City's hands on all the future discretionary approvals. The Council can, should, and indeed must reject this piecemeal approach.

Because the City Council is bound to follow the law, not the profits of a developer or the pressures of a state agency, the tentative map should be denied and certification of the EIR rejected.

Sincerely,

DICKENSON, PEATMAN & FOGARTY PC

Joshua S. Devore

JSD:emn
cc: Ethan Walsh, City Attorney

From: Elizabeth Green
To: Paul Dohring; Eric Hall; Lester Hardy; Anna Chouteau; Billy Summers; Anil Comelo; Maya DeRosa; Cindy Tzafopoulos; April Mitts; Erika Opp
Subject: Fw: [External] Letter to Shannan West
Date: Monday, June 26, 2023 9:27:32 AM
Attachments: Letter to Shannan West, re Hunter Development 6-21-23.pdf

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----- Forwarded Message -----
From: Elizabeth Green <green05@sbcglobal.net>
To: Elizabeth Green <green05@sbcglobal.net>
Sent: Monday, June 26, 2023 at 09:23:36 AM PDT
Subject: Fw: Letter to Shannan West

Good morning all,

Below is a very powerful letter that was just sent from Angela Zivkovic to Shannan West, Chief of Housing Accountability, CA and an excerpt of great importance:

"I would also like to make sure you are aware of recent advancements with regard to the legal liability of ignoring climate change in development projects and point to you a report prepared by the Conservation Law Foundation entitled "Climate Adaptation and Liability" https://www.clf.org/wp-content/uploads/2018/01/GRC_CLF_Report_R8.pdf
In other words, not just the city of Saint Helena but also the state of California could be sued for their part in promoting and pushing the approval of development projects in high-risk areas without properly taking into account the increasing risks of climate change."

Respectfully,

Elizabeth Green
Vineyard Valley

---- Forwarded Message -----

Angela M. Zivkovic, PhD
1180 Starr Avenue
St. Helena, CA. 94574

Shannan West
Housing Accountability Unit Chief
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453

June 21, 2023

Dear Miss West,

I am aware that you sent a "Letter of Support" to Mayor Dohring, Vice Mayor Eric Hall, and Council Members Anna Choutaeu, Lester Hardy, and Billy Summers, of the city of St. Helena, dated June 8, 2023, in which you are offering support for the approval of the Hunter Development, which would result in the building of 87+ housing units. I want to make you aware of the fact that this project would be building homes, including low-income homes, not only in a FEMA flood zone, behind an unscreened levee, but also in a high-risk fire area where safe evacuations during emergency situations have not been fully evaluated. In fact, **this development poses a threat to public health and safety that cannot be mitigated** given current infrastructure limitations, and therefore should not be approved. I am writing to you because you should be aware of this. **It is not only irresponsible but also amoral for state officials to be pressuring small municipalities such as the city of St. Helena to build housing in a high-risk area that could lead to the loss of lives, especially and including the lives of vulnerable, low-income, underrepresented minorities and elderly**. In our rush to provide homes for some people we must make sure that we do not displace and endanger the lives of others.

First of all, you should be aware that the proposed Hunter Development is located in a FEMA flood zone. According to the official FEMA map of the city of St. Helena, the Hunter Subdivision project is clearly within a flood zone (https://map1.msc.fema.gov/firm?id=06055C0264E). A levee was constructed to protect the homes that already exist in this flood plain, many of which were already flooded, with lives lost during two flooding events that occurred in 1986 and 1995. However, Measure A, which was passed to approve and finance the construction of the levee, has a specific provision that "none of these projects are intended or designed to encourage population growth," meaning that the levees constructed throughout Napa Valley, including the levee in the city of St. Helena, were NOT intended to promote development behind those levees. Even if we decide to ignore this provision, which may be illegal to do, construction behind levees is a bad idea for many reasons. First, all levees fail eventually, thus building behind a levee always means that at some point homes built in that location will be subject to the dangers of flooding events. Second, when levees fail, the damage that results is worse than if there were no levee there in the first place (https://www.sciencedaily.com/releases/2016/02/160209162403.htm#:~:text=Levees%20often%20prevent%20costly%20flood,not%20there%2C%20the%20study%20found). Third, at a minimum, we should know how much risk we are taking in the assessment of whether it is worth it to build behind a particular levee. In other words, it is important to calculate the residual risk that remains of a flooding event that would overtop the levee. However, the residual risk of levee failure for this levee is unknown. FEMA launched a new risk rating policy starting October 1, 2021 for any new projects (https://www.fema.gov/flood-insurance/risk-rating). This new risk assessment system was put in place because the old approach of evaluating risk was inadequate.

Instead of simply relying on historical projections and ratings based on the physical attributes of a levee at the time of construction, the Risk Rating 2.0 system additionally actually screens individual levees and rates their condition according a set of metrics. However, the St. Helena levee is not one of the 20% of screened levees in the National Levee Database (NLD). As such, the entries for "Levee Performance and Potential Lost Benefits", and "Incipient Overtopping Annual Exceedance Probability" (AEP, or annual probability of the flood event that would load the Levee System to the top) in the NLD for the St. Helena levee are "No Data Entered" or "Unknown." In the absence of these real risk evaluations for unscreened levees the old risk ratings of "100-year flood zone" and "200-year flood zone" are assumed as a default. This means that the real residual risk of levee failure, which takes into account the actual state and maintenance records of the levee, is not known for this levee. In addition to that, due to climate change, the real risk of occurrence of a catastrophic weather event that would lead to levee failure are also unknown. As has been illustrated by recent levee failures all around the country and the state, and as experts in the field will tell you, it is irresponsible to build housing, particularly low-income housing behind levees. It is just a question of *when*, not *if* a catastrophic flooding event will occur which will resulting in levee failure and flooding, with loss of life, as already happened here in this very location just 30 years ago. **Movements are under way around the country to curtail development in flood zones** (https://www.nytimes.com/2020/09/04/climate/flood-fire-building-restrictions.html). Again, because the St. Helena levee is an unscreened levee, there is currently no clear estimate of the % risk of a flood on any given year, nor of the ability of the levee to withstand a future potential catastrophic flood event. **It is not even clear whether the future residents of the Hunter development would be able to secure flood insurance under the new system, given how many insurance companies no longer insure homes in high-risk areas and have in fact even stopped insuring homes in the state of California (e.g. AllState, State Farm)** (https://www.latimes.com/california/story/2023-06-18/state-farm-allstate-wildfire-flood-insurance-california-climate-change-housing-rebuild).

In case you are thinking, well this is St. Helena's problem, not the state's problem: Professor Nicholas Pinter, Professor in the UC Davis Department of Earth and Planetary Sciences, and Associate Director of the UC Davis Center for Watershed Sciences, wrote a very insightful and informative blog post on the topic of the St. Helena levee. In his blog he explains the problem of residual risk of building behind a levee, and highlights the legal implications for not just the municipality but also the state: "Residual risk also can be borne by the governmental agencies that facilitate "field of dreams" levees. Legal liability came to roost in California in 2003, when the Court of Appeals found the state liable for $500 million in damages resulting from a levee break on the Yuba River in February of 1986, the same storms that flooded St. Helena. The case was Paterno v. State of California, and **although the state neither built nor maintained the levee that gave way, the court found that it was responsible for inadequate maintenance and management of the system… In the Paterno case, the financial hit of that $500 million decision shook the financial structure of the entire state, such that California was forced to borrow funds from Merrill Lynch in order to pay the claims against it**."

Secondly, you should also be aware that this housing development also threatens the safety of St. Helena residents with regard to safe evacuations during wildfire. The question is not whether the development would adequately provide access for the development residents out of the development area, but how the project will impact those residents once they leave the development, and the rest of the citizens of St. Helena who all need to evacuate via the same limited routes out of the city and out of the valley. Once the hundreds of additional residents occupying hundreds of additional cars actually drive out of the development, they are going to have to funnel into the existing roadways, which are already impacted and cannot adequately handle evacuation in an emergency situation such as a quickly occurring wildland fires or catastrophic floods. Perhaps you are not aware of the unique geography of the Napa Valley generally, and the city of St. Helena specifically. The city of St. Helena is located in a narrowing portion of the valley, surrounded by mountain ranges on both sides, with high-risk wildland fire areas to the north, east, and west of town. There is effectively only one

egress route out of town, south on Highway 29. With the Silverado Trail often not being a viable egress route due to fires and due to the fact that the only way across the Napa River from the part of town where the Hunter development would be built is across a historic bridge (the Pope Street Bridge), on which two vehicles can barely (and sometimes not at all depending on the vehicle in question) pass by each other. The Pope Street Bridge is not capable of handling even the current number of cars that need to be able to evacuate out of the area. The bridge is extremely narrow with no shoulder. This is an unsafe, inadequate exit route on the best of days, much less during an emergency situation. There is no infrastructure and funding capacity to replace the Pope Street Bridge, and even if there was, as I mentioned, the Silverado Trail is often not a viable egress route given that the last two devastating fires in the area burned all the way down to the trail (e.g. the Glass fire). There is also no infrastructure or funding to widen Highway 29 to increase egress rates, nor could it be done given the physical constraints of the railroad on one side and buildings on the other side of this portion of Highway 29 (called Main Street for the portion that runs through the city of St. Helena).

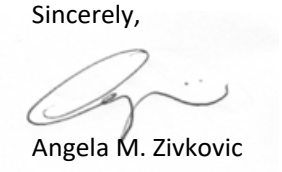
Third, it is critical to appreciate that climate change is happening and that the extreme weather events that lead to wildfires, floods and landslides are only increasing in both severity and frequency over time. The recent conclusion from the United Nations Glasgow Climate Change Conference (COP26) meeting is that even if all countries that pledged to fully implement changes needed to meet agreed upon greenhouse gas reduction goals are actually able to meet those goals, we are still on a trajectory to see increases in the earth's temperature of at least 1.8 degrees Celsius (https://www.washingtonpost.com/climate-environment/2021/11/09/cop26-un-emissions-gap/). This means that the recently experienced natural disasters in our area including wildfires, flooding, mud slides, and droughts, are only going to be more frequent, more extreme, and more unpredictable over the next 10-20 years and beyond. According to the National Interagency Fire Center the state of California faced over 8,000 fires that burned over 500,000 acres of land in 2002 (https://www.predictiveservices.nifc.gov/intelligence/2002_statssumm/fires_acres.pdf). In 2020 those numbers jumped to nearly 10,000 fires that burned over 4 million acres of land (https://www.predictiveservices.nifc.gov/intelligence/2020_statssumm/fires_acres20.pdf)! The state of California is facing unprecedented increases in wildfire incidences just in the last 20 years, at a time when the earth's temperature has increased by less than 1 degree Celsius (https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature), while the *best-case* scenario projections for temperature change are on the order of 1.8 degrees Celsius over the next 20 years, strongly suggesting that the incidence and severity of wildfires is only going to increase. More fires means more evacuations and more people that need to be able to leave in a short amount of time in a limited geographic area with limited evacuation routes. The recent wildfires in Napa Valley and Sonoma Valley are a sobering reminder of what happens when wild, unpredictable winds coincide with extreme dry conditions and ignition sources. Due to climate change the "wildfire season" in California is increasing. More and more days out of more and more months of the year, from as early as April to as late as December, there are days when the combined conditions of extremely low humidity and high winds make this area ripe for fires to start (https://www.latimes.com/projects/wine-country-fires-california-sonoma-napa/).

I would also like to make sure you are aware of recent advancements with regard to the **legal liability of ignoring climate change in development projects** and point you to a report prepared by the Conservation Law Foundation entitled "Climate Adaptation and Liability" https://www.clf.org/wp-content/uploads/2018/01/GRC_CLF_Report_R8.pdf. In other words, not just the city of St. Helena but also the state of California could be sued for their part in promoting and pushing the approval of development projects in high-risk areas without properly taking into account the increasing risks of climate change.

Fourth, it is imperative to note that the Hunter development disproportionately endangers the lives and safety of underrepresented minorities, low-income families and the elderly. The Hunter parcel is located on the East side of town, which already houses the most vulnerable citizens in our city, encompassing multiple low-income housing units and homes for the elderly who have a variety of disabilities making it more difficult for them to safely evacuate in an emergency situation. These are individuals who are not only at higher risk from injury but who are also less likely to be able to "evacuate early" as opposed to at the last minute once emergency shelters have been established, making the impact of urgent, last-minute evacuations even more important. They may also be hard of hearing, or have a multitude of disabilities that may make leaving quickly, or even hearing sirens and being aware of an emergency a problem. As examples of recent wildland fires both here in St. Helena, and in Napa as well as Santa Rosa have clearly shown over the last 6 years, wildland fires are increasingly wind-driven, fast-moving, unpredictable, and can occur in the middle of the night. The current roadways and infrastructure (i.e. bridges) are inadequate to ensure the ability of residents to safely evacuate in an emergency situation. **This is especially true for the most vulnerable residents of St. Helena, all of whom live DOWNSTREAM from the proposed development** and would have to compete with hundreds of additional vehicles trying to exit out of town ahead of them. These residents include low-income families from two large low-income apartment complexes, and a large number of elderly individuals in the Vineyard View 55+ community. The proposed development is not in the part of town where half of the homes are second homes that sit unoccupied most of the year. The East side of St. Helena where the Hunter parcel is located is the part of town where there are more people per square mile that need to be able to evacuate in an emergency. The FEIR for this proposed development already concedes that the one environmental impact that cannot simply "be mitigated" is the unavoidable impact on traffic. Phrasing it as a simple "traffic problem" makes it seem like just a minor nuisance. This is not about having to wait a few extra minutes to make a left turn to get to work on a Monday morning. **This could mean the difference between a family being able to evacuate to safety in time, or not being able to do so** because they are stuck in traffic with hundreds more vehicles all competing for egress via the same limited roadways at the same time. **This is also an equity issue:** the very people who are the most likely to have to wait until the last minute to evacuate and thus be in danger when traffic is backed up and they cannot evacuate from fire, are those who do not have the funds or ability to evacuate earlier than "necessary" because they cannot afford to simply pay for a hotel for days on end.

It is reckless and irresponsible to push this sort of development project in areas of the state that are at high risk of flooding and wildland fires. Whole families could perish and it will be blood on your hands for playing a part in pushing the city council to approve this development to meet some quota when real safety and real lives are at stake. It is your responsibility as a public official to make sure that the work you are doing on behalf of the state does not jeopardize the lives of citizens of this state and does not put the state at increased liability and financial strain. Are you sure that your letters urging the city of St. Helena to approve this highly controversial project are the right thing for you to be doing as a public official? I would like to make sure you understand that the citizens of St. Helena are aware that you personally, on behalf of the state of California, endorsed and supported the city to approve this project.

Sincerely,



Angela M. Zivkovic

Gayle DeRusha Davies
1 La Canada Ct
St. Helena,

June 25, 2023

Dear Mayor, Vice Mayor and City Council:

Let me first acknowledge that I live and work on the *un*ceded land of Onasatis people.

The Hunter Project is also required, per EIR, to make some degree of acknowledgement that they are working on (and profiting from) unceded land that was home to Onasatis people. We know from previous development of Vineyard Valley (and perhaps the levee?) that Onasatis remains have been found in the area of this project. The EIR process requires that this developer must have contact with a representative of the people indigenous to the land they plan to develop about their plans. Simply marking “Insignificant” on the Final EIR does not give anyone any indication that this requirement was fulfilled.

Upon inquiring, Suscol Intertribal Council told me that they had no record that this requirement had been fulfilled. This does not necessarily mean that the requirement was not satisfied, but I am asking that you please make certain this EIR requirement was satisfied and not simply marked “Insignificant” without the work getting completed. On May 1st, I gave applause to Councilman Hardy for several things he said, one of which being his discomfort with hearing so many people feeling unheard and feeling dismissed with numerous items simply marked “Insignificant” that were indeed significant to many voting, tax paying residents. I agree, but how much worse it would be if requirements were ignored yet “checked off”.

Health and safety is certainly significant. It is very puzzling to me how both fire and police chiefs could possibly determine that the Hunter Project would not have any significant impact on evacuation safety. When I inquired as to what information they used to make this determination, I was informed that they used the information gathered from the Vineyard Valley evacuation drill. In that drill, 132 Vineyard Valley residents participated. There are 350 residents. Information from a drill that was a.) planned well in advance b.) in daylight c.) without urgency d.) only 37% participation bears no resemblance to an actual evacuation. The math of Hunter + Vineyard Valley residents using the levee during an evacuation do not add up to something insignificant.

For these reasons, I ask you to please challenge the conclusion that the Hunter Project will not compromise safety during an evacuation.

On the health side of Health and Safety, more and more evidence is provided to us by professionals, doctorate level in prestigious organizations (see below), that human health is greatly impacted by contact with open greenspace. How fabulous it has been to have this benefit in our city. The area where Hunter Project is has been the ONE place that qualifies as open greenspace that takes one out of cityscape and into a natural environment where one can

get a healthy dose of benefits without having to leave town. The Hunter Subdivision will strip this true health resource from our community.

I am asking you to please not cheat us out of this essential health resource.

Interesting variety of credible sources of information of this health benefit here:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6388234/

https://www.epa.gov/smartgrowth/smart-growth-and-open-space-conservation

https://www.irvinestandard.com/2021/how-irvines-open-spaces-make-us-feel-happier-healthier-and-more-creative/

https://www.newscientist.com/article/mg24933270-800-green-spaces-arent-just-for-nature-they-boost-our-mental-health-too/

Please vote to preserve the health and safety of the residents of St Helena.

Sincerely,
Gayle DeRusha Davies

City Council

You must deny the Hunter Project for the following reasons:

MEASURE A

SECTION 2. FINDING

G. None of the projects in the Plan are intended or designed to encourage population growth in Napa County. All of the projects are for flood protection, preserving ground water integrity, reducing sediment in the Napa River system, and for maintaining the reliability of the water supply for the existing Napa County populations as of the effective date of this Ordinance.

One of the reasons the voters in St Helena voted for this Ordinance was because it contained the statement that the project would not promote growth. This Ordinance would never have passed without that statement. The Hunter project certainly provides a large amount of growth.

The Hunter project also does not preserve ground water integrity, or reduce sediment in the Napa River. The project is planning on using the flood project detention basin which was built with Measure A money.

Measure A also states that the flood project also should maintain the reliability of the water supply for the existing Napa County populations as of the effective date of the Ordinance. Adding three to four hundred people in the proposed project does not guarantee that there will be water available as stated in the Ordinance.

AFFORDABLE HOUSING

The proposed Hunter project will not satisfy the Cities Regional Housing Needs (RHNA) requirements nor will it be consistent with the St Helena Municipal Codes Inclusionary code Chapter 17.146 which states that the affordable unit shall be comparable in number of bedrooms, exterior appearance as the market rate units in the same residential project and that the affordable housing shall be disbursed though the residential property. The tentative map that is under consideration segregates the smaller lot with the affordable rental units away from the lot with the market rate housing. The Hunter project is NOT AN AFFORDABLE HOUSING project and will not satisfy St. Helena’s RHNA requirements.

EMERGENCY EVACUATION

Safety of people leaving areas surrounding the proposed Hunter project (Stonebridge. Silverado Orchards, Star Avenue, Meadow Creek, Hunts Grove and even the New City Hall) will be compromised because that land is a fire break. There has been much publicity and money spent on fire safety from the City. Many of us are losing our fire insurance because of the fire danger To approve the Hunter development would be contrary to what the City, Insurance Companies, your resident ands the voters of St Helena have said and are still saying. We voted for you to keep us safe, so please vote no for us and keep us safe.

Grace D. Kistner

;

From: auntienora
To: Public Comment
Subject: [External] Hunter Project
Date: Saturday, June 24, 2023 5:48:45 PM

I have lived in St. Helena since the mid-eighties, and we didn't have enough water for the citizens of St. Helena then! At that time the population of St. Helena was 5,000! Today the population has increased to 6,000 plus more wineries, gyms, and businesses, yet our available water has not increased at all!

How very bold of you to charge us higher water prices and penalties and at the same time vote to bring more people into this city!!! THIS INSANITY HAS TO STOP!

How many City Councils and Mayors do we have to live through before a City Council and Mayor understand the stupidity of adding more people to a city that didn't have enough water for 5,000 citizens in 1985 let alone 6,000 plus Hunter Project citizens in 2023 . . . and hasn't done anything to obtain more water!

I SAY ABSOLUTELY "NO" TO THE HUNTER PROJECT!

FIX OUR WATER PROBLEMS FIRST!!

P.S. How many consultants do we have to have before we get decent sidewalks on Main Street?? I know of two in the last few years!!! The money you spent on them could have gone a long way to fixing our Main Street sidewalks. Most senior citizens in this city avoid Main Street because the sidewalks are so very dangerous! No wonder the businesses are suffering!

You have to do better than this!

N. O'Neill

Holland & Knight

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Holland & Knight LLP | www.hklaw.com

Daniel R. Golub
415-743-6900
Daniel.Golub@hklaw.com

June 23, 2023

Via Email

Paul Dohring, Mayor
Eric Hall, Vice Mayor
Anna Chouteau, Council Member
Lester Hardy, Council Member
Billy Summers, Council Member
CITY OF ST. HELENA CITY COUNCIL
1088 College Avenue
St. Helena, CA 94574

Re: Housing Law Issues – Hunter Subdivision Project

Dear Mayor Dohring, Vice Mayor Hall, and Councilmembers:

Holland & Knight LLP represents Dennis Hunter, Kelly and Ben Vanzutphen, and White Fang Properties, LLC (collectively, the "Applicant Team") in connection with the Hunter Subdivision project located north of Hunt Avenue (APN 009-030-057) (the "Project") in St. Helena (the "City"). Our West Coast Land Use & Environmental Law practice group focuses on enforcing recently reformed provisions of state housing law, in particular Housing Element Law and the Housing Accountability Act (the "HAA"). We write to remind the City of its obligations under state housing law in advance of the June 26, 2023 City Council meeting concerning the Project. Please ensure that this correspondence is included in the record of proceedings related to the Project.

First, the Project is a protected "housing development project" under the HAA, as the City has acknowledged.[1] As such, the City's discretion to disapprove the Project is heavily constrained. Specifically, to disapprove the Project, the City would need to make written findings, supported by a preponderance of evidence on the record, that the Project "would have a specific, adverse impact upon the public health or safety," and that there is "no feasible method to satisfactorily mitigate or avoid the adverse impact … other than the disapproval of the housing development

[1] Report to the City Council (May 1, 2023 Hearing), at 7 (https://sthelena.civicweb.net/document/73337/Hunter%20Project%20-%20EIR%20and%20Tentative%20Map.pdf?handle=1E3AF87EBDF8430C96935C79A339A296).

project or the approval of the project upon the condition that it be developed at a lower density."[2] Suffice it to say, there is *no* evidence in the record to support such a finding, much less a preponderance of the evidence. Whatever concerns have been raised about the project, none of them rise to the level of identifying any "quantifiable" violation of any "objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete."[3] There is therefore no lawful basis on which the Project could be disapproved or reduced in density.

The City's obligations under Housing Element Law are equally relevant to its consideration of the Project. As you know, the City must accommodate a Regional Housing Needs Allocation ("RHNA") of 256 units, of which the Project's 87 units supply roughly a third. The City has consistently relied on these units to meet its RHNA obligations in the draft Housing Elements provided to the Department of Housing and Community Development ("HCD").

Housing Element Law requires that the City's Housing Element "identify adequate sites for housing" and set forth an "inventory of land suitable and available for residential development, including vacant sites and *sites having realistic and demonstrated potential for redevelopment* during the planning period to meet the locality's housing need for a designated income level[.]"[4] Here, the goal "is not just to identify land, but to pinpoint sites that are adequate and realistically available for residential development targets . . . ."[5] The Housing Element must also contain "an analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels," and must "demonstrate local efforts to remove governmental constraints that hinder the locality from meeting its share of the regional housing need."[6] The City's failure to adequately address these requirements, both generally and with respect to the Project specifically, was central to HCD's rejection of both of the City's prior draft Housing Elements.[7]

As you are aware, on June 8, 2023, HCD's Housing Accountability Unit provided a Letter of Support and Technical Assistance to the City ("HAU Technical Assistance Letter"), which is attached hereto as **Exhibit A**. The HAU Technical Assistance Letter reminds the City of its obligations under both the Housing Accountability Act and Housing Element Law, concluding that "*HCD supports the approval of the Project* during this critical housing crisis and appreciates

[2] Gov. Code § 65589.5(j)(1). The HAA also clarifies that "It is the intent of the Legislature that the conditions that would have a specific, adverse impact upon the public health and safety, as described in paragraph (2) of subdivision (d) and paragraph (1) of subdivision (j), arise infrequently." Gov. Code § 65589.5(3).
[3] Gov. Code § 65589.5(j)(1)(A).
[4] Gov. Code § 65583(a)(3).
[5] *Martinez v. City of Clovis* (2023) 90 Cal.App.5th 193, 193.
[6] Gov. Code § 65583(a)(5).
[7] HCD, "City of St. Helena's 6th Cycle Draft Housing Element" (Dec. 6, 2022), Appx. at 2 ("The element should provide an analysis demonstrating the likelihood of these [Hunter Subdivision Project] units being built during the planning period."); HCD, "City of St. Helena's 6th Cycle Draft Housing Element" (Apr. 7, 2023), Appx. at 2 ("The element should clearly indicate timelines and remaining steps to fully entitle this project and demonstrate the likelihood these units will become available during the planning period.").

the opportunity to assist the City in meeting its statutory obligations in the decision-making process."[8] We expect HCD personnel to monitor the June 26, 2023 City Council meeting.

At its prior meeting concerning the Project, the City Council addressed the EIR's conclusion that the Project would have significant and unavoidable environmental impacts on a single topical area: Vehicle Miles Traveled ("VMT").[9] To be clear, the Applicant Team has consistently disputed this finding.[10] As the City's own consultant admitted at the prior hearing, the EIR's VMT impact finding exists only because the City chose to measure VMT relative to the City's average VMT per capita, rather than regional VMT per capita.[11] This optional policy choice, if applied consistently, will have the effect of declaring all housing in the City to per se have a significant and unavoidable impact, and thus to require a Statement of Overriding Considerations. The City could have easily avoided this issue by employing a regional VMT measurement, which is a more appropriate measure for the City. Moreover, the City's decision to measure VMT in this manner – which *is not necessary to comply with CEQA* – is an unnecessary governmental constraint on housing supply, which Housing Element Law requires the City to disclose and then remove.[12]

In any event, assuming *arguendo* that the EIR's conclusions are correct, the Staff Report's recommendation to adopt a Statement of Overriding Considerations is also correct. CEQA provides for public agencies to adopt a Statement of Overriding Considerations where "specific overriding . . . legal . . . benefits" of approving a project outweigh its significant and unavoidable environmental effects.[13]

At the May 1, 2023 hearing, the City Council ultimately continued the item to June 26, 2023, purportedly to further consider whether the benefits provided by the Project were sufficient to justify the proposed Statement of Overriding Considerations. The considerations previously identified in the draft Statement of Overriding Considerations are more than sufficient:

1. The Project provides needed housing to the City, particularly affordable housing.
2. The City, per the adopted 2015 Housing Element, has a jobs to housing ratio above the County average, indicating a need for additional housing. As of the most recent Housing Element Progress Report (April 2022), the City had not met its regional housing needs allocation for very-low or moderate income housing.

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[8] HAU Technical Assistance Letter at 2.
[9] Report to the City Council (May 1, 2023 Hearing), at 12-13.
[10] See Comment Letter 93 (Leslie R. Perry, "Comments to Draft EIR – Hunter Subdivision Project" (Nov. 1, 2021) (enclosing W-Trans, "Comments on the Environmental Impact Report (EIR) for Hunter Subdivision Project" (Nov. 1, 2021); DKS, "Review of City of St. Helena's Application of SB 743 Requirements Project #21082-000 of the Planned Residential Development" (Oct. 20, 2021)) (Planning Commission Report, pages 3006-3017); Pub. Res. Code §21082.2(a).
[11] City of St. Helena, Special City Council Meeting (May 1, 2023), at 2:34:30 (https://www.youtube.com/watch?v=_sNV7B7U6HQ).
[12] Gov. Code § 65583(a)(5).
[13] Pub. Res. Code § 21081(b).

3. The Project would implement the City's General Plan. The Project site is identified as a housing site in the City's current General Plan, the current Housing Element, and the previous two iterations of the City's General Plan.
4. The significant and unavoidable impact is related to VMT. Ultimately VMT per capita will be reduced by providing necessary housing in jurisdictions with a high number of jobs. As stated previously, the City of St. Helena currently has a jobs housing imbalance which the Project will help address.
5. The Project will pay development fees which will assist in needed infrastructure improvements in the City, including wastewater treatment and collection systems.
6. The Project would construct the extension of Starr Avenue and the partial extension of Adams Street consistent with the General Plan Circulation Element.[14]

While these considerations are more than sufficient, the Applicant Team provides the following comments with respect to the Statement of Overriding Considerations, in response to the implication that the Project may not provide sufficient benefits to justify an override, or that the City's determination "may ride on the perceived community benefits"[15] provided by the Project:

- The only VMT "impact" of the Project is, as the most recent staff report states, that "the number of miles that will be driven by residents of the proposed project exceeds the standard at issue."[16] But the draft Statement of Overriding Considerations itself acknowledges that "[u]ltimately VMT per capita will be reduced by providing necessary housing in jurisdictions with a high number of jobs. As stated previously, the City of St. Helena currently has a jobs housing imbalance which the Project will help address." That is to say, the City acknowledges that "ultimately" VMT will actually be *reduced* by approving the Project and other housing developments like it and that the Project will *improve* the City's jobs-housing imbalance. To the extent that the Project has a VMT "impact," it is an extremely attenuated and technical one.
- As the draft Statement correctly notes, the Project will provide much-needed housing and affordable housing to the City, which has severely underbuilt for decades. To this end, we note that Generation Housing, the leading advocate for affordable and diverse housing in the North Bay, has submitted a letter in support of the Project, highlighting that the Project will "deliver a diversity of housing types across the affordability spectrum which will aid in affirmatively furthering fair housing and promoting upward mobility for low-income families."[17]

[14] Report to the City Council (May 1, 2023 Hearing), at 13.
[15] Email Correspondence from Anil Comelo, City Manager, "Hunter – Community Benefits" (May 15, 2023) (attached hereto as **Exhibit B**).
[16] Report to the City Council (June 26, 2023 Hearing), at 9 (https://sthelena.civicweb.net/document/75375/Hunter%20Project%20-%20EIR%20and%20Tentative%20Map.pdf?handle=6B5D3DFF921F4A4AB033355222B81F80).
[17] Generation Housing, "Support for Hunter Subdivision" (June 1, 2023), at 2 (attached hereto as **Exhibit C**).

- There are also several additional public and community benefits that the Applicant Team has already provided. Most notably, the Applicant Team engaged cooperatively with the City to facilitate construction of the levee adjacent to the Property, to protect the Vineyard Valley mobilehome community. Specifically, the Applicant Team cooperated with the City with respect to the land swap required to construct the levee, and provided the City access to the Applicant Team's well as needed for that project. The Applicant Team's voluntary cooperation with respect to the levee constituted a community benefit that the Project has already provided. This stands as an as-yet-unreciprocated benefit provided to the public and the community.
- Finally, as the most recent staff report notes, complying with the City's obligations to comply with the HAA and with Housing Element Law constitute an additional and independent legal "benefit" of approving the Project.[18]

Please consider these other additional benefits as part of the reasons the Project warrants approval. The Project provides more than sufficient benefits to justify staff's recommendation to adopt a Statement of Overriding Considerations, particularly where the draft Statement acknowledges that approving housing like the Project will "ultimately" reduce, rather than cause, VMT impacts. The HAA only permits a city to disapprove an HAA-protected Project for violating objective "public health and safety" standards – not subjectively-established VMT standards – and CEQA gives the city no authority to do anything that housing law forbids.[19] CEQA requires the City to disclose impacts and impose feasible mitigation (which the City has now done), but it would be plainly unlawful for the City to consider these benefits insufficient to override the single environmental "impact" identified in the EIR.

Finally, we note that on May 9, 2023, the City amended its General Plan to adopt the housing element that is currently under review by HCD (the "Adopted Housing Element"). While the Adopted Housing Element has not yet been certified as substantially compliant by HCD, it is nonetheless part of the City's operative General Plan, and as such is legally binding and enforceable. "[T]he propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements."[20] As such, disapproving the Project would be an act inconsistent with the City's own General Plan.

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[18] *See Tiburon Open Space Committee v. County of Marin* (2022) 78 Cal.App.5th 700, 733 ("A statement of overriding considerations—which is the finding described in subdivision (b) of section 21081—is to be used in situations where the public agency deems a project sufficiently important or desirable for reasons that override the normal obligation to mitigate significant environmental effects. One of those statutory reasons allows for considerations, conditions, or factors that are 'legal.'") (citing Pub. Res. Code §§ 21081, subds. (a)(3), (b), 21002.1, subd. (b); CEQA Guidelines § 15364).

[19] *Ibid.*; see also 14 Cal. Code Regs. § 15064 (b) ("CEQA does not grant an agency new powers independent of the powers granted to the agency by other laws"); 14 Cal. Code Regs. § 15064(e) ("The exercise of discretionary powers for environmental protection shall be consistent with express or implied limitations provided by other laws")

[20] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 570 (quotation omitted)

Moreover, the Adopted Housing Element sets forth specific commitments to ensuring that the remaining approvals required of the Project are timely processed. Specifically, Implementation Program H-A states that the City will "Commit to streamlining review of Hunter Subdivision project to completion with the goal of Building Permit applications in 2025."[21] We note that this commitment was specifically referenced by HCD in the HAU Technical Assistance Letter.[22] The City's commitment to streamline all future approvals is therefore legally binding, and the City is precluded from taking any actions inconsistent with this commitment. Despite these binding and enforceable commitments in the City's adopted Housing Element, the June 27, 2023 Staff Report does not describe the remaining process as "streamlined," stating instead that "[a]ll of the applications will require a public hearing or be considered at a public meeting of the approving body (Council or Planning Commission) at which the public will be able to provide written and oral comments."[23] The Applicant Team looks forward to the City's cooperation in identifying meaningful pathways to reduce burdensome processes and accomplish the "streamlined" issuance of the remaining approvals to which the City has committed in its General Plan, as amended by the Adopted Housing Element.

We recognize that new housing can be unpopular, and that there is often substantial pressure on local elected officials to bend to that pressure. But it is precisely for this reason that the state finds itself in a generational housing supply crisis. And it bears repeating that in the application before the Council, the Applicant team has asked for nothing more than to subdivide their own private property in a manner completely consistent with the City's own code and the City's own plans. As the May 1, 2023 Staff Report notes, "the subject property has been designated since at least 1993 for development with Medium Density Residential Homes."[24] The Applicant Team proposes to do just that; an outcome that the City presumably wanted when it adopted the current zoning. In addition to being zoning-compliant, the Project is compliant with all objective standards set forth in the General Plan. Its environmental impacts have been studied exhaustively for more than a decade. The approvals before the City Council have been unanimously recommended by the Planning Commission. Approval of the Project is also indispensable to the City's ability to comply with Housing Element Law. And, with the adoption of the Adopted Housing Element, approval of the Project is also required by the City's General Plan. We therefore encourage the City Council to adhere to the recommendation of City staff, and the Planning Commission, and HCD, and to abide by its own zoning and General Plan, and approve the Project.

Very truly yours,

[21] Adopted Housing Element at 1-10.
[22] HAU Technical Assistance Letter at 2 ("Specifically, the objectives in Implementation Program H-A state that the City will commit to approving and streamlining the Project.").
[23] Report to the City Council (June 26, 2023 Hearing), at 6.
[24] Report to the City Council (May 1, 2023 Hearing), at 1.



Daniel R. Golub
William Sterling
West Coast Land Use & Environmental Law Practice Group
Holland & Knight LLP

cc: Maya DeRosa, AICP, Community Development Director
Ethan Walsh, City Attorney
Cindy Tzafopoulos, City Clerk
Department of Housing & Community Development

EXHIBIT A

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

June 8, 2023

Mayor Paul Dohring
Vice Mayor Eric Hall
Council Members Anna Choteau, Lester Hardy, and Billy Summers
City of St. Helena
1088 College Avenue
St. Helena, CA 94574

Dear Mayor Paul Dohring, Vice Mayor Eric Hall
Council Members Anna Choteau, Lester Hardy, and Billy Summers:

RE: City of St. Helena – Letter of Support and Technical Assistance

The purpose of this letter is to assist the City of St. Helena (City) with its decision-making regarding the Hunter Subdivision Project (Project). As you are aware, the State of California is in a housing crisis, and the provision of housing is a priority of the highest order. The California Department of Housing and Community Development (HCD) recognizes the challenge of interpreting ever-changing housing and land use laws and appreciates the opportunity to provide technical assistance that may lead to better housing outcomes for the state, as well as the City of St. Helena.

HCD understands the City Council will consider the Project at the June 26, 2023 public hearing. HCD understands Ben and Kelly Banzutphen (Applicant) are seeking approval of a tentative subdivision map and certification of an environmental impact report to allow 1.) Development of 51 single-family residential lots with 11 accessory dwelling units on a vacant, approximately 16.9-acre parcel; and 2.) 25 multifamily residential units on 3.13-acres. The Project also includes an anticipated 20 percent of the proposed units will be set aside for lower-income households.

Housing Element Commitments

As the City is aware, the City Council adopted St. Helena's 6th Cycle Housing Element (2023-2031) on May 9, 2023. Under that Housing Element, the City must accommodate a Regional Housing Needs Allocation (RHNA) of 256 total units comprising 104 very low-income units, 59 low-income units, 26 moderate-income units, and 67 above moderate-income units. The adopted Housing Element identifies the Project as essential to meeting the 256 units required by the 6th Cycle RHNA. The approval of the Project would contribute significantly toward meeting the City's RHNA obligations. Further, the Project is consistent with the goals, policies, and implementation programs

outlined in the City's Housing Element. Specifically, the objectives in Implementation Program H-A state that the City will commit to approving and streamlining the Project. Not meeting the objectives in Implementation Program H-A will require the City to identify alternative housing sites to meet its RHNA obligations.

It is important to note that the adopted 6th Cycle Housing Element is currently under review by HCD for substantial compliance with State Housing Element Law and that HCD will continue to monitor the City's progress toward implementation of the programs contained within the Housing Element to ensure the City meets its RHNA requirements.

Housing Accountability Act

In addition, the City should be aware that the Project meets the definition of a "housing development project" under the Housing Accountability Act (HAA). Therefore, the City must consider its obligations under the HAA (Gov. Code, § 65589.5). The HAA limits a local government's ability to deny, reduce the density of, or make infeasible housing development projects that are consistent with objective local development standards that contribute to meeting housing needs. Please see the Housing Accountability Act Technical Assistance Advisory available on HCD's website.[1]

In sum, HCD supports the approval of the Project during this critical housing crisis and appreciates the opportunity to assist the City in meeting its statutory obligations in the decision-making process. If you have any questions regarding the content of this letter or would like additional technical assistance, please contact Jessica Evans at jessica.evans@hcd.ca.gov.

Sincerely,



Shannan West
Housing Accountability Unit Chief

[1] https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/hcd-memo-on-haa-final-sept2020.pdf

EXHIBIT B

From: Anil Comelo <AComelo@cityofsthelena.org>
Subject: Hunter - Community Benefits
Date: May 15, 2023 at 1:07:04 PM PDT
To: "ben@vanzutphen.us" <ben@vanzutphen.us>, "tim@uprightcapital.com" <tim@uprightcapital.com>
Cc: Maya DeRosa <MDeRosa@cityofsthelena.org>, Ken Hira <khira@kosmont.com>, Thomas Jirovsky <tjirovsky@kosmont.com>

Hello Ben and Tim,

I'm very pleased we had the opportunity to meet last week and discuss the project. As we shared on the call, we are looking for a way to ensure that there was no stone unturned as we prepare for the last meeting on your application scheduled for June 7th. It may be that the success of that outcome may ride on the perceived community benefits. To this end, the City has Kosmont consultants under contract and they have been asked to support City staff and you to explore possibilities. Kosmont is a professional group with lots of experience with helping developers and public agencies address such issues. I suggest that your team meet with Kosmont as swiftly as possible. Given the timing issues and my calendar, I suggest that you interact with them without me.

However, I have taken the liberty to send you an invite to connect with them and me on Thursday, May 25th at 1pm. I hope this time works for you.

Please let me know if you have any questions.

Thank you,

Anil Comelo
City Manager
City of St. Helena
1088 College Avenue | St. Helena, CA 94574 à*New address*
Direct: (707) 968-2744

EXHIBIT C

GENERATION HOUSING

427 Mendocino Ave
Suite 100
Santa Rosa, CA 95404

(707) 900-4364
info@generationhousing.org

1 June 2023

Via email

Re: Support for Hunter Subdivision

Dear Mayor Dohring, Councilmembers, and staff:

We write today to express our **strong support** for the immediate approval of the Hunter Subdivision Tentative Map ("project") and certification of the corresponding Final Environmental Impact Report ("EIR").

Generation Housing is leading the movement for more, more affordable, and more diverse housing in the North Bay. We champion effective policy, sustainable funding resources, and collaborative efforts to create an equitable, healthy, and resilient community for everyone.

We face an unprecedented imbalance in the availability of homes, both for rent and for sale and across the affordability spectrum, relative to the number of jobs in the Bay Area region. Comments on the EIR for this project speak of concerns around the increase in Vehicle Miles Traveled ("VMT") that will be generated by the future residents. This position fails to recognize that the most sustainable outcome for St. Helena and all communities is to build housing which allows workforce members to work where they live.

Earlier this year, Generation Housing released a report that evaluated the challenges born from high housing costs and record setting levels of cost burden.[1] The information collected and analyzed for this report led us to the following realities of excessive time spent commuting:

+ Increased commute times significantly increase transportation expenditures, further limiting burdened households' overall financial flexibility for other necessities, savings, and personal expenditures.
+ Increased commute time has deleterious health effects too: long commute time increases exposure to pollutants, reduces time to exercise, increases stress, anxiety, and depression, and negatively impacts sleep.
+ More time on the road also means less time parents can spend with their children, which we know can impact educational outcomes.
+ It's a climate change issue. Migration away from centralized hubs in search of more affordable housing reduces access to public transportation and adds to overall vehicle miles traveled. Lower wage earners often drive older cars that tend to be more polluting, both increasing harmful greenhouse gas emissions and exposure to pollutants.

[1] Making the Rent: The Human Price of Housing Cost Burden; https://generationhousing.org/wp-content/uploads/2023/03/2023_0322-Making-the-Rent-The-Human-Price-of-Housing-Cost-Burden.pdf

GENERATION HOUSING

427 Mendocino Ave
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(707) 900-4364
info@generationhousing.org

The proposed project delivers 87 units of housing, which amounts to approximately one-third of St. Helena's regional housing needs allocation for the 6th cycle. More importantly, the project delivers a diversity of housing types across the affordability spectrum which will aid in affirmatively furthering fair housing and promoting upward mobility for low-income families. The project will also promote healthy lifestyles by creating linkages to the Napa Valley Vine Trail.

For the reasons outlined above and so much more, we call on the City Council to immediately approve this project and ensure workforce families in St. Helena have a place to call home.

Respectfully,

Calum Weeks
Policy Director, Generation Housing

Holland & Knight

560 Mission Street, Suite 1900 | San Francisco, CA 94105 | T 415.743.6900 | F 415.743.6910
Holland & Knight LLP | www.hklaw.com

Daniel R. Golub
415-743-6900
Daniel.Golub@hklaw.com

June 23, 2023

Paul Dohring, Mayor
Eric Hall, Vice Mayor
Anna Chouteau, Council Member
Lester Hardy, Council Member
Billy Summers, Council Member
CITY OF ST. HELENA CITY COUNCIL
1088 College Avenue
St. Helena, CA 94574

Re: CEQA Issues - Hunter Subdivision Project

Dear Mayor Dohring, Vice Mayor Hall, and Councilmembers:

Holland & Knight, LLP ("H&K") represents Dennis Hunter, Kelly and Ben Vanzutphen, and White Fang Properties, LLC (collectively, "Applicant Team") in connection with the Hunter Subdivision in St. Helena (the "Project"), which will be heard at a Special Meeting of the City Council on June 26, 2023. This is the second of two letters we respectfully submit related to the Project; the other letter relates to housing law issues. Please ensure that this correspondence is included in the record of proceedings related to the Project.

These comments supplement material already in the record related to the Environmental Impact Report ("EIR") the City of St. Helena ("City") prepared for the Project pursuant to the California Environmental Quality Act ("CEQA"). Specifically, the information contained in this letter responds to two comment letters the City Council received immediately prior to the first meeting to consider the project from Water Audit California ("WAC") and St. Helena Citizens for a Sustainable Future ("SHC") (collectively "Commenters").

The Staff report thoroughly explains the reasons that none of Commenters' comments identify any legal insufficiency in the EIR that the City prepared and subjected to exhaustive review and comment. We write with additional comments in support of the position – endorsed by City staff and unanimously by the City's Planning Commission – that the EIR be certified and a statement of overriding considerations be adopted.

I. The On-Site Groundwater Well Is Not Legally "Abandoned"

The EIR explains that an existing on-site agricultural well is proposed to be used to provide non-potable supplies to the separately plumbed landscape irrigation systems throughout the Project site to irrigate public and private landscaping. The on-site well has sufficient capacity to meet the Project's estimated landscape water demand of 17.16 acre feet per year ("AFY"). The Final EIR clarifies that (1) "there is an inactive groundwater well located in the northern portion of the Project site that may have been historically used to provide construction water for the City's Floor Protection Project and was used in the past for agricultural irrigation." (at 4-10), and (2) "The Project is proposing to use the existing agricultural well to irrigate the Project's public and private landscaping." (at 4-61, 4-268).

A main point of contention from Commenters is that the Project cannot rely on the groundwater well located on-site (which will supply water for the Project's landscaping irrigation). For example, WAC opines that the question of "[w]hither the well is capable of operation is irrelevant. By the process of law the 1976 well is deemed abandoned and it must be destroyed forthwith." Similarly, SHC claim that "there is no operating well on the property, and it has not been operating for a considerable period of time. The use of the well had been long abandoned." Both of these statements are incorrect.

Health and Safety Code section 115700(d) – on which Commenters rely -- provides that "a 'permanently inactive well' is a well that has not been used for a period of one year, unless the person owning land in fee simple or in possession thereof under lease or contract of sale demonstrates *an intent for future use for water supply*, groundwater recharge, drainage, or groundwater level control, heating or cooling, cathodic protection, groundwater monitoring, or related uses." (emphasis added). The California Department of Water Resources ("DWR") regulatory standards consider a groundwater well to be abandoned or permanently inactive if it has not been used for one year, "unless the owner demonstrates *intention to use the well again*."[1]

Here, Applicant applied for the Project in 2010, at which time the groundwater well was operational and being used by the City. The "Project Description" included in Applicant's application package, which the City's Planning Department received on September 9, 2010, expressly stated that "[t]here is an existing well near the southeastern end of the property that is proposed to be maintained in place *and used for irrigation of the project's landscape areas*. It is a *high producing well that is also capable of supplying additional water to the project should it be found necessary*."[2] The Project Description further explained that "[t]he groundwater well on

[1] See, DWR Bulletin 74, Part III, Section 21; available at https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction; attached hereto as **Exhibit A**, emphasis added.
[2] See, Applicant's Project Description, attached hereto at **Exhibit B**, at 1; emphasis added.

the site previously used for irrigation of the grape vines is presently used by the City (free of charge) to start the landscape required by their flood control project"[3]

Thus, Applicant provided sufficient notice of an intent to use the groundwater well for a future purpose, and did so at a time when the well was operating. Commenters have not cited any decisional or factual support for their contention that the Project (or the EIR) cannot rely on the groundwater well as a source of water supply for irrigation purposes – only a faulty legal interpretation of the statutory framework.

Commenters' position that the Project cannot rely on the groundwater well for non-drinking irrigation purposes is both impractical and runs contrary to their *other* comments alarmed at the City's dependence on water from other sources (e.g., the State Water Project, Bell Canyon Reservoir), which are addressed below. If Commenters' positions were adopted, it would lead to an absurd result in which an applicant would need to "destroy" (or "fill") a perfectly capable water well, only to then re-construct and re-permit said well. This would lead to an inefficient use of private and public resources, and Commenters cite to no legal authority or precedent of this process being used in the City, Napa County, or anywhere else in California.

SHC are also incorrect in noting that the Phase I Environmental Site Assessment for the Project site indicates that the groundwater well is "inoperable."[4] The Phase I did not opine that the well is incapable of being used (nor would it, as that would be an issue outside the scope of the ASTM standard for Phase Is). The Phase I consultants merely observed that "[a]t the time of the property inspection, the well was not in use."[5]

Finally, it is important to note that none of this affects the ultimate conclusion in the EIR. Regardless of whether the on-site well is operable (and it is), the City would require the Project to offset its demand on water pursuant to the Water Neutrality Ordinance, and compliance with this legal requirement should ensure no significant impacts regardless.

II. The Project Will not Lead to Well Interference and Negatively Impact the Bell Canyon Reservoir

Commenters opine that the Project's water demand will interfere with other groundwater sources serving the City, including the Bell Canyon Reservoir. Specifically, WAC claims that "[w]hole in the past the Bell Canyon Reservoir has been able to produce the largest portion of the City's water supply, recently that has not been the case." WAC further claims that the EIR "omits entirely the years of 2021, 2022 and 2023."

First, the EIR includes a comprehensive discussion of the Bell Canyon Reservoir and the role it plays in the City's water supply mix. See, DEIR at 3.13-3. The EIR quantified the reductions in water supply from the Bell Canyon Reservoir in recent years, and explained that supplies have

[3] *Id*. at 3.
[4] See, Attachment 14h to Staff Report; Phase I Environmental Site Assessment, EBA Engineering, March 8, 2018.
[5] *Id*. at 16.

declined in part due to water release into the Napa River to support fish habitat. In other words, the EIR fully acknowledges that supplies at the reservoir have declined in recent years – and none of the data WAC claims is missing from the EIR implicates its analyses or conclusions regarding the Project's impacts on City water supplies.

Moreover, recent public reports presented to the City Council indicate that, in fact, groundwater capacity has increased at the Bell Canyon Reservoir in 2023. On February 14, 2023, the City Council adopted a resolution memorializing the termination of the City's Phase II Water Emergency in November 2021 (effective December 2021), and adopted a recommendation from staff to terminate the Phase I Water Emergency in July 2023 (upon the presentation of a confirmatory report).[6] A staff presentation indicates that the Bell Canyon Reservoir "has a projected available capacity of 1814 AF in June 2024, which is "well above the 1431 AF level when the Phase I Water Emergency was declared in June 2020."[7] Based upon the assumptions associated with the current supply (i.e. rainfall, customer demand, etc.), the City is projected to have sufficient supply beyond June 2024.[8] Lastly, the staff report confirms a pivotal point: "the City relies on water volume availability from all water sources, *not just water levels at Bell Canyon to meet system demand*."

III. The March 2023 Groundwater Sustainability Annual Report Does Not Undermine the EIR's Water Supply Analysis

Next, WAC attempts to cast doubt into the EIR water supply analysis by challenging the EIR's omission of the 2022 Groundwater Sustainability Report from March 2023 (the "LSCE 2023 Report").[9] WAC states that the EIR references prior groundwater annual reports (from 2013-2017), but fails to incorporate data from the LSCE 2023 Report – which was released just three months ago in March 2023. As noted in the most recent staff report, City staff have reviewed the LSCE 2023 Report and provided their expert opinion that it contains no significant new information altering the conclusions in the EIR. The following provides additional comments supportive of that conclusion.

First, the EIR analyzed the Project's demand on groundwater resources, including the Project's use of the on-site well, and concluded, based on substantial evidence, that the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. (Draft EIR, 3.9-40 through 3.9-43.) In doing so, the EIR described the current status of groundwater levels in the Napa Valley Subbasin based on prior LSCE reports, and expressly acknowledged how the Subbasin is prone to decreased water supplies during dry-year and multiple dry-year events:

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[6] https://sthelena.civicweb.net/document/71523/Phase%20I%20Water%20Emergency%20Disposition.pdf?handle=DAA7A51185A04B51A1E05EB6B909863D, attached hereto as **Exhibit C**.
[7] See *id*..; City of St. Helena Water Update (Attachment 1) at 7.
[8] *Id*. at 3.
[9] https://www.countyofnapa.org/DocumentCenter/View/28114/2022-Napa-County-Groundwater-Monitoring-Annual-Report?bidId=

- "Based on an extensive analysis of historical monitoring data on groundwater levels, groundwater in storage, groundwater quality, and interconnections between groundwater and surface water, there have been no basin-wide significant and unreasonable effects with regard to chronic lowering of groundwater levels, reduction in groundwater storage, seawater intrusion, degraded water quality, and land subsidence (LSCE 2016). The basin analysis report found that groundwater levels in the Napa Valley have been stable over the hydrologic base period (1988- 2015), and the prior historical period where data are available, *with recognition that groundwater levels in some areas have been lower during dry water year types* (LSCE 2016). … The 2020 annual report updated the total amount in storage of the Napa Valley Subbasin to 196,651 acre-feet *which is a decrease from the year prior due to a very dry year*; however, the report concluded that the basin continues to be managed sustainably despite the most recent fluctuation (LSCE 2021)." DEIR at 3.9-14; emphasis added.

- "Napa County releases annual reports that provide an update on basin conditions and makes recommendations necessary to continue to maintain and improve sustainable management. The most recent annual report finds that most of the groundwater levels in the wells measured have remained above minimum thresholds, *however seven wells did record groundwater levels below their minimum thresholds including a well near the Project site* (see discussion below)." "However, these thresholds are monitored for evidence of chronic declines and not necessarily as an isolated exceedance, as the annual report still determined that the Subbasin has continued to be managed sustainably through 2020 (LSCE 2021)." *Id*.; at 3.9-14 to 3.9-15; emphasis added.

Despite acknowledging that groundwater levels are susceptible of reduced capacities in the event of drought, the EIR nevertheless concludes that the Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basis. Nothing in the LSCE 2023 Report diminishes the accuracy of that conclusion.

Second, viewed objectively, the LSCE 2023 Report does not indicate that groundwater supplies are in such a dire condition as WAC would have the City believe. The LSCE 2023 Report provides an update on groundwater conditions, water use, and Groundwater Sustainability Plan ("GSP") implementation in the Napa Valley Subbasin. It notes that: "[t]he recent very dry water years' conditions emphasize the susceptibility of the Subbasin to substantially reduced recharge and the propensity for increased groundwater pumping to meet water demands. Together, these water budget components result in significantly reduced groundwater storage during these very dry water years." But it also goes on to note that **"[t]he strong beginning of WY 2023 has shown excellent recovery with high levels of precipitation in December 2022 and January 2023**."[10]

The only undesirable event reported in the LSCE 2023 Report was that the seven-year *average* annual net groundwater extraction has exceeded the sustainable yield of 15,000 AFY.

[10] LSCE 2023 Report at ES-8.

Commenter notes this, but ignores the following prefatory remark in LSCE 2023 Report: "Management actions underway include (but are not limited to) the Groundwater Pumping Reduction Workplan and the Napa County Vineyard and Winery Water Conservation Workplan. These workplans, targeted to be completed in 2023, will help to curtail groundwater pumping and **overall water use to enable the Subbasin to achieve the measurable objective established in the GSP of 10% reduction in average annual groundwater pumping**."[11]

Third, the LSCE 2023 Report offers only a "snapshot" of groundwater conditions following a historically dry period in California's history. The LSCE 2023 Report is not demonstrative of historic conditions or future projections of groundwater supplies, including the improved state of groundwater aquifers in the City and Napa County following the 2023 wet season.[12]

IV. Current Status of the State Water Project

In a further attempt to diminish the legitimacy of the EIR's water supply analyses, WAC appears to argue that the EIR omitted key information on the State Water Project ("SWP") and the City's reliance on deliveries therefrom. In particular, WAC claims that the "actual deliveries [from the SWP] are determined by the Department of Water Resources ("DWR")," and "[DWR] estimates that 62% of SWP contractors' entitlements would be available in a normal year, 29% would be available during a single-dry year, and 5% available during a multi-year dry period."[13]

None of this information calls into question the adequacy of the EIR and its water supply analysis. The EIR contains a thorough discussion of the SWP, the City of Napa's SWP entitlements, and the variability of such entitlements in wet, dry and multi-dry years (EIR at 3.13-6). While WAC is correct that SWP entitlements vary based on normal, multiple-dry, and single-dry years, the EIR itself acknowledged this very point. See, e.g., Table 3.13-6 (SWP Reliability Assumptions).

Furthermore, recent DWR public reports indicate that deliveries from the SWP are expected to be plentiful throughout 2023 and beyond. WAC ignores the current state and optimistic forecasts for the SWP. See, e.g.,:

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[11] *Id*. at ES-9.

[12] See, e.g., **Exhibit C** ("December and January storms provided large quantities of rainwater that resulted in the overtopping of spillways at both Bell Canyon Reservoir and Lake Hennessey — a City of Napa water source for St. Helena"; "Based upon the assumptions associated with the current supply (i.e. rainfall, customer demand, etc.), the City is projected to have sufficient supply beyond June 2024."); Napa County News (May 30. 2023), available at https://www.countyofnapa.org/CivicAlerts.aspx?AID=433, attached hereto as **Exhibit D** ("On May 30, the Napa County Board of Supervisors voted to end the State of Local Emergency due to drought conditions in Napa County, thus terminating the emergency powers of county officials set forth in Resolution No. 2022-29. …. Since October 1, 2022, Napa has received nearly 32 inches of rain, exceeding average annual rainfall. Despite a particularly wet winter, eight of the past 10 years have been characterized as dry to very dry conditions. While the wetter winter of 2022-2023 has achieved a notable recovery in groundwater levels since 2022, overall resilience and sustainability of Napa County's groundwater resources remain a top priority.")

[13] WAC Comment Letter at 2.

- January 26, 2023 – "DWR today announced that recent storms will allow the [SWP] to boost deliveries to 29 public water agencies serving 27 million Californians. Based on the amount of water captured and stored in recent weeks, DWR now expects to deliver 30 percent of requested water supplies – or 1.27 million acre-feet -- in 2023, up from the initial 5 percent announced on December 1."[14]

- March 24, 2023 – "DWR today announced a significant boost in the forecasted [SWP] deliveries this year due to continued winter storms in March and a massive Sierra snowpack. DWR now expects to deliver 75 percent of requested water supplies, up from 35 percent announced in February. The increase translates to an additional 1.7 million acre-feet of water for the 29 public water agencies that serve 27 million Californians."[15]

V. The EIR Was Not Required to Analyze Social Impacts Associated with Loss of "Recreational" Value of Project Site

Section 3.12 of the EIR (Public Services and Recreation) analyzed two recreation-based impacts under CEQA. Specifically, the EIR analyzed whether the Project includes recreational facilities or will require the construction or expansion of recreational facilities which could have an adverse impact on the environment (Draft EIR 3.12-16 to 3.12-17), and whether the Project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The EIR concludes that neither of these impact areas will be significant impact.

However, SHC claims the EIR's analysis of recreation impact is deficient under CEQA because "it wholly ignores that the site is currently used for recreation, and that recreation site will be lost as a result of the Project."[16] Response #22 of th Staff Report correctly refutes this comment on the basis that the project site is privately owned, is therefore not a public recreation area, and accordingly that SHC's opinion is not supported by substantial evidence. Response #22 is correct. Further, even if SHC's unsupported claims were true (the private site is used for public recreation), the loss of that unpermitted public recreational use would be considered a social – not an environmental – impact. Lead agencies need not analyze social or economic impacts of a proposed project, but can consider social or economic impacts in determining whether a physical change in the environment is significant. SHC's concern (public annoyance in finding a new place for recreational activities) is not a recognized CEQA impact.

[14] https://water.ca.gov/News/News-Releases/2023/Jan-23/Recent-Storms-Allow-State-Water-Project-to-Increase-Expected-2023-Deliveries, attached hereto as **Exhibit E.**
[15] https://water.ca.gov/News/News-Releases/2023/March-23/Harnessing-Series-of-Winter-Storms-California-Increases-State-Water-Project-Allocation attached hereto as **Exhibit F**.
[16] SHC Comment Letter at 12.

VI. The EIR Analyzed an Appropriate Range of Alternatives; the City is not Obligated to Consider Every Alternative Proposed by Commenters

WAC contends that the City committed a "failure of the CEQA process and an abuse of discretion" by failing to consider "a transfer of suplus waters in the Rector Reservoir equal to the extraction of Stonebridge," something that WAC purportedly proposed to the City in January 2023. WAC further claims that this is the "environmentally preferable alternative" to, presumably, the Project. The City was under no legal obligation to analyze this suggested alternative, which resembles a water policy for the City to make as opposed to a particular alternative to this Project.

In addition to analyzing the environmental effects of a proposed project, EIRs must consider and analyze project alternatives that would reduce adverse environmental impacts. An EIR must "describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project...." (Guidelines § 15126.6 (a).) However, CEQA does not require lead agencies to consider specific alternatives that are proposed by members of the public or other outside agencies. Nor does an EIR need to consider every conceivable alternative to a project or alternatives that are infeasible. The range of alternatives considered in an EIR is governed by the "rule of reason." Accordingly, an EIR is not required to analyze alternatives that cannot achieve a project's basic objectives.

Here, the EIR analyzes four alternatives: (i) No Project/No Build Alternative, (ii) No Project/General Plan Alternative, (iii) Park Preserve Alternative, and (iv) Increased Density/Affordable Housing Alternative. The EIR also establishes eight (8) project objectives, only one of which concerned water supply. Project objectives include, but are not limited to, "provide opportunities to develop a variety of housing types, including multi-family, single family, and accessory dwelling units, affordable to a range of incomes …."; "provide opportunities to contribute to the provision of workforce and affordable housing consistent with the City's adopted Housing Element and the Regional Housing Needs Assessment (RHNA) …'; "Support alternative transportation by providing a pedestrian and bicycle linkage through St. Helena …" The sole project objective related to water supply is "[m]inimize City water use by continuing the use of an existing on-site water well for irrigation of Proposed Project landscaped areas."

The alternative posed by WAC would accomplish none of the EIR's stated project objectives. Thus, City is not required to endorse or analyze such an alternative.

VII. The City's Statement of Overriding Consideration Satisfies CEQA and Represents Sound Judgment on Behalf of the City's Decisionmakers

SHC claim the City's draft "statement of overriding consideration" included in the May 1, 2023 City Council Staff Report was deficient under CEQA.

As a preliminary point, SHC attempts to write new requirements into CEQA statute. Nothing in CEQA nor the CEQA Guidelines requires statements of overriding considerations to "explain in detail" how project benefits outweigh significant and unavoidable impacts, or "identify real, quantifiable benefits." CEQA Guidelines sections 15093(b)-(c) provide that [w]hen the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. Statements of overriding considerations focus on the larger, more general reasons for approving a particular project, such as the need to create new jobs, provide housing, generate taxes, and the like. Their purpose is to demonstrate local decisionmakers' weighing of the benefits of a proposed project against its unavoidable environmental risks.

That is precisely what the City did when it prepared a draft statement of overriding considerations in the May 1, 2023 City Council Staff Report. The draft statement finds that each of the social, economic and environmental benefits of the Project separately and individually outweigh the Project's potential unavoidable adverse impacts.

In short, the Project's provision of additional housing opportunities (including affordable housing) constitutes a laudable social and economic benefit supporting the statement of overriding consideration. While SHC may favor different policies other than those furthered by the Project, that does not render the City's statement of overriding considerations legally deficient under CEQA.

Very truly yours,



Daniel R. Golub
Kevin J. Ashe

Holland & Knight LLP

cc: Maya DeRosa, AICP, Community Development Director
Ethan Walsh, City Attorney
Cindy Tzafopoulos, City Clerk
Department of Housing & Community Development

EXHIBIT A

DWR Bulletin 74, Part III, Section 21

Part III. Destruction of Water Wells

Section 20. Purpose of Destruction

Part III. Destruction of Water Wells

Section 20. Purpose of Destruction

A well that is no longer useful (See Note 1) (including exploration and test holes) must be destroyed in order to:

- 1. Assure that the groundwater supply is protected and preserved for further use.
- 2. Eliminate the potential physical hazard.

Section 20 Notes:

1. Very often wells are prematurely abandoned and destroyed. However, proper maintenance will ensure that they will continue to produce for many years. The maintenance program should include regular measurement of the water level (depth to water from ground surface), determination of water quality, pump tests (for determination of pump and well efficiency) and cleaning.

Section 21. Definition of Abandoned Well

Section 21. Definition of "Abandoned" Well

A well is considered 'abandoned' or permanently inactive if it has not been used for one year, unless the owner demonstrates intention to use the well again. In accordance with Section 115700 of the California Health and Safety Code, the well owner shall properly maintain an inactive well as evidence of intention for future use in such a way that the following requirements are met:

- (1) The well shall not allow impairment of the quality of water within the well and groundwater encountered by the well.
- (2) The top of the well or well casing shall be provided with a cover, that is secured by a lock or by other means to prevent its removal without the use of equipment or tools, to prevent unauthorized access, to prevent a safety hazard to humans and animals, and to prevent illegal disposal of wastes in the well. The cover shall be watertight where the top of the well casing or other surface openings to the well are below ground level, such as in a vault or below known levels of flooding. The cover shall be watertight if the well is inactive for more than five consecutive years. A pump or motor, angle drive, or other surface feature of a well, when in compliance with the above provisions, shall suffice as a cover.
- (3) The well shall be marked so as to be easily visible and located, and labeled so as to be easily identified as a well.
- (4) The area surrounding the well shall be kept clear of brush, debris, and waste materials.

If a pump has been temporarily removed for repair or replacement, the well shall not be considered 'abandoned' if the above conditions are met. The well shall be adequately covered to prevent injury to people and animals and to prevent the entrance of foreign material, surface water, pollutants, or contaminants into the well during the pump repair period.

Section 22. General Requirement

Section 22. General Requirement

All "abandoned" wells and exploration, or test holes shall be destroyed. The objective of destruction is to restore as nearly as possible those subsurface conditions which existed before the well was constructed taking into account also changes, if any, which have occurred since the time of construction. (For example, an aquifer which may have produced good quality water at one time, but which now produces water of inferior quality, such as a coastal aquifer that has been invaded by seawater.)

Destruction of a well shall consist of the complete filling of the well in accordance with the procedures described in Section 23 (following).

Section 23. Requirements of Destroying Wells

Section 23. Requirements for Destroying Wells

A. ***Preliminary Work.*** Before the well is destroyed, it shall be investigated to determine its condition, details of construction, and whether there are obstructions that will interfere with the process of filling and sealing. This may include the use of downhole television and photography for visual inspection of the well.

- **1. *Obstructions.*** The well shall be cleaned, as needed, so that all undesirable materials, including obstructions to filling and sealing, debris, oil from oil-lubricated pumps, or pollutants and contaminants that could interfere with well destruction are removed for disposal. The enforcing agency shall be notified as soon as possible if pollutants and contaminants are known or suspected to be in a well to be destroyed. Well destruction operations may then proceed only at the approval of the enforcing agency. The enforcing agency should be contacted to determine requirements for proper disposal of materials removed from a well to be destroyed.
- **2.** Where necessary, to ensure that sealing material fills not only the well casing but also any annular space or nearby voids within the zone(s) to be sealed, the casing should be perforated or otherwise punctured.
- **3. I**n some wells, it may be necessary or desirable to remove a part of the casing. However, in many instances this can be done only as the well is filled. For dug wells, as much of the lining as possible (or safe) should be removed prior to filling.

B. ***Filling and Sealing Conditions***. Following are requirements to be observed when certain conditions are encountered:

- 1. **Wells situated in unconsolidated material in an unconfined groundwater zone**. **I**n all cases the upper 20 feet of the well shall be sealed with suitable sealing material and the remainder of the well shall be filled with suitable fill, or sealing material. (See Figure 9A, of Bulletin 74- 81.)
- 2. **Well penetrating several aquifers or formations. I**n all cases the upper 20 feet of the well shall be sealed with impervious material. **I**n areas where the interchange of water between aquifers will result in a significant (See Note 1) deterioration of the quality of water in one or more aquifers, or will result in a loss of artesian pressure, the well shall be filled and sealed so as to prevent such interchange. Sand or other suitable inorganic material may be placed opposite the producing aquifers and other formations where impervious sealing material is not required. To prevent the vertical movement of water from the producing formation, impervious material must be placed opposite confining formations above and below the producing formations for a distance of 10 feet or more. The formation producing the deleterious water shall be sealed by placing impervious material opposite the formation, and opposite the confining formations for a sufficient vertical distance (but no less than 10 feet) in both directions, or in the case of "bottom" waters, in the upward direction. (See Figure 9B.) **I**n locations where interchange is in no way detrimental, suitable inorganic material may be placed opposite the formations penetrated. When the boundaries of the variousformations are unknown, alternate layers of impervious and pervious material shall be placed in the well.
- **3. *Well penetrating creviced or fractured rock.* I**f creviced or fractured rock formations are encountered just below the surface, the portions of the well opposite this formation shall be sealed with neat cement, sand-cement grout, or concrete. **I**f these formations extend to considerable depth, alternate layers of coarse stone and cement grout or concrete may be used to fill the well. The limiting dimensions of coarse stone are usually considered to range between ¼ and 4 inches. Fine grained material shall not be used as fill material for creviced or fractured rock formations.

- 4. ***Well in noncreviced, consolidated formation.*** The upper 20 feet of a well in a noncreviced, consolidated formation shall be filled with impervious material. The remainder of the well may be filled with clay or other suitable inorganic material.
- 5. ***Well penetrating specific aquifers, local conditions.*** Under certain local conditions, the enforcing agency may require that specific aquifers or formations be sealed off during destruction of the well.

C. ***Placement of Material.*** The following requirements shall be observed in placing fill or sealing material in wells to be destroyed:

- 1. The well shall be filled with the appropriate material (as described in Subsection D of this section) from the bottom of the well up.
- 2. Where neat cement grout, sand-cement grout, or concrete is used, it shall be poured in one continuous operation.
- 3. Sealing material shall be placed in the interval or intervals to be sealed by methods that prevent free fall, dilution, and/or separation of aggregate from cementing materials.
- 4. Where the head (pressure) producing flow is great, special care and methods must be used to restrict the flow while placing the sealing material. In such cases, the casing must be perforated opposite the area to be sealed and the sealing material forced out under pressure into the surrounding formation.
- 5. In destroying gravel-packed wells, the casing shall be perforated or otherwise punctured opposite the area to be sealed. The sealing material shall then be placed within the casing, completely filling the portion adjacent to the area to be sealed and then forced out under pressure into the gravel envelope.
- 6. When pressure is applied to force sealing material into the annular space, the pressure shall be maintained for a length of time sufficient for the cementing mixture to set.
- 7. To assure that the well is filled and there has been no jamming or "bridging" of the material, verification shall be made that the volume of material placed in the well installation at least equals the volume of the empty hole.

D. ***Materials.*** **Requirements for sealing and fill materials are as follows:**

- 1. ***Impervious Sealing Materials.*** No material is completely impervious. However, sealing materials shall have such low permeability that the volume of water passing through them is of small consequence. Suitable impervious materials include neat cement, sand-cement grout, concrete, and bentonite clay, all of which are described in Section 9, Subsection D, "Sealing Material" of these standards; and well-proportioned mixes of silts, sands, and clays (or cement), and native soils that have a coefficient of permeability of less than 10 feet per year. Examples of materials of this type are: very fine sand with a large percentage of silt or clay, inorganic silts, mixtures of silt and clay, and clay. Native materials should not be used when the sealing operation involves the use of pressure. Used drilling muds are not acceptable.
- 2. ***Filler Material.*** Many materials are suitable for use as a filler in destroying wells. These include clay, silt, sand, gravel, crushed stone, native soils, mixtures of the aforementioned types, and those described in the preceding paragraph. Material containing organic matter shall not be used.

E. ***Additional Requirements for Wells in Urban Areas.***
In incorporated areas or unincorporated areas developed for multiple habitation, to make further use of the well site, the following additional requirements must be met (see Figure 9C):

- 1. A hole shall be excavated around the well casing to a depth of 5 feet below the ground surface and the well casing removed to the bottom of the excavation.
- 2. The sealing material used for the upper portion of the well shall be allowed to spill over into the excavation to form a cap.
- 3. After the well has been properly filled, including sufficient time for sealing material in the excavation to set, the excavation shall be filled with native soil.

F. ***Temporary Cover.*** During periods when no work is being done on the well, such as overnight or while waiting for sealing material to set, the well and surrounding excavation, if any, shall be covered. The cover shall be sufficiently strong and well

enough anchored to prevent the introduction of foreign material into the well and to protect the public from a potentially hazardous situation.

Section 23 Notes:

1. Determining the significance of interchange of waters whose qualities vary and of the loss of artesian pressures, requires extensive knowledge of the groundwater basin in question. The Department of Water Resources has over the years, and frequently in cooperation with agencies such as the U. S. Geological Survey, undertaken a number of groundwater studies and amassed considerable information and data about the subject. Although much is known about the State's groundwater supplies, detailed studies sufficiently accurate to define interchange problems have been made only in certain areas. In still other areas, there is only partial definition of the problem.

EXHIBIT B

Project Description

HUNTER SUBDIVISION
PROJECT DESCRIPTION

GENERAL INFORMATION

The subject property is a 16.9-acre parcel (APN 009-030-057) located north of Hunt Avenue and east of Adams Street. The site is bounded by single-family homes to the west and southwest, a mobile-home park to the southeast, the flood control project to the east and a City-owned parcel (for access to the flood control project) to the north. There is existing vineyard over a portion or the property with the remaining land being vacant and recently disturbed/graded as part of the flood control project.

The owner, Mr. Dennis Hunter, seeks approval to subdivide the parcel into 51 single-family residential lots, 11 of those with affordable granny units, and a parcel designated for a future 25-unit workforce/affordable housing development. The parcel currently has a *Medium Density Residential* Zoning and General Plan designation allowing for a density range of 5.1 to 16.0 du/acre and maximum yield of 270 du. The proposed 87 units (51 lots + 11 granny units + 25 future multi-family units) results in a density of 5.1 du/acre thereby meeting the minimum requirement.

In terms of development standards, the resulting lots meet or exceed all the shape, size and setback requirements of the MR zoning district. Houses are not being proposed at this time or as part of this application. The affordable units will be deed restricted for a minimum of 30 years (per SB 1818). This project is a housing development entitled to a density bonus and multiple incentives and concessions under the provisions of Government Code §65915.

As indicated above, there are a few remainder parcels being proposed as part of this subdivision. Parcel A is 3.13 net acres and will be set aside for a future 25-unit multi-family development. There is also a small sliver of land along the north PL that is Parcel B.

The project will be served by new public streets including the interconnection of Starr Avenue to Adams Street. These streets are classified as collectors and have been designed to the 60-foot right-of-way standard. All others streets are designed to the minor residential standard (56'). Adams Street is shown on the City-owned parcel with a small portion lying on the subject property.

In terms of utilities, there is an existing sanitary sewer in Hunt Avenue and new water and storm drain lines that run through the property, all of which are accessible for connection by the new project. There are also existing dry utilities nearby in Hunt Avenue and in Adams Street for service of gas, electric, cable and phone to the project. There is an existing well near the southeastern end of the property that is proposed to be maintained in place and used for irrigation of the project's landscape areas. It is a high-producing well that it also capable of supplying additional water to the project should it be found necessary.

HUNTER SUBDIVISION
PROJECT DESCRIPTION

The grading design for the project, as shown on the Tentative Map, is based on the Soil Stockpile Grading Plan dated January 2009 prepared by Mead & Hunt for the flood control project. The grades have been set to utilize the pad that is being constructed and to achieve an earthwork balance in an effort to avoid future offhaul of material. The fill slope along the south and southeast property lines being constructed will be replaced by a retaining wall and drainage swale, also as shown on the Tentative Map. The grading and drainage design has been coordinated with the flood control project based on feedback from and a field meeting with Jon Lander.

It is anticipated that site improvements for the project will be complete within one and one-half years after the approval of the project's entitlements.

HISTORY OF PRIOR KNOWN DEVELOPMENT ACTIVITY

The architectural firm Dahlin Group was retained in May of 2005 to prepare a Master Plan for the site. Following several meetings with City Staff, at Staff's suggestion, the design work was halted to allow for the completion of the General Plan Update program. On May 23, 2006 the Civil Engineering firm Riechers Spence & Associates (RSA) was retained to start Tentative Map work but again at the suggestion of City Staff the work was halted to permit the completion of the General Plan Update program.

In June of 2007 the City first contacted Mr. Hunter with a request for right of entry to the property to explore Indian remains identified in their Cultural Resources Study. The City explained that their flood control project was a life-safety project for the senior residents of the mobile home park. Mr. Hunter signed the right of entry (without charge) on October 11, 2007.

During the summer of 2006 the City again contacted Mr. Hunter to see if he would consider allowing the spoils from the flood control project to be placed on his property. This action would reduce the cost of the flood control project to the City. Mr. Hunter agreed subject to the fill being placed in a compacted form, suitable for development. It was the City's estimate that 37,000 cubic yards of fill would be available. A grading plan was prepared by Civil Design and submitted to the City and a Soils Report for the site was prepared by Miller Pacific Engineering Group.

In the spring of 2008 the City again approached Mr. Hunter to see if he was interested in a possible trade in lieu of the purchase of his property for the flood control project. A number of meetings were held and a lot line adjustment agreed upon. Land was appraised and a price was established. The Agreement of Purchase and Sale was signed in December of 2008.

In the fall of 2007 the City again approached Mr. Hunter asking if he would support placing an Assessment District on property benefiting from the flood control project. Additional money was required to complete the City's project. Mr. Richard McDonnell

HUNTER SUBDIVISION
PROJECT DESCRIPTION

of Vineyard Valley Mobile Home Park, on Marcy 21, 2008 protested the Assessment District which constituted a majority protest and killed the Assessment District. Mr. Hunter agreed to the Assessment District which would place a lien of $586,084.96 on his property.

All of the meetings with the City to this point, including meetings held with Councilman Eric Sklar in attendance, envisioned development of the Hunter parcel. The values of property arrived at for the land trade/sale with the City was based on developable land prices. And, the placement of City fill on the Hunter property was to be done consistent with the future urban development of the parcel. Furthermore, to accommodate development and as part of the land swap, the City's Flood Control Project:

- Removed grape vines along the north side of the property for the extension of Adams Street and through the middle of the site where Starr Avenue was to be extended.
- Moved the water main from the center of the property to the location of the future Starr Avenue right-of-way.
- Up-sized the retention pond and pumps to serve the developed Hunter parcel.
- Created an easement and moved the sewer line.
- Created an easement to facilitate the extension of Starr Avenue.

In September of 2009 architect Mark Scheurer was retained as designer of the project and Mark met with City Staff. In December of 2009 the design work was again put on hold to allow for the completion of the General Plan Update program. The Civil Engineering firm RSA then rejoined the development team.

At the present time the right-of-way for Adams Street has been graded and rocked, the right-of-way for Starr Avenue has been cleared and the water utility installed. The easterly half of the Hunter property has been used as a construction staging area by the City and is devoid of any vegetation. And the stockpile is currently being placed and compacted on the eastern portion of the site (per the stockpile Plan referenced above). The ground water well on the site previously used for irrigation of the grape vines is presently used by the City (free of charge) to start the landscape required by their flood control project.

Dennis Rudenter
Applicant *or* Property Owner Signature

Sept 9, 10
Date

RECEIVED
PLANNING DEPARTMENT
SEP 09 2010
City of St. Helena

EXHIBIT C

Staff Report and Presentation
February 14, 2023 City Council Meeting

Report to the City Council
Regular City Council - 14 Feb 2023

Agenda Section: **CONSENT ITEMS**

Subject: **Consideration and Proposed Approval of a Resolution (1) Memorializing the Termination of the Phase II Water Emergency in November 2021, effective December 2021; and (2) Confirmation of Staff's Proposal to Provide a Recommendation for the Termination of the Phase I Water Emergency at a Council Meeting in July 2023.**

CEQA Determination: **Not a CEQA project**

Prepared By: Joseph Leach, Public Works Director and City Engineer

Reviewed By: April Mitts, Assistant City Manager

Approved By: Anil Comelo, City Manager

BACKGROUND

In response to the 2011 Safe Water Yield Committee recommendations and the 2015 State-mandated conservation requirements, the St. Helena Municipal Code Section 13.04 address various mandated conservation requirements and criteria for declaring water emergency phases. Section 13.04.220 establishes that at any time that the City Council finds and determines a water shortage emergency condition exists within the criteria of Sections 13.04.230 through 13.04.250, and that it is necessary to limit usage by the customers of the municipal water department, the City Council shall adopt a resolution setting forth the applicable phase.

The criteria for establishing Phase I Water Regulations, as determined by the Safe Yield Committee in its report dated March 17, 2011, shall be any or all the following:

1. The supply/usage balance, as calculated at the beginning of the fiscal year, is in deficit;
2. The volume of water to be delivered by the City of Napa in any fiscal year will not exceed four hundred (400) AF;

3. The volume of water anticipated to be available prior to the next November 1st, as determined by the Director of Public Works, is not sufficient to meet projected demand through November 1st without demand reduction measures being implemented; or
4. Conditions requiring the establishment of a Phase II water emergency, as determined by the Director of Public Works, appear to be imminent.

St. Helena Municipal Code Section 13.04.010 establishes that the City shall calculate the water supply/usage balance as soon as practicable ***after the end of each fiscal year***. The supply/usage balance is the difference between the safe annual yield of the City's water supply and the total current usage with total current usage being the average usage over the last five fiscal years. The balance is positive, or in surplus, when the safe annual yield exceeds total current usage. The balance is negative, or in deficit, when the safe annual yield is less than total current usage.

As noted above, the 2011 Safe Yield Committee determined the Safe Yield was 1,950 acre-feet of water prior to the 200 acre-feet water increase from the City of Napa which was adopted in the December 2011 Water Agreement Amendment. This 2011 Amendment increased the City's allocation from 400 acre-feet to 600 acre-feet. The current Safe Yield of the City's Water Supply is 2,150 acre-feet.

The annual Water Shortage Emergency (WSE) is determined pursuant to the analytical methodology created by the Safe Yield Committee as identified in its report dated March 17, 2011. This calculation requires compilation and evaluation of multiple data sources including: annual and monthly production volumes for Louis Stralla Water Treatment Plant, Stonebridge Wells and Napa Water; monthly Bell Canyon water levels; operational water in the distribution system; water loss; and delivery to the water enterprise customers. The result of this analysis is the annual water supply/usage balance which then dictates if a water shortage emergency exists.

On June 23, 2020, the City Council adopted Resolution No. 2020-72 declaring a Phase I Water Emergency. Then on October 27, 2020, the City declared a Phase II Water Emergency with the adoption of Resolution No. 2020-107. The Public Works Director subsequently terminated the Phase II Water Emergency in November 2021, effective December 2021; however, it is necessary for the City Council to adopt a resolution declaring as such. The City has remained in a Phase I Water Emergency.

DISCUSSION

When the Phase I Water Emergency was adopted via Resolution 2020-72 on June 23, 2020, the Public Works Director presented criteria to the Council, conforming to the Safe Yield criteria and St. Helena Municipal Code, to support the declaration. ***Attachment 1*** includes annual water demand trends for the past 12 fiscal years, combined water source production over the past 12 fiscal years, and a 17-year summary showing Bell Canyon capacity levels in May, November, and December.

The three tables below show the criteria utilized to determine the necessity to continue or rescind the Phase I Water Emergency.

Bell Canyon Reservoir Capacity

Month	2019	2020	2022	2023
November	57.0%		61.7%	
December	71.7%		100.0%	
May		62.9%		TBD

Water Production Trend (Bell Canyon, Napa Intertie and Stonebridge Wells)
Values in acre-feet; Fiscal Year 2022-23 is through January 2023

Source	2019-20	2020-21	2021-22	2022-23*
Bell Canyon	765	601	379	322
Napa Water	592	487	393	328
Stonebridge Wells	300	576	466	162
Totals	1,657	1,664	1,238	812

Water Demand Trend (i.e. Water Billed)
Values in acre-feet; Fiscal Year 2022-23 is through January 2023

	2019-20	2020-21	2021-22	2022-23*
Water Customers Demand	1,488	1,372	1,032	645
Percent Loss (Audit)	85%	85%	85%	85%
Water Demand	1,751	1,614	1,214	759

It should also be noted that on January 26, 2023, the Department of Water Resources issued a letter to entities with State Water Contracts that their “Table A” water supply would be available to increase (***Attachment 2***).

Finally, the Monthly Water Report for January 2023 (to be included in the February 28, 2023 Council agenda) includes the graph of Projected Water Supply for Bell Canyon Reservoir (***Attachment 1, page 6***). Based upon the assumptions associated with the current supply (i.e. rainfall, customer demand, etc.), the City is projected to have sufficient supply beyond June 2024. While this projection is an estimate, the termination of the Phase I Water Emergency should conform to the recommendation of the Safe Yield Report and SHMC, which would dictate an evaluation after the end of the FY2022-23 in July 2023, with an evaluation of the Bell Canyon Reservoir capacity level at the end of May 2023.

Based on this information presented staff recommendations Council adopt a resolution:

1. Memoralizing the termination of the Phase II water emergency in November 2021, effective December 2021; and
2. Confirming staff's recommendation to bring a water update to the Council in July 2023 to allow for an evaluation of the Bell Canyon Reservoir capacity level at the end of the FY 2022-23 to determine if the corresponding analysis warrants adoption of a resolution terminating the Phase I Water Emergency.

FISCAL IMPACT

The current water rate structure includes a drought period surcharge that begins once the City implemented the Phase I Water Regulations. Drought rates are only applied to use charges (i.e. does not affect service/“base” charges). Drought rates are 6% higher than non-drought rates. It is undetermined the order of magnitude, if any, the loss of revenue to be realized by the City since customer water use may change once the restrictions are rescinded.

RECOMMENDED ACTION

Adopt the attached resolution.

ATTACHMENTS

Attachment 1 - Presentation COSH Water Update_021423
Attachment 2 - DWR ltr SWP Table A Water_012623
Attachment 3 - Resolution_021423

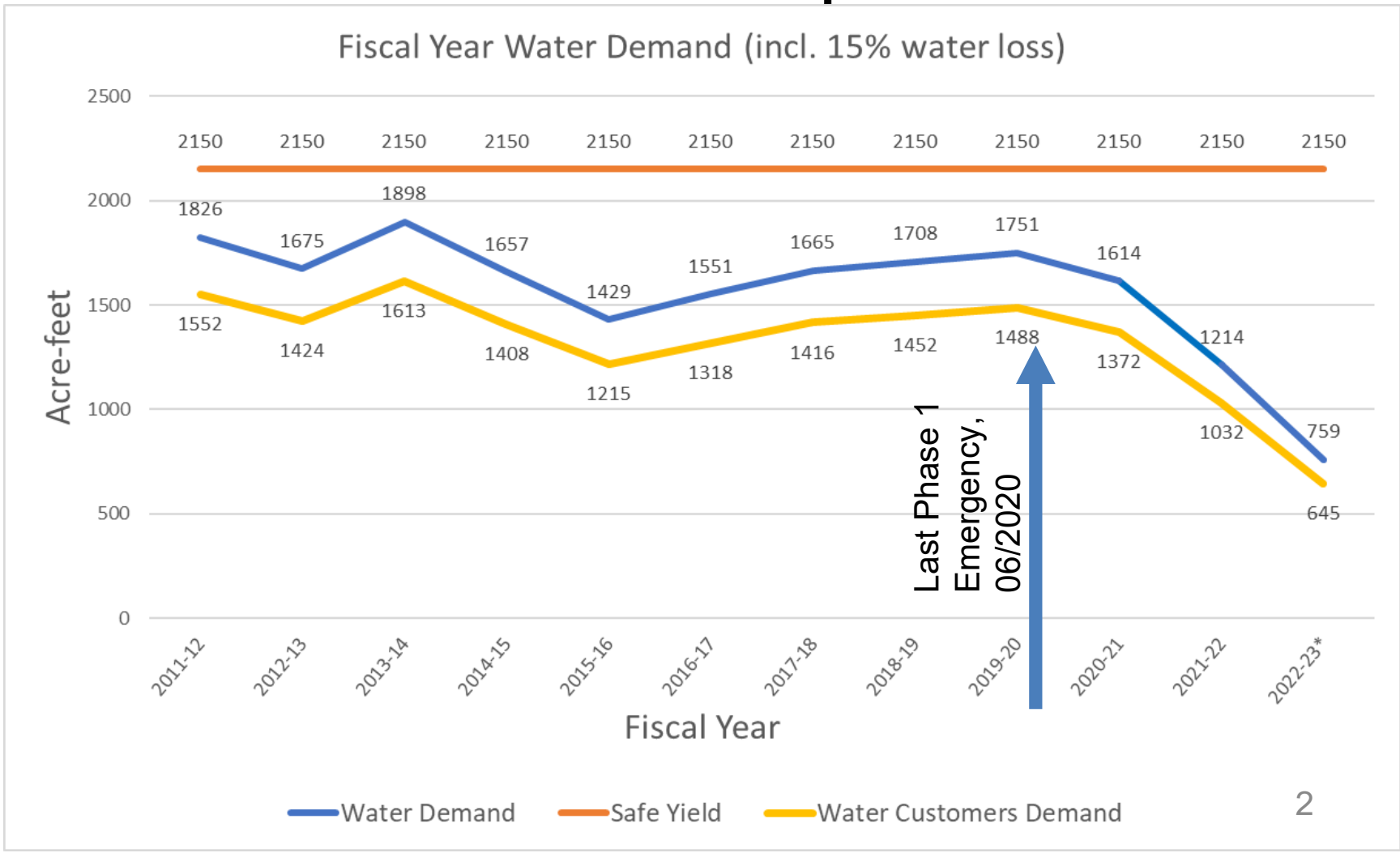
City of St. Helena Water Update Attachment 1

By: Joe Leach, PE

Director of Public Works

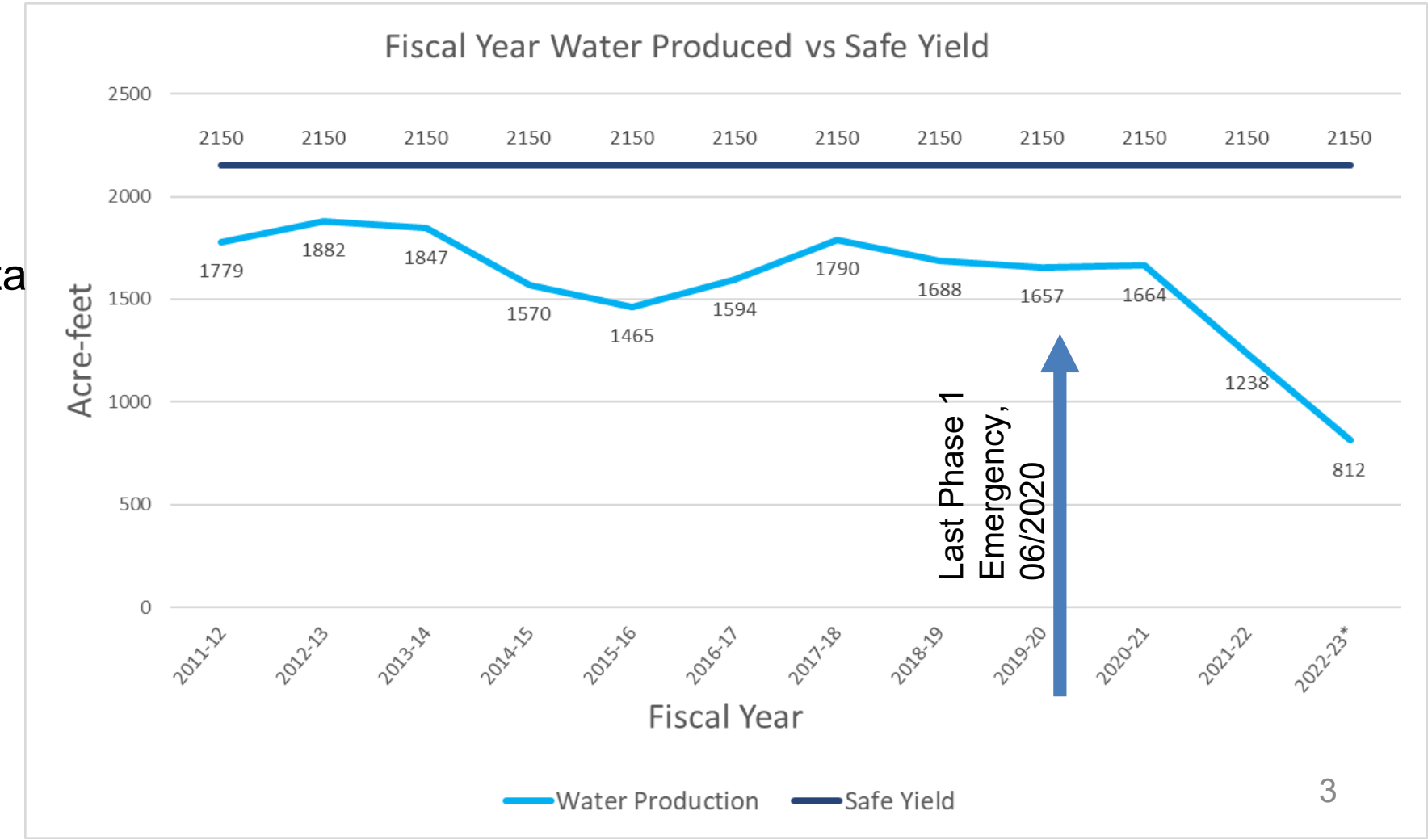
City of St. Helena Water Update

- Fiscal Year water demand incl. 15% “system loss”
- FY2022-23 data thru Jan 31



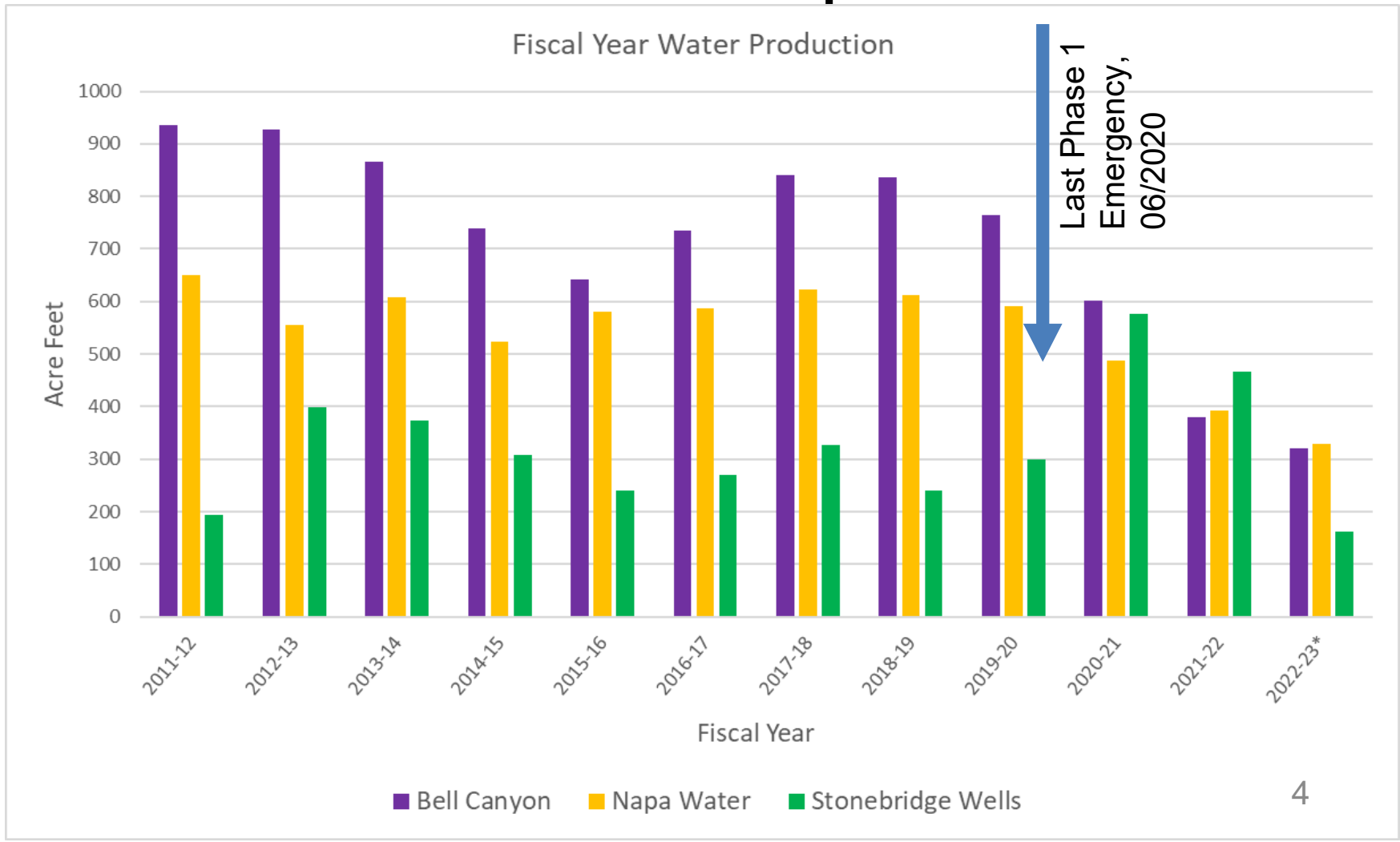
City of St. Helena Water Update

- Fiscal Year water production
- FY2022-23 data thru Jan 31



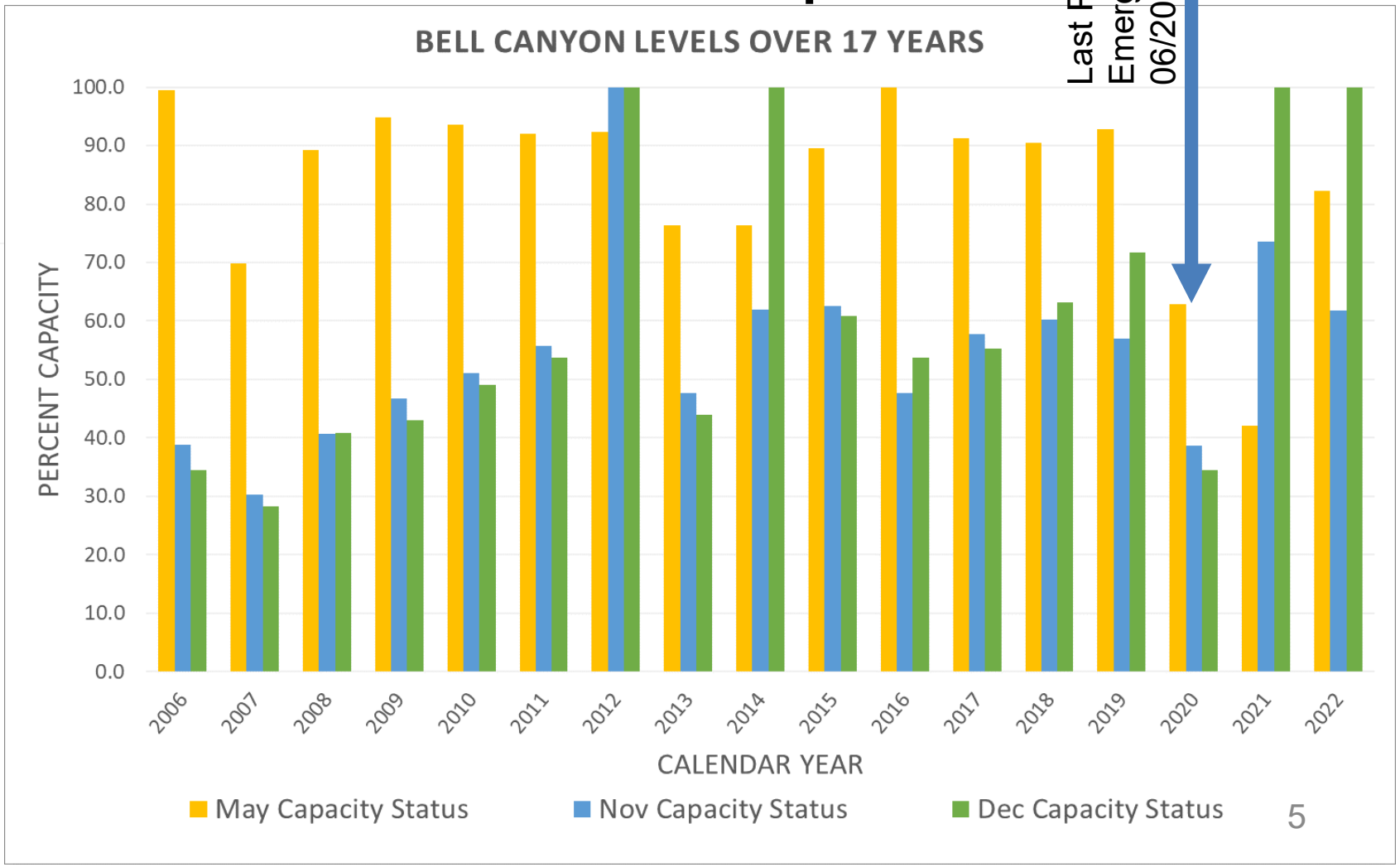
City of St. Helena Water Update

- Combined Water Source Production since FY 2011-12
- FY2022-23 data thru Jan 31



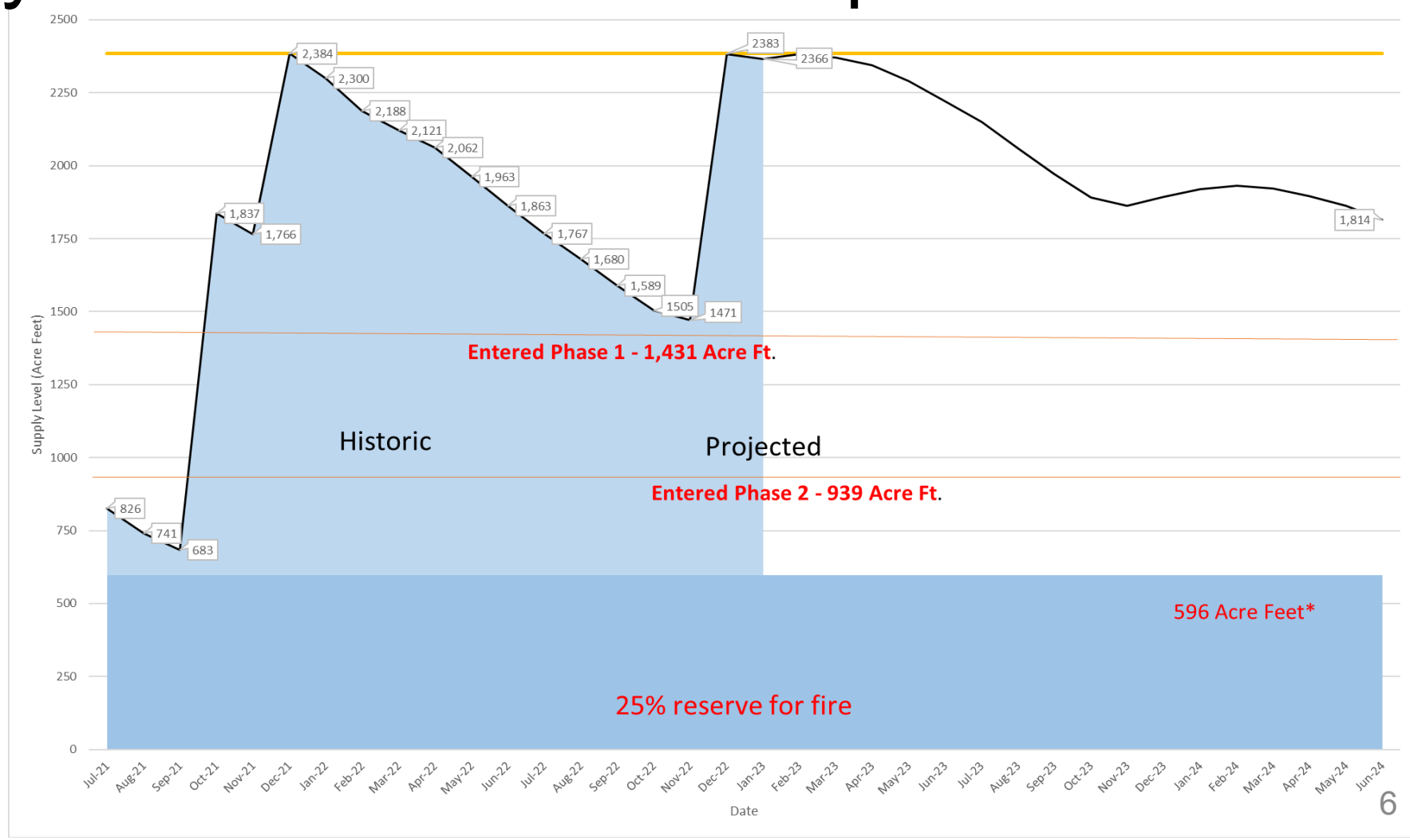
City of St. Helena Water Update

- Bell Canyon Capacity in May, November and December since 2006
- FY2022-23 data thru Jan 31



City of St. Helena Water Update

- Bell Canyon Reservoir Monthly storage
- Projected sufficient supply (1814 AF) beyond June 2024



City of St. Helena Water Update

- Prior to 2007 no City of Napa water was available
- Post 2011, the City has an annual allocation of 600 acre-feet from the City of Napa with the option to purchase an additional 200 acre-feet per year.
- The 2011 Safe Yield Report assumes limiting the Stonebridge Wells long term average of 450 acre-feet per year. Well usage has been averaging approximately 382 acre-feet/year for the last 5 fiscal years.
- In spite of significant staff turnover during the last several years, Water Operations staff continues to equitably balance the supplies.
- Bell Canyon has a projected available capacity of 1814 acre-feet in June 2024, well above the 1431 acre-foot level when the Phase I Water Emergency was declared in June 2020.
- It is important to note that the City relies on total water volume availability from all water sources and not just water levels at Bell Canyon to meet system demand.

City of St. Helena Water Update

Director of Public Works Recommendations:

- Adopt Resolution to terminate the Phase II Water Emergency retroactive to November 2021.
- Adopt Resolution directing staff to provide Water Supply Update to Council at a meeting in July 2023 to determine if there is need to continue Phase I Water Emergency or if termination is warranted.
- Continue to conserve Bell Canyon Reservoir water by minimizing water treatment operations at Louis Stralla and utilizing Stonebridge Wells and City of Napa water allocation, adhere to recommendations adopted in the 2011 Safe Yield Report and provide monthly updates to City Council.
- Alert City Council of any changes to the City's water supply and/or drought restrictions that may be set by the State that would impact the existing Phase I Water Emergency in advance of any regularly scheduled City Council meeting.

City of St. Helena Water Update

Questions?

State of California DEPARTMENT OF WATER RESOURCES California Natural Resources Agency
CALIFORNIA STATE WATER PROJECT

NOTICE TO STATE WATER PROJECT CONTRACTORS

Date: January 26, 2023

Number: **23-03**

Subject: **Increase of State Water Project 2023 Allocation to 30 Percent**

From: Original signed by
Ted Craddock
Deputy Director, State Water Project
Department of Water Resources

Due to extreme weather and a series of atmospheric rivers from late December 2022 through January 2023, the Department of Water Resources (DWR) is increasing the State Water Project (SWP) allocation from 5 percent to 30 percent of most[1] SWP contractors Maximum Annual Table A amounts.

Based on currently available information, the 30 percent Table A allocation should be sufficient to eliminate all contractors' provisional human health and safety (HH&S) allocations identified in the Notice to State Water Project Contractors 22-04, Initial 2023 Allocation.

In determining available SWP supplies, DWR has considered several factors including SWP contractors' projected 2023 demands, existing storage in SWP conservation facilities, estimates of future runoff, SWP operational and regulatory requirements from the federal Endangered Species Act and California Endangered Species Act, and water rights obligations under the State Water Resources Control Board's authority. DWR may revise the SWP allocation if warranted by the year's developing hydrologic conditions and available SWP water supplies.

DWR will utilize the 30 percent schedules submitted by the Contractors in October 2022 (as part of initial requests), including any subsequent updates that may have been

[1] Attachment A presents these allocations.

provided to DWR. If a contractor foresees any changes to their water delivery schedule, please communicate such changes with DWR in a timely manner.

If you have any questions or need additional information, please contact John Leahigh, Assistant Division Manager, Water Management, SWP Division of Operations and Maintenance, at (916) 902-9876.

Attachment A: Updated 2023 SWP Allocation Table

Attachment A
2023 STATE WATER PROJECT ALLOCATION
Updated
1/26/23

SWP CONTRACTORS	TABLE A (Acre-Feet) (1)	TABLE A INITIAL REQUEST (Acre-Feet) (2)	TABLE A APPROVED ALLOCATION (Acre-Feet) (3)	TABLE A PERCENT INITIAL REQUEST APPROVED (4) = (3)/(2)
FEATHER RIVER				
County of Butte	27,500	27,500	16,500	60%
Plumas County FC&WCD	2,700	2,700	810	30%
City of Yuba City	9,600	9,600	3,840	40%
Subtotal	**39,800**	**39,800**	**21,150**	
NORTH BAY				
Napa County FC&WCD	29,025	29,025	11,610	40%
Solano County WA	47,756	47,756	19,103	40%
Subtotal	**76,781**	**76,781**	**30,713**	
SOUTH BAY				
Alameda County FC&WCD, Zone 7	80,619	80,619	24,186	30%
Alameda County WD	42,000	42,000	12,600	30%
Santa Clara Valley WD	100,000	100,000	30,000	30%
Subtotal	**222,619**	**222,619**	**66,786**	
SAN JOAQUIN VALLEY				
Oak Flat WD	5,700	5,700	1,710	30%
County of Kings	9,305	9,305	2,792	30%
Dudley Ridge WD	41,350	41,350	12,405	30%
Empire West Side ID	3,000	3,000	900	30%
Kern County WA	982,730	982,730	294,819	30%
Tulare Lake Basin WSD	87,471	87,471	26,242	30%
Subtotal	**1,129,556**	**1,129,556**	**338,868**	
CENTRAL COASTAL				
San Luis Obispo County FC&WCD	25,000	25,000	7,500	30%
Santa Barbara County FC&WCD	45,486	45,486	13,646	30%
Subtotal	**70,486**	**70,486**	**21,146**	
SOUTHERN CALIFORNIA				
Antelope Valley-East Kern WA	144,844	144,844	43,454	30%
Santa Clarita Valley WA	95,200	95,200	28,560	30%
Coachella Valley WD	138,350	138,350	41,505	30%
Crestline-Lake Arrowhead WA	5,800	5,800	1,740	30%
Desert WA	55,750	55,750	16,725	30%
Littlerock Creek ID	2,300	2,300	690	30%
Metropolitan WDSC	1,911,500	1,911,500	573,450	30%
Mojave WA	89,800	89,800	26,940	30%
Palmdale WD	21,300	21,300	6,390	30%
San Bernardino Valley MWD	102,600	102,600	30,780	30%
San Gabriel Valley MWD	28,800	28,800	8,640	30%
San Gorgonio Pass WA	17,300	17,300	5,190	30%
Ventura County WPD	20,000	20,000	6,000	30%
Subtotal	**2,633,544**	**2,633,544**	**790,064**	
TOTAL	**4,172,786**	**4,172,786**	**1,268,727**	**30%**

CITY OF ST. HELENA

RESOLUTION NO. 2023-

Resolution of the City Council of the City of St. Helena to: (1) Memorialize the Termination of the Phase II Water Emergency in November 2021, Effective December 2021 and (2) Direct Staff to Provide a Recommendation Related to the Termination of the Phase I Water Emergency at a Council Meeting in July 2023

WHEREAS, Resolution No. 2020-72 established a Phase I Water Emergency and Resolution 2020-107 established a Phase II Water Emergency; and

WHEREAS, based upon criteria established by the City of St. Helena Safe Water Yield Committee and Municipal Code, the Public Works Director ended the Phase II Water Emergency in November 2021; and

WHEREAS, the available water supply appears to be sufficient for the foreseeable future but additional confirming analysis is recommended at the end of the 2022/23 Fiscal Year as delineated in the Safe Water Yield report and St. Helena Municipal Code.

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. HELENA AS FOLLOWS:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The City Council terminates the Phase II Water Emergency retroactive to November 2021, effective December 2021.

SECTION 3. The City Council hereby requires staff to provide a presentation and recommendation related to the disposition of the Phase I Water Emergency at a Council meeting in July 2023 with the intent to either continue or terminate said conservation requirements.

Approved at a Regular Meeting of the St. Helena City Council on February 14, 2023, by the following vote:

Mayor Paul Dohring: _____

Vice Mayor Eric Hall: _____

Council Member Anna Chouteau: _____

Council Member Lester Hardy: _____

Council Member Billy Summers: _____

APPROVED: ATTEST:

_____ _____

Paul Jamison Dohring, Mayor Cindy Tzafopoulos, City Clerk

EXHIBIT D

Napa County News
State of Local Emergency expires due to drought conditions
(May 30, 2023)

NAPA COUNTY
CALIFORNIA

Napa County News

Posted on: May 30, 2023

State of Local Emergency expires due to drought conditions

NAPA, CA – On May 30, the Napa County Board of Supervisors voted to end the State of Local Emergency due to drought conditions in Napa County, thus terminating the emergency powers of county officials set forth in Resolution No. 2022-29.

The Board proclaimed a State of Local Emergency on March 8, 2022, following Proclamation of a State of Emergency by the Governor on May 10, 2021, and worsening drought conditions in winter 2021-2022. Government Code section 8630(c) requires local agencies to revisit local emergency proclamations at least once every 60 days until the local emergency is terminated.

Although the State of Local Emergency has ended, the county is still responsible for implementing the Groundwater Sustainability Plan. The reduced water criterion [0.3 acre-feet per acre for new wells in the Napa Valley Subbasin (one acre-foot equals 326,000 gallons)] was adopted June 7, 2022, during the State of Local Emergency. The criterion was put in place to ensure that future development does not further diminish groundwater supplies in the Subbasin.

Since October 1, 2022, Napa has received nearly 32 inches of rain, exceeding average annual rainfall. Despite a particularly wet winter, eight of the past 10 years have been characterized as dry to very dry conditions. While the wetter winter of 2022-2023 has achieved a notable recovery in groundwater levels since 2022, overall resilience and sustainability of Napa County's groundwater resources remain a top priority. The cumulative impact of these recent hotter, drier years has resulted in increased groundwater pumping to compensate for increased temperatures, reduced surface water supplies, and the resulting increased evaporative demand of plants and crops. While groundwater conditions have improved, groundwater level projections for fall of 2023 drop below the established Minimum Threshold values that could negatively impact sustainability for the Subbasin, which is why the county is committed to long-term groundwater sustainability for the public good.

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- Napa County News

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The Governor's Office continues to emphasize this message, stating "next winter's hydrology is uncertain and the most efficient way to preserve the State's improved surface water supplies is for Californians to continue their ongoing efforts to make conservation a way of life" (EO N-5-23). On March 28, 2023, a presentation to the Napa County Groundwater Sustainability Agency on the Water Year 2022 Annual Report concluded with the recommendation that "conservation be a Napa way of life."

For questions, please contact Napa County Natural Resources Conservation Manager Jamison Crosby at jamison.crosby@countyofnapa.org.

⇐ **Previous**
Napa County Board of Supervisors denies severance pay to former CEO Minh Tran

Next ⇒
Napa County awards $2.3 million to fund 14 projects for community-based organizations

Other News in Napa County News

CAL FIRE suspends burn permits in Colusa, Napa, Solano, Sonoma and Yolo Counties

Posted on: June 22, 2023

Napa County launches Easy Smart Pay service for property tax payment

Posted on: June 22, 2023

TRUTH Act public hearing set for July 18

Posted on: June 16, 2023

Community encouraged to take broadband digital equity public survey

Posted on: June 14, 2023

Board of Supervisors grants Napa County Forgivable Child Care Loan funds to seven providers

Posted on: June 13, 2023

Napa County Board of Supervisors appoints Ryan J. Alsop County Executive Officer

Posted on: June 8, 2023



Napa County Board of Supervisors denies severance pay to former CEO Minh Tran

Posted on: June 6, 2023

Napa County awards $2.3 million to fund 14 projects for community-based organizations

Posted on: May 16, 2023

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Board of Supervisors appoints newest Napa County Poet Laureate

Posted on: May 16, 2023



New Napa County commission and board appointments

Posted on: May 16, 2023

Recipients announced for Napa County's 2023-2024 Arts, Culture & Heritage Grant Program

Posted on: May 16, 2023

Agricultural Commissioner releases 2022 Napa County Agricultural Crop Report

Posted on: May 16, 2023

Federal COVID-19 Public Health Emergency Ends, Vaccinations Encouraged ahead of Summer

Posted on: May 11, 2023

Board of Supervisors approves board and commission appointments and reappointments

Posted on: April 4, 2023

Stay safe and informed with new Alert Napa County emergency notification system

Posted on: April 4, 2023

Napa County encourages childcare providers to apply for county childcare program

Posted on: April 4, 2023

Napa County Affordable Accessory Dwelling Unit Forgivable Loan Program officially launches

Posted on: March 17, 2023



Isolation guideline updates follow end of COVID-19 State of Emergency

Posted on: March 14, 2023

Napa County launches survey for public feedback on next County Executive Officer

Posted on: March 3, 2023

County to Host Groundbreaking Ceremony for New Jail Replacement Facility

Posted on: February 14, 2023



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Health & Human Services - Public Health highlights CPR and AED during American Heart Month

Posted on: February 10, 2023

CalFresh Emergency Allotments - Final Issuance in March 2023

Posted on: February 3, 2023

CA Department of Water Resources approves Napa Valley Subbasin Groundwater Sustainability Plan (GSP)

Posted on: January 26, 2023

County celebrates opening of Carneros Fire Station with ribbon cutting ceremony

Posted on: January 25, 2023



Napa County issues local emergency after recent storms

Posted on: January 18, 2023

Board of Supervisors appoint new chair and vice chair

Posted on: January 4, 2023

Linda Ong named Napa County Communication and Public Information Officer

Posted on: December 22, 2022



Napa County Appoints Dr. Christine Wu as Deputy Director of Health and Human Services Agency

Posted on: December 13, 2022



Napa County Program spurs Program Affordable Housing through Forgiveness of ADU Construction Loan

Posted on: December 5, 2022

PG&E announces likely PSPS for the northern most part of Napa County beginning this Sunday @ 6 AM

Posted on: October 22, 2022

Avian Influenza Detected in a Napa County Wild Bird

Posted on: September 12, 2022



Soscol Junction Project in Southern Napa County

Posted on: September 12, 2022

Google Translate

County encourages residents to stay cool, hydrated and informed during high heat



Posted on: August 31, 2022

Don't Wait for an Emergency; Apply for Your Ag Verification Card Today

Posted on: August 30, 2022

Paul Pelosi Pleads Guilty to DUI with Injury Charges

Posted on: August 23, 2022

OPR Publishes Wildfire Planning Resources

Posted on: August 18, 2022

Napa County Completes Legionella Bacteria Remediation for Hall of Justice Cooling Tower

Posted on: August 11, 2022

Ongoing Investigation Identifies Legionella in More Sites

Posted on: August 11, 2022

Paul Pelosi Arraigned on DUI with Injury Charges and Pleads Not Guilty

Posted on: August 3, 2022

Release of Napa County CEO

Posted on: July 29, 2022

Napa County Public Health Investigates Outbreak of Legionnaires' Disease

Posted on: July 29, 2022

Two Type 1 Helitankers will be based within LNU

Posted on: July 28, 2022

Napa County Public Health Investigates First Probable Case of Monkeypox

Posted on: July 26, 2022

Annual Increase to the Local Assessment Roll

Posted on: July 12, 2022

Agricultural Commissioner releases 2021 Napa County Agricultural Crop Report

Posted on: June 7, 2022

Napa County Will Recognize Juneteenth as an Observed County Holiday



Posted on: April 19, 2022

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Ahead of Fire Season, Napa County Kicks Off the County's 2022 Emergency Preparedness Campaign

Posted on: March 23, 2022

California Deploys over $10 million of Non-Response Follow Up Funding to Double Down on 2,000 Census

Posted on: September 16, 2020

Property Tax Postponement Applications Now Available

Posted on: September 4, 2020

Wildfire Local Assistance Center Opens in Napa County

Posted on: August 28, 2020

Wildfire Community Briefing 08/21/2020

Posted on: August 21, 2020

Community Rating System Update

Posted on: August 4, 2020

Napa County Placed on Statewide COVID-19 Monitoring List

Posted on: July 7, 2020

EXHIBIT E

DWR News Release (Jan. 26, 2023)

Recent Storms Allow State Water Project to Increase Expected 2023 Deliveries to 1.27 Million Acre-Feet of Water

Published: Jan 26, 2023

SACRAMENTO, Calif. –The Department of Water Resources (DWR) today announced that recent storms will allow the State Water Project (SWP) to boost deliveries to 29 public water agencies serving 27 million Californians. Based on the amount of water captured and stored in recent weeks, DWR now expects to deliver 30 percent of requested water supplies – or 1.27 million acre-feet -- in 2023, up from the initial 5 percent announced on December 1.

The allocation increase is the direct result of extreme weather in late December and nine atmospheric rivers in early January that helped fill reservoirs and dramatically increase the Sierra Nevada snowpack. The SWP's two largest reservoirs (Oroville and San Luis) have gained a combined 1.62 million acre-feet of water in storage -- roughly enough to provide water to 5.6 million households for a year. While Water Year 2023 began with below average precipitation, conditions shifted to extreme above average conditions.

"We are pleased that we can increase the allocation now and provide more water to local water agencies," said DWR Director Karla Nemeth. "These storms made clear the importance of our efforts to modernize our existing water infrastructure for an era of intensified drought and flood. Given these dramatic swings, these storm flows are badly needed to refill groundwater basins and support recycled water plants."

The updated SWP delivery forecast takes into account current reservoir storage and is based on a conservative runoff forecast. It does not take into account the current Sierra Nevada snowpack. DWR will conduct snow surveys on February 1, March 1, April 1, and May 1 and may further update the allocation as the water supply outlook becomes clearer with the new data.

In addition to on the ground surveys, DWR will gather data from its Airborne Snow Observatory (ASO) surveys. For the second year in a row, DWR is broadening the deployment of these more sophisticated technologies, such as ASO surveys, that can collect snow measurements farther upslope of the Sierra Nevada. The data from these flights, which use LiDAR and spectrometer technology to measure snowpack across broad swaths of key watersheds, will be used by DWR to get a more accurate account of California's snowpack and to update water supply runoff forecasts. Since the storms California experienced this month saw variable snow elevations, the data from ASO flights will help DWR verify snow course and snow sensor data and understand how snow has been distributed across the Sierra Nevada.

DWR cautioned that while recent storms have been impressive, two months remain in the wet season and California could see a return to warm and dry conditions prior to April 1. Californians should continue to use water wisely to help the state adapt to a hotter, drier future and the possible return of drought.

The SWP pumps currently are operating at maximum capacity of 9,500 cubic feet per second (cfs) and will continue to be adjusted as needed to meet State and federal requirements. However, had the proposed Delta Conveyance Project been in place, the SWP could have stored an additional 202,000 acre-feet of water – enough to supply more than 710,000 households for a year – between January 1 and January 23 while staying within compliance of rules to protect endangered species.

California traditionally receives half its rain and snow by the end of January. Water managers will reassess conditions monthly throughout the winter and spring. Starting in February, the assessments will incorporate snowpack data and runoff forecasts.

Water managers will be monitoring how the wet season develops and whether further actions may be necessary later in the winter. Additional actions that have been taken previously, such as submission of a Temporary Urgency Change Petition (TUCP) or

installation of the West False River Emergency Drought Salinity Barrier in the Sacramento-San Joaquin Delta, are unlikely this year based on current conditions.

Each year, DWR provides the initial SWP allocation by December 1 based on available water storage, projected water supply, and water demands. Allocations are updated monthly as snowpack and runoff information is assessed, with a final allocation typically determined in May or June.

The lowest initial SWP allocation was zero percent on December 1, 2021, with limited water designated only for any unmet human health and safety needs. Last year's final allocation was 5 percent plus unmet human health and safety needs. Four of the 29 State Water Contractors ultimately requested and received additional human health and safety water supply.

DWR will host a media briefing to discuss this announcement, as well as how DWR and the State are preparing for the remainder of the water year given recent storms and the ongoing drought, later today from 1:00 – 2:00 p.m. (PST). Credentialed media can register for the briefing at

https://ca-water-gov.zoom.us/meeting/register/tZctdu2upzkjGNOvffSJ8Agdiw4GY105t7gG.

Contact:
Bryan Byrd, Public Affairs, Department of Water Resources

media@water.ca.gov

EXHIBIT F

DWR News Release (Mar. 24, 2023)

Harnessing Series of Winter Storms, California Increases State Water Project Allocation

Published: Mar 24, 2023

SACRAMENTO, Calif. – The Department of Water Resources (DWR) today announced a significant boost in the forecasted State Water Project (SWP) deliveries this year due to continued winter storms in March and a massive Sierra snowpack. DWR now expects to deliver 75 percent of requested water supplies, up from 35 percent announced in February. The increase translates to an additional 1.7 million acre-feet of water for the 29 public water agencies that serve 27 million Californians.

Consistent storms in late February and March have built up the Sierra snowpack to more than double the amount that California typically sees this time of year. Rainfall has also allowed for robust flows through the system, providing adequate water supply for the environment and endangered fish species while allowing the SWP to pump the maximum amount of water allowed under state and federal permits into reservoir storage south of the Sacramento-San Joaquin Delta.

“California continues to experience weather whiplash, going from extreme drought to at least 19 atmospheric rivers since late December. It really demonstrates that in times of plenty, we need to move as much water into storage as is feasible,” said DWR Director Karla Nemeth. “We’ve been able to manage the system to the benefit of communities, agriculture and the environment. It’s certainly been a welcome improvement following the three driest years on record for California.”

Taking advantage of the extreme high flows in the system, the SWP is making additional water available to any contractor that has the ability to store the water in its own system, including through groundwater recharge. Formally known as Article 21 water, this water does not count toward formal SWP allocation amounts.

The SWP typically evaluates the allocation forecasts monthly using the latest snow survey data, reservoir storage and spring runoff forecasts. The 75 percent forecasted allocation announced today takes into account that data from March. Further adjustments to the forecasted allocation are likely following the milestone April snow survey measurements. April 1 is traditionally when California’s snowpack peaks and starts to melt. DWR is planning to host its April snow survey on Monday, April 3, at Phillips Station, weather conditions permitting.

DWR now expects San Luis Reservoir in Merced County to end the wet season at capacity. Lake Oroville, the State Water Project’s largest reservoir, is at 120 percent of average for this time of year and currently releasing water through the Oroville Spillway to reduce flood risk for downstream communities in anticipation of the spring snowmelt. The SWP will continue to optimize water storage in Lake Oroville to support environmental needs in the summer and allow for carryover storage for next year if dry conditions return.

Preparing California for extreme weather swings will require the rehabilitation and modernization of SWP infrastructure. As the backbone of water supply delivery, California must address subsidence along the California Aqueduct in the Central Valley and advance the Delta Conveyance Project so that the state can move as much water as possible during high flow events.

While California’s surface water conditions have greatly improved this year following three years of historic drought, several water supply challenges remain in parts of the state.

The Colorado River Basin, which is a critical water supply source for Southern California, is still in the midst of a 23-year drought. Millions of Californians also rely on groundwater supplies as a sole source of water, and the state’s groundwater basins will be slow to recover following the extreme drought. Californians should continue to use water wisely to help the state adapt to a hotter, drier future.

DWR will host a media briefing via Zoom at 1 p.m. today to discuss the latest on storm conditions, flood response, and State Water Project operations and the increased allocation forecast. Register here.

Resources

- Latest on California's Drought Response
- Current Statewide Reservoir Conditions
- Save Our Water: Tips to Conserve Water During a Drought

Contact:
Ryan Endean, Public Affairs, Department of Water Resources

media@water.ca.gov

From: W Thompson
To: Public Comment
Subject: [External] Hunter Subdivision
Date: Saturday, June 24, 2023 5:11:38 PM

As a resident of Vineyard Valley I have reviewed the EIS and believe it addresses the impact that this project is expected to have. The location of the project extends the city's development boundaries and minimizes the impact of scattered development in St Helena. The project is adjacent to other mixed use areas of St Helena and therefore makes a good addition to the city.
I support the project development.
Sincerely,

Bill Thompson
Thompswj@gmail.com
33 Redondo Court
St Helena. CA 94574

St Helena City Council,

I believe that the Hunter parcel is a buildable parcel…with all the entitled rights that it has carried with it from the day the City participated in its creation as a viable City lot in a certain zoning designation. I believe it can, (and existing in a region with a housing shortage, should) be developed.
The Planning Commission and City Council and Citizens of St Helena are not entitled to an inspired project. But they are entitled/required even to receive and approve a project that can demonstrate that it meets the standards of our code. See below section from Code: C. 17.146.050 Residential development project-Inclusionary/in-lieu fee requirements:

I. Basic Requirements for Owner-Occupied and Rental Affordable Units. Affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction to market rate units in the same residential project. Subject to the approval of the planning commission, square footage of affordable units and interior features in affordable units need not be the same as or equivalent to those in market rate units in the same residential project, so long as they are of good quality and are consistent with contemporary standards for new housing. Affordable units shall be dispersed throughout the residential project, or, subject to the approval of the planning commission, may be clustered within the residential project when this furthers affordable housing opportunities.

I believe this is an inspired and valuable piece of our code that we should take pride in. It makes clear that in no way should required/more affordable units be segregated and instead requires that they be integrated. Creating and weaving into our urban fabric varied housing opportunities should be seen as a vital and beautiful facet of meeting our infrastructure obligations. I believe it is a piece of code designed to make critical workforce housing solutions most successful. The Planning Commission provided no legal findings or rationale or even discussion to make the case that approving this method/configuration of parcel map “furthered affordable housing opportunities”. On that point, I do not believe it should have been approved. With the approval of this version of a proposed/tentative parcel map there will exist no plausible way to craft “after the fact” an inclusive approach. It is that simple. I understand it is a challenge create attainable housing for all the sorts of working people that the City needs to be sustainable and to thrive; and I appreciate the amount of effort that has been engaged in by City staff, Dudek, the Developer and even Planning Commission and City Council. However, I believe it is worth the additional effort to get this project properly configured so that it can be most productive.

I believe we (as planners, developers, and as a City) should welcome the development of this legal parcel…as we are obligated and I also believe we should make no excuses or apologies for also requiring it to be developed legally and appropriately to the standards set forth in our code.

I agree with the HCD letter in saying to not reduce the density. I appreciate their support for housing and I would welcome and wholly support a project that would be more dense, but critically also, more integrated, textured and varied as our Code instructs and more critically, REQUIRES. That collaborative approach would be more beneficial for the fabric of town as a whole and also would make a more successful project for the developer. As with any project, until it can be demonstrated that it meets the standard or code, I do not believe it should progress to its next step.

Thank you for your consideration,

Daniel Hale

From:	Vineyard Valley MHP
To:	Public Comment
Cc:	Paul Dohring; Eric Hall; Anna Chouteau; Lester Hardy; Billy Summers; Cindy Tzafopoulos
Subject:	[External] Hunter Subdivision Project
Date:	Monday, June 26, 2023 12:10:07 PM

Good Evening

I am Greg Reynolds, 290 Pope Street St Helena. I am the managing partner for Vineyard Valley Mobile Home Park.

There continues to be a myriad of concerns we have about the Hunter Project. As our residents have come to understand more about the project, topics of impact are significant and across the board, from levee access and levee maintenance to vista and privacy concerns the electorate here in VV is not happy.

There are so many mitigating circumstances raised in today's current environment around water, fire safety, emergency response, and traffic to name a few that your job as City Council members makes it all the more critical that evidence doesn't get ignored. You have a tough job you need to forecast where a project like this takes the citizens of Vineyard Valley and the greater City of St Helena.

I will focus just on three issues

- Emergency Evacuation (Saving Lives)
- Water specific to Sewer Discharge
- Traffic

Vineyard Valley is a Retirement Community 55 and older approximately 218 homes When everyone is home, the park is home to 350 people, many are retired seniors.

After the last 7 years and recent years with the Glass Fire We have spent more time each year focused on fire suppression, readiness, and safety. This year again primarily in neighborhood outreach, fuel suppression and resident evacuation in the event of an emergency.

After the devastating floods of 86 and 95 the park was transformed with a significant investment in the Flood Wall Project. The design and building of that project attempted to mitigate the flood plain realities **with the Flood Wall, the levee and holding pond and pumps.** The deployment of that significant investment did not include the construction referenced here. The **Hunter Project** was not part of that plan and the safety it proposed to deliver.

We are very concerned that a safe evacuation and access through the back of the park will disappear with this project. We are concerned that the construction will undermine the levee and overwhelm the Army Corp Strategy put in place to protect our 350 residents and their homes. **To build behind a levee** was not the intent of this strategy.

We are concerned about water as many have commented.

We will comment in writing specifically about wastewater flows and what appears to be a plan to connect a portion of the **Hunter Project** to Vineyard Valleys waste water discharge sewer. This is a City sewer that is documented to have significant issues when it does rain. The majority of the Hunter Project single family homes 46 out of 51 will be connected to the VV

sewer. We will be getting most of this sewer flow. Considering the multi-family units as well almost 75% of the total project discharge is directed our way, the VV sewer is already overtaxed, this will clearly drown this infrastructure. As in other parts of the City this is unacceptable and expensive as the City spends and documents every clean up situation.

The traffic data clearly demonstrates significant challenges for our senior contingent. In the FEIR It is clear from the table the Proposed Project Transportation Demand Management (TDM) strategies would result in a **Project VMT to be 15.2 %** higher than the City wide VMT per capita. Final EIR concludes and clearly states that the Proposed Project has a significant and unavoidable impact, **then it is our opinion that the council has an obligation to the citizens of St Helena to protect their environmental integrity and vote to deny acceptance of this project.**

Thank You

Greg Reynolds

Vineyard Valley residents in support of this letter:
Denise Leonetti, 7 Redondo Court
Claude and Chantal Leruitte, 48 Laguna Seca Court
Mara Rankin, 7 La Cuesta Court
Fred and Ann Camacho,18 Del Rio Court
Jim and Mary McTiernan, 15 Laguna Seca Court
John and Celia Rehnberg, 1 La Cuesta Court
Judy Greene, 20 Redondo Court
Kristi Lyn Matthews, 14 Redondo Court
Jean Martin, 5 San Juan Court
Linda Wall, 6 Del Campo Court
Greg and Denise Nelson, 59 Laguna Seca Court
Carl and Patricia Myers, 3 San Ardo Court
Darryl Myers, 3 San Ardo Court
Chris Echols, 11 Del Rio Court
Barbara and Tom Ringenberg, 9 Los Robles Court
David Armington, 6 Del Monte Court
Bill Savidge, 7 San Lucas Court
Madeline DeMarco, 5 Del Campo Court
Gary Crosman, 5 Del Campo Court
Kevin and Karen Bradley, 6 San Juan Court
Betsy Holzhauer, 17 Los Robles Court
Rodney and Elizabeth Green
Nora O'Neill, 37 Laguna Seca Court
Sherry Powell, 4 La Canada Court
Diana Lavagnino, 7 Los Robles Court
Barbara Yost, 19 Del Rio Cout
Katalin Kádár Lynn PhD, 12 Redondo Court
Will and Kathy Canum, 12 San Lucas Court
Cathy Small, 9 Del Monte Court
James Wayson and Marianne Sylva, 8 Del Rio Court
Anne Gridley, 6 Laguna Seca Court
James and Janeen Dirienzo, 10 Redondo Court
Dorothe Gingerelli, 50 Laguna Seca Court
Linda Titus, 38 Laguna Seca Court
Andree Bryan, 39 Laguna Seca Court
Vivian and Kenneth Robison, 35 Redondo Court

Nancy Batt, 24 San Lucas Court
Paul Piazza, 49 Laguna Seca Court
Lauretta Cecchino, 5 Los Robles Court
Marsha Maxcy, 31 Redondo Court
Wendy Strachan, 53 Laguna Seca Court
Bette Antor,3 Del Rio Court
Mary and John West, 3 Laguna Seca Court
Dennis and Mariam Hansen, 5 San Lucas Court
Bob Childs and Nancy Carlson, 2 La Canada Court
Roger Collins, 55 Laguna Seca Court
Henk and Joyce Brok, 15 Redondo Court
John and Jerri Patton, 15 San Juan Court
Jeff Bernys, 5 La Canada Court

Cindy Tzafopoulos

From: Joe McGrath <joe.mcgrath65@gmail.com>
Sent: Monday, June 26, 2023 1:10 PM
To: Cindy Tzafopoulos; Joe McGrath
Subject: [External] Submission for Hunter Project

Hi Cindy:

Can you submit this letter for tonight's meeting.
Thx,

Joe

****

Mr. Mayor, Council, and Staff,

With the pending decision on the Hunter Project, the City now faces an important and fraught decision. As the council considers this matter, it will likely come to the conclusion that it has "no choice" but to approve the pending application and tentative map, either facing the wrath of many concerned citizens or a precarious legal challenge by the Developer.

However the decision goes, it is imperative that the City acknowledge that both current and prior administrations have painted the City into the corner it now finds itself with two administrative decisions.

1) Re-zoning the parcel to MDR post funding the levee.

My father was flooded out twice in Vineyard Valley. The need to re-engineer the river bed north or the Pope Street bridge was real. In his article "*St. Helena, California: Dealing with a Field-of-Dreams Levee, Residual Risk, and a Flood of Controversy*" (Posted on July 17, 2016 by UC Davis Center for Watershed Sciences), Nicolas Printer has articulated a three-point sniff test to justify construction of a levee to protect floodplain infrastructure if it is:
a) concentrated
b) high in value
c) pre-existing

The Vineyard Valley mobile home park satisfied all three elements of the sniff test, and as such, justified its construction. While one can argue that Vineyard Valley should have never been built in that location, it existed at the time the decision was made to fund the levee.

The decision to effectively rezone agricultural land (soon to be protected by a levee) to Medium Density Residential effectively turned a defensive and justified levee into what Printer calls a "Field of Dreams" levee. "Build it and they will come". And while we assure ourselves that the levee is build to withstand a 200-yr standard with a .5% annual chance of being breached, even today, the New York Times asserts that the rainfall averages that have established these criteria are woefully outdated to a calmer climatic (ie pre climate change) history.

By zoning the land MDR, the City granted entitlement rights to the Developer in a high-risk area.

2) Housing Element

The purpose of the Housing Element (HE) and the Regional Housing Needs Allocation (RHNA) allocations as legislated and regulated by the State of California is an attempt to equitably distribute the anticipated population growth of California to all the Counties and Municipalities of the State. The HE process however does not greatly distinguish the unique challenges of every community in California. In the case of St. Helena and other desirable second home communities, the Housing Element and RHNA processes severely miss the objective in the allocation of target numbers for the "above moderate" (ie. > 120% AMI) or "market rate" category of housing. In many communities of California, a new single family subdivision serving "market rate" would solve both workforce housing needs and RHNA goals. In St. Helena this is just not so. Placing goals on St. Helena to build more market rate housing without capping Average Median Income (AMI) restrictions regarding the market rate development (eg. 200%, 300%...??) serves little purpose other than to open St. Helena up for **speculative development for more second homes.** Surely that argument should be made to the State of California in our HE submission?

So now the State is arguing on behalf of speculative developers to build more second homes in our community that will do little to help the workforce housing shortage.

Moving Forward

While the City is now painted in a corner, it still has options. And it still has leverage. Due to the EIR's "unmitigated significant impact" regarding traffic, the City must make a statement of overriding consideration due to the sufficient benefit of the project to the community. The City should use this leverage to extract benefits beyond property tax receipts.

It seems at minimum that the City should trade a quantity of AMI deed-restricted single-family (SF) homes integrated into the Single Family portion of the project for a quantity of deed-restricted units in the Affordable Multi-family portion of the project. The deed-restricted SF homes could perhaps be smaller parcels with smaller homes, and, or perhaps deed-restricted beyond the 120% AMI cap that defines "affordable". An effort such as this would at least make steps toward creating a more vibrant and integrated community that makes a small contribution toward the workforce housing shortage.

And perhaps we could thread the needle between community wrath and ongoing legal challenges.

At minimum, we should all reflect on past decisions and current policy that have shaped this predicament.

Joe McGrath

TO: City Council
FROM: Sandra McCorkle

I am writing to support the statement submitted by Josh Devore on behalf of St. Helena Citizens for a Sustainable Future. I hope that the Council will carefully consider the statement of Overriding Considerations they are asked to adopt.

As Mr. Devore stated, the Project has no stated benefits and as a result the City has no basis for adopting a Statement of Overriding Considerations. There is no evidence in the record as to any benefits for the City resulting from the Project. CEQA requires "the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits . . . of a proposed project against its unavoidable environmental risks when determining to approve the project." The Council is required to document such benefits, by stating "in writing the specific reasons to support its action based on the final EIR and/or other information in the record."

The most recent Staff Report concedes that "there are no direct fiscal impacts to the General Fund resulting from the approval of the Tentative Parcel Map." As such, and since the City has piecemealed the approvals, the decision before the City Council now has no fiscal benefit. And again, other than a generic suggestion that 'all housing is good', the City has not presented the public with any specific benefits of the Project that is actually proposed to support adopting a Statement of Overriding Considerations. The draft Statement of Overriding Considerations still contains no specific benefits, only general platitudes. And the Staff Report concedes that any fiscal or housing benefits from the project can only come from future approvals. Because there is no affordable housing agreement, there is no affordable housing benefit – the Staff Report makes clear that remains undecided. Even the latest housing element update acknowledges that the Project cannot be considered as "affordable" due to the lack of an affordable housing agreement. As such, in conducting the required balancing, there are no tangible benefits to the Project – which at this point is purely a tentative division of land and does not allow the construction of any housing – affordable or otherwise. Without a complete Project to consider, there is no way to analyze any potential benefits. The applicant's piecemealing of the Project in direct contradiction to the City's Subdivision Code and CEQA renders any potential benefits from future required approvals purely speculative. There is no evidence cited in the proposed findings of anything other than prejudging that future approvals may lead to future benefits. Such speculation lacks substantial evidence to support adoption of a statement of overriding considerations.

Thank you. Sandra McCorkle
1178 Meadowcreek Circle

From: ann@nieman.org
To: Public Comment
Cc: ann@nieman.org; Cindy Tzafopoulos
Subject: [External] Public comment for tonight"s meeting - June 26, 2023
Date: Monday, June 26, 2023 12:26:22 PM
Importance: High

Submittal for Public Comment to tonight's City Council Special Meeting – June 26, 2023 – New Business item 6.1 – proposed Hunter/VanZuphten project tentative map

Honorable Mayor and City Council,

I am writing to request the City Council, in keeping with your public pledge to operate in a transparent and informative manner, ensure that all questions during the Public Comment at the Hunter project City meeting tonight, be noted by the City Clerk and answered by City Staff or Council prior to the discussion and final vote taken.

As often heard by a frustrated St Helena public, the questions posed by residents during the Public Comment period are often not answered by the Council and City Staff prior to the Council vote. While many of us realize that Council comments during that period are limited to allow the public uninterrupted time, the questions posed by your constituency should not go unanswered before a vote is taken, so we understand fully what the council is committing the taxpayers to. We voted you in to office to represent us in decisions that affect us, and we need to know how you resolve the public's questions in your vote of yes or no. As you are well aware, the decision tonight is one that impacts all St Helena residents, and as you have seen over a decade of opposition, including over 1,000 signatures recently gathered to oppose the project, there needs to be clear and full answers provided before our elected officials vote on something that your constituency so widely and strongly opposes.

I will include my questions here, to ensure that they are included in the meeting and answers are provided to the residents of St Helena before the vote.

1. What is the evacuation route for residents in, and near, the Hunter/VanZuphten project in the event of a flood or levee failure? (Note: This is not a question about fire evacuation.)
    a. Please supply the basic information regarding: What is the projected timing of a levee failure evacuation? What were the numbers used for the number of people and number of cars to safely evacuate? Who did the evacuation modeling? Where can the Public find this report?
    b. What is the flood evacuation route and projected timing specifically for the senior community of Vineyard Valley residents to safely evacuate, since they are situated downriver at lower elevations than the Hunter project housing?

2. In CA State Assembly Bill 1898, the City of St Helena agreed to indemnify the State of California for any damages resulting from the levee project. Is the city of St Helena liable for damages caused by levee malfunction or failure? If not, who is responsible for the liability? If St Helena is not liable, does the City have that in writing? Where can the public access that

information so we are clear about our liability?

3. Did the project's EIR include the allowable Density Bonus and legal ADU (accessory dwelling units) impacts such as water use, surface permeability and stormwater drainage, traffic, fire and flood evacuation timing, etc? (ADU's legally allowed in the remaining 46 housing lots i.e., of the 57 housing lots, 11 will have an ADU, so there are 46 home lots that can also build ADU's. If not, will there be another EIR since these additional impact may have made the project non-mitigatable in numerous ways if it had been included in the initial EIR as Dudek stated clearly in the Public Meeting at the St Helena firehouse on October 22, 2016, which was recorded.

4. What studies have been done to evaluate the impact of the use of the well on the project site specifically because the pre-existing vineyard covering the project site was NEVER irrigated. There is no historic data for how that well will function and how it will impact the Napa River and the City water supply form the Stonebridge wells. Please provide the public information/report that evaluated that well's impacts on:
    a. The Napa River
    b. The City water supply form the Stonebridge wells?

Thank you for your service, and for your commitment to ensuring that the City Council and Staff provide complete and transparent information to the St Helena public.

Ann Nevero
St Helena resident

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Daniel R. Golub
415-743-6900
Daniel.Golub@hklaw.com

June 26, 2023

Via Email

Paul Dohring, Mayor
Eric Hall, Vice Mayor
Anna Chouteau, Council Member
Lester Hardy, Council Member
Billy Summers, Council Member
CITY OF ST. HELENA CITY COUNCIL
1088 College Avenue
St. Helena, CA 94574

Re: Response to Further Late Comments – Hunter Subdivision Project

Dear Mayor Dohring, Vice Mayor Hall, and Councilmembers:

Holland & Knight LLP represents Dennis Hunter, Kelly and Ben Vanzutphen, and White Fang Properties, LLC (collectively, the "Applicant Team") in connection with the Hunter Subdivision project located north of Hunt Avenue (APN 009-030-057) (the "Project") in St. Helena (the "City").[1]

We write to respond to yet another last-minute letter from opponents of the Project,[2] which urges the City to violate both state housing law and the commitments made in its General Plan, as amended by its recently-adopted Housing Element. At the outset, we note that while the letter specifically purports to respond "to the applicant's counsel's May 1 letter [and] to points raised at the May 1, 2023 City Council meeting," it was not provided until Friday, June 23, nearly eight weeks after those events. Aside from being discourteous to City staff, "late hit" letters raising CEQA issues are highly disfavored by the judiciary. *See Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 568 ("We cannot, of course, overemphasize our disapproval of the tactic of withholding objections, which could have been raised earlier in the environmental

[1] We would like to take the opportunity to clarify a discrepancy in our prior letter, dated June 23, 2023. At Page 3, Paragraph 5, Sentence 1, the letter should have referred to "*water* sources serving the City, including the Bell Canyon Reservoir," and at Page 4, Paragraph 1, Sentence 1, should have said that "*water* levels have increased at the Bell Canyon Reservoir in 2023," but due to an editing error the term "groundwater" rather than "water" was used.

[2] Saint Helena Citizens for a Sustainable Future, "Hunter Subdivision Project, File #PL10-040" (June 23, 2023).

review process, solely for the purpose of obstruction and delay."). We note that the Council continued the prior meeting purportedly for the purpose of allowing staff sufficient time to respond to the opponents' *last* round of objections. It is clear that there will be no end to these types of comments until the Council makes it decision, and this pattern gives rise to a strong inference that these perpetual comment letters are sent for the purpose of delay. It is for these reasons that the Legislature in the Housing Crisis Act has enacted a "five hearing limit" which requires a final vote at the upcoming hearing.

In any event, the letter fails on substance as well as timing, for the reasons that follow.

1. **The City's Discretion With Respect to Project Approval Is Heavily Constrained, and the City Cannot Feasibly Achieve Housing Element Compliance Without the Project.**

As set forth in the Applicant Team's June 23, 2023 correspondence regarding the Project, the City's obligations under the Housing Accountability Act ("HAA") and Housing Element Law weigh strongly in favor of approving the Project. First, the City's discretion to disapprove the Project is heavily constrained, requiring written findings, supported by a preponderance of evidence on the record, that the Project "would have a specific, adverse impact upon the public health or safety," and that there is "no feasible method to satisfactorily mitigate or avoid the adverse impact … other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density."[3] Second, under Housing Element Law, the Project's 87 units supply roughly a third of the City's total 6th Cycle Regional Housing Needs Allocation ("RHNA"). The City has consistently relied on these units to meet its RHNA obligations in the draft Housing Elements provided to the Department of Housing and Community Development ("HCD"). To this end, HCD's Housing Accountability Unit provided a Letter of Support and Technical Assistance to the City ("HAU Technical Assistance Letter"), reminding the City of its obligations under both the Housing Accountability Act and Housing Element Law, concluding that "HCD supports the approval of the Project during this critical housing crisis and appreciates the opportunity to assist the City in meeting its statutory obligations in the decision-making process."[4]

The June 23, 2023 correspondence from Saint Helena Citizens for a Sustainable Future ("CSF") begins by encouraging the City to disregard the City's legal obligations. Contrary to CSF's assertions, the City cannot jettison one-third of its entire 6th Cycle RHNA obligation and expect to be entitled to have its Housing Element certified – and the staff report and HCD guidance have well advised the City of the consequences of remaining out of Housing Element

[3] Gov. Code § 65589.5(j)(1). The HAA also clarifies that "It is the intent of the Legislature that the conditions that would have a specific, adverse impact upon the public health and safety, as described in paragraph (2) of subdivision (d) and paragraph (1) of subdivision (j), arise infrequently." Gov. Code § 65589.5(3).

[4] HAU Technical Assistance Letter at 2.

compliance.[5] As we have detailed to HCD on several prior occasions, the Project is the only concrete proposal of any magnitude that appears in the City's Housing Element site inventory.[6] Nearly all of the remaining projections are speculative, and many are particularly unlikely in view of existing uses that show no indication of ceasing during the 6th Cycle. For this reason, the "alternative" referenced by CSF – the supposed "surplus capacity" identified in the City's Housing Element – is no alternative at all. Those projections have not been accepted as satisfactory by HCD, which has twice rejected the City's draft Housing Element to date. Yet CSF proposes that the City discard the only concrete development proposal on the horizon, in spite of the fact that it is zoning-compliant.

For the same reason, CSF's comment that the Project "will not be helpful to the State's housing crisis," but will instead "take away an opportunity for a more inclusive, affordable, and better housing opportunity for the City" is misguided. Again, employing a classic NIMBY tactic, CSF proposes that the City disregard a real, concrete proposal in favor of an imaginary one. No such "more inclusive, affordable, better" proposal exists. The Project, which will comply with the City's inclusionary ordinance and therefore contribute significantly to affordable housing,[7] does exist. Nor does CSF explain why the imaginary "more inclusive, affordable, better" project it has conjured up will avoid the alleged CEQA impacts that it purports to identify elsewhere in the letter and which it claims makes the Project site entirely inappropriate for housing.

Nor has HCD taken the position that "all housing is good" – but the State Legislature and executive branch have certainly taken the position that "building no housing is bad." Under Housing Element Law, all jurisdictions must build *some* housing, and HCD has advised cities that these statutory requirements will actually be enforced in the 6th Cycle. Under these laws, a city is not entitled to decide *whether* it will allow any housing to be built within its borders, but it has broad discretion to decide *where* it is built. And in exercising this discretion, the City zoned and planned the Project Site for housing, and then elected to adopt a Housing Element that places

[5] If the City were to disapprove the Project as CSF suggests, then the Applicant Team – as well as other developers in the City – would be entitled to submit a "Builder's Remedy" application for a different, more intense project on this property that would not be required to conform the City's zoning and General Plan. The Applicant Team would prefer to avoid this outcome and simply develop a medium-density residential development project consistent with the City's zoning, which is what it has proposed to do for more than a decade

[6] Attached as Exhibits A and B are the Applicant Team's November 28, 2022 correspondence to HCD detailing inadequacies with the City's initial draft Housing Element, and HCD's December 6, 2022 correspondence to the City confirming that the initial draft Housing Element failed to substantially comply with state law. Attached as Exhibits C and D are the Applicant Team's March 9, 2023 correspondence to HCD detailing inadequacies with the City's subsequent draft Housing Element, and HCD's April 7, 2023 correspondence to the City confirming that the subsequent draft Housing Element failed to substantially comply with state law. Attached as Exhibit E is the City's Adopted Housing Element. As it recognizes, the City has failed for years to meet is legal requirements to permit sufficient housing to meet its Regional Housing Needs Allocation.

[7] Although there are multiple pathways to comply with the City's inclusionary ordinance, the default pathway, set forth in Chapter 17.146 of the City's Municipal Code, is to ensure that 20% of all new dwelling units are affordable, at income levels commensurate with the City's outstanding RHNA share. In any event, the Project will meet or exceed the requirements for low- or moderate-income housing as set forth in Section 65915 of the Government Code..

87 units – the Project's 87 units – on the Hunter Subdivision site, and specifically committed to streamlining all remaining approvals for the Project by 2025. Those commitments are meaningful, both under Housing Element Law and because they are now incorporated into the City's General Plan.[8] So, contrary to CSF's statements, Housing Element Law is deeply relevant to this determination. Moreover, to disapprove the Project now, while HCD's review of the adopted Housing Element is still pending, would loudly communicate that the City has no intention of upholding any of the commitments set forth therein.

2. The City's Discretion With Respect to Project Approval Is Heavily Constrained, and the City Cannot Feasibly Achieve Housing Element Compliance Without the Project.

Next, the CSF letter posits that the City has failed to identify any benefits of the Project. Again, they are incorrect. As discussed in the Applicant Team's June 23, 2023 correspondence, the considerations previously identified in the draft Statement of Overriding Considerations are more than sufficient on their own:

1. The Project provides needed housing to the City, particularly affordable housing.
2. The City, per the adopted 2015 Housing Element, has a jobs to housing ratio above the County average, indicating a need for additional housing. As of the most recent Housing Element Progress Report (April 2022), the City had not met its regional housing needs allocation for very-low or moderate income housing.
3. The Project would implement the City's General Plan. The Project site is identified as a housing site in the City's current General Plan, the current Housing Element, and the previous two iterations of the City's General Plan.
4. The significant and unavoidable impact is related to VMT. Ultimately VMT per capita will be reduced by providing necessary housing in jurisdictions with a high number of jobs. As stated previously, the City of St. Helena currently has a jobs housing imbalance which the Project will help address.
5. The Project will pay development fees which will assist in needed infrastructure improvements in the City, including wastewater treatment and collection systems.
6. The Project would construct the extension of Starr Avenue and the partial extension of Adams Street consistent with the General Plan Circulation Element.[9]

These are not mere platitudes, as CSF contends. The City does need additional housing and affordable housing. The Project supplies that. The City does have a jobs-to-housing imbalance. The Project will help address that. The Project is consistent with the City's General Plan (and

[8] CSF was conspicuously absent from the Planning Commission and City Council debates concerning the Housing Element. If CSF did not want the Project built, it had ample opportunity to raise those concerns *before* the City repeatedly told HCD that it would put 87 units on the Hunter Subdivision site and then amended its General Plan to write those commitments into law.

[9] Report to the City Council (May 1, 2023 Hearing), at 13.

indeed, with the adoption of the Housing Element, Project approval is required by the City's General Plan). The Project will help reduce VMT impacts by correcting the jobs-to-housing imbalance. The Project will supply the City with development fees. And the Project will provide the extensions of Starr Avenue and Adams Street. Anyone who regards these contributions as only "general platitudes" should consider paying for them.

Moreover, the Applicant Team has already provided several additional public and community benefits. Most notably, the Applicant Team engaged cooperatively with the City to facilitate construction of the levee adjacent to the Property, to protect the Vineyard Valley mobilehome community. Specifically, the Applicant Team cooperated with the City with respect to the land swap required to construct the levee, and provided the City access to the Applicant Team's well as needed for that project. The Applicant Team's voluntary cooperation with respect to the levee constituted a community benefit that the Project has already provided. This stands as an as-yet-unreciprocated benefit provided to the public and the community.

Finally, as the most recent staff report notes, complying with the City's obligations to comply with the HAA and with Housing Element Law constitute an additional and independent legal "benefit" of approving the Project. "A statement of overriding considerations—which is the finding described in subdivision (b) of section 21081—is to be used in situations where the public agency deems a project sufficiently important or desirable for reasons that override the normal obligation to mitigate significant environmental effects. One of those statutory reasons allows for considerations, conditions, or factors that are 'legal.'" [10] So, CSF is incorrect that the City's compliance with the HAA is "not a benefit."[11]

3. The Record Does Not Support Denial of the Project Under the HAA.

Next, CSF argues that the City should deny the Project under the very narrow ground to disapprove certain HAA-protected projects if they are able to make written findings, "based upon a preponderance of the evidence in the record," that the "housing development project … as proposed would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households … ."[12] CSF wrongly asserts that the Project presents such an impact because it is in CSF's opinion near to land classified as a very high fire hazard severity zone. This rationale does not come close to justifying a finding under the HAA – a fact that is underscored by additional statutory text designed to curtail bad faith, NIMBY reliance on this provision to block all housing.

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[10] *See Tiburon Open Space Committee v. County of Marin* (2022) 78 Cal.App.5th 700, 733 (citing Pub. Res. Code §§ 21081, subds. (a)(3), (b), 21002.1, subd. (b); CEQA Guidelines § 15364).

[11] The City's decision to follow the law would also have the effect of avoiding expenditure of public funds on legal fees – another public benefit.

[12] Gov. Code § 65589.5(d)(2); see also (j).

First, the statute itself elaborates that, as "used in this paragraph, a 'specific, adverse impact' means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete."[13] CSF conveniently admits this language. Presumably, that is because it is unable to identify any objective written public health or safety standard, policy, or condition that identifies being "near" a fire zone as a specific, adverse impact. (Contrary to CSF's contentions, the nearest fire hazard area is not "adjacent" to the Project in any reasonable sense.) Nor does CSF present any evidence that the impact it alleges is "quantifiable." Nor does CSF present any evidence that the impact it alleges is "unavoidable."

Moreover, and critically, there is no evidence that the impact identified by CSF is "specific" to the Project. To the contrary, the large majority of Napa County is designated as a fire hazard severity zone. If merely being "near" such land were sufficient to create a "specific, adverse impact," then all of Napa County would functionally be exempt from state housing law. To the contrary, forecasting the potential mischief that could be caused by abuse of this law, the Legislature specifically provides in the HAA that "the conditions that would have a specific, adverse impact upon the public health and safety, as described in paragraph (2) of subdivision (d) and paragraph (1) of subdivision (j), arise infrequently."[14] A condition that would apply to most of Napa County is, of course, not one that can be said to "arise infrequently."

4. The City's Staff Report and Applicant's Letters Have Refuted All of CSF's Groundwater Comments

CSF repeats what has now become a tired argument: the on-site groundwater well at the Project is "legally abandoned," and thus the Project (and EIR) cannot rely on it for on-site landscaping irrigation needs, despite it being perfectly capable of providing water in that capacity. Both City Staff and Applicant have responded to this contention ad nauseam. *See, e.g.*, Staff Report at Section 6 (Status of the Onsite Well); *id*. at Attachment 5, Responses 1 and 2; Applicant's May 1, 2023 Letter re Hunter Subdivision Project at 9-10; Applicant's June 23, 2023 Letter re CEQA Issues at 2-3. As stated multiple times, substantial evidence in the record demonstrates that the on-site well is not legally abandoned, but is fully capable of providing 17.16 acre feet per year ("AFY") for public and private landscaping.

CSF also repeats an assertion that the on-site well is subject to new Napa County Well Permit Standards. The Staff Report correctly notes:

> "The existing well on project site, which was originally permitted in 1976, remains operable (the well was once referenced in the EIR as "inoperable" because it was not in use at the time, but it was subsequently verified in the 2021 test of the well to be operable and capable of meeting projected needs). Because the well has an existing permit that, to

[13] Gov. Code § 65589.5(d)(2).

[14] Gov. Code § 65589.5(a)(3).

> the City's current knowledge, does not require modification, and because no increase in well use over historic levels is proposed, the evidence before the City does not suggest that a new well permit is required by Napa County. Giving this, the pumping limitations cited in the comment (which affect only new wells, or modified wells with new permits) would not apply."[15]

CSF claims there is no evidence that the City coordinated with Napa County. In fact, the City released a Notice of Preparation ("NOP") on March 6, 2018 through April 9, 2018, and held a public scoping meeting on March 12, 2018. State and local agencies (including Napa County) were invited to the scoping meeting and provided with a copy of the NOP. In fact, on March 7, 2018, the Napa County Public Works Department submitted such a comment on the NOP. The City provided the County (as well as other state and local agencies) with the full ability to comment on the NOP (and its acknowledgment that the Project would rely on on-site water), and the Draft EIR's analysis of the on-site water well. Nothing more was required under CEQA.

5. There is No Legal or Practical Reason to Recirculate the EIR

Unfortunately but not surprisingly, CSF now requests that the City recirculate the EIR – after 11 years of public review - for ***additional*** public comment. Specifically, CSF contends recirculation is warranted due to what it calls "substantial" revisions to the "water baseline and groundwater/well analysis," and it also demands that recirculation is required merely because the City has confirmed that the levee maintenance road CSF contends is inadequate is not necessary to serve as an emergency access route. Neither of these "changes" justify recirculation and additional public comment under CEQA.

Under CEQA, if a lead agency adds "significant new information" to an EIR after the close of public comment but before it is certified, it must recirculate the EIR for a new round of public comment.[16] New information added to an EIR is not "significant" unless it changes the EIR in which a way that "deprives the public of a meaningful opportunity to comment" on a significant environmental impact or a mitigation measure that the project proponent has declined to implement. a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement."[17] The CEQA Guidelines describe the types of "significant new information" requiring recirculation, including disclosure of "[a] new significant environmental impact," "[a] substantial increase in the severity of an environmental impact," and the addition of a "feasible project alternative or mitigation measure considerably different from the others previously analyzed."[18]

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[15] See, Staff Report, Attachment 5, Response #2.

[16] Pub. Res. Code § 21092.1

[17] *Id*.

[18] CEQA Guidelines §§ 15088.5(a)(1)-(3).)

Recirculation is not required simply because new information is added or deleted to an EIR, and courts have recognized that recirculation is intended to be an exception, not the general rule.[19]

Here, the only *revisions* that the Final EIR makes pertaining to the on-site groundwater well are non-technical edits to clarify the non-operating status of the well. See, FEIR at 3-3 ("However, since the well is ~~currently~~ not currently in operation it is likely that ~~if~~ the vineyard is not currently receiving ~~artificial~~ irrigation"); id. ("There is an existing well on the Project site that is presently not in operation (see Section 3.9, Hydrology and Water Quality for more information on the existing well and groundwater resources). These are not "substantial," as CSF claims. The FEIR's revisions to the on-site groundwater well do not introduce a new or substantially more severe environmental impact, alternative or mitigation measure. Nor have the baseline conditions changed pertaining to the EIR's water supply analysis.

With respect to the levee maintenance road, no significant change has been made to the Project – and the change that has been made should be welcomed by residents of Vineyard Valley. The Staff Report includes a June 6, 2023 Letter from the St. Helena Fire Department, who has determined that reliance upon a proposed emergency vehicle access ("EVA") connecting the Project to the levee road is not required because the Project provides adequate egress and emergency vehicle access without relying upon the levee road. The Fire Department's letter does not undermine or conflict with the EIR's conclusion that the Project will not cause a significant hazard risk; if anything, it bolsters that conclusion. CSF incorrectly assumes that the deletion of COA 69 (*EVA: From Street A to levee*) is a "substantial change" to the Project. This is incorrect, and neither City nor Applicant are proposing a substantial reconfiguration, design, or different spatial placement of the Project or any component thereof. It was CSF who argued that the levee road was inadequate by contending that the road failed to meet certain road standards. (In fact, the road standards CSF cited only applied to roads relied upon for *fire apparatus* access and there is no reason to believe the road is inadequate for emergency evacuation.) But to avoid any argument, and to be responsive to the issues CSF raised, the City has apparently reviewed whether the roads other than the levee road are sufficient to provide evacuation and emegency access. And as the Fire Department noted in its letter, the levee road has now been designated as an evacuation route for tenants of Vineyard Valley and so removing it as an EVA for the Hunter Subdivision should only be helpful in ensuring that Vineyard Valley tenants have sufficient evacuation routes. Now, the only "change" proposed is that the Fire Department has confirmed that the levee road need not not be relied upon for emergency access and evacuation purposes because there are sufficient other roads providing adequate emergency access and that in fact the future Hunter subdivision residents have better egress via Roads A & B and. Now, CSF seeks to use the City's efforts to resolve CSF's concerns against the City. But this is not a significant "change" in the Project or the circumstances, and does not warrant recirculation under CEQA.

[19] South County Citizens for Smart Growth v. County of Nevada (2013) 221 Cal.App.4th 316

6. Conclusion

The Applicant team respectfully requests approval of the Project.

Very truly yours,



Daniel R. Golub
Kevin J. Ashe
William Sterling
West Coast Land Use & Environmental Law Practice Group
Holland & Knight LLP

cc: Maya DeRosa, AICP, Community Development Director
Ethan Walsh, City Attorney
Sarah Owsowitz, City Attorney
Cindy Tzafopoulos, City Clerk
Department of Housing & Community Development

EXHIBIT A

Holland & Knight

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November 28, 2022

Jamillah Williams
Melinda Coy
Department of Housing & Community Development
Division of Housing Policy Development
2020 West El Camino Avenue, Suite 500
Sacramento, CA 95833
VIA EMAIL (jamillah.williams@hcd.ca.gov; melinda.coy@hcd.ca.gov)

RE: City of St. Helena, Initial Draft Housing Element

Dear Ms. Williams and Ms. Coy:

We understand that you are in the process of reviewing the City of St. Helena's initial draft Housing Element, submitted to HCD on September 7, 2022. As you know, our West Coast Land Use & Environmental Law practice group focuses specifically on enforcing recently reformed provisions of state housing law, and in particular Housing Element Law. We have been engaged to represent Dennis Hunter in connection with the Hunter Subdivision project located North of Hunt Avenue (APN 009-030-057) (the "Project" or "Hunter Subdivision Project"). As proposed, the Project consists of 51 single-family residences (11 of which will feature accessory dwelling units), as well as a 25-unit affordable multifamily development with 5 very low income and 20 moderate income units. We submit these comments in response to the City's initial draft Housing Element, which makes several commitments and representations regarding the Project.

To meet the City's Regional Housing Needs Allocation (RHNA) responsibilities, the draft Housing Element would rely on the one hand upon a Project that the City has failed to bring up for a vote for 12 years, and on the other hand on a set of sites where any development is speculative at best and unlikely at worst. Neither of these bases provide an adequate foundation for the City's compliance with its legal obligations to accommodate its fair share of the regional housing need.

The draft Housing Element depends on the Hunter Subdivision Project to produce a substantial number of the units that the City is counting on to meet its RHNA responsibilities. Remarkably, however, the draft housing element fails to disclose that the Project application has been has been pending since 2010, when the Project applicants first applied to subdivide the parcel, and that there is still, at this time, *no* commitment by the City to complete the required CEQA review and actually vote to approve the Project by any date certain. The Project application was

accepted as complete in early 2011. For the next six years (2011-2017), the City conducted a CEQA analysis, only to abandon that analysis at the last minute, purportedly because the relevant consultant resigned. The City engaged a new consultant in 2018, but rather than simply completing the EIR begun in 2011, it elected to start over with a second EIR. Now, four years later, it is entirely unclear that the City is committed to concluding the CEQA process and moving the Project forward. Most recently, at a November 1, 2022 meeting, the St. Helena Planning Commission was scheduled to conduct a hearing on, and vote to recommend certification of, the Final EIR for the Project. At this hearing, the Commission voted unanimously (at staff's recommendation) to continue the item "to a date uncertain in 2023." In short, the City has repeatedly demonstrated its intent to forestall ever voting to approve the Project, and to otherwise frustrate the Project from proceeding, a pattern which continues to this day.

In view of this, it is astonishing that the Project features heavily in the City's plans for accommodating its 6th Cycle RHNA allocation, as set forth in the draft Housing Element. Specifically, the draft Housing Element uncritically includes as among the housing units it can be counted on to approve within the next cycle "87 units that are pending planning/entitlement approval under the Hunter Subdivision project[,]" an amount representing a significant portion of St. Helena's total RHNA allocation (254 total units, with 162 low-income units, 26 moderate-income units, and 66 above-moderate units).[1] In light of the Project's history, the draft Housing Element's assertion that these units will be developed within the 6th Cycle is questionable at best. The City's Housing Element should not be allowed to count housing units that the City has failed to actually vote to approve over the past 12 years, unless the certification of the Housing Element is contingent upon a firm schedule to actually vote on the Project.

The applicants were equally surprised to learn that the City has listed all 87 units as market rate units, despite the fact that the Project application clearly proposes that 25 of those units be affordable at below market rates to lower income and moderate income households. Specifically, the draft Housing Element states: "While the Hunter Subdivision project is proposing approximately 25 affordable units, because the affordable agreements are not in place at the time of Housing Element, all unit credits were assumed to be above moderate."[2] To be clear, there is no serious dispute that the Project applicants intend to develop these 25 units as affordable housing. The applicants submitted a proposed Affordable Housing Agreement in 2019, although it has yet to be approved by the City Council. It is extremely rare, if not impossible, for a project to have "affordable housing agreements . . . in place" before project approvals, since such agreements are almost always recorded after project approvals take place. If having a recorded affordable housing agreement in place is a prerequisite to counting units towards a City's affordable housing RHNA targets, then few, if any, of the City's sites can be counted on to produce affordable units.

[1] St. Helena, "City of St. Helena 2023-2031 Housing Element Update, Public Review Draft" (June 2022), at 2-153, 1-7 (https://sthelenahousing.com/images/docs/SHHEU_Housing_Element_2022_06_29_RLc_Web.pdf).
[2] St. Helena, "City of St. Helena 2023-2031 Housing Element Update, Public Review Draft" (June 2022), at 2-153-154 (https://sthelenahousing.com/images/docs/SHHEU_Housing_Element_2022_06_29_RLc_Web.pdf).

The Project's proposed 25 affordable units are far more concrete than many other affordable units that the City has projected in its sites inventory. For instance, the City projects that 57 affordable units (all low- or very low-income) will be developed across three City-owned sites (6 units at 1480 Main St., 20 units at 1572 Railroad Ave., and 31 units at Adams St.).[3] These projections are, frankly, fanciful. Because commercial use is a primary use at 1480 Main St., the 6 affordable units at that site cannot be completed until commercial structures are developed, which in turn requires the demolition of an existing building. The same goes for the 31 affordable units projected for Adams St., where "residential uses are permitted on upper stories [*i.e.*, above ground floor commercial uses] within the Central Business district." The ground floor commercial uses that must first be developed do not exist, and the City's analysis indicates that the parcel is currently leased to a vineyard, with no indication of the lease's expiration date. The 20 units projected for 1572 Railroad Ave., meanwhile, cannot be completed until active uses at the site (currently City Hall) cease and those buildings are demolished. Beyond the practical constraints associated with developing these units on sites with active uses, the City makes no effort to identify funding sources for any of these projections. And of course, no affordability agreements are in place for these 57 units, despite the fact that the City's draft refuses to count the Project's 25 affordable units for precisely that reason.

The same issues plague the City's affordable (and market rate) unit projections for privately owned sites.[4] The 20 affordable units projected at 821 Pope St. would replace a single-family residence, but the City gives no indication that that owner is willing to sell. The same is true for the 24 affordable and 24 market rate units projected for 1447 and 1515 Spring St., parcels that are similarly occupied by single-family residences with no apparent plans to sell. And while the City has indicated owner interest in developing 882 and 886 College Ave. (currently vacant) and Spring St. (currently a vineyard), there is no basis for accepting the City's conclusions that development will occur at anywhere near the scale projected (30 units and 88 units respectively). Here again, there is no affordability agreement in place for any of these projected affordable units. None of these sites even have active project applications, to say nothing of being near ready for final approval (as the Project is).

In view of these deficiencies in the City's other identified sites, the City needs the Project's 87 units in order to realistically accommodate its RHNA allocation. It is therefore particularly important that timely action on Project approval be a condition of counting the Project as part of the City's plan to comply with Housing Element Law. In view of the City's past (and ongoing) approach to the Project, and the size of the Project in relation to the City's total RHNA allocation, we respectfully submit that the City's Housing Element cannot be found substantially compliant with state law until at least the following actions are taken:

- First, the City should amend its draft Housing Element to provide commitments to ensure that the Project is actually developed in the 6th Cycle timeframe. The Housing Element

[3] St. Helena, "City of St. Helena 2023-2031 Housing Element Update, Public Review Draft" (June 2022), at 2-156-158 (https://sthelenahousing.com/images/docs/SHHEU_Housing_Element_2022_06_29_RLc_Web.pdf).
[4] *See* St. Helena, "City of St. Helena 2023-2031 Housing Element Update, Public Review Draft" (June 2022), at 2-161-170 (https://sthelenahousing.com/images/docs/SHHEU_Housing_Element_2022_06_29_RLc_Web.pdf).

statute provides that identified sites can only count for "the number of units that can realistically be accommodated on that site."[5] As such, HCD routinely requires draft Housing Elements relying on "pipeline" units to demonstrate that those units are actually likely to be built during the relevant period, and where necessary to "include programs with actions that commit to facilitating development and monitoring approvals of the projects[.]"[6] This approach is appropriate here, given the City's past course of conduct and the large share of the City's RHNA allocation that the Project represents. Specifically, the revised Housing Element should commit to holding a final vote on the Project EIR, and all other approvals necessary to commence development, in the first six months of 2023. Certification of the Housing Element should be contingent upon these actions being promptly taken within that timeframe.

- Second, the City should amend its draft Housing Element to address the Project's decade-plus CEQA process as a governmental constraint. Housing Elements must contain both an analysis of "potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels" and a schedule of actions that "[a]ddress and, where appropriate and legally possible, remove" such constraints.[7] Given that the Project application was submitted in 2010, the City's subsequent approach to the Project plainly reflects actual government constraints on the development of housing. And while the current draft Housing Element addresses the City's land-use controls as government constraints generally,[8] it makes no mention of the extraordinary CEQA-related delays that have stalled the Project for more than a decade. The revised Housing Element should analyze the City's CEQA practices as a constraint to housing, and further commit to mitigating that constraint.

- Third, the City should amend its sites inventory to correctly indicate that 25 of the Project's 87 units will be affordable. HCD requires that sites inventories "specify whether the site or a portion of the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing."[9] The Project's 25 moderate and low income units will not be available at market rates, and the City cannot use them to accommodate its market rate RHNA allocation. It must instead plan

[5] Cal. Gov. Code § 65583.2(c). *See also* Cal. Gov. Code § 65583.2(c)(2) (inventory projections must take into account "the realistic development capacity for the site").
[6] HCD, "RE: City of Moorpark's 6th Cycle (2021-2029) Draft Housing Element" (May 9, 2022), at 5 (https://www.hcd.ca.gov/community-development/housing-element/docs/venmoorparkdraftout050922.pdf). *See also* HCD, "RE: San Francisco's 6th Cycle (2023-2031) Draft Housing Element (Aug. 8, 2022) at 5 (https://www.hcd.ca.gov/community-development/housing-element/docs/sfrsanfranciscodraftout080822.pdf) ("[G]iven the element's reliance on pipeline projects, the element must include programs with actions that commit to facilitating development and monitoring approvals of the projects … with a commitment to alternative actions … if assumptions are not realized.").
[7] Cal. Gov. Code § 65583(a)(5); (c)(3).
[8] St. Helena, "City of St. Helena 2023-2031 Housing Element Update, Public Review Draft" (June 2022), at 2-129 (https://sthelenahousing.com/images/docs/SHHEU_Housing_Element_2022_06_29_RLc_Web.pdf).
[9] HCD, "Housing Element Sites Inventory Guidebook" (May 2020), at 9 (https://www.hcd.ca.gov/community-development/housing-element/docs/sites_inventory_memo_final06102020.pdf).

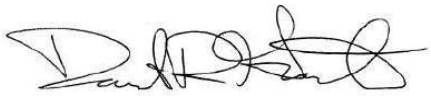
for market rate units elsewhere, to the extent necessary to meet its market rate RHNA allocation.

- Finally, in light of the highly speculative assumptions the City has made about the sites other than the Project site in the draft Housing Element inventory, the City must adopt a more reasonable and conservative projection about the number of housing units that can realistically be projected to occur on the sites in the next planning period.

As such, we request that HCD find that the draft Housing Element will not be found in substantial compliance with state law unless these amendments to the Housing Element are implemented. We further request that HCD inform the City that further obstruction of the Project will result in the decertification of its Housing Element. This approach is appropriate and sadly necessary in view of the City's demonstrated history of frustrating housing, including affordable housing.

Should HCD require further information with respect to the Project or the City's actions with respect thereto, we are happy to provide it.

Very truly yours,



Daniel R. Golub
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EXHIBIT B

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
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December 6, 2022

Maya DeRosa, Planning & Building Director
Planning Department
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

Dear Maya DeRosa:

RE: City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element

Thank you for submitting the City of St. Helena's (City) draft housing element received for review on October 5, 2022. Pursuant to Government Code section 65585, subdivision (b), the California Department of Housing and Community Development (HCD) is reporting the results of its review. In addition, HCD considered comments from Holland & Knight, Generation Housing, and Nancy Dervin pursuant to Government Code section 65585, subdivision (c).

The draft element addresses many statutory requirements; however, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Gov. Code). The enclosed Appendix describes the revisions needed to comply with State Housing Element Law.

For your information, pursuant to Assembly Bill 1398 (Chapter 358, Statutes of 2021), if a local government fails to adopt a compliant housing element within 120 days of the statutory deadline (January 31, 2023), then any rezoning to make prior identified sites available or accommodate the regional housing needs allocation (RHNA) shall be completed no later than one year from the statutory deadline pursuant to Government Code sections 65583, subdivision (c) and 65583.2, subdivision (c). Otherwise, the local government's housing element will no longer comply with State Housing Element Law, and HCD may revoke its finding of substantial compliance pursuant to Government Code section 65585, subdivision (i). Please be aware, if the City fails to adopt a compliant housing element within one year from the statutory deadline, the element cannot be found in substantial compliance until these rezones are completed.

Public participation in the development, adoption and implementation of the housing element is essential to effective housing planning. Throughout the housing element process, the City should continue to engage the community, including organizations that represent lower-income and special needs households, by making information regularly

available and considering and incorporating comments where appropriate. Please be aware, any revisions to the element must be posted on the local government's website and to email a link to all individuals and organizations that have previously requested notices relating to the local government's housing element at least seven days before submitting to HCD.

Several federal, state, and regional funding programs consider housing element compliance as an eligibility or ranking criteria. For example, the CalTrans Senate Bill (SB) 1 Sustainable Communities grant; the Strategic Growth Council and HCD's Affordable Housing and Sustainable Communities programs; and HCD's Permanent Local Housing Allocation consider housing element compliance and/or annual reporting requirements pursuant to Government Code section 65400. With a compliant housing element, the City will meet housing element requirements for these and other funding sources.

For your information, some general plan element updates are triggered by housing element adoption. HCD reminds the City to consider timing provisions and welcomes the opportunity to provide assistance. For information, please see the Technical Advisories issued by the Governor's Office of Planning and Research at: https://www.opr.ca.gov/planning/general-plan/guidelines.html.

We are committed to assisting the City in addressing all statutory requirements of State Housing Element Law. If you have any questions or need additional technical assistance, please contact Jamillah Williams, of our staff, at Jamillah.Williams@hcd.ca.gov.

Sincerely,

Paul McDougall
Senior Program Manager

Enclosure

APPENDIX
CITY OF ST. HELENA

The following changes are necessary to bring the City's housing element into compliance with Article 10.6 of the Government Code. Accompanying each recommended change, we cite the supporting section of the Government Code.

Housing element technical assistance information is available on HCD's website at https://www.hcd.ca.gov/hcd-memos. Among other resources, the housing element section contains HCD's latest technical assistance tool, *Building Blocks for Effective Housing Elements (Building Blocks),* available at https://www.hcd.ca.gov/building-blocks and includes the Government Code addressing State Housing Element Law and other resources.

A. Review and Revision

Review the previous element to evaluate the appropriateness, effectiveness, and progress in implementation, and reflect the results of this review in the revised element. (Gov. Code, § 65588 (a) and (b).)

As part of the evaluation of programs in the past cycle, the element must provide an explanation of the effectiveness of goals, policies, and related actions in meeting the housing needs of special needs populations (e.g., elderly, persons with disabilities, large households, female-headed households, farmworkers, and persons experiencing homelessness).

B. Housing Needs, Resources, and Constraints

1. *Affirmatively further[ing] fair housing in accordance with Chapter 15 (commencing with Section 8899.50) of Division 1 of Title 2…shall include an assessment of fair housing in the jurisdiction. (Gov. Code, § 65583, subd. (c)(10)(A).)*

   Enforcement: While the element includes analysis of fair housing complaints, it must describe the City's compliance with existing fair housing laws and regulations. For additional information, please see pages 28-30 on HCD's Affirmatively Furthering Fair Housing (AFFH) Guidance Memo at https://www.hcd.ca.gov/community-development/affh/index.shtml.

   Concentration of Fair Housing Issues: The assessment of fair housing (AFH) demonstrated that there is a concentration of several fair housing issues within the east and southeast quadrant of the City. For example, this area has the highest concentrations of lower-income households, highest percentage of single-headed households, greatest percentage living below the poverty line, high exposure to environmental burdens, and is considered the only low-resourced area in the City. As a result, the analysis should address trends, past and current policy efforts, and their effectiveness, neighborhood investment or disinvestment, local data and knowledge, and other relevant factors, particularly relative to equitable quality of life, resources, and strategies to address any inequities in quality of life.

2. *Include an analysis and documentation of household characteristics, including level of payment compared to ability to pay, housing characteristics, including overcrowding, and housing stock condition. (Gov. Code, § 65583, subd. (a)(2).)*

   Housing Costs (For Sale and Rental Prices): While the element includes estimated rents and for sale housing costs for residents, it utilizes American Community Survey (ACS) data. The element should supplement census data with other sources (e.g., local knowledge) to better reflect current market conditions.

3. *An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites. (Gov. Code, § 65583, subd. (a)(3).)*

   Progress towards Regional Housing Needs Allocation (RHNA): The element is crediting 87 above moderate-income units from the Hunter Subdivision Project towards the RHNA. However, HCD has received public comment indicating that the Hunter Subdivision project has been pending since 2010 and there are concerns about the City's ability to process and approve this project during the planning period. The element should provide an analysis demonstrating the likelihood of these units being built during the planning period.

   Nonvacant Sites: The element must include an analysis demonstrating the potential for redevelopment of nonvacant sites. In addition, the element could analyze the extent that existing uses may impede additional residential development. The element included a site-by-site description along with some general information about the characteristics for each site. While the element included an analysis of some sites existing uses, it did not provide an analysis for all sites. For example, Sites 1, 2, 3, 11, and 13 included information on the existing use but provided no analysis on the likelihood for redevelopment. For example, Site 1 and 2 stated that development will occur upon the removal of the existing uses and structures. However, the element did not include any information on the likelihood that this will occur during the planning period. Additionally, Site 6 includes two parcels with separate owners and states that one of the owners is interested in developing pursuant to Senate Bill 9, however provides no description or analysis about the likelihood that the second parcel will redevelop. Sites 7 and 9 do not include any analysis of the existing uses or information about the likelihood for redevelopment. Lastly, Sites 5, 6, 10, and 12 analysis is entirely dependent on property owner interest. The element should either provide additional information on these sites such as the nature of meetings with property owners, the likelihood that the owner will redevelop during the planning period or additional information that indicates the likelihood for redevelopment.

   To facilitate a complete analysis, the element can summarize past experiences converting existing uses to higher density residential development, include current market demand for the existing use, provide analysis of existing leases or contracts that would perpetuate the existing use or prevent additional residential development and include current information on development trends and market conditions in the City and relate those trends to the

sites identified. The element could also consider indicators such as age and condition of the existing structure expressed developer interest, low improvement to land value ratio, and other factors. Based on a complete analysis, the element may need to add or modify programs to further encourage and incentivize redevelopment of sites.

Lastly, HCD received a number of comments concerning sites identified in the inventory that have a low likelihood of redevelopment due to existing buildings in commercial districts and on privately-owned property. As noted above, the element should provide additional analysis and information demonstrating the likelihood of redevelopment on these sites.

Realistic Capacity: The element is generally assuming 75-80 percent of maximum allowable densities on most sites. However, while the element provides assumptions of buildout for sites included in the inventory, it must also provide support for these assumptions. For example, the element mentions realistic capacity assumptions were taken into account for sites selection but should demonstrate what specific criteria, trends, factors, and other evidence led to the assumptions. The estimate of the number of units for each site must be adjusted as necessary, based on the land use controls and site improvements, typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction, and on the current or planned availability and accessibility of sufficient water, sewer, and dry utilities.

The element also assumes that Site 5 will be developed for 50 lower-income units. However, this site allows a maximum allowable density of 26 units per acre and the site size is 1.8 acres equating to a total capacity of 46 units. While the site may have owner interest to develop beyond the maximum allowable densities, the element must either revise the capacity assumptions within the allowable densities or include a program to increase the sites allowable density.

The element also should analyze the likelihood that the identified units will be developed as noted in the inventory in zones that allow 100 percent nonresidential uses. This analysis should consider the likelihood of nonresidential development, performance standards, and development trends supporting residential development. For additional information, see the Building Blocks at https://www.hcd.ca.gov/analysis-of-sites-and-zoning.

Publicly-Owned Sites: The element must include additional discussion on each of the City-owned sites identified to accommodate the RHNA. Specifically, the analysis should provide support for residential capacity assumptions, existing uses and any known conditions that preclude development in the planning period and the potential schedule for development. If zoning does not currently allow residential uses at appropriate densities, then the element must include programs to rezone sites pursuant to Government Code section 65583.2, subdivisions (h) and (i). In addition, the housing element must include a description of whether there are any plans to sell the property during the planning period and how the jurisdiction will comply with the Surplus Land Act Article 8 (commencing with Section 54220) of Chapter 5 of Part 1 of Division 2 of Title 5.

Replacement Housing Requirements: If the sites inventory identifies sites with existing residential uses, it must include a program to provide for replacement. Absent a replacement housing program, these sites are not adequate sites to accommodate lower-income households. The replacement housing program has the same requirements as set forth in Gov. Code section. 65915, subdivision (c)(3).

Infrastructure Availability: The element included a capacity analysis for water, sewer and dry utilities. The analysis noted that there are some deficiencies in the current infrastructure system and additional upgrades will be needed to meet current demand such was the water distribution system, wastewater collection system, and storm drainage system. The element must include a program committing to actions and a timeline to make sufficient infrastructure available to accommodate the RHNA. Additionally, while the element included an analysis of infrastructure capacity, the element must specifically indicate if total infrastructure capacity (existing and planned) is available to accommodate the RHNA.

Environmental Constraints: The element describes a few environmental conditions within the City and indicates that the City certified a FEIR with the 2040 General Plan Update that described environmental constraints and mitigation measures. However, the element must specifically describe any known environmental constraints or any other conditions that preclude development on identified sites within the planning period.

Sites Inventory Electronic Form: Please note, pursuant to Government Code section 65583.3, subdivision (b), the City must utilize standards, forms, and definitions adopted by HCD when preparing the sites inventory. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance. Please note, upon adoption of the housing element, the City must submit an electronic version of the sites inventory with its adopted housing element to sitesinventory@hcd.ca.gov.

Zoning for a Variety of Housing Types:

- *Emergency Shelters* – The element states that emergency shelters are required to provide sufficient parking for employees and one space per two beds pursuant to AB 139 (Statutes of 2019). However, pursuant to Government Code section 65583, subdivision a)(4)(A), parking for emergency shelters should only be the number of spaces necessary for staff working in the shelter and no more than other uses in the same zones. The element should discuss compliance with this requirement or include a program, if necessary. Additionally, the element should describe any siting or spacing requirements imposed on emergency shelters. Lastly, the element must include an analysis of the suitability and capacity of the zone(s) identified to accommodate emergency shelters. Specifically, the analysis should demonstrate whether the I and SC zone have sufficient capacity to accommodate the identified housing need for emergency shelters. For example, identifying the number of parcels, typical parcels sizes, whether the sites are nonvacant, and the potential capacity for adaptive reuse. Lastly, in analyzing the

suitability of these zones, the element should address proximity to transportation and services and any conditions inappropriate for human habitability.

- *Transitional and Supportive Housing* - While the element indicates that the City permits supportive housing by-right in all residential zones, the element must specifically demonstrate compliance with AB 2162 (Statutes of 2018). Specifically, supportive housing shall be a use by-right in zones where multifamily and mixed uses are permitted, including nonresidential zones permitting multifamily uses pursuant to Government Code section 65651. The element must demonstrate compliance with this requirement and include programs, if necessary.

- *Accessory Dwelling Unit (ADU)* – The element notes that ADUs are allowed in most residential zones. However, ADUs must be permitted in all zones that allow for residential uses including the AP Zone, mixed-use and commercial zones. The element should analyze consistency with this requirement and include a program, if appropriate. Additionally, after a cursory review of the City's ordinance, HCD discovered several areas which were not consistent with State ADU Law. This includes, but is not limited to, the definition of a cooking facility, definition of an efficiency kitchen, allowing both an ADU and JADU for conversions on a lot with an existing or proposed single-family dwelling, separate conveyance of an ADU or JADU, and restricting bedroom count. The element must include a program to update the City's ADU ordinance in compliance with state law.

4. *An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the types of housing identified in paragraph (1) of subdivision (c), and for persons with disabilities as identified in the analysis pursuant to paragraph (7), including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures... (Gov. Code, § 65583, subd. (a)(5).)*

   Land-Use Controls: The element must identify and analyze all relevant land use controls impacts as potential constraints on a variety of housing types (e.g., multifamily rental housing, mobilehomes, transitional housing), as follows:

   - *Zoning* – The element must include an analysis of all residential zones, especially those identified to accommodate a variety of housing types and the regional housing needs allocation (RHNA) i.e., mixed-use, central business, overlay zones, etc., As part of the analysis, the element should identify all applicable land use controls including development standards, allowable densities, zoning, and any other relevant requirements. The analysis should evaluate these requirements for impacts on achieving maximum densities, cost, feasibility and supply (number of units) of housing. Lastly, the element should identify and analyze any minimum unit size requirements.

   - *Parking* – The element notes that mobile home units are required to provide two spaces per mobile home unit in addition to centralized parking and multifamily housing is required to provide 1.5 – 2 parking spaces per unit. The element should

analyze these requirements and their impacts on cost, supply, housing choice and affordability and include programs to address identified constraints.

Local Processing and Permit Procedures: The element briefly discusses the required permits for a typical single family, subdivision, and multifamily project. This is not a complete analysis and does not address the requirements. The element must describe and analyze the City's permit processing and approval procedures by zone and housing type (e.g., multifamily rental housing, mobilehomes, housing for agricultural employees, supportive housing. The analysis should consider processing and approval procedures and time for typical single-family and multifamily developments, including type of permit, level of review, approval findings and any discretionary approval procedures. The analysis must evaluate the processing and permit procedures' impacts as potential constraints on approval certainty, feasibility, and housing supply and affordability. For additional information and sample analysis, see the *Building Blocks* at https://www.hcd.ca.gov/processing-permitting-procedures.

Additionally, the element indicates that multifamily requires a conditional use permit (CUP) and design review, however the element also states that multifamily is allowed by right and subject only to "routine approvals" and design review. The element must clearly detail the approval process for multifamily housing by zone. For your information, subjecting multifamily housing to an exception process such as a CUP in zones where multifamily housing is already allowed is generally considered a constraint. As noted above, the element must clarify what type of discretionary process and identify and evaluate any approval findings or decision-making criteria for this requirement. The analysis should address impacts on housing cost, supply, timing and approval certainty. Based on a complete analysis, the element should include programs to address or remove the identified constraints.

Design Review: The element's analysis of the design review process states that every development including an individual single-family home and multifamily housing must go through design review and approvals from planning commission which can take an average of three months processing time. In addition, the various approval criteria include subjective language related to the compatibility of design with the neighborhood and surrounding areas, compatibility with historical character, and designs that promote harmonious transitions. Design review processes that have little to no guidance or clarity and requiring findings related to character are generally considered a constraint. The element must analyze this process and the approval criteria for potential constraints on approval certainty, feasibility, supply and affordability. Based on a complete analysis, the element may need to include or modify a program to address and remove or mitigate any identified constraints.

Local Ordinances: While the element included a discussion of the City's inclusionary requirement, it must specifically identify and analyze any other locally adopted ordinances such as short-term rental ordinances that directly impact the cost and supply of residential development.

On/Off-Site Improvements: While the element indicates on and off-site improvements are listed in St. Helena's municipal code, it must specifically identify subdivision level improvement requirements, such as minimum street widths (e.g., 40-foot minimum street width) and analyze their impact as potential constraints on housing supply and cost. For additional information and a sample analysis, see the Building Blocks at http://www.hcd.ca.gov/community-development/building-blocks/constraints/codes-and-enforcement-on-offsite-improvement-standards.shtml.

Fees: The element includes a hypothetical example of fees for single family and a multifamily project that focuses on detailing impact fees for each project type. However, a complete analysis should identify all fees and costs including permit processing and planning fees, development fees, exactions, and any other applicable fees and analyze as potential constraints on housing supply and affordability. For more information, please visit: https://www.hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks/fees-and-exactions.

Building Codes and Enforcement: While the element states that the City has authority to deem any structure unsafe, it should specifically discuss the City's code enforcement process (e.g., whether code enforcement activities are compliant-based or proactive).

Constraints on Housing for Persons with Disabilities:

- *Reasonable Accommodation* – The element identifies approval findings for granting a reasonable accommodation including finding related to impacts on surrounding uses – essentially a CUP finding. However, reasonable accommodation should be a unique exception process from a CUP, especially given its importance in addressing barriers to housing for persons with disabilities. The element should include a program to amend the Reasonable Accommodation Ordinance and remove constraints, namely the "potential impact on surrounding uses" approval finding. Additionally, the element should also indicate whether the City charges any fees to applicants filing reasonable accommodation requests.

- *Other Requirements* – The element must also include an analysis of zoning, development standards, building codes, and process and permit procedures as potential constraints on housing for persons with disabilities. Specifically, the analysis must describe any zoning code definitions of family and any spacing or concentration requirements for housing for persons with disabilities.

- *Residential Care Facilities of Seven or More* – The element states that these uses are permitted with a CUP in high-density residential zones. For your information, excluding these uses from residential zones and/or subjecting the uses to a CUP is generally considered a constraint and programs should be modified as appropriate with specific commitment to allow the use in residential zones with objectivity and certainty.

- *Residential Care Facilities of Six or Fewer* – The element indicates that group homes of six or fewer are excluded from some residential zones. For your

information, these uses must be allowed in any area zoned for residential use. The element should include or modify a program to address this requirement committing to allowing these uses in any zone that permits residential uses.

5. *An analysis of potential and actual nongovernmental constraints upon the maintenance, improvement, or development of housing for all income levels, including… …the length of time between receiving approval for a housing development and submittal of an application for building permits for that housing development that hinder the construction of a locality's share of the regional housing need in accordance with Government Code section 65584... (Gov. Code, § 65583, subd. (a)(6).)*

   Permit Times: The element must include an analysis of the length of time between receiving approval for a housing development and submittal of an application for building permits that potentially hinder the construction of a locality's share of the regional housing need.

6. *Analyze any special housing needs such as elderly; persons with disabilities, including a developmental disability; large families; farmworkers; families with female heads of households; and families and persons in need of emergency shelter. (Gov. Code, § 65583, subd. (a)(7).)*

   Special Needs Households: While the element includes data and a general discussion of housing challenges faced by special needs households, it still must provide an analysis of the existing needs and resources for each special needs group including extremely low-income households, persons with disabilities including developmental disabilities, female headed households, and farmworkers. For example, the element should discuss the existing resources to meet housing needs (availability of shelter beds, number of large units, number of deed restricted units, etc.), an assessment of any gaps in resources, and proposed policies, programs, and funding to help address those gaps.

C. Housing Programs

1. *Include a program which sets forth a schedule of actions during the planning period, each with a timeline for implementation, which may recognize that certain programs are ongoing, such that there will be beneficial impacts of the programs within the planning period, that the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the Housing Element... (Gov. Code, § 65583, subd. (c).)*

   To address the program requirements of Government Code section 65583, subdivision (c)(1-6), and to facilitate implementation, programs should include: (1) a description of the City's specific role in implementation; (2) definitive implementation timelines; (3) objectives, quantified where appropriate; and (4) identification of responsible agencies and officials. Programs to be revised include the following:

   - *Ongoing Programs*: Numerous programs continue to indicate an "ongoing" implementation status. While this may be appropriate for some programs, programs

with quantified objectives or specific implementation actions must include completion or initiation dates resulting in beneficial impacts within the planning period. This includes but is not limited to Programs H-U, H-X, H-KK and H-P.

- *Timelines*: The element includes two programs with timelines for implementation towards the end of the planning period (Programs H-S and H-I). Given the importance of these programs and to achieve beneficial impact throughout the planning period, the element should revise these programs to be implemented earlier in the planning period.

2. *Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory completed pursuant to paragraph (3) of subdivision (a) without rezoning, and to comply with the requirements of Government Code section 65584.09. Sites shall be identified as needed to facilitate and encourage the development of a variety of types of housing for all income levels, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing. (*Gov. Code, § *65583, subd. (c)(1).)*

   As noted in Finding B3, the element does not include a complete site analysis, therefore, the adequacy of sites and zoning were not established. Based on the results of a complete sites inventory and analysis, the City may need to add or revise programs to address a shortfall of sites or zoning available to encourage a variety of housing types. In addition, the element should be revised as follows:

   Shortfall of Sites (Program H-A): The element notes that several sites do not currently permit residential uses or have appropriate densities and will need to be rezoned to accommodate the RHNA. While the element included Program H-A to rezone sites, the program should identify acreage, allowable densities, and anticipated units to be rezoned and must specifically commit to meet all requirements pursuant to Government Code section 65583.2, subdivisions (h) and (i). For example, the program must commit to permit owner-occupied and rental multifamily uses by-right for developments in which 20 percent or more of the units are affordable to lower-income households. By-right means local government review must not require a CUP, planned unit development permit, or other discretionary review or approval.

   Replacement Housing Requirements: The housing element must include a program to provide replacement housing. Absent a replacement housing program, these sites are not adequate sites to accommodate lower-income households. The replacement housing program must adhere to the same requirements as set forth in Government Code section 65915, subdivision (c)(3).

   Sites Identified in Multiple Planning Periods: While the element includes Program H-A to maintain an inventory to comply with Government code section 65583.2 (c), this program must commit to zone and allow for the following:

- sites must meet the density requirements for housing for lower income households, and
- allow by-right approval for housing developments that include 20 percent or more of its units affordable to lower income households (Gov. Code, § 65583.2, subd. (c).).

Nonvacant Sites Reliance to Accommodate RHNA: As the element relies upon nonvacant sites to accommodate the regional housing need for lower-income households, it should include a program(s) to promote residential development of those sites. The program could commit to provide financial assistance, regulatory concessions, or incentives to encourage and facilitate new, or more intense, residential development on the sites. Examples of incentives include identifying and targeting specific financial resources and reducing appropriate development standards. For additional information, see the Building Blocks at https://www.hcd.ca.gov/identify-adequate-sites.

Publicly-Owned Sites: The element identified publicly-owned sites to accommodate a portion of the RHNA. The element should include a program with numerical objectives that ensures compliance with the Surplus Land Act, provides incentives and actions along with a schedule to facilitate development of publicly- owned sites. Actions should include outreach with developers, issuing requests for proposals, incentives, fee waivers, priority processing and financial assistance.

Senate Bill 9 Implementation: The element relies on the implementation and usage of Senate Bill 9 to accommodate a portion of the RHNA, promote a variety of housing types and choices, and implement affirmatively furthering fair housing requirements. While the element included program H-T to support lot splits, the element must include specific actions to implement and incentive the usage of SB 9. This includes but is not limited to establishing a compliant ordinance, development standards, incentives, and marketing and outreach to developers and property owners.

Program H-C – Water Sewer Priority: For your information, water and sewer service providers must establish specific procedures to grant priority water and sewer service to developments with units affordable to lower-income households. (Gov. Code, § 65589.7.) While the element commits to granting priority water and sewer to developments with units affordable to lower income households, local governments are also required to immediately deliver the housing element to water and sewer service providers. HCD recommends including a program, policy, or commitment to deliver the adopted housing element to water and sewer providers and include a cover memo describing the City's housing element, including the City's housing needs and regional housing need. For additional information and sample cover memo, see the Building Blocks at https://www.hcd.ca.gov/priority-for-water-and-sewer.

3. *Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints to, and provide reasonable accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities. (Gov. Code, § 65583, subd. (c)(3).)*

As noted in Findings B4 and B5, the element requires a complete analysis of potential governmental and non-governmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs and address and remove or mitigate any identified constraints. In addition, the element should be revised as follows:

Program H-B (Growth Management System): The element notes that the City implemented a growth management system which likely violates SB 330 (Housing Crisis Act, 2019, Gov. Code, § 66300). The element included a program to remove the growth management system, however included the timeline has "ongoing." The element should include a specific implementation timeline for when this system will be removed and implementation should happen earlier in the planning period (e.g., one year).

4. *Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics... (Gov. Code, § 65583, subd. (c)(5).)*

   As noted in Finding B1, the element requires a complete AFFH analysis. Depending upon the results of that analysis, the City may need to revise or add programs. Additionally, while the element did include programs to address fair housing issues and contributing factors, several programs will need to be revised with increased metrics, geographic targeting for place-based strategies, and implementation steps to facilitate meaningful change. Additionally, while the element included some programs for place-based strategies, these programs must include geographic targeting for the Southeast quadrant of the City, include actions that improve one's quality of life related to housing, transportation, safety, education, recreation, infrastructure, etc., and quantified metrics that target beneficial impacts for people, households and neighborhoods (e.g., number of people or households assisted, number of housing units built, number of parks or infrastructure projects completed). HCD will follow-up under a separate cover with additional information.

D. Public Participation

Local governments shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the Housing Element, and the element shall describe this effort. (Gov. Code, § 65583, subd.(c)(9).)

While the element described various efforts to achieve public participation in the preparation of the housing element update, it should also describe how comments were considered and incorporated into the element.

EXHIBIT C

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March 9, 2023

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RE: City of St. Helena, Initial Draft Housing Element

Dear Ms. Williams and Ms. Coy:

We understand that you are in the process of reviewing the City of St. Helena's subsequent draft Housing Element, submitted to HCD on February 7, 2023. Holland & Knight has been engaged to represent Dennis Hunter, Ben and Kelly Vanzutphen, and White Fang Properties, LLC (collectively, the "Applicant Team") in connection with the Hunter Subdivision project located North of Hunt Avenue (APN 009-030-057) (the "Project" or "Hunter Subdivision Project"). As proposed, the Project consists of 51 single-family residences (11 of which will feature accessory dwelling units), as well as a 25-unit multifamily development, for a total of 87 units. 20% of the Project's units will be affordable, pursuant to the City's inclusionary zoning ordinance.

As you know, on December 6, 2022, HCD completed its review of the City's initial draft Housing Element and provided its feedback to the City. That feedback detailed the changes required for the City to comply with State Housing Element Law. The City's revisions, which were submitted on February 7, failed to address many of HCD's comments.

The Applicant Team provides this letter to detail several of the remaining deficiencies. Although we know HCD looks at much more than a single development when reviewing a City's Housing Element, it is no exaggeration that in this case, this single project is critical to the City's compliance with Housing Element Law. First, with 87 total units, the Project represents more than one third of the City's total RHNA allocation of 256 units. Second, the Project is the only pending residential development of any significance in the entire City.[1] This matters because the City's sites inventory is largely predicated on projects of comparable size; 7 of the 12 sites are

[1] *See* Revised Housing Element at 2-194 ("Currently there is one single-family residence and four moderate-income units, not to exceed 120 percent of the AMI, that are approved and undergoing building permit processing. In addition, there are 87 units that are pending planning/entitlement approval under the Hunter Subdivision project.").

projected for 20+ units, with the largest (Site 10) projected for 88 units.[2] As such, the City's treatment of the Project is the best, and possibly only, indicator of how the City is likely to treat comparably-sized projects proposed during the 6th planning cycle. It is for these reasons among others that members of the City's Planning Commission emphasized in a recent hearing that HCD would be closely watching the City's treatment of this Project as it considered the City's compliance with Housing Element law.

As such, the Applicant Team requests that HCD consider and incorporate the following comments into its review of the City's subsequent draft.

I. The City has not provided an analysis demonstrating a likelihood that the Hunter Subdivision Project will be built within the planning period.

Housing Element Law requires that the City's Housing Element provide "an inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites."[3]

In its review of the City's initial draft Housing Element, HCD wrote:

> The element is crediting 87 above moderate-income units from the Hunter Subdivision Project towards the RHNA. However, HCD has received public comment indicating that the Hunter Subdivision project has been pending since 2010 and there are concerns about the City's ability to process and approve this project during the planning period. The element should provide an analysis demonstrating the likelihood of these units being built during the planning period.[4]

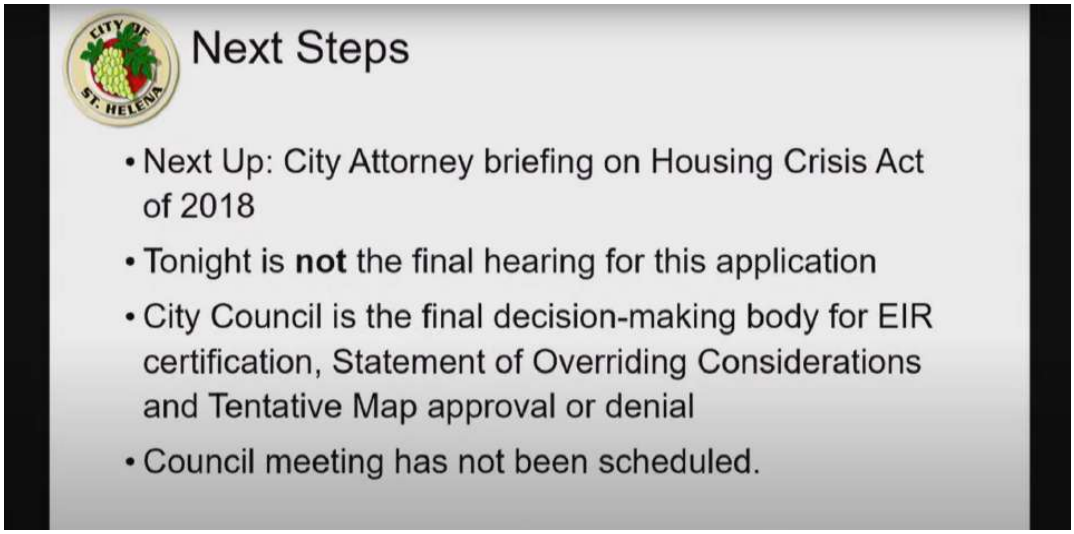
In response to this feedback, the City supplemented its draft to add the following: "The Hunter Subdivision project is anticipated to receive planning approval in the near future. The Final Environmental Impact was released in October 2022 and the project is scheduled for hearing before the City's Planning Commission in February of 2023."[5]

This statement is misleading to the point of untruth. At this time, only one discretionary approval is before the City: a Vesting Tentative Map. The Planning Commission did certify the Final EIR for that Vesting Tentative Map at a recent hearing. That determination, however, must still be ratified by the City Council, and as of this writing, the City Council has conspicuously declined to schedule a hearing on the matter. This raises the concerning possibility that the City may delay such a hearing until HCD has completed its review of the Housing Element, so that its subsequent treatment of the Project will be less closely scrutinized.

Moreover, although the City's revised draft states that the necessary approvals for the Project are "anticipated," the City took the opposite tack at the February 7, 2023 Planning Commission

[2] Revised Housing Element at 2-218, Table 57.
[3] Gov. Code, § 65583(a)(3).
[4] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 2.
[5] Revised Housing Element at 2-195.

hearing. There, Planning Commissioners and City staff repeatedly emphasized that they were "only" voting on the Vesting Tentative Map, and not on other discretionary approvals that would be required for the Project, in an effort assuage the concerns of Project opponents. These remarks are summarized on the following slide, which was prepared by City staff and presented at that hearing:[6]



At a minimum, this approach indicates a reluctance to approve the Project, undermining the subsequent draft's statement that approvals are "anticipated … in the near future."

Further, the two misleading sentences added by the City hardly supplies the "analysis demonstrating the likelihood of these units being built" that HCD required. If the City had provided such an analysis, it would have disclosed the fact that the City has subjected the Project to numerous onerous conditions that undermine the feasibility of the Project actually being built. Many of these conditions are wholly subjective, and some of them seek to obligate the Applicant Team to perform core municipal functions on the City's behalf.

Specifically, the Planning Commission's approval of the Vesting Tentative Map was premised on 123 Conditions of Approval (the "Conditions"), which are attached hereto as **Attachment A**. The Conditions are problematic for numerous reasons. For example, many of them afford impermissible discretion to City officials. *See* Exhibit A, Conditions 33, 44, 47, 55, 72, 97, 100, 101, 105, 108, 110, 116. Other Conditions simply require the Applicant Team to perform "to the City's satisfaction" or otherwise leave the determination to "the discretion of the City." *See* Conditions 40, 107, 109, 111, 112, 113. *See also* Conditions 35 ("the Final Map shall be designed to the satisfaction of the Public Works Director"), 118 (fire hydrants must be installed "to the satisfaction of the Fire Department"). These Conditions essentially vest City officials

[6] *See* Planning Commission Hearing (Feb. 7, 2023) at 57:56 (https://www.youtube.com/live/N1RUOjqb4Z4).

with unbridled discretion to stall 1/3 of the City's 6th Cycle RHNA, even if the units are technically "approved." and should at a minimum have been disclosed to HCD.

The requested analysis would also have disclosed, for example, the City's practice of applying a citywide VMT baseline average for residential uses, rather than using a regional baseline average, which OPR guidance supports.[7] Notably, because the City employed a citywide baseline, the Project EIR treats the Project as though it will have significant VMT impacts despite the fact that it provides the lowest allowable density under the applicable Medium Density Residential zoning. This result would not have occurred if the City applied a regional baseline for calculating VMT impacts. Moreover, this result suggests that, if the City continues to employ a citywide baseline, essentially all new housing projects of any consequence will be considered to have significant VMT impacts, and require the City to prepare an EIR and adopt a statement of overriding considerations for each such project. This approach suggests the type of excessive CEQA processing against which HCD has warned as a potential violations of Housing Element Law and the Housing Accountability Act.[8] But at a minimum, the City's practice must be disclosed and analyzed, both with respect to the Project and as a potential governmental constraint on the approval of housing Citywide.

Again, the City's treatment of the Project matters. The Project represents 1/3 of the City's 6th Planning Cycle RHNA. As Planning Commission Chair Ponte stated at the February 7, 2023 hearing, "This is probably the biggest open piece of land … left inside our development borders."[9] And yet the Project has been pending since 2010 – the 4th Planning Cycle. This history merits far more than a single paragraph in the City's 400+ page draft, dismissing valid skepticism with misleading assurances that the Project "is anticipated to receive planning approval in the near future."

Instead, HCD should not certify the Housing Element until the City has demonstrated its commitment to issue *final* approvals for a Project that can be feasibly be developed at this location.

II. The City has not provided an analysis demonstrating the redevelopment potential of the nonvacant sites in its housing inventory.

Beyond the Project itself, the City's other projections remain inadequate, because they fail to provide the requisite analysis to support the Housing Element's fanciful projections.

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[7] Governor's Office of Planning and Research, "Technical Advisory on Evaluation Transportation Impacts in CEQA" (Dec. 2018), at 15 (https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf).
[8] *See, e.g.*, HCD, "Berkeley – Letter of Technical Assistance" (June 3, 2022) (https://www.hcd.ca.gov/community-development/housing-element/docs/alaberkeley-ta-060322.pdf); HCD, "San Francisco – Letter of Inquiry and Technical Support" (Nov. 22, 2021) (https://www.hcd.ca.gov/community-development/housing-element/docs/sfrsanfrancisco-loi-ta-112221.pdf).
[9] *See* Planning Commission Hearing (Feb. 7, 2023) at 2:21:30 (https://www.youtube.com/live/N1RUOjqb4Z4).

a. City-owned sites.

Of the twelve sites in the City's inventory, three – Sites 1, 2, and 3 – are owned by the City. Collectively, the City projects that 57 units will be developed on these sites: 6 units on Site 1, 20 units on Site 2, and 31 units on Site 3. All are projected as 100% lower-income.[10]

In its responses to the initial draft, HCD stated:

> The element must include additional discussion on each of the City-owned sites identified to accommodate the RHNA. Specifically, the analysis should provide support for residential capacity assumptions, existing uses and any known conditions that preclude development in the planning period and the potential schedule for development. If zoning does not currently allow residential uses at appropriate densities, then the element must include programs to rezone sites pursuant to Government Code section 65583.2, subdivisions (h) and (i). In addition, the housing element must include a description of whether there are any plans to sell the property during the planning period and how the jurisdiction will comply with the Surplus Land Act Article 8 (commencing with Section 54220) of Chapter 5 of Part 1 of Division 2 of Title 5.[11]

The City did not comply with this direction. In fact, the City made only one site-specific addition, to Site 1 (6 units). Here, it added a vague statement that "While the Mixed-Use Zone could potentially support 100 percent commercial development, the City has identified this site as suitable for housing development with intentions to develop."[12] With respect to Site 2 (20 units) and Site 3 (31 units), the City made no effort to supplement its analysis or otherwise comply with HCD's guidance.[13] Thus, there is no support for the City's capacity assumptions, no analysis of existing uses (Site 2 hosts City Hall, and Site 3 is leased to a vineyard), and no potential schedule for development.

Nor is there any commitment to rezone as needed to accommodate the projections. This is particularly relevant to Site 3, which is in the "Central Business" zone. Indeed, the draft indicates that "no land use changes are proposed as residential uses are permitted on upper stories within the Central Business district."[14] But given that Site 3 currently features no buildings, the City's statement presupposes the build-out of enough multi-story commercial buildings to accommodate 31 lower-income units on the upper stories of those buildings. And yet, the City has provided no discussion of that process, or any support for the assumption that such development would occur during the planning period.

As such, the City failed to comply with HCD's directions regarding City-owned sites, and its analysis remains deficient with regard to these 57 units.

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[10] Revised Housing Element, 2-218.
[11] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 3.
[12] Revised Housing Element at 2-197.
[13] Revised Housing Element at 2-199-200.
[14] Revised Housing Element at 2-200.

b. Privately-owned nonvacant sites.

Of the remaining nine sites in the City's inventory, six are nonvacant, but instead have active uses. Addressing these sites in its responses to the City's initial draft, HCD stated:

> Nonvacant Sites: The element must include an analysis demonstrating the potential for redevelopment of nonvacant sites. In addition, the element could analyze the extent that existing uses may impede additional residential development. The element included a site-by-site description along with some general information about the characteristics for each site. While the element included an analysis of some sites existing uses, it did not provide an analysis for all sites. For example, Sites 1, 2, 3, 11, and 13 included information on the existing use but provided no analysis on the likelihood for redevelopment. For example, Site 1 and 2 stated that development will occur upon the removal of the existing uses and structures. However, the element did not include any information on the likelihood that this will occur during the planning period. Additionally, Site 6 includes two parcels with separate owners and states that one of the owners is interested in developing pursuant to Senate Bill 9, however provides no description or analysis about the likelihood that the second parcel will redevelop. Sites 7 and 9 do not include any analysis of the existing uses or information about the likelihood for redevelopment. Lastly, Sites 5, 6, 10, and 12 analysis is entirely dependent on property owner interest. The element should either provide additional information on these sites such as the nature of meetings with property owners, the likelihood that the owner will redevelop during the planning period or additional information that indicates the likelihood for redevelopment.[15]

Here again, the City's analysis remains inadequate. In particular, the City's projections with respect to Site 7, Site 9, and Site 10, which collectively total 156 units (more than half of the City's total RHNA of 256), are speculative and unsupported considering the existing uses.

> **Site 7 (20 units; 10 lower-income and 10 moderate income)**.[16] This 1.0 acre parcel is currently occupied by a single family residence. In its comments, HCD stated that the City's analysis of Site 7 did "not include any analysis of the existing uses or information about the likelihood of redevelopment."[17] Despite HCD's instruction to do so, the City did not update its draft to provide any discussion of owner interest in redevelopment. Nor did the City provide any support for the seemingly-arbitrary affordability projections. The City's only addition explained its conclusion that the parcel is similar to other parcels that were recently redeveloped. However, with no discussion of whether the existing use is likely to cease during the planning period, the City has failed to demonstrate the property's realistic potential for development.

[15] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 2.
[16] Revised Housing Element at 2-207.
[17] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 2.

Site 9 (48 units; 24 lower income and 24 above moderate income).[18] These two parcels total 2.4 acres and are both occupied by single-family residences. In its comments, HCD stated that the City's analysis of Site 9 did "not include any analysis of the existing uses or information about the likelihood of redevelopment."[19] Here again, the City failed to provide the requested analysis. There is no discussion of owner interest in redeveloping (here, agreement from two separate property owners would be required). Nor is there any support for the arbitrary affordability projections. As with Site 7, the City explained that Site 9 was similar to other properties that were recently redeveloped, but offered no support for the notion that the existing owners would support such redevelopment.

Site 10 (88 units; 44 lower income and 44 moderate income).[20] This 4.4 acre parcel is an active vineyard. In its comments, HCD noted that Site 10 "is entirely dependent on property owner interest," and stated that the amended housing element "should either provide additional information on these sites such as the nature of meetings with property owners, the likelihood that the owner will redevelop during the planning period or additional information that indicates the likelihood for redevelopment."[21] Here again, the City failed to provide the requested discussion of owner interest in redevelopment. Its only addition indicates that the City has "seen recent development of housing on properties with existing vineyards." But without an analysis specific to this vineyard and this property owner, there is no support for the City's assumption that these 88 units (themselves more than 1/3 of the City's RHNA) will be developed in the 6th Cycle.

Moreover, all three of these sites were included in the City's 5th Cycle sites inventory. This fact casts further doubt on the likelihood that they will be redeveloped during the 6th Cycle, much less at the intensities projected in the draft.

As such, the City should revise its draft to include an analysis demonstrating that redevelopment of the sites listed in its sites inventory is likely to occur in the 6th Cycle <u>at the projected intensities</u>. If (as seems likely) it is unable to do this with respect to the current sites, then it must either identify other sites or commit to programs that will facilitate the required development.

III. The City has not demonstrated that adequate water supply exists to accommodate the RHNA.

Gov. Code § 6553.2(b)(5) provides that the sites inventory must contain a "description of existing or planned water, sewer, and other dry utilities supply, including the availability and access to distribution facilities[,]" and further specifies that "[p]arcels included in the inventory must have sufficient water, sewer, and dry utilities supply available and accessible to support housing development or be included in an existing general plan program or other mandatory program or plan, including a program or plan of a public or private entity providing water or

[18] Revised Housing Element at 2-210.
[19] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 2.
[20] Revised Housing Element at 2-212.
[21] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 2.

sewer service, to secure sufficient water, sewer, and dry utilities supply to support housing development."

The revised draft's discussion of the City's water supply essentially concedes that the City lacks adequate water supply to accommodate its 6th Cycle RHNA.[22] In relevant part, this discussion states:

> The City has adequate water supply to meet current demand, however the effects of climate change will likely reduce water supply from current sources. The City needs to obtain new water supplies and/or achieve more water savings in order to reliably meet future water demand. At the same time, the City recognizes that any new water supply, even if forthcoming, is likely to be expensive, potentially increasing the unit cost of potable water. The main emphasis within the General Plan (regarding water supply) is on conservation, seeking to reduce demand by all classes of users.
>
> According to the City's Water Shortage Emergency Ordinance, if the City's water balance pursuant to the safe yield calculation is in deficit, then the City must comply with Phase I water restrictions. Most importantly, this requires that any new water demand, such as from a new residential project, must be completely offset by a reduction in current water demand, to the satisfaction of the Director of Public Works.[23]

Although the City states that it "needs to obtain new water supplies and/or achieve more water savings in order to reliably meet future water demand," the Housing Element makes no commitment to obtain additional supply. Nor does the Housing Element commit to reductions in existing water usage.

Instead, the Housing Element indicates that the City will simply employ its existing policy of requiring all new developments to completely offset their water usage. Specifically, Implementation Program H-VV states that the City will enforce "requirements for water-efficient landscaping for new residential and commercial construction, as well as implementing the 'Water Neutrality' policy for all new development."[24] Thus, the City places the burden of reducing consumption entirely on the new developments that it is required to plan for and accommodate. If new housing cannot do so, then the City's policy is that there can be no new housing. Obviously, this is inconsistent with Housing Element Law.

Housing Element Law mandates that that "[p]arcels included in the inventory must have sufficient water[.]"[25] If they do not have sufficient water, they cannot be used to satisfy the City's RHNA. But the City's draft fails to analyze whether new developments can feasibly and realistically find the water offsets required by the neutrality policy. As such, if the City intends to subject all new development to a water neutrality policy, then it must first provide an analysis demonstrating why this policy does not render the projections in its sites inventory infeasible. If

[22] Revised Housing Element at 2-150-152.
[23] Revised Housing Element at 2-151.
[24] Revised Housing Element at 1-39.
[25] Gov. Code § 6553.2(b)(5).

it cannot do this, then the City must adopt a program committing to procure additional water to supply its RHNA. At the moment, the draft does neither.

Moreover, despite HCD's instruction that a demonstration of realistic capacity required that estimates "must be adjusted as necessary, based on … the current or planned availability and accessibility of sufficient water, sewer, and dry utilities,"[26] the revised draft made no effort to adjust its sites inventory estimates in view of the water supply issues the draft identifies. To the contrary, the City's edits only reinforce the notion that it lacks sufficient water supply to facilitate the development promised in the sites inventory. Its additions to Implementation Program H-A, for example, state that "each site has the capacity to accommodate at least 16 units and will be available for development in the planning period where water, sewer, and dry utilities can be provided."[27]

Further, the City is aware of demonstrated problems with its own water supply infrastructure, resulting in the waste of significant water supply that could otherwise be used to satisfy the needs of projected new development. The City must disclose that governmental constraint on new housing supply in the Housing Element, and adopt a program committing to reduce or eliminate it.

The current draft's water supply discussion calls the entirety of the City's sites inventory projections into question. To demonstrate that these parcels "have sufficient water," the Housing Element should be revised to either (1) commit to procuring additional water supply to facilitate the City's RHNA; or (2) explain why the water supply constraints disclosed by the current draft do not preclude development of the City's RHNA. The revised Housing Element should also explain why the City's program of applying its water neutrality policy to all new residential development does not render the projections in its sites inventory infeasible.

IV. The City has incorrectly allocated the Project's 87 units.

Finally, the City's draft incorrectly assigns all of 87 of the Project's units as above moderate income, stating: "While the Hunter Subdivision project is proposing approximately 25 affordable units, because the affordable agreements are not in place at the time of Housing Element, all unit credits were assumed to be above moderate."[28]

As an initial matter, the City's position is wholly inconsistent with its sites inventory projections. The sites inventory forecasts 204 lower income units and 69 moderate income units. No affordability agreements are in place for those projects either. In fact, those projects do not even exist. They are wholly speculative. Why the City would refuse to correctly allocate the Project's affordable units simply because an affordability agreement is not yet executed, while confidently stating that the purely hypothetical units in its sites inventory will be affordable, is baffling.

[26] HCD, "City of St. Helena's 6th Cycle (2023-2031) Draft Housing Element" (Dec. 6, 2022), Appendix at 3.
[27] Revised Housing Element at 1-10.
[28] Revised Housing Element at 2-195.

In any event, the City's inclusionary zoning ordinance requires 20% of the Project's units to be affordable. The Applicant Team intends to comply with this ordinance. The City's Housing Element should reflect this.

The City should be required to correct its error before HCD certifies its Housing Element. Accurate counting matters, for several reasons. First, overcounting the number of market rate units the Project will provide distorts the City's other projections. The Project's 20% affordable units will not be developed at market rates, and the City must therefore plan for those market rate units elsewhere.

Second, accurate counting matters for the No Net Loss requirements set forth in Gov. Code § 65863. If the City incorrectly counts the Project's affordable units as market rate units, then final approvals cannot issue unless and until the City makes "a written finding supported by substantial evidence as to whether or not remaining sites identified in the housing element are adequate to" meet the City's RHNA.[29] Given the spurious nature of the City's current projections, it is far from certain that the City would be able to make those findings, thus triggering the requirement to make additional sites available to replace those units.[30] In practice, there is no statutory mechanism for the Applicant Team to compel the City to make those findings, even where (as here) the issue stems from the City's own error. As such, it is critical that the City correctly allocate the Project's 87 units in its sites inventory.

V. The revised draft remains out of compliance with State Housing Element Law.

For at least the reasons discussed above, the City's revised draft Housing Element remains out of compliance with Housing Element Law, and HCD should decline to certify it until the following changes are made:

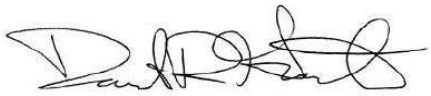
- With respect to the Project, the Housing Element should not be certified until it is demonstrated that the City will issue final approvals for a project that can be feasibly developed. Further, the City should amend its sites inventory to correctly reflect that the Project will consist of 20% affordable units, as required by the City's own ordinances.
- With respect to the remaining City-owned and privately-owned nonvacant sites in the sites inventory, the City should amend the draft to supply an analysis that demonstrates that development is likely during the planning period, specifically including a discussion of owner interest with respect to each privately-owned site. If it cannot do so, the City should instead either identify alternative sites where development is feasible, or commit to programs that ensure feasibility at the currently-identified sites.
- With respect to all projected developments (including the Project), the City should amend the draft to address its water supply constraints, and should specifically either (1) commit to procuring additional water supply to facilitate the City's RHNA; or (2) explain why the water supply constraints disclosed by the current draft do not preclude development of the City's RHNA. Further, the City should amend the draft to explain why the City's

[29] Gov. Code § 65863(b)(2).
[30] Gov. Code § 65863(c).

program of applying its water neutrality policy to all new residential development does not render the projections in its sites inventory infeasible.

Should HCD require further information with respect to the Project or the City's actions with respect thereto, we are happy to provide it.

Very truly yours,



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ATTACHMENT A

HUNTER SUBDIVISION CONDITIONS OF APPROVAL 2-7-23

Tentative Subdivision Map TM 2022-001
APN 009-030-057

These conditions shall apply to City approval of Tentative Subdivision Map TM 2022-001. However, the only conditions herein that constitute preconditions to the approval of the Final Map are those that explicitly state that they constitute such preconditions, and such conditions may be satisfied through substantial completion, as determined by the City Engineer, by execution of a Subdivision Improvement Agreement, in a form acceptable to the City Engineer, or a combination thereof. Either substantial completion or execution of a Subdivision Improvement Agreement or a combination of both, shall enable the City Engineer to make a determination of substantial compliance with these condition and the Tentative Subdivision Map TM 2022-001.

Planning Division: General Conditions

1. This specific approval is limited to the Tentative Subdivision Map TM 2010-40, and is not intended to serve as an approval of the overall project description that was submitted with the tentative map application.

2. This approval is based upon all conditions of approval set forth herein, including mitigation measures and specified plans and agreements included by reference, as well as all applicable City rules and regulations. Any deviations from the conditions must be reviewed and approved by the City for conformity with this approval. Deviations may require approved changes to these approvals and/or further environmental review. Deviations without the above described approval will constitute a violation of permit approval.

3. Except as specifically authorized in these conditions of approval, the grading, development, use, and maintenance of the property; the size, shape, arrangement, and location of the structures, parking areas and landscape areas; and the protection and preservation of resources shall be subject to Planning Commission approval and shall conform to the conditions of approval below. Notwithstanding the foregoing, the associated grading and construction of infrastructure for the project shall be permitted without Design Review approval if the design of such infrastructure has otherwise been approved by means of the Tentative Map or Final Map. All plans and agreements (such as landscape maintenance plans) required pursuant to these conditions of approval must be submitted for review and approval and shall be implemented as approved by the City.

4. The use and/or construction of any structures or improvements authorized by this approval shall not commence until all necessary planning and building permits pertaining to the use or construction in question are obtained. Before any grading or building permit will be issued by the City, the Owner/Applicant must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Applicant has satisfied all pre-construction conditions.

5. The Owner/Applicant's acceptance of this permit and/or commencement of use, construction and/or operations under this approval shall be deemed acceptance of all conditions of this approval by the Owner/Applicant.

6. The Owner/Applicant shall ensure that potential contractors are aware of City requirements. The Owner/Applicant shall notify all contractors and subcontractors in writing of the site rules, restrictions, and Conditions of Approval and submit a copy of the notice to the Planning Department.

7. Pursuant to the Municipal Code, Section 16.16.100, the Tentative Map approval is valid for a two (2) year period ending February 7, 2025, unless later extended by operation of state law. The Final Map shall be filed by this date or an extension of time shall be requested prior to the expiration date.

8. Pursuant to St Helena Municipal Code, any request for an extension of the Tentative Map must be justified in writing and received by the Planning Department at least twenty (20) days prior to expiration. The time at which such map expires may be extended by the City Council for one year, and on further application twenty (20) days before the expiration of the one year extension, the subdivider may request a second one-year extension, and on further application twenty (20) days before the expiration of the second one-year extension may request a third one-year extension. No extension shall be permitted beyond the third one-year extension.

9. Prior to recordation of the Final Map and subject to City approval as to form and content, the Owner/Applicant shall include all of the mitigation measures and conditions of approval associated with or required by this Project approval on a separate informational sheet(s) to be recorded with the Final Map. All applicable conditions and mitigation measures for the Project shall be printed on grading and/or building plans.

10. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases not later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.

11. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.

12. This Tentative Parcel Map shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.

13. If the Tentative Map is proposed to be revised, including revisions to these conditions of approval, the revisions shall be approved pursuant to and in accordance with Section 16.16.130 of the St. Helena Municipal Code.

14. The primary purpose of this review is for compliance with the General Plan and Zoning Ordinance. The owner/applicant is responsible for meeting with the Building Official/Fire Inspector to review compliance with Building and Fire Codes, including fire protection systems and the accessibility standards of Title 24.

15. All required fees, including planning fees, development impact fees, park impact fees, and building permit fees shall be paid prior to issuance of building permit unless such payment has been modified by adopted mitigation measures or conditions of approval. Fees shall be those in effect at the time of the issuance of the building permit.

16. This authorizes the creation of a tentative subdivision of a 16.92-acre parcel (APN 009-030-057) located at the north/east terminus of Adams Street into 52 lots. In addition, two lettered lots are created: Parcel A (0.06 acres) is an open space lot adjacent to an internal roadway; Parcel B (0.04 acres) will contain a private water well to be used for irrigation of landscaped areas.

17. All uses of the property shall be in compliance with the MR: Medium Density Residential zoning district regulations.

18. The applicant shall be responsible for compliance with all mitigations measures adopted as part of this project and listed in the Environmental Impact Report and Mitigation Monitoring and Reporting Program (MMRP) adopted as part of this project.

19. All conditions of approval shall be clearly identified and included on all plans submitted for future permit review and issuance.

20. Prior to applying for building permits, proposed future development on any of the newly created lots or parcels shall require the approval of a Design Review application and Use Permit application as applicable, subject to discretionary review by the Planning Commission.

21. The Applicant shall be responsible for all City plan check and inspection costs as described in the St. Helena Comprehensive Fee and Rate Schedule.

Planning Division: Final Map Conditions

22. The owners of the 51 single family residences and the multi-family development on parcel 52 shall be members of a homeowner's association, or another funding mechanism acceptable to the City, dedicated to the maintenance of the project's common areas, the internal irrigation system (fed by the well on Parcel B), and the well on Parcel B.

23. Prior to recordation of the final map and concurrent with the Subdivision Improvement Plan, the applicant shall submit CC&R's (Codes, Covenants and Restrictions) to the City Attorney, Public Works Director and Community Development Director for review and approval. CC&R's shall be recorded at time of recordation of final map. CC&R's shall include all

restrictions and maintenance regulations pertaining to, landscaping and common areas; shall include all restrictions and maintenance agreements pertaining to roads and access easements; and all restrictions and maintenance agreements pertaining to the irrigation well and internal irrigation water distribution system. The CC&Rs must be recorded prior to issuance of any building permit for any structure on the project site.

24. Pursuant to Section 16.20.090, upon approval of the final map by the City Council, the City Clerk shall execute the appropriate certificate on the certificate sheet and shall, subject to the provisions of Section 66464 of the state Subdivision Map Act, transmit the map, or have an authorized agent forward the map, to the county recorder prior to the issuance of a building permit.

25. Prior to issuance of a Certificate of Occupancy, all overhead utilities on the site shall be undergrounded.

Planning: Misc. Conditions

26. Prior to issuance of building permits, the applicant shall develop a building construction plan to be approved by the Planning Director and Building Official to insure that the homes meet or exceed Title 24 Energy Efficiency Standards and receive a green rating under either the LEEDS, Green Points Checklist, or other acknowledged rating system for energy conservation and green building practices. The latest version of the City of St. Helena green building standards will apply at the time of building permit submittal.

27. Prior to approval of the Final Map, the applicant shall enter into an Affordable Housing Agreement with the City of St. Helena, which agreement shall be subject to review and approval by the St. Helena City Council. The Affordable Housing Agreement shall be recorded in the Official Records of Napa County, and shall ensure that the project complies with the requirements of Municipal Code section 17.146.050, Residential development project, inclusionary/in-lieu fee requirements. The Affordable Housing Agreement shall demonstrate how the project satisfies the minimum density requirement of the General Plan to construct a minimum of 87 dwelling units, including single family, multifamily, and accessory dwelling units.

Planning: Flooding Conditions

28. Prior to issuance of building permits, the occupant shall prepare a statement that has been approved by the Public Works Director for inclusion in the disclosure documents provided to purchasers of homes which describes the flood risk present at this location and notifies the buyer of the availability of low-cost Preferred Risk Policy flood insurance.

Planning: Landscape Conditions

29. City of St. Helena Community Development Department shall review the final landscape and fencing plan as part of a Design Review approval and prior to issuance of building permits for construction on the property to ensure compliance with Mitigation Measures. Landscaping shall be native, drought tolerant, compatible with oak trees and requiring minimal irrigation.

30. Landscape plans shall comply with the State of California Model Water Efficient Landscape Ordinance and Section 17.112.140 of the St Helena Municipal Code. Plans shall be designed and verified by a landscape professional and shall include drought tolerant landscaping and low water irrigation systems. Landscaping shall not block vision from exits or at street intersections.

Planning: Construction Activities Conditions

31. Mechanical equipment, including heating and air conditioning units and spa equipment, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBa, Ldn. This condition of approval implements Mitigation Measure NOI-1 from the project environmental impact report, Chapter 8.24 of the St Helena Municipal Code, and noise-related policies of the St Helena General Plan, including policy 8.3.11 from the 1993 General Plan and policy PS2.4 from the 2019 General Plan.

32. The applicant and/or construction manager shall notify all contractors and subcontractors that no trespassing is allowed on adjoining properties.

33. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3)other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

34. This property in the vicinity of an agricultural district. All future purchasers of homes or renters living in the project shall be notified of the expectation of legal, normal agricultural activities on the adjacent land, including day or night disbursement of chemicals, and creation of dust, noise, or fumes, and of the City's Right to Farm ordinance.

Public Works: General Conditions

35. Prior to recordation, the Final Map shall be designed to the satisfaction of the Public Works Director to accommodate the following facilities in the right of way of both Starr Avenue and Adams Street:

    - Curb and Gutter in accordance with City Standard #310 for a 24" gutter.
    - Sidewalks, either attached to the curb or detached from the curb, on both sides of the street along Starr Avenue, and only on the south side of Adams Street, in accordance with City Standard #315
    - Parking lane on both sides of the street in accordance with City Standard #301 for a "Collector" street.

- Class II on-street bike lane on both sides of the street in accordance with Caltrans' Highway Design Manual Index 1003.2 but not less than 5 feet wide.
- Two vehicle travel lanes in accordance with City Standard #301 for a "Collector" street.
- Striping to delineate parking, bike, and travel lanes.

36. All public improvements utility connections shall be designed in accordance with the City of St. Helena's Construction Standards (SHMC 16.32.230).

37. The City has adopted the latest edition of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. Applicant is responsible for conformance construction plans in accordance with the BASMAA Manual, SHMC Section 13.32 et. seq., and the State Water Resources Control Board Phase II Municipal Separate Storm Water System (MS4) General Permit (Order 2013-0001 DWQ). Approval of project by Planning Commission does not constitute compliance with storm water regulations nor a right to develop per approved plans unless this condition of approval is fully satisfied.

38. Grading plans, public improvement plans and connections to public utilities shall be prepared by a California Licensed Civil Engineer.

39. An Encroachment Permit is required prior to starting work within City right of way.

40. All public facilities damaged by construction activities shall be the responsibility of the Applicant and shall be repaired to the satisfaction of the City at the Applicant's expense.

41. During water shortage emergencies, all construction water used for the project shall be obtained from a source other than a City of St. Helena potable water sources (SHMC 13.04.221).

42. Unless exempted, any ADU or JADU constructed with a new single-family home shall have a separate utility connection directly between the ADU or JADU and the utility and payment of the normal connection fee and capacity charge for a new dwelling are required SHMC 17.116.030(G)(2).

43. Developer shall design and construct all improvements and facilities shown on any approved tentative map, site plan, or other documents submitted for permit approval, in accordance with the St. Helena Municipal Code (SHMC), and the City of St. Helena Design and Construction Standards. Approval of a tentative map depicting improvements that do not conform to the SHMC or City standards does not constitute approval of an exception to the SHMC or City standards unless explicitly stated herein or in another City resolution.

44. The developer shall be responsible for all City plan check, map check and inspection costs. The developer shall deposit funds with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual plan check and inspection costs.

45. If any of the improvements which the applicant is required to construct or install is to be constructed or installed upon land in which the applicant does not have title or interest

sufficient for such purposes, the applicant shall do all of the following at least 60 days prior to the filing of the final or parcel map for approval pursuant to Government Code Section 66457:

a) Notify the City of St. Helena (hereafter "City") in writing that the applicant wishes the City to acquire an interest in the land which is sufficient for such purposes as provided in Government Code Section 66462.5;

b) Supply the City with (i) a legal description of the interest to be acquired, (ii) a map or diagram of the interest to be acquired sufficient to satisfy the requirements of subdivision (e) of Section 1250.310 of the Code of Civil Procedure, (iii) a current appraisal report prepared by an appraiser approved by the City which expresses an opinion as to the current fair market value of the interest to be acquired, and (iv) a current Litigation Guarantee Report;

c) Enter into an agreement with the City, guaranteed by such cash deposits or other security as the City may require, pursuant to which the applicant will pay all of the City's cost (including, without limitation, attorney's fees and overhead expenses) of acquiring such an interest in the land.

46. Prior to the issuance of a Certificate of Occupancy, all proposed utilities, both on-site and along project frontages, shall be placed underground. This does not include surface mounted transformers, pedestal mounted terminal boxes and meter cabinets.

47. Except for the existing well on Lot 19 of the Tentative Map that will be providing irrigation water to this development, all existing wells, septic tanks and/or underground fuel storage tanks shall be abandoned under permit and inspection of Napa County Department of Environmental Health. If applicant determines that there are none, prior to the issuance of a grading permit, the project engineer shall provide a letter describing the scope of the search done to make this determination and demonstrating to the reasonable satisfaction of the City Engineer that there are no other existing wells, septic tanks and/or underground fuel storage tanks within the boundaries of the Tentative Map.

Public Works: Fees

48. Public Works engineering and inspection fees for Improvement Plan and Final Map review shall be due and payable at the time of making the first submittal in connection with the Improvement Plans or the Final Map, as applicable.

49. All Public Works Development Impact fees shall be due and payable at the time of issuance of building permit(s) for the improvements to which they are applicable, unless otherwise authorized by the City.

Public Works: Improvement Plan and Construction Conditions

50. Improvement plans shall be prepared and submitted by a California Registered Civil Engineer for the construction of all necessary and required on-site and off-site improvements including grading, water, sanitary sewer, storm drain facilities, roadway improvements, curbs, gutters,

sidewalks, parkway strips and streetlights. All design and construction shall conform to the City of St. Helena Design and Construction Standards, as applicable.

51. Per Mitigation Measure GEO-1, a detailed Soils Investigation/Geotechnical Report (the "Soils Report") shall be prepared and submitted for review with the submittal of the improvement plans. The report shall address, at a minimum, potential for liquefaction, expansive soils, seismic risk, recommendations for roadway structural sections, foundation, and other items as mentioned in the Mitigation Measure. The improvement plans shall incorporate all design and construction criteria recommended in the Geotechnical Report and acknowledgement of inclusion of any recommendations in the soils report applicable to improvements within this development shall be included on a signature line for the Geotechnical Engineer on the cover sheet of the improvement plans. The signature line should include a statement that the Geotechnical Engineer has reviewed the plans and that the plans have incorporated recommendations as outlined in the Soils Report.

52. All private water mains, sewer mains and storm drains shall be clearly labeled "Private" on the improvement plans.

53. Improvements plans shall include a storm water pollution prevention plan. Erosion control measures shall be included within the improvement plans and the projects WDID number shall be included on the cover sheet of the improvement plans.

54. The improvement plans shall include the following note per the *Engineering Controls* portion of Mitigation Measure NOI-1: "All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order."

55. Roadway Improvements:

    a. The structural section of all road improvements shall be designed based upon a geotechnical investigation that provides the basement soils R-value and expansion pressure test results. A copy of the geotechnical report shall also be submitted with the first set of improvement plan check-prints.

    b. Where new roadway improvements abut existing paving and sidewalk, curb and gutter, the existing pavement and concrete curb and gutter section shall be saw-cut and reconstructed to provide a smooth conforms conform. The limits of such reconstruction shall be as determined by the City Engineer.

    c. Pavement markings and signage shall be provided on all streets as necessary and as required by the City Engineer. Signage restricting parking and red painted curbing shall be installed where appropriate. Speed limit signs and other regulatory and informational signs shall be installed at locations determined by the City Engineer.

    d. Street lighting shall be designed to provide to meet safety requirements and minimize glare. Street light standard and luminaries of the design, spacing, and locations shall be approved by the City Engineer. All lighting must have shields.

e. Ramps for disabled persons meeting the most recent standards shall be provided at all intersections and at the limits of the improvements where they do not adjoin existing sidewalk improvements. Sidewalk warps shall be provided as necessary to allow a clear four-foot-wide walkway at all locations, including areas where mailboxes, streetlights, and fire hydrants obstruct sidewalks.

56. In accordance with mitigation measure BIO-1 of the approved environmental document, a qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony. A written report of the findings shall be provided to the City prior to grading.

57. In accordance with mitigation measure BIO-2 of the approved environmental document, if construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), prior to commencement of construction the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds:

- Preconstruction surveys by a biologist of all potential nesting habitats within 500 feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim.

- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department.

- If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.

58. In accordance with mitigation measure BIO-3 of the approved environmental document, wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.

59. Prior to the commencement of grading, the developer shall provide evidence that an archaeological monitor has been retained to be present on the site during all ground-disturbing activities per mitigation measure CUL-1.

60. Per mitigation measure CUL-2 of the approved environmental document, if human remains are unearthed during grading operations, work must stop within 100 feet of the find and the county Coroner shall be contacted immediately.

61. Per mitigation measure GEO-2 of the approved environmental document, if known or suspected paleontological resources are unearthed during grading or trenching operations, the area of discovery shall be roped off by the contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist.

62. Per mitigation measure HAZ-1 of the approved environmental document, the Project applicant shall ensure the following subsurface soils testing and follow-up analysis be performed prior to obtaining a grading permit:

    - A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, environmental engineer, or similar qualification) for the portions of the Project site historically used for agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval.

    - The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary endangerment assessment guidance manual). • The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight. In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or

remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the Project.

63. Per mitigation measure NOI-1 of the approved environmental document, the contractor shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation, and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted.

Administrative Controls – At all times during site preparation and construction:

- Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods,
- Minimize idling time of onsite equipment, and
- Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors.

Engineering Controls – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and

Install Sound Abatement – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the exterior of a residence (either offsite or onsite), do the following:

- Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or
- Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.

Public Works: Improvement Plan and Construction Conditions

64. Starr Avenue: Prior to the issuance of a Certificate of Occupancy, Starr Avenue shall join the existing Starr Avenue at Hunt Avenue and shall be improved to include the facilities listed in condition of approval #35. The structural section of the street shall be per recommendations contained in the Soils Report.

65. Adams Street: Prior to the issuance of a Certificate of Occupancy, Adams Street shall join the existing section of Adams Street (currently a dead end) and be extended into the subdivision. The street shall be improved per condition of approval #35. At the northerly terminus of Adams Street, a conform shall be constructed with Class 2 aggregate base to connect to the existing walking path/access road/levee. A gate shall be included at the terminus of the road and connection to the walking path/access road that has appropriate signage indicating it is not a through road for vehicles. The gate shall be constructed per direction from the Fire Chief and shall include a Knox box. The structural section of the street shall be per recommendations contained in the Soils Report.

66. Street A: Prior to the issuance of a Certificate of Occupancy, Street A shall be improved to include two 10 ft. travel lanes, two 8 ft. parking lanes, curbs, gutters, a 6 ft. planter strips and 4 ft. sidewalk on the south side of the road and a 10-foot distance from the face of curb to the right-of-way line on the west side of the road. The total right-of-way width shall be 56 feet. The area between the curb and the right-of-way line on the west side of the street shall be graded such that it can be passable by pedestrians (cross slopes should not exceed 5%). The structural section of the street shall be per recommendations contained in the Soils Report.

67. Streets B and C: Prior to the issuance of a Certificate of Occupancy, Streets B and C shall be improved to include two 10 ft. travel lanes, two 8 ft. parking lanes, curbs, gutters, 6 ft. planter strips and 4 ft. sidewalks within an overall 56 ft. right-of-way. The cul-de-sac associated with Street C shall be constructed per City Standard 304. The knuckle at the intersection of Streets B and C shall be constructed per City Standard 305. The structural section of the street shall be per recommendations contained in the Soils Report.

68. EVA: From Street A to levee: Prior to the issuance of a Certificate of Occupancy, the emergency vehicle access road (EVA) shall be improved to provide an all-weather access road (paved) from Street A up to the existing levee road to the north. The width of the EVA shall be a minimum of 21 feet from face of curb to face of curb within an overall 25 ft. wide dedicated EVA. The EVA shall accommodate emergency vehicles (must provide for turning radii to accommodate fire vehicles as per the Fire Department requirements.) Turning templates shall be provided with the improvement plans during the plan check process to ensure the EVA can accommodate Fire Department apparatus.

69. Access from Lot 52 to Starr Avenue shall be for EVA and pedestrian purposes. Ownership of this parcel shall be the same as Lot 52, or the access point shall be made part of Lot 52.

70. Adjacent to Lot 51 there is a portion of existing right-of-way that needs to be vacated by the City prior to the recordation of the final map. The applicant shall provide all descriptions and

plats to the City for vacation of this right-of-way. The vacation of the right-of-way by the City of St. Helena shall either be done prior to or concurrently with the recordation of the final map.

71. Per Mitigation Measure AES-1, all streetlights shall include shields and downward focused to reduce glare and spillover light and to minimize effects on wildlife and to retain the rural ambience of the development.

Public Works Water and Sanitary Sewer Improvements Conditions

72. As detailed in the Final EIR for the project, the Developer is required to off-set the Project's water demand of 37.04 AFY. The Project's landscape water demand is estimated at 17.16 acre-feet per year, which is within the capacity of the existing on-site well. Due to the new potable water demand on the City system in the amount of 19.8 AFY, the Developer shall implement an alternative innovative method of mitigating water use as allowed under Section 13.12.030(B) of the SHMC and/or Appendix J of the EIR. The required improvements to offset water demand are as follows: Identify and implement offsite improvements that reduce water loss from the public water distribution system and/or identify and implement offsite improvements that result in a net increase in potable water availability equivalent to 19.8 AFY, or a combination of these. No building permit may be issued until the City has confirmed that the Developer has completed the approved measures and such measures have been accepted by the City, or Developer has entered into a public improvement agreement with the City to ensure the completion of such improvements and provided security in one of the forms described in Government Code section 66499 in an amount equal to the estimated cost of construction of the proposed offsite improvements as determined, or reviewed and approved, by the City Engineer. Any public improvements shall be constructed to St. Helena Public Works Construction Standards whenever applicable.

73. Any modifications to the existing well other than the installation or maintenance of pumping and storage equipment and connection to the onsite irrigation water distribution system, shall require a permit per section 13.16.060 of the St Helena Municipal Code.

74. The Final Map shall include easements to provide for the installation of the private onsite water system connected to onsite well.

75. All homes and the proposed multi-family parcel shall be served by the onsite well for landscaping and other outdoor water use. Only interior fixtures may be served by City of St. Helena domestic water.

76. All parcels must be connected to the internal irrigation well for outside uses, including landscape irrigation and exterior hose bibs.

77. The Applicant shall make written application to the City of St. Helena in conformance with Chapter 13.04 of the St. Helena Municipal Code for Water Service to the new parcels.

78. The applicant/owner shall be required to install water mains and service lines to serve the project parcels with City water. All water mains and lines within the public right of way shall be constructed in conformance with City standards.

79. The applicant/ owner shall make written application to the City of St. Helena for annexation to the Sewer District and for Sewer Service to the new parcels in conformance with Chapter 13.20.070 of the St. Helena Municipal Code.

80. All public water and sewer mains must be located in public right-of-way wherever possible. Where public water and sewer mains must be located on private property, all necessary easement dedications must be made part of the final map or by separate document (if outside of the boundaries of the final map) prior to final acceptance of the improvements by the City.

81. Sewer grades must be designed such that ultimate finished floors are a minimum of 12" above upstream manhole or clean-out rim elevations. Inadequate elevation differentials or grade on private laterals, as determined by the City, must be mitigated by either raising finished floor elevation(s) or installing privately owned and operated sewer lift station(s) with grinder/ejector pump(s) on site.

82. All water improvements shall conform to the City standards.

83. The existing 10 ft. public waterline easement shall be abandoned by separate document once the relocated water line has been built and is operational.

84. Prior to the first Certificate of Occupancy, the existing 12-inch waterline running through the development shall be relocated to Starr Avenue by the applicant/developer. At the westerly end of Starr Avenue, the line shall be reconnected to the existing 12-inch waterline outside north of Lot 46.

85. The proposed well and appurtenances (pump, etc.) for this development shall be owned and operated by the Homeowner's Association for this development. The well shall supply irrigation water for all landscaping of common areas and on all lots within the subdivision to limit use of domestic water produced by the City. Signage shall be provided on each lot warning of the use of well water and that the well water shall not be used for domestic purposes. Piping for all irrigation water from the well shall be purple pipe (same as used for recycled water). Also, disclosure statements (either through disclosures as required by the Department of Real Estate or on the final map) shall be provided to all property owners notifying them about use of well water and statements warning that well water should not be used for domestic purposes.

86. The sewer easement on lot 21 shall be a minimum of 15 feet wide and shall be located entirely within Lot 21. Statements shall be included on the final map precluding any permanent structures from being constructed within this easement. The sewer line shall be connected to the existing sewer main in Paseo Grand Drive.

Public Works Drainage Improvements Conditions

87. Prior to the issuance of the first building permit, all City-required improvements related to storm water for the project shall be installed by the project developer at its expense. Drainage improvements shall be designed and funded by the developer in accordance with the Design Criteria utilizing the rationale method and any applicable adopted City drainage plans.

88. Prior to the issuance of the first building permit, the applicant shall submit for review and approval, drainage plans and hydraulic calculations prepared by a Registered Civil Engineer. The drainage plans and calculations shall indicate the following conditions before and after development:

    - Quantities of water, water flow rates, major water courses, drainage areas and patterns, diversions, collection systems, flood hazard areas, sumps and drainage courses.

89. Post-development flows leaving the site shall not exceed pre-development flows.

90. Prior to building permit issuance, the applicant shall provide to the City an analysis of the capacity and condition of existing drainage facilities downstream of the development (including any detention/retention ponds), including recommendations for off-site drainage improvements, which shall be constructed prior to the issuance of the first certificate of occupancy. Site grading and drainage improvements shall be shown on the improvement plans.

91. The 100-year overflow and pipeline easement on Lot 25 shall be dedicated on the final map and language shall be included on the final map prohibiting any permanent structures (including garages, sheds, swimming pools, etc.) from being constructed within the easement, as well as provisions (including requirement regarding grading) that ensure that Lot 25 remain in a condition such that it allows relief for the 100-year storm overflows.

92. Prior to Final Map recordation, the developer shall obtain a construction easement from the City over Parcel 009-030-019 to construct the drainage improvements, wall, and fence on lots 5-20. The drainage ditch on Lots 5-20 shall be privately owned and maintained.

Public Works Final Map Conditions

93. A final map, as defined in the State Subdivision Map Act, shall be prepared by a licensed surveyor or civil engineer, showing all parcels, rights-of-way, and easement(s) shall be filed with the City Engineers Office. The final map shall be substantial conformance with the approved Tentative Map and all applicable conditions of approval. The final map is not valid until it has been approved and recorded.

94. Prior to building permit issuance, the developer shall secure all necessary rights-of-way and easements for both onsite and offsite improvements. Rights-of-way and easements shall be dedicated on the map or provided by separate instrument. The developer shall prepare all necessary legal descriptions and deeds. Offers of dedication shall be either via easement or fee title).

95. The applicant shall transmit by certified mail a copy of the conditionally approved Tentative Map together with a copy of Section 66436 of the State Subdivision Map Act to each public entity or public utility that is an easement holder of record. Written compliance shall be submitted to the City of St. Helena

96. The final map shall not be approved prior to approval of the Subdivision Improvement Plans.

97. Prior to approval of the final map, the developer shall either complete required improvements in accordance with the approved improvement plans or enter into a Subdivision Improvement Agreement with the City. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.

98. Abandonment of existing 10-foot public water easement crossing the property shall be included on the final map or by separate document.

99. The unnumbered lot between Lots 3 and 4 as shown on the Tentative Map shall be included as part of Lot 52 and shall not be a separate lot.

Public Works Construction Conditions

100. No grading or other construction shall be performed until the improvement plans have been approved and signed by the City Engineer. Encroachment Permits and Building Permits will not be issued prior to the approval of the improvement plans. An Encroachment Permit is required for any work within the City's rights of way.

101. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.

102. Prior to the issuance of a grading permit, the developer shall provide evidence that a Notice of Intent has been submitted and received by the Regional Water Quality Control Board for a General Construction Activity Storm Water Permit. A copy of the project Storm Water Pollution Protection Plan shall be submitted to the City.

103. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Napa County Environmental Health Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.

104. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

105. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil and/or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or

geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

106. Prior to placing the final lift of asphalt, all public sanitary sewer lines shall be video inspected at the expense of the contractor/developer. All video tapes shall be submitted to the City. If any inadequacies are found, they shall be repaired prior to the placement of the final lift of asphalt.

107. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired to the satisfaction of the City at the Developer's expense.

108. The applicant shall submit a proposed haul route for all trucking associated with this project to the City Engineer for review and approval prior to issuance of a grading permit.

109. Dust control must be maintained to the City's satisfaction.

110. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.

Public Works Subdivision Final and/or Release of Securities Conditions:

111. All public improvements shown on the Improvement Plans shall be completed and accepted by the City prior to release of any security posted.

112. All punch-list work shall be completed, and any outstanding inspection fees or other charges shall be paid prior to issuance of any certificate of occupancy or prior to acceptance of the improvements, at the discretion of the City.

113. Video inspections shall be made of all storm drain and sewer lines installed by developer as set forth in the approved improvement plans to ensure that they are clean of dirt, rocks, debris or other material. Contractor/developer shall be responsible for cleaning and flushing all storm drain lines prior to acceptance by the City. If flushing of the storm drain system is required, the contractor/developer shall put sufficient plugs/filters in place to ensure that any debris, mud or other material is not washed beyond the piping system in the subdivision nor into any natural water course. A copy of the DVD of all storm drain lines shall be delivered and reviewed by the City prior to acceptance. This condition shall be satisfied prior to issuance of any certificate of occupancy or prior to acceptance of the improvements, at the discretion of the City.

114. Developer shall provide sufficient security guaranteeing the public improvements for a period of one year.

115. A complete set of As-Built or Record improvement plans showing all substantial changes from the original plans shall be certified by the Civil Engineer of record and submitted to the City Engineer prior to acceptance of the public improvements.

116. Prior to acceptance of the public improvements, the developer shall provide a written statement signed by his or her engineer certifying that they observed the work during construction and that site grading and all private site improvements have been completed in accordance with the improvement plans approved by the City Engineer.

117. Prior to acceptance of the public improvements, the developer shall provide a written statement signed by his or her geotechnical engineer certifying that they observed the work and reviewed testing results, and that all of work was performed in accordance with the recommendations included in the Soils Report or other recommendations necessitated by field conditions.

Fire Department Conditions

118. Prior to the issuance of a Certificate of Occupancy, the developer is responsible for fire hydrants to be included and installed within the development (number, location and spacing) to the satisfaction of the Fire Department. Locations of the fire hydrants shall be approved by the Fire Department prior to approval of the final map.

119. Plans submitted for building permit shall exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.

120. Prior to issuance of future building permits, all construction plans for homes and other structures shall include fire sprinklers as required by the City of St. Helena Fire Department.

121. One hour minimum fire-resistant construction on all exterior walls within 10’ of property boundary is required. Fire resistant construction of interior walls shall be determined by type of occupancy.

122. Any gates installed to control vehicular access to a property are required to be setback 30-feet from the property line and/or edge of pavement, whichever is greater. No vehicle gates may be installed without Fire Department and Public Works Department review and explicit approval.

123. Access to the levee road is restricted for public use and only granted to emergency vehicles and emergency egress for Vineyard Valley Mobile Home Park residents. Signage prohibiting its use by the public is recommended. Public access will be granted at the discretion of the Authority Having Jurisdiction during emergencies/evacuations.

EXHIBIT D

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY GAVIN NEWSOM, *Governor*

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF HOUSING POLICY DEVELOPMENT
2020 W. El Camino Avenue, Suite 500
Sacramento, CA 95833
(916) 263-2911 / FAX (916) 263-7453
www.hcd.ca.gov

April 7, 2023

Maya DeRosa, Planning & Building Director
Planning Department
City of St. Helena
1572 Railroad Avenue
St. Helena, CA 94574

Dear Maya DeRosa:

RE: City of St. Helena's 6th Cycle (2023-2031) Revised Draft Housing Element

Thank you for submitting the City of St. Helena's (City) revised draft housing element that was received for review on February 7, 2023. Pursuant to Government Code section 65585, subdivision (b), the California Department of Housing and Community Development (HCD) is reporting the results of its review. HCD considered comments from Holland and Knight; David Kellogg and Generation Housing; pursuant to Government Code section 65585, subdivision (c).

The revised draft element addresses many statutory requirements described in HCD's December 6, 2022 review; however, revisions will be necessary to comply with State Housing Element Law (Article 10.6 of the Gov. Code). The enclosed Appendix describes the revisions needed to comply with State Housing Element Law.

Public participation in the development, adoption and implementation of the housing element is essential to effective housing planning. During the housing element revision process, the City must continue to engage the community, including organizations that represent lower-income and special needs households, by making information regularly available while considering and incorporating comments where appropriate. Please be aware, any revisions to the element must be posted on the local government's website and to email a link to all individuals and organizations that have previously requested notices relating to the local government's housing element at least seven days before submitting to HCD.

For your information, pursuant to Assembly Bill 1398 (Chapter 358, Statutes of 2021), if a local government fails to adopt a compliant housing element within 120 days of the statutory deadline (January 31, 2023), then any rezoning to make prior identified sites available or accommodate the regional housing needs allocation (RHNA) (Program H-A) shall be completed no later than one year from the statutory deadline pursuant to Government Code sections 65583, subdivision (c) and 65583.2, subdivision (c).

Otherwise, the local government's housing element will no longer comply with State Housing Element Law, and HCD may revoke its finding of substantial compliance pursuant to Government Code section 65585, subdivision (i). Please be aware, if the City fails to adopt a compliant housing element within one year from the statutory deadline, the element cannot be found in substantial compliance until these rezones are completed.

Please be aware Chapter 654, Statues of 2022 (AB 2339), adds specificity on how cities and counties plan for emergency shelters and ensure sufficient and suitable capacity. Future submittals of the housing element may need to address these statutory requirements. For additional information and timing requirements, please see HCD's memo at https://www.hcd.ca.gov/sites/default/files/docs/planning-and-community/ab2339-notice.pdf.

Several federal, state, and regional funding programs consider housing element compliance as an eligibility or ranking criteria. For example, the CalTrans Senate Bill (SB) 1 Sustainable Communities grant; the Strategic Growth Council and HCD's Affordable Housing and Sustainable Communities programs; and HCD's Permanent Local Housing Allocation consider housing element compliance and/or annual reporting requirements pursuant to Government Code section 65400. With a compliant housing element, the City will meet housing element requirements for these and other funding sources.

For your information, some general plan element updates are triggered by housing element adoption. HCD reminds the City to consider timing provisions and welcomes the opportunity to provide assistance. For information, please see the Technical Advisories issued by the Governor's Office of Planning and Research at: https://www.opr.ca.gov/planning/general-plan/guidelines.html.

We are committed to assisting the City in addressing all statutory requirements of State Housing Element Law. If you have any questions or need additional technical assistance, please contact Jamillah Williams, of our staff, at Jamillah.Williams@hcd.ca.gov.

Sincerely,

Paul McDougall
Senior Program Manager

APPENDIX
CITY OF ST. HELENA

The following changes are necessary to bring the City's housing element into compliance with Article 10.6 of the Government Code. Accompanying each recommended change, we cite the supporting section of the Government Code.

Housing element technical assistance information is available on HCD's website at https://www.hcd.ca.gov/planning-and-community-development/hcd-memos. Among other resources, the housing element section contains HCD's latest technical assistance tool, *Building Blocks for Effective Housing Elements (Building Blocks),* available at https://www.hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks and includes the Government Code addressing State Housing Element Law and other resources.

A. Housing Needs, Resources, and Constraints

1. *Affirmatively further[ing] fair housing in accordance with Chapter 15 (commencing with Section 8899.50) of Division 1 of Title 2…shall include an assessment of fair housing in the jurisdiction. (Gov. Code, § 65583, subd. (c)(10)(A).)*

   Enforcement: While the element discussed compliance with existing fair housing laws, it must also address any past or current findings, lawsuits, enforcement actions, settlements or judgements related to fair housing or civil rights. For additional information, please see HCD's prior review and pages 28-30 on HCD's Affirmatively Furthering Fair Housing (AFFH) Guidance Memo at https://www.hcd.ca.gov/community-development/affh/index.shtml.

   Concentration of Fair Housing Issues: The element was revised to briefly indicate that the east side of the City's fair housing conditions are attributed to types of uses and zoning. However, to better formulate appropriate policies and programs, the element must still analyze trends, past and current policy efforts, and their effectiveness, neighborhood investment or disinvestment, local data and knowledge, and other relevant factors, particularly relative to equitable quality of life, resources, and strategies to address any inequities in quality of life. Please see HCD's prior review for more information.

2. *An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites. (Gov. Code, § 65583, subd. (a)(3).)*

Progress towards the Regional Housing Needs Allocation (RHNA): The element is crediting 87 units from the Hunter Subdivision Project towards the RHNA. HCD's prior review found that the City must analyze the likelihood that this project will be built and units will be available during the planning period. Additionally, the prior review found that HCD has received public comments regarding the City's ability to process and approve this project in a timely manner. Further, this analysis is particularly important given that the project has been pending since the 4th cycle planning period and the project will help the City provide housing and build a portion of their RHNA. The element was revised to state that the project will receive "planning approvals in the near future" and the next planning commission hearing is in February. This does not address HCD's prior review. The element should clearly indicate timelines and remaining steps to fully entitle this project and demonstrate the likelihood these units will become available during the planning period. Lastly, the revised element is now crediting these units towards the City's above moderate-income RHNA. However, HCD received public comments from the applicant indicating that 20 percent of the project will be affordable via deed restrictions in line with the City's inclusionary requirements. The element could be revised to credit a portion of these units towards the City's lower-income RHNA. Based on the outcomes of a complete analysis, the element should include a program to monitor the progress of the project and take alternative action if the project is not entitled and permit are not issued in a timely manner.

Realistic Capacity: The element was revised to state that sites are assumed to develop at an average of 80 percent of maximum allowable densities and noted three projects that have developed between 50-100 percent of maximum allowable densities. First, while the element states that most sites were assumed to develop at 80 percent of maximum allowable densities, Sites 2, 4 and 5 have higher build out assumptions (e.g., 85-100 percent). The element should either adjust calculations in the inventory based on the analysis or provide a specific analysis supporting the higher assumptions. Second, the analysis indicates that realistic capacity was based on past trends and notes three projects. However, the element should include all recent residential or multifamily projects to analyze all development activity by zone, size, allowable density, built density and affordability.

The element was revised to indicate that sites in the mixed-use zone do allow 100 percent commercial and that the City will implement Program H-P to incentivize residential development. However, to account for the likelihood of 100 percent nonresidential development, the analysis should discuss recent trends for development in the pertinent zone, including how often 100 percent nonresidential uses occur, then, adjust residential capacity assumptions and add or modify programs, if appropriate.

Nonvacant Sites: The element was revised with additional site characteristics, including owner interest and referenced past projects that redeveloped to residential development with similar existing uses. However, in addition to property owner interest and development trends, the analysis should consider additional factors that are indicative of redevelopment potential. For example, several sites seem to have low underutilization e.g., existing densities vs. allowable densities, floor area ratio (FAR), low lot coverage,

etc., The element could quantify this factor for applicable sites and include additional local or regional examples supporting the trend that underutilized sites will redevelop at the densities and uses identified in the inventory.

Lot Consolidation: The revised element now indicates that Sites 8 and 9 are made up of several parcels. The element should include an analysis evaluating whether these sites will need be consolidated to develop at the densities that were identified in the inventory. Based on a complete analysis, the element may need to add or modify programs with a commitment to facilitate and incentivize lot consolidation.

City-Owned Sites: HCD's prior review found that the element must include an analysis supporting residential capacity assumptions, existing uses and any known conditions that would preclude development. The element was not revised to address this finding. The element did reference that the City conducted feasibility studies for these sites. Where appropriate, the analysis should incorporate more information regarding the outcomes of these feasibility studies to support the likelihood of development on these sites. Please see HCD's prior review for additional information.

Sites Inventory Electronic Form: Please note, pursuant to Government Code section 65583.3, subdivision (b), the City must utilize standards, forms, and definitions adopted by HCD when preparing the sites inventory. Please see HCD's housing element webpage at https://www.hcd.ca.gov/community-development/housing-element/index.shtml for a copy of the form and instructions. The City can reach out to HCD at sitesinventory@hcd.ca.gov for technical assistance. Please note, upon adoption of the housing element, the City must submit an electronic version of the sites inventory with its adopted housing element to sitesinventory@hcd.ca.gov.

Infrastructure: The element was revised to state that adequate infrastructure is available contingent upon the implementation of infrastructure improvements identified in the City's Integrated Utility master plan. However, the element must still include a program committing to actions and a timeline to make sufficient infrastructure and implement the necessary improvements to accommodate the RHNA. Please see HCD's prior review for additional information.

3. *An analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the types of housing identified in paragraph (1) of subdivision (c), and for persons with disabilities as identified in the analysis pursuant to paragraph (7), including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, and local processing and permit procedures.. (Gov. Code, § 65583, subd. (a)(5).)*

   Land Use Controls: While the element was revised to include a list of all development standards by zone, it must evaluate lot coverage requirements and heights for impacts on achieving maximum densities, cost, feasibility and supply (number of units) of housing.

Parking: The element was revised with an analysis evaluating the 1.5 parking space requirement for smaller bedroom types (i.e., studio and one-bedrooms). While the analysis found that these requirements are not a constraint on development due to the lack of available public transportation, requiring 1.5 parking spaces for a studio apartment is generally considered a constraint and can impact a project's cost, supply (number of units), feasibility and ability to achieve maximum densities. The element should be revised with a program committing to reducing parking requirements.

Local Permit and Processing Procedures: HCD's prior review found that multifamily housing is subject to a conditional use permit (CUP) and it is considered a constraint. Additionally, HCD's certification of the 5th cycle housing element on May 29, 2015 explicitly stated that for the City to remain in compliance, it must complete Program HE1.D which committed to eliminating use permit requirements for multifamily projects in the medium density residential district. Further, HCD's records indicate that the City utilized state funding to remove or lessen discretionary review for multifamily housing (SB2 Planning Grants) and removing the use permit requirements for multifamily housing in certain zones (LEAP Planning Grants).

However, the element provides conflicting information. For example, the element's review and revise section indicates that the City removed the CUP requirement for multifamily housing. Additionally, page 2-162 indicates that a CUP is a required permit, while page 2-160 notes that multifamily is only subject to design review. The element must reconcile this information and clearly indicate if multifamily housing is subject to CUP requirements and whether this constraint has been removed. If this constraint has not been fully addressed, the element must include a program committing to removing this constraint early in the planning period (e.g., one year).

Additionally, the element should address public comments on this revised draft submittal and discuss compliance with the Permit Streamlining Act and intersections with CEQA and timing requirements, including streamlining determinations and add or modify programs as appropriate.

Fees and Exactions: While the element now includes a listing of fees for a typical single family and multifamily development, the element should specifically evaluate impact fees e.g., parks and public safety for impacts on housing cost, supply, and feasibility.

Constraints on Housing For Persons with Disabilities: While the element now includes Program H-F committing to allowing group homes for seven or more persons similarly to multifamily uses, it must also commit to 1) allowing group homes of seven or more in all zones allowing residential uses and 2) permit these uses with objectivity and certainty similar to other residential uses of the same form.

B. Housing Programs

1. *Identify actions that will be taken to make sites available during the planning period with appropriate zoning and development standards and with services and facilities to accommodate that portion of the city's or county's share of the regional housing need for each income level that could not be accommodated on sites identified in the inventory completed pursuant to paragraph (3) of subdivision (a) without rezoning, and to comply with the requirements of Government Code section 65584.09. Sites shall be identified as needed to facilitate and encourage the development of a variety of types of housing for all income levels, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing. (*Gov. Code, § *65583, subd. (c)(1).)*

   As noted in Finding A2, the element does not include a complete site analysis, therefore, the adequacy of sites and zoning were not established. Based on the results of a complete sites inventory and analysis, the City may need to add or revise programs to address a shortfall of sites or zoning available to encourage a variety of housing types. In addition, the element should be revised, as follows:

   Replacement Housing Requirements: The housing element must include a program to provide replacement housing. Absent a replacement housing program, these sites are not adequate sites to accommodate lower-income households. The replacement housing program must adhere to the same requirements as set forth in Government Code section 65915, subdivision (c)(3).

   City-Owned Sites: While the element includes Program H-L (City-Owned Sites), the Program should be revised based on the outcomes of a complete analysis as noted in Finding A2. In addition, the Program should include steps and milestones beyond a request for proposal, including complying with the Surplus Land Act, facilitating all necessary entitlements, assisting with funding, issuing permits and alternative actions to identify other sites within a specified time if development does not proceed as anticipated. Finally, the program should include numeric objectives, including affordability, consistent with the assumptions in the sites inventory.

   Permanent Supportive Housing: The element now includes Program H-F (Municipal Code Updates) to incorporate objective design standards for ministerial design review of multifamily uses. However, the Program should clarify permanent supportive housing pursuant to Government Code section 65651 will also be permitted without discretionary action.

2. *Address and, where appropriate and legally possible, remove governmental and nongovernmental constraints to the maintenance, improvement, and development of housing, including housing for all income levels and housing for persons with disabilities. The program shall remove constraints to, and provide reasonable*

accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities. (Gov. Code, § 65583, subd. (c)(3).)

As noted in Finding A3 the element requires a complete analysis of potential governmental and nongovernmental constraints. Depending upon the results of that analysis, the City may need to revise or add programs and address and remove or mitigate any identified constraints.

3. *Promote and affirmatively further fair housing opportunities and promote housing throughout the community or communities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics... (Gov. Code, § 65583, subd. (c)(5).)*

   As noted in Finding A1, the element requires a complete AFFH analysis. Depending upon the results of that analysis, the City will need to add or revise programs. Goals and actions must specifically respond to the analysis and to the identified and prioritized contributing factors to fair housing issues and must be significant and meaningful enough to overcome identified patterns and trends.

   Additionally, as found in HCD's prior review, programs still should be revised with increased metrics and significant and meaningful actions (beyond the RHNA) to promote housing mobility (more choices and affordability across geographies) and new housing choices and affordability in higher opportunity and relatively higher income areas (e.g., missing middle housing types). Further, as found in HCD's prior review, the element still must include significant and meaningful place-based strategies for community revitalization with actions targeting the southeast quadrant of the City to improve quality of life related to housing, transportation, safety, education, recreation, infrastructure, etc., and quantified metrics that target beneficial impacts for people, households and neighborhoods (e.g., number of people or households assisted, number of housing units built, number of parks or infrastructure projects completed). HCD will follow-up under a separate cover with additional information.

EXHIBIT E

CITY OF ST. HELENA

RESOLUTION NO. 2023-44

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. HELENA ADOPTING A GENERAL PLAN AMENDMENT (GPA 2023-001) TO UPDATE THE HOUSING ELEMENT OF THE GENERAL PLAN FOR THE PERIOD OF 2023-2031 AND ADOPTING AN ADDENDUM TO THE GENERAL PLAN ENVIRONMENTAL IMPACT REPORT

Recitals

1. The California legislature has found that "California has a housing supply and affordability crisis of historic proportions. The consequences of failing to effectively and aggressively confront this crisis are hurting millions of Californians, robbing future generations of the chance to call California home, stifling economic opportunities for workers and businesses, worsening poverty and homelessness, and undermining the state's environmental and climate objectives." (Gov. Code Section 65589.5.); and
2. The legislature has further found that "Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration." (Gov. Code Section 65589.5.); and
3. The legislature recently adopted the Housing Crisis Act of 2019 (SB 330) which states that "In 2018, California ranked 49th out of the 50 states in housing units per capita… California needs an estimated 180,000 additional homes annually to keep up with population growth, and the Governor has called for 3.5 million new homes to be built over 7 years"; and
4. State Housing Element Law (Government Code Sections 65580 et seq.) requires that the City Council adopt a Housing Element for the eight-year period 2023-2031 to accommodate the City of St. Helena's (City) regional housing need allocation (RHNA) of 256 housing units, comprised of 104 very-low income units, 59 low-income units, 26 moderate-income units, and 67 above moderate-income units; and
5. To comply with State Housing Element Law, the City of St. Helena has prepared Housing Element Update 2023-2031 (the Housing Element); and
6. As provided in Government Code Section 65350 et. seq., the Housing Element constitutes a General Plan Amendment; and
7. As provided in Government Code Sections 65352 – 65352.5 the City of St. Helena referred the Housing Element to all California Native American tribes on the contact list provided by the Native American Heritage Commission and to other entities listed. No California Native American tribe requested consultation; and
8. The Housing Element has been prepared to comply with State law, accommodate the RHNA, affirmatively further fair housing, and facilitate and encourage a variety of

housing types for all income levels, including multifamily housing (Gov. Code Sections 65583.2 and 65583(c)); and

9. The City conducted extensive community outreach over a two-year period including six public meetings/workshops and joint Planning Commission/City Council meetings; and

10. In accordance with Government Code Section 65585 (b), on September 7, 2022, the City submitted the draft Housing Element to the State Department of Housing and Community Development (HCD) for its review; and

11. On December 6, 2022, the City received a letter from HCD providing its comments and findings regarding the draft Housing Element; and

12. On January 31, 2023, the City published a revised draft Housing Element responding to HCD's findings and requested public comment on the draft; and

13. On February 7, 2023, the City submitted a second draft Housing Element to HCD for review; and

14. On April 7, 2023, the City received a second letter from HCD providing additional comments and findings regarding the draft Housing Element; and

15. The City revised the draft Housing Element to address HCD's additional comments; and

16. On May 2, 2023, the City of St. Helena Planning Commission held a duly noticed public hearing on the draft Housing Element where they approved a resolution recommending that the City Council adopt the General Plan EIR Addendum and Housing Element Update; and

17. On May 9, 2023, the City Council of the City of St. Helena conducted a duly and properly noticed public hearing, reviewed the Housing Element and all pertinent maps, documents and exhibits, including HCD's findings, the City's response to HCD's findings, the staff report and all attachments, and oral and written public comments; and determined the Housing Element to be consistent with State law and the General Plan of the City of St. Helena.

Resolution

A. In making the findings in this Resolution, the City Council relied upon and hereby incorporates by reference all of the documents referenced in this Resolution and the associated staff reports, City files for this matter, correspondence, presentations and other materials.

B. **NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ST. HELENA AS FOLLOWS:**

1. The foregoing recitals are true and correct and are incorporated by reference into this action.

2. The City Council received an Addendum to the St. Helena General Plan Update Environmental Impact Report (General Plan EIR) (State Clearinghouse No.

2010042001). In accordance with CEQA Guidelines Sections 15162 and 15164, the Addendum evaluated whether the project's environmental impacts are covered by and within the scope of the General Plan EIR and substantiated the City's determination that the Housing Element update policies and programs are within the scope of the General Plan EIR. Therefore, the Housing Element update does not require subsequent action under CEQA, and the Addendum Evaluation, in conjunction with the EIR, adequately analyzes potential environmental impacts.

3. The Housing Element substantially complies with Housing Element Law, as provided in Government Code 65580 et seq., and contains all provisions required by State Housing Element Law.
4. This resolution shall become effective upon adoption by the City Council.
5. The Community Development Department or designee is hereby directed to file all necessary material with the Department of Housing and Community Development for the Department to find that the Housing Element is in conformance with State Housing Element Law and is further directed and authorized to make all non-substantive changes to the Housing Element to make it internally consistent or to address any non-substantive changes or amendments requested by the Department to achieve certification.
6. The City Council adopts a General Plan Amendment (GPA 2023-001) to update the Housing Element of the General Plan for the period of 2023 – 2031 and adopts an Addendum to the General Plan Environmental Impact Report.

Approved at a Regular Meeting of the St. Helena City Council on May 9, 2023, by the following vote:

Mayor Paul Dohring:	**YES**
Vice Mayor Eric Hall:	**YES**
Council Member Anna Chouteau:	**YES**
Council Member Lester Hardy:	**YES**
Council Member Billy Summers:	**YES**

APPROVED:

Paul Jamison Dohring

Paul Jamison Dohring, Mayor

ATTEST:

Cindy Tzafopoulos

Cindy Tzafopoulos, City Clerk

CITY OF ST. HELENA
Incorporated March 24, 1876
Reincorporated May 14, 1992
STATE OF CALIFORNIA

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City of St. Helena
2023-2031 Housing Element Update

Adopted

May 9, 2023



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Private Property
STONEBRIDGE
900-1078 COLLEGE AVENUE

Introduction

Purpose of the Element

Since 1969, California has required that all local governments (cities and counties) adequately plan to meet the housing needs of everyone in the community. California's local governments meet this requirement by adopting housing plans as part of their "general plan" (also required by the state). General plans serve as the local government's "blueprint" for how the city and/or county will grow and develop and include seven required elements: land use, transportation, conservation, noise, open space, safety, and housing. The law mandating that housing be included as an element of each jurisdiction's general plan is known as "housing-element law."

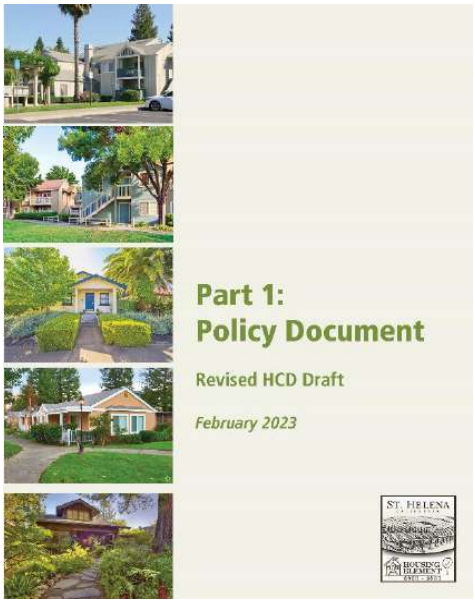
California's housing-element law acknowledges that, in order for the private market to adequately address the housing needs and demand of Californians, local governments must adopt plans and regulatory systems that provide opportunities for (and do not unduly constrain), housing development. As a result, housing policy in California rests largely upon the effective implementation of local general plans and, in particular, local housing elements.

Although the Housing Element is one of seven required elements of the general plan, it has several unique requirements that set it apart from the other six. State law (Government Code Section 65580 (et seq.)) specifies in detail the topics that the housing element must address and sets a schedule for required updates every eight years. The housing element is also the only element reviewed and certified by the State for compliance with State law. Every jurisdiction in the State of California is required to submit a Housing Element to the Department of Housing and Community Development (HCD) for review and certification.

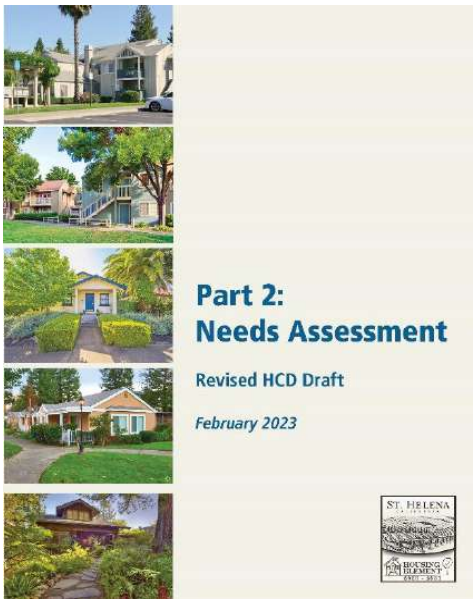
The 2023-2031 Housing Element establishes a comprehensive plan to address housing needs in St. Helena over the eight-year planning period between January 31, 2023 and January 31, 2031. The Housing Element sets the community goals and policies surrounding the development, rehabilitation, and preservation of housing units to meet the needs of St. Helena residents (present and future. St. Helena is a member of the Association of Bay Area Association of Governments and, therefore, is required submit an updated Housing Element to HCD by January 31, 2023.

Housing Element Update Components

The 2023-2031 Housing Element Update consists of two parts; the Housing Needs Assessment, and this Housing Element Policy Document.



1. The **Policy Document** states goals, policies, implementing program, and quantified objectives for the development, rehabilitation, and preservation of housing. The Policy Document is the action plan that reacts directly to the findings of the Housing Needs Assessment and input from the community. The City will implement the actions specified in the Policy Document throughout the planning period.



2. The **Needs Assessment** identifies and analyzes the existing and projected housing needs, provides a list of sites for housing development that are adequate to accommodate the City's regional housing needs allocation, documents constraints to housing production, and analyzes fair housing. In short, the Needs Assessment provides the context for the City's housing action plan.











Part 1: Policy Document

Adopted

May 9, 2023

ST. HELENA
CALIFORNIA
HOUSING ELEMENT
2023 - 2031


1426

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Organization of the Policy Document

The 2023-2031 Housing Element Policy Document includes six goals, supported by policies and implementation programs that aim to address identified housing needs during the planning period. The goals, policies, and programs of the Housing Element establish a policy framework to guide city decision-making to meet identified housing needs. The Policy Document is organized under the following goal titles:

1. A Diversity of Housing to Meet Local Needs
2. High-Quality Neighborhoods with a Balance of Housing
3. Conservation of Existing Housing
4. Assistance to Support Affordable Housing
5. Resource Conservation
6. Affirmatively Further Fair Housing

Goals

The housing goals are articulated as general "end condition statements," which describe a desired outcome or end state. The goals do not contain an action verb as they reflect a final statement of what the city hopes to achieve. Goals describe ideal future conditions for a topic and tend to be general and broad in nature. How the goal will be achieved is established via the applicable policies and programs.

Policies

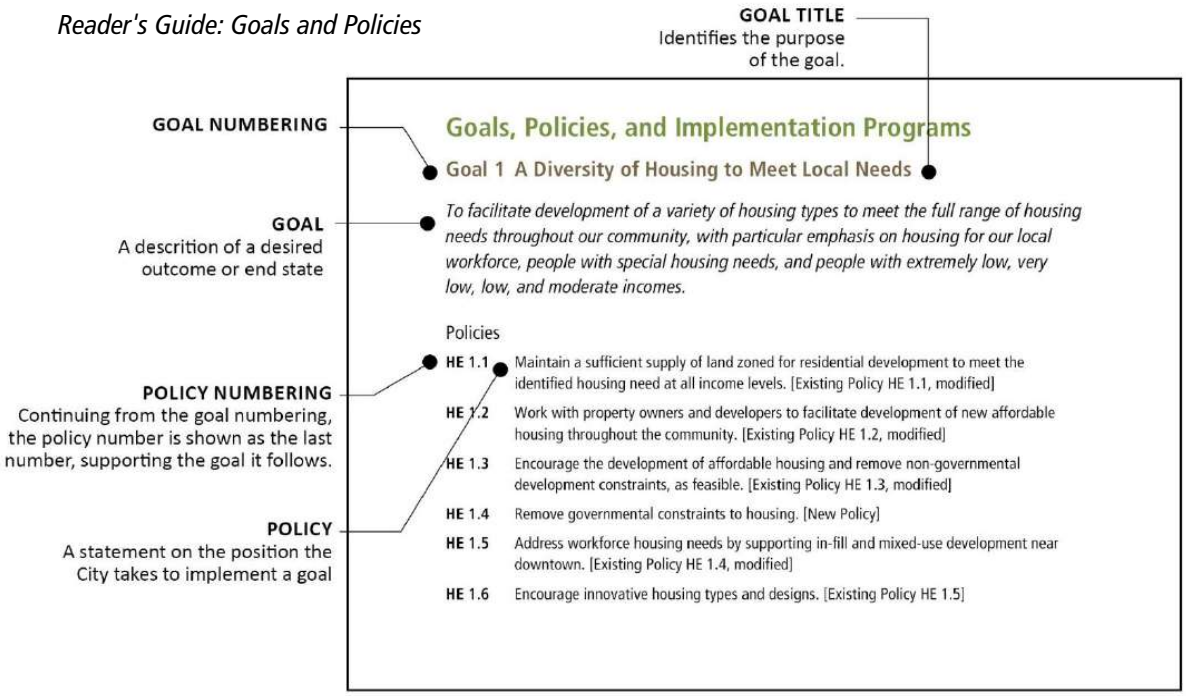
Policies are statements on the position the City takes to implement a goal. Policies contained in the Housing Element are important statements as they provide a clear and unambiguous statement that guides a specific course of action for decision-makers to achieve a desired goal. Future actions and development must be consistent with these policies.

Programs

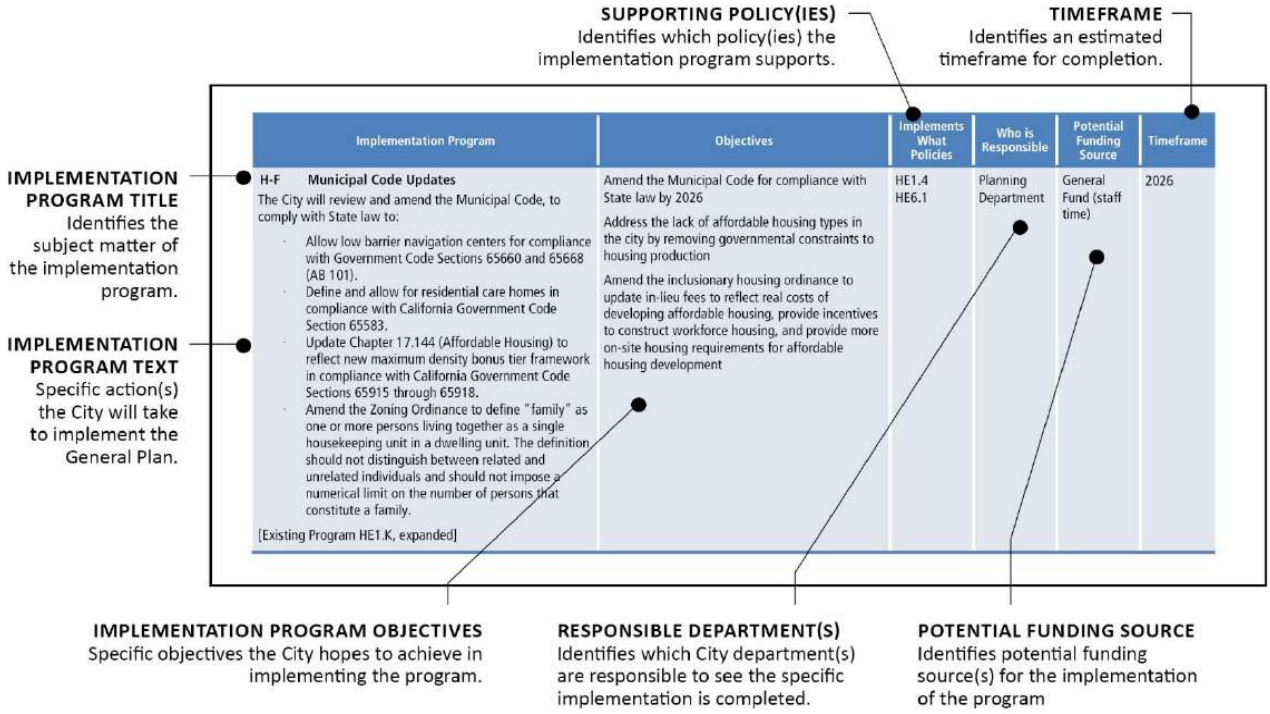
While many policies can be implemented as part of standard City operations, some policies require specific programs to assure their implementation. Housing programs define the specific actions the City will undertake to achieve the stated goals and policies.

For more information, please see the Policy Document Reader's Guide diagrams on the following page.

Reader's Guide: Goals and Policies



Reader's Guide: Implementation Programs



Key Findings and Recommendations

The following section summarizes the key findings in the Housing Needs Assessment and references the resulting programs.

Review of Existing Housing Element

Since the City of St. Helena adopted the Housing Element Update in 2014, the City successfully implemented a majority of the Housing Element implementation programs. Between 2014 and 2021, the City was successful in obtaining additional funding for affordable housing production, preserving existing affordable housing units, and promoting the expansion of multifamily and mixed use housing through the recent 2040 General Plan Update. The City also successfully implemented programs incentivizing and streamlining affordable housing development and revised development standards related to second units for state compliance. While the 2040 General Plan Update process required significant staff time and delayed implementation of some Municipal Code amendments, the City is currently (2022) undertaking a zoning code update that will address the remaining code amendments implementation measures during the 6th cycle. As the code update draws to its conclusion, the City will have more resources available to implement the remaining implementation actions, which have been continued and expanded in the 2023-2031 Housing Element.

Demographic and Economic Trends

Generally, the population of the Bay Area continues to increase because of natural growth and the strong economy drawing new residents to the region. The population of St. Helena increased by 2.1 percent from 2000 to 2020, which is lower than the growth rate of the Bay Area. In 2019, St. Helena's youth population under the age of 18 was 1,050 and senior population 65 and older was 1,636. These age groups represent 17.2 percent and 26.8 percent, respectively, of St. Helena's population. Program H-A commits the City to providing sufficient housing sites to meet the needs of the population and Programs H-H and H-I address workforce housing.

Housing Conditions

Number of Homes. The number of new homes built in the Bay Area has not kept pace with the demand, resulting in longer commutes, increasing prices, and exacerbating issues of displacement and homelessness. The number of homes in St. Helena increased, 4.4 percent from 2010 to 2020, which is above the growth rate for Napa County and below the growth rate of the region's housing stock during this time period. Program H-N, H-O work to facilitate higher density development, and H-P works to provide residential development opportunities in commercial areas through the implementation of mixed-use zoning.

Home Prices. A diversity of homes at all income levels creates opportunities for all St. Helena residents to live and thrive in the community.

- **Ownership.** The largest proportion of homes had a value in the range of $1 million-$1.5 million in 2019. Home prices increased by 118.2 percent from 2010 to 2020. Program H-GG works to increase affordable homeownership opportunities in St. Helena through the pursuit of mortgage credit certificates.

- **Rental Prices.** The typical contract rent for an apartment in St. Helena was $1,470 in 2019. Rental prices increased by 15.7 percent from 2009 to 2019. To rent a typical apartment without cost burden, a household would need to make $59,160 per year. Programs H-DD, H-EE, H-FF, and H-HH work to assist the development of affordable housing. Program H-II includes a commitment to support the Housing Choice Voucher program and to support efforts to expending funding for the program.

Housing Type. It is important to have a variety of housing types to meet the needs of a community today and in the future. In 2020, 63.9 percent of homes in St. Helena were single family detached, 6.1 percent were single family attached, 6.2 percent were small multifamily (2-4 units), and 18.4 percent were medium or large multifamily (5+ units). Between 2010 and 2020, the number of single-family units increased more than multi-family units. Generally, in St. Helena, the share of the housing stock that is detached single family homes is above that of other jurisdictions in the region. Programs aimed at addressing the lack of affordable housing types include H-A, H-B, H-E, H-H, H-I, H-J, H-M, H-P, and H-W.

Cost Burden. A household is considered "cost-burdened" if it spends more than 30 percent of its monthly income on housing costs, while those who spend more than 50 percent of their income on housing costs are considered "severely cost-burdened." In St. Helena, 21.1 percent of households spend 30-50 percent of their income on housing, while 16.6 percent of households are severely cost burden and use the majority of their income for housing. Lower-income, Latinx, and large households are disproportionally impacted by housing cost burdens. Programs including H-E, H-H, H-M, H-DD, H-EE, and H-FF work to reduce the costs of production or create more affordable housing opportunities by streamlining development approvals, incentivizing affordable housing types, generating funds, and reducing fees.

Special Housing Needs

People with Disabilities. In St. Helena, people with disabilities make up around 12 percent of the total population. Children (under 18) make up around 38 percent of the developmentally disabled population, while adults make up around 62 percent. Most of the developmentally disabled population reside with their parent, family, or guardian.

Senior Households. Senior households represent a higher percentage of the total households in St. Helena, at about 39 percent of households in the city. There is a large income disparity between seniors who rent housing and seniors who own their home. Most seniors who rent make 0 to 30 percent of AMI, and sixty-eight percent of senior households in this income category have housing cost burdens. By contrast, most seniors who own make greater than 100 percent of AMI; thirteen percent of senior households in this category experience housing cost burdens.

Farmworkers. The number of permanent farm workers in Napa County has increased from 2,916 in 2002 to 4,290 in 2017, while the number of seasonal farm workers decreased from 7,855 to 5,734. In St. Helena, the migrant worker student population totaled 20 during the 2019-20 school year, an increase of two students since the 2016-17 school year.

Persons Experiencing Homelessness. According to a Point in Time Count provided by the Chief of Police, there is one homeless person who resides in St. Helena. Countywide, many of the persons experiencing homelessness report chronic substance abuse or mental illness.

Programs H-E, H-H, H-I, H-BB, H-FF, H-KK, H-LL, H-NN, H-OO respond to the city's special housing need by streamlining development review, incentivizing development, or providing directly funding for construction or rehabilitation of housing for those with special needs.

Non-governmental and Governmental Constraints

The non-governmental constraints that restrict building in St. Helena include the price of land, cost of construction, flooding, conservation easements and long-term vineyard leases, and a lack of rental accessory dwelling units. The governmental controls analyzed in this section were land use controls, codes and enforcements, on-and off-site improvements, fees and exactions, processing and permit procedures, and regulations affecting housing for persons with disabilities. The land use controls including zoning and current General Plan land use designations do not constrain residential development; however, some changes are necessary to streamline the design review process. Additionally, water and sewer access are constrained, and the City must prioritize service for proposed development that includes housing for lower-income households (Program H-C). Additionally, St. Helena must also amend the Zoning Code to allow for low barrier navigation centers, consistent with State law. See Program H-F for more information.

Sites Inventory and Zoning for a Variety of Housing Types

Sites Inventory. In combination with the City's pending projects and ADU development trends, the sites inventory provides adequate sites to meet the City's RHNA allocation and buffer requirements. St. Helena received a RHNA of 256 total units distributed across very low-income (104 units), low-income (59 units), moderate-income (26 units), and above moderate-income (67 units) categories. A total of 83 lower income housing units can be accommodated on City-owned properties and 332 total housing units can be accommodated on vacant and non-vacant sites. Multiple property owners of vacant and non-vacant sites are supportive of and interested in housing development on their properties. See Program H-A for more information.

Zoning for a Variety of Housing Types. St. Helena's Zoning Code allows for a variety of housing types in the City including multiple-family units, transitional and supportive housing, single-room occupancy units, manufactured and mobile homes, and accessory dwelling units. However, to comply with Section 65915 through 65918 of the California Government Code, St. Helena should amend the Zoning Code to reflect the new

maximum density bonus provisions that were adopted by the State in 2020. Program H-F commits the City to updating the Zoning Code for compliance with State law.

Affirmatively Furthering Fair Housing

Concentrations of Lower- and Moderate-Income Earning Populations. In St. Helena, residents with low and moderate household incomes are concentrated in the eastern portion of the city. The Housing Element ensures available land to accommodate all income levels on sites located across the city. Efforts to combat this impediment are outlined in Programs H-A, H-B, H-N, H-O, H-R, H-S, H-U, H-V, H-W, and H-AA.

Insufficient Housing Stock for Farmworkers. Farmworker housing is a critical need in Napa County and St. Helena due to the presence of year-round agricultural production. The migratory and sometimes seasonal nature of farm work poses housing challenges for the community and are seen as an impediment for St. Helena. Efforts to combat this impediment are outlined in Programs H-E, H-H, H-I, and H-KK.

Lack of Affordable Housing Types. There is a lack of diversity in housing types that restricts development of affordable housing in St. Helena. Local land use and zoning regulations perpetuate this deficiency by limiting the form of housing that can be developed on a particular site. Much of the residentially zoned parcels within the city are zoned low and medium density residential and are not compatible with the construction of duplexes, triplexes, quadplexes and multifamily housing developments. The City is upzoning a number of parcels as a part of the Housing Element Update to allow higher density residential development. Efforts to further combat this impediment are outlined in Programs H-A, H-B, H-E, H-H, H-I, H-J, H-M, H-N, H-P, H-R, H-S, H-V, H-W, H-AA, H-DD, H-EE, H-FF, H-GG, H-LL, and H-NN.

Goals, Policies, and Implementation Programs

Goal 1 A Diversity of Housing to Meet Local Needs

To facilitate development of a variety of housing types to meet the full range of housing needs throughout our community, with particular emphasis on housing for our local workforce, people with special housing needs, and people with extremely low, very low, low, and moderate incomes.

Policies

HE 1.1 Maintain a sufficient supply of land zoned for residential development to meet the identified housing need at all income levels. [Existing Policy HE 1.1, modified]

HE 1.2 Work with property owners and developers to facilitate development of new affordable housing throughout the community. [Existing Policy HE 1.2, modified]

HE 1.3 Encourage the development of affordable housing and remove non-governmental development constraints, as feasible. [Existing Policy HE 1.3, modified]

HE 1.4 Remove governmental constraints to housing. [New Policy]

HE 1.5 Address workforce housing needs by supporting in-fill and mixed-use development near downtown. [Existing Policy HE 1.4, modified]

HE 1.6 Encourage innovative housing types and designs. [Existing Policy HE 1.5]

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-A Available Sites Inventory The City will prepare a sites inventory and suitability analysis that identifies suitable sites for housing development that allows targeted income housing developers to have a clear idea of what sites are suitable for meeting the Regional Housing Needs of the City. To accommodate the remaining lower-income RHNA of 156 units, the City of St. Helena will identify and rezone a minimum of 14 acres to the HDR zoning district, allowing exclusively residential uses and a minimum of 20 units per acre to a maximum of 28 units per acre by January 31, 2026. Rezoned sites will permit owner-occupied and rental multifamily uses by right pursuant to Government Code section 65583.2(h) and (i) for developments in which 20 percent or more of the units are affordable to lower income households and will be selected from sites 2, 3, 5, 8, and 10 in the parcel listing (Table 58). As reflected in *11: Housing Resources*, each site has the capacity to accommodate at least 16 units and will be available for development in the planning period where water, sewer, and dry utilities can be provided. The City will maintain an inventory of parcels meeting the requirements of Government Code Section 65583.2(c); that is, vacant sites identified in two or more consecutive housing elements or nonvacant sites identified in a prior housing element, that are identified to accommodate housing for lower income households. This inventory shall be made available online. All previously used lower-income sites currently meet the lower-income density threshold (20 du/ac), however the City shall update the zoning code to allow by-right approval for housing developments that	Identify housing sites suitable to accommodate: · Very low income: 104 units · Low income: 59 units · Moderate income 26 units · Above Moderate income: 67 units · Total: 256 units Provide sites that proactively work to overcome concentrations of lower- and moderate-income earning populations; with the goal of facilitating the development of 82 lower income units in the western portion of the city Provide sites appropriate for affordable housing types Commit to streamlining review of Hunter Subdivision project to completion with the goal of Building Permit applications in 2025. Evaluate timeline at the end of 2025 and if determined necessary, identify additional housing sites to meet the City's 6th Cycle RHNA requirements	HE1.1	Planning Department	General Fund (staff time)	Within three years of the adoption deadline Publicly-available inventory: by 2024 **Hunter Subdivision** Building permits: 2025 Evaluate timeline by end of 2025

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
include 20 percent or more of its units affordable to lower income households (Gov. Code, § 65583.2, subd. (c).) on these sites. The City will consider AFFH in the identification of sites within the inventory and will work to provide sites that proactively work to overcome concentrations of lower- and moderate-income earning populations on the eastern portion of the city. [New Program]					
H-B Growth Management System The City will remove the Growth Management System (GMS) from the Zoning Code. Due to Senate Bill 330, the GMS cannot currently be enforced. The City shall remove the GMS from the zoning code through the current Comprehensive Zoning Code Update currently underway. The GMS has been removed from the Draft Zoning Code, which is scheduled for adoption in summer/fall 2023. [Existing Program HE1.A, modified]	During the planning period, encourage the development of: · 4 very low-income units · 4 low-income units · 10 moderate-income units · 10 above moderate-income units Address the city's lack of affordable housing by removing governmental constraints	HE1.1 HE1.4	Planning Department	General Fund (staff time)	Implementation: immediate Revised Zoning Code: by 2025 (prior to sunset of SB 330)

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-C Water and Sewer Access The City will continue to give priority access to water and sewer infrastructure to projects that include affordable housing units. As required by State law, the City shall deliver the adopted housing element to water and sewer providers, including a cover memo describing the City's housing element, as well as the City's housing needs and regional housing need. [Existing Program HE1.C, modified]	Establish specific procedures providing priority access to water and sewer infrastructure to developments with units affordable to lower-income households, as required by State law Provide water and sewer providers with the adopted housing element, including cover memo, as required by State law	HE1.3 HE1.4	Planning and Public Works Departments	General Fund (staff time) Water and Sewer Enterprise Funds	Establish procedure: by 2025 Provide providers with housing element: immediately upon adoption
H-D Road and Utility Improvement Coordination The City will continue to work with private property owners/developers to plan for road and utility improvements necessary to support housing on sites identified for lower-income housing, in the event these sites are developed. Funding for off-site improvements will be provided through development impact fees. The City shall annually evaluate funding levels and potential opportunities for use of the funds in line with this program. [Existing Program HE1.E]	During the planning period, encourage the development of: · 4 very low-income units · 4 low-income units · 4 units identified for seniors, farmworkers, or persons with disabilities	HE1.2 HE1.3	Planning Department	General Fund (staff time)	Throughout the planning period, as needed Evaluate funding levels and opportunities: annually

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-E Streamline Special Needs Housing The City will apply streamlined ministerial review to housing developments that meet the needs of lower income households and special needs groups, such as seniors, people with disabilities, farmworkers, and homeless families and individuals. The City shall evaluate the streamlined review policy every two years to identify constraints on special needs housing production. The City shall provide priority processing to development applications that work to provide housing for residents with special housing needs. The City shall also support these applicants by providing technical support through the entitlement process and shall provide additional density bonuses and modifications to development standards (beyond State law) to special needs housing projects proposed on the western half of the city, where fair housing issues are less concentrated. [Existing Program HE1.F, modified]	During the planning period, encourage the development of: · 15 very low-income units · 8 low-income units · 6 units identified for seniors, farmworkers, or persons with disabilities Address the lack of affordable housing types in the city Address the lack of farmworker housing in the city Provide incentives that work to overcome concentrations of affordable housing on the eastern portion of the city	HE1.4	Planning Department	General Fund (staff time)	Evaluate constraints: every two years Apply streamlined review: throughout planning period

H-F Municipal Code Updates The City will review and amend the Municipal Code, to comply with State law to: · Allow low barrier navigation centers for compliance with Government Code Sections 65660 and 65668 (AB 101). · Allow for residential care facilities of six or fewer in zones allowing single-family uses, subject only to the requirements of single-family uses, in compliance with State law (HSC § 1568.0831); and permit facilities with seven or more beds in all residential zones with objectivity and certainty similar to other residential uses of the same form · Update Chapter 17.144 (Affordable Housing) to reflect new maximum density bonus tier framework in compliance with California Government Code Sections 65915 through 65918. · Amend the Zoning Ordinance to define "family" as one or more persons living together as a single housekeeping unit in a dwelling unit. The definition should not distinguish between related and unrelated individuals and should not impose a numerical limit on the number of persons that constitute a family. · Update parking requirements related to emergency shelters for compliance with Government Code section 65583, subdivision (a)(4)(A) to require only be the number of spaces necessary for staff working in the shelter and no more than other uses in the same zones. · Allow accessory dwelling units in all zones allowing residential uses, including the AP Zone, mixed-use and commercial zones.	Amend the Municipal Code for compliance with State law by 2025 Address the lack of affordable housing types in the city by removing governmental constraints to housing production Amend the inclusionary housing ordinance to update in-lieu fees to reflect real costs of developing affordable housing, provide incentives to construct workforce housing, and provide more on-site housing requirements for affordable housing development	HE1.4 HE6.1	Planning Department	General Fund (staff time)	By 2025

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
· Update Chapter 17.116.030 (Accessory Dwelling Units) for compliance with Government Code section 65852.2. · Update Chapter 173.200 (Reasonable Accommodation) to remove discretionary finding requirements that constrain development, including finding #5, which considers impacts to surrounding properties or uses. · Incorporate objective design standards for single-family, small lot, and multifamily developments that provide a ministerial design review process · Provide a by-right streamlined review process for affordable housing developments meeting state affordability thresholds, in compliance with SB 35 and SB 330. · Allow permanent and supportive housing pursuant to Government Code section 65661 without discretionary action. [Existing Program HE1.K, expanded]					
H-G Safety Element Update The City will, in accordance with SB 1035, update the General Plan Safety Element to include any new information on fire and flood hazards, as well as climate adaptation and resiliency strategies. In accordance with SB 99 and AB 747, the updated Safety Element will also include evacuation routes and their capacity, safety, and viability under a range of emergency scenarios and to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes. [New Program]	Update the Safety Element by 2024	HE1.4	Planning Department	General Fund (staff time)	2024

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-H Workforce and Farmworker Housing The City will identify and adopt, as appropriate, incentives for development to address the housing needs of "workforce" and farmworker households, with priority given to projects in lower-density higher income on the western half of the city.. As part of this effort, the City will explore the feasibility of adding an above moderate-income workforce housing component to the Inclusionary Housing Ordinance requirements and amend the Ordinance as appropriate. [Existing Program HE1.H, modified]	Identify and adopt, as appropriate, development incentives such as higher density and height allowances, a streamlined design review process, and financial incentives, including fee reductions and waivers and contributions from the City's Housing Trust Fund, to encourage the development of workforce and farmworker housing, including additional incentives for those projects in low-density high-income areas Encourage the development of: · 10 units identified for workforce or farmworker housing during the planning period · 2 workforce housing developments in low-density high-income areas Address the lack of affordable housing types in the city Address the lack of farmworker housing in the city	HE1.4	Planning Department	General Fund (staff time)	By 2025

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-I ADU Workforce Housing Incentive Program The City will implement a program to provide financial assistance for the development of accessory dwelling units in exchange for affordability restrictions that will provide workforce housing. Potential funding sources include, but are not limited to, Housing Trust Funds and Transient Occupancy Tax revenues. To encourage housing mobility and housing choice, the City shall provide marketing of the ADU Workforce Housing Program (and financial incentives) targeted at low-density areas of the city, with particular emphasis on the western half of the city where fair housing issues and existing affordable units are less concentrated. As part of this effort, the City shall hold up to two multi-lingual engagement events. [Existing Program HE1.I]	Establish an ADU Workforce Housing incentive program Market financial incentives to residents in LR and MR zones, particularly on the western portion of the City in combination with Programs H-Q and H-R, encourage the development of: · 80 accessory dwelling units, targeting 60 on the western portion of the city · 20 ADUs with affordability restrictions during the planning period, including 15 within the western portion of the city. · 15 ADUs near downtown Address the lack of affordable housing types in the city Address the lack of farmworker housing in the city	HE1.4	Planning Department	Housing Trust Funds Transient Occupancy Tax State and Federal workforce housing programs State and Federal grant funding	Establish program: by 2025 Provide marketing and engagement events: 2025

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-J Non-traditional Housing Types The City will encourage development of co-housing, ecohousing, a 'green' manufactured home, and other forms of housing, and will ensure these housing types are considered in the city's streamlined approval process. The City will evaluate and update, as appropriate, current zoning practices to remove constraints to non-traditional housing types. The City will also amend the zoning code to provide objective standards for residential development that work for a variety of housing types, including non-traditional housing types. [Existing Program HE1.J, modified]	Evaluate current zoning practices to identify constraints to non-traditional housing types by 2025 Amend the zoning code to remove constraints and provide objective design standards by 2026 Encourage the development of: · 10 missing middle units on infill parcels or in areas within the western portion of the city, consistent with AFFH. · 4 non-traditional housing units during the planning period. Address the lack of affordable housing types in the city	HE1.5	Planning Department	General Fund (staff time)	Encourage non-traditional housing types: throughout the planning period Evaluate zoning: by 2025 Amend zoning: by 2026
H-K Non-Vacant Sites The City shall adopt a policy(ies) to incentivize new or more intense development on sites included in the sites inventory as lower-income capacity, including sites 7, 9, and 11 (for sites 1 and 2, see Program H-L. Incentives may include, but are not limited to, reducing development standards, providing flexible parking standards, priority processing, or deferred fees. The City shall engage property owners within six months of adoption to discuss constraints and potential incentives.	Adopt policies that Incentivize the development of new or more intense uses on non-vacant sites identified as lower-income capacity to meet the RHNA. Encourage the construction of 42 new lower-income units on sites 7, 9, and 11, including 32 on the western portion of the city	HE 1.1 HE 1.2 HE 1.3	Planning Department	General Fund (staff time)	Engage property owners: within six months of adoption Adopt incentives: 2024

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-L City-owned Sites The City will maintain compliance with the Surplus Land Act throughout the 2023-2031 Housing Element planning period. The City will assess the appropriateness of and consider implementing the following: outreach opportunities with housing developers, requests for proposals, development incentives, fee waivers, priority processing, and financial assistance (when available) to facilitate and incentivize developers to develop housing units on City-owned sites. The City plans to make 3 properties available through the Surplus Land Act process over the next two years for a potential development of 57 lower-income units. The City shall conduct studies of City owned sites included in the sites inventor to determine the most efficient use for housing. These include sites 1, 2, and 3. Through this process, the City shall engage local affordable housing developers to determine site constraints and potential policies to meaningfully incentivize affordable housing development on these sites. The City shall proceed with the findings for housing development by 2026. The City anticipates two-and-a-half years to enter into an Exclusive Negotiation Agreement (Fall 2026), and one-and-a-half additional years for land use entitlements and development agreements (Spring 2028). City owned sites included in the inventory (sites 1-3) shall be rezoned incompliance with Govt. Code Section 65583.2(h) and (i) within three years of the adoption deadline (by January 31, 2026.	Engage local affordable housing developers immediately Study city owned sites to determine the most efficient use for affordable housing development within the first year following adoption By 2026, implement an action plan to sell, or release an RFP to develop, City owned land for affordable housing development based on the findings of the conducted studies. Through the action plan, establish and implement a variety of incentives to facilitation housing development. Maintain compliance with the Surplus Land Act throughout the 2023-2031 Housing Element Planning Period Make properties available through the Surplus Land Act process Target Exclusive Negotiating Agreement by Fall 2026 Target land use entitlements issuance by Spring 2028 Encourage the development of 57 lower-income units in the northeast quadrant of the city near transit opportunities, and where fair housing issues are less concentrated, and walkability and environmental scores are more positive	HE 1.1 HE 1.2 HE 1.3	Planning Department	General Fund (staff time)	Engage developers: immediately upon adoption Conduct studies: by July 2025 Implement action plan and incentives for City owned sites: by 2026 Rezone sites: by Jan. 31, 2026

Goal 2 High-Quality Neighborhoods with a Balance of Housing Types

To plan for a balance of housing types throughout the community. [Existing Goal, modified]

Policies

HE 2.1 Encourage higher density development. [Existing Policy HE 2.1, modified]

HE 2.2 Promote higher density development opportunities in low density, high resource areas. [New Policy]

HE 2.3 Promote mixed-use developments. [Existing Policy HE 2.3]

HE 2.4 Promote accessory dwelling unit (ADU) production. [Existing Policy HE 2.4, modified]

HE 2.5 Allow duplexes to the extent required by State law in all single-family residential zones consistent with SB 9. [New Policy]

HE 2.6 Promote the development of missing middle housing with an area median income target of 120 percent (moderate income). [New Policy]

HE 2.7 Promote a balance of housing types and unit sizes throughout the community. [Existing Policy HE 2.6, modified]

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-M Incentives for Lower-Cost Housing Types The City will continue to provide incentives for higher density housing and will explore possible incentives for building attached market rate housing units for rent and for sale. Incentives may include, but are not restricted to, fast tracking development applications, deferred development fees, reduced parking and/or other city standards, and density bonuses. [Existing Program HE2.A]	Encourage the development of 20 lower income units during the planning period Study potential incentives for attached market rate units by 2027 Address the lack of affordable housing types in the city	HE2.1	Planning Department	General Fund (staff time)	Throughout the planning period Attached market-rate housing study by 2027

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-N Zoning to Facilitate Higher Density Housing The City will modify the Zoning Code to facilitate higher density housing, consistent with the 2040 General Plan Update and Housing Sites Analysis, and discourage the construction of oversize homes, particularly within the western portion of the city, consistent with AFFH. The City shall revise maximum lot coverage to 55 percent and maximum height to 42 feet in the HR zone and on key housing sites in the MR zone (see Section 17.40.020(N)). The City shall revise the zoning code to allow minor modifications of up to 10 percent increase in lot coverage standards and 5 percent (or two feet, whichever is greater) in maximum height. Minor modifications shall be approved by the Community Development Director without a public hearing. The City shall reduce parking requirements for multifamily uses with three or more units to require one parking space for studio or one-bedroom units. The City shall revise Section 17.40.020 to allow duplexes and triplexes and densities of 5.1 to 16 dwelling units per acres in the MR zone without a conditional use permit. [Existing Program HE2.B, modified]	Modify the development standards within the Zoning Ordinance to encourage higher density developments by 2026 Develop land use patterns that work to overcome geographic concentrations of lower-and moderate-income earning populations Address the lack of affordable housing types in the city	HE2.1 HE2.2	Planning Department	General Fund (staff time)	By 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-O Exemptions from Minimum Density The City will amend zoning regulations to prohibit exemptions from minimum density requirements. [Existing Program HE2.C]	Prohibit exemptions from minimum density requirements Encourage development patterns that work to overcome geographic concentrations of lower-and moderate-income earning populations	HE2.1 HE2.2	Planning Department	General Fund (staff time)	By 2026
H-P Mixed-use Development Types The City will amend the Zoning Code to create and implement the development criteria set for mixed use development within St Helena. [Existing Program HE2.G, modified]	Amend the Zoning Ordinance to create and implement the development criteria set for mixed use development by 2026 Encourage the development of 20 housing units in mixed-use projects during the planning period Explore and adopt, as appropriate, development incentives such as higher density and height allowances, a streamlined design review process, and financial incentives, including fee reductions and waivers and contributions from the City's Housing Trust Fund, to encourage employers to provide on-site employee housing Address the lack of affordable housing types in the city	HE2.3	Planning Department	General Fund (staff time)	By 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-Q Direct Assistance for ADU Development The City will continue to provide financial incentives, such as fee waivers and pre-approved plans, for ADU development. The City will also explore additional options such as covering the cost of a feasibility consult or the license fee for pre-approved plans, or capping total fees. The City will work with Napa Sonoma ADU to provide public information regarding ADUs on the City website, including a guide for homeowners explaining the benefits and procedures for adding an ADU and links to resources, including the ADU Feasibility Calculator, Home Match Program, and Standard ADU Plans Program. [Existing Program HE2.J, modified]	Provide direct financial incentives to 10 ADU projects in the planning period Explore additional financial incentives by 2025 Provide informational materials and technical assistance regarding the development of ADUs to 30 households in low-density western portions of the city within the planning period Address the lack of affordable housing types in the city	HE2.4	Planning Department	Housing Trust Fund General Fund (staff time)	Explore additional incentives: by 2025 Provide information al materials: by 2025 Engage Napa Sonoma ADU: annually

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-R Place-based ADU Strategy The City will target specific areas for ADU incentives and will create incentives to construct ADUs in the low- and medium-density areas near downtown as well as in low-density higher-income areas of the city, particularly on the western portion of the city. Potential incentives include, but are not restricted to, fast tracking development applications, deferred development fees, and reduced parking and/or other city standards. [Existing Program HE2.K, modified]	Establish place-based ADU strategies and incentives by 2026 In combination with Program H-I and H-Q, the development of: · 80 accessory dwelling units, targeting 60 on the western portion of the city · 20 ADUs with affordability restrictions during the planning period, including 15 within the western portion of the city. · 15 ADUs near downtown Proactively work to overcome concentrations of lower- and moderate-income earning households Proactively work to relieve displacement pressures on multifamily zones	HE2.2 HE2.4	Planning Department	General Fund (staff time)	Establish program: by 2026
H-S Affordability Requirements for ADU Incentives The City will link financial incentives and development standard variances to affordability requirements for ADUs. Whenever the City assists in the development of an ADU through financial incentives or by granting a variance, the City will require that either the main house or the ADU is used as a rental unit affordable to lower- and moderate-income households for a minimum of five years through an affordable housing regulatory agreement with the City. [Existing Program HE2.M, modified]	Update the zoning ordinance to include affordability requirements for ADU projects receiving financial or regulatory incentives by 2026 Incentivize the development of: · 12 very low-income units · 14 low-income units · 6 moderate income units	HE2.4	Planning Department	Housing Trust Fund General Fund (staff time)	By 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-T Illegal Housing Units The City will continue to respond to complaints regarding illegal units. Additionally, the City will work with the property owners to help bring illegal units up to code and to abate the use of non-habitable buildings as living units. [Existing Program HE2.N]	Respond to complaints regarding illegal units Provide technical and financial support to assist five lower income units to be brought up to code within the planning period	HE2.4	Planning and Building Department	General Fund (staff time) Housing Trust Fund	Throughout the planning period
H-U Place-based Density Increases The City will revise the Zoning Code to allow urban lot splits, duplexes, and other two-unit projects in single-family residential zones in accordance with Senate Bill 9. The City will also adopt incentives, which may include fee reductions, deferrals, or waivers; flexible development standards; priority processing, or allowing triplexes on single-family lots if one unit ensures affordability to lower- or moderate-income renters by deed restriction. The City shall publicize informational materials outlining policies and incentives on the City website and through mailing lists and social media outlets. [New Program]	Adopt incentives for small multi-unit SB 9 projects in single-family zones by 2024 Publicize informational materials by 2024; update within 30-days of changes Revise the Zoning Code by 2026 Proactively work to overcome concentrations of lower- and moderate-income populations Proactively work to relieve displacement pressures in multifamily zones	HE2.2 HE2.5	Planning Department	General Fund (staff time)	Allow duplexes: by 2024 Adopt incentives: by 2024
H-V Multi-unit Development in Low-density Higher-income Areas The City will encourage the development of affordable housing on in-fill parcels and in low-density areas in the western portion of the city, in line with the City's commitment to affirmatively further fair housing. As part of this effort, the City will explore and adopt, revisions to development	Post an inventory of potential housing sites on the City's web site immediately following adoption of the Housing Element Explore revisions to development standards to encourage multi-unit infill development (as part of comprehensive zoning code update) by 2026	HE2.2, HE2.6	Planning Department City Council	General Fund (staff time)	Housing sites posted to website in 2023 Standards update: 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
standard to encourage multi-unit developments within existing neighborhoods throughout the city. The City will also explore additional incentives to encourage affordable multi-unit projects in high resource areas, including, but not limited to priority permit processing, reduced or waived development fees, reduced parking and/or other city standards, and an additional density bonus. [Existing Program HE2.P, modified]	Facilitate the development of three multi-unit lower-income housing projects on City-owned properties in the planning period Facilitate the development of five lower- or moderate-income infill projects in the planning period Address disproportionate housing needs in infill areas, including overpayment, overcrowding, and displacement risk by increasing housing opportunities; facilitate seven SB9 lot splits to increase housing opportunities in single family neighborhoods in the planning period, with a goal of facilitating development of five lower-income units on these properties Explore additional incentives for affordable multi-unit projects in low-density areas on the western portion of the city by 2026 Encourage the development of eight lower- and eight moderate income multi-family units in high resource areas or on infill parcels within the planning period Proactively work to overcome concentrations of lower- and moderate-income households on the eastern portion of the city Address the lack of affordable housing types in the city				Explore potential addition incentives: by 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timing
H-W Missing Middle Housing The City will review and amend the zoning code and applicable development standards to encourage and promote a mix of dwelling types and sizes, specifically missing middle-density housing types (e.g., triplexes, courtyard buildings, townhomes, live/work) to create a diversity of housing types and densities and increase the availability of affordable housing to reduce displacement risk for residents overpaying for housing. Specifically, the City will add a new mixed use zone, consistent with the 2040 General Plan Update, and will evaluate and revise minimum lot sizes and parking ratios, particularly in high resource, low-density areas. [New Program]	Revise zoning standards to encourage missing middle housing by 2026 To enhance housing mobility and housing choice, encourage the development of a variety of missing middle housing types in infill projects; support the development of three missing middle housing developments between three and 20 units To enhance housing mobility, encourage the development of 15 lower- and 15 moderate-income units in low-density high-income areas	HE2.2 HE2.6 HE2.7	Planning Department	General Fund (staff time)	Revise Zoning Code: by 2026

Goal 3 Conservation of Existing Housing

Improve and conserve existing housing, with particular attention to the rehabilitation and retention of existing affordable units. [Existing Goal]

Policies

HE 3.1 Protect the existing stock of affordable and market rate housing. [Existing Policy HE 3.1]

HE 3.2 Support the conservation of existing housing units for those with special housing needs, including seniors and others with special housing needs. [New Policy]

HE 3.3 Monitor housing conditions. [Existing Policy HE 3.2]

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-X Condominium Conversion The City will continue to restrict the conversion of rental units to condominiums. Current policy allows conversion to condominiums under certain circumstances when the vacancy rate is high. Because the presence of second homes within the community results in an inflated vacancy rate, the City will update the current policy to eliminate the linkage to vacancy rates. To work to reduce displacement pressures in lower-resourced areas, the revised policy will completely restrict all conversions in the eastern portion of the city. [Existing Program HE3.A]	Preserve existing affordable housing stock Update current policy to remove linkage to vacancy rates Completely restrict condominium conversion in the eastern portion of the City Address the lack of affordable housing types in the city	HE3.1	Planning Department	General Fund (staff time)	Update policy by 2026
H-Y Affordable Housing Impact Fee The City will continue to charge an affordable housing impact fee whenever housing units are converted to other uses. The City will exempt conversion projects that create affordable for-sale housing from this impact fee. Collected affordable housing impact fees will be used for the preservation and development of housing opportunities affordable to lower- and moderate-income households, and will give priority to projects in the eastern portion of the city where fair housing issues, and displacement risks exist in greater concentrations. [Existing Program HE3.B]	Evaluate the impact fee against the real cost of affordable housing development every two years Discourage the conversion of residential uses to nonresidential uses Address the lack of affordable housing types in the city by working to retain existing units or generating funding for future affordable units	HE3.1	Planning Department	General Fund (staff time)	Throughout the planning period Evaluate impact fee: every two years

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-Z At-Risk Assisted Affordable Housing Units Although there are no assisted affordable units currently at-risk of conversion to market rate in St. Helena, the City with the assistance of the Napa Housing Authority, shall continue to monitor assisted properties. If units are identified as at-risk of conversion, the City will work with the property owners and/or other parties to ensure that they are conserved as affordable housing. The City will also engage with owners of deed-restricted moderate-income for-sale units (Marietta Townhomes and Voorhees Circle) at-risk of conversion to market rate within the planning period. The City will work with owners to find solutions to extend affordability requirements. [Existing Program HE3.C, modified]	Unless consistent with the terms of an affordable housing agreement with the City of St. Helena, prohibit the conversion of assisted affordable units to market rate Retain all assisted affordable units during the planning period Immediately (by 2024) engage homeowners with expiring deed-restrictions	HE3.1	Planning Department	General Fund (staff time)	Engage at-risk property owners: immediately, and twice annually thereafter
H-AA Vacation Rentals The City will continue to limit the conversion of market rate housing to vacation rentals and will abate the use of illegal vacation rentals, including time shares and fractional interests. To preserve existing affordable housing and reduce displacement pressures, the City shall adopt a policy restricting conversion of units occupied by lower- and moderate- income households in the southeast quadrant of the city to vacation rentals. [Existing Program HE3.D]	Maintain the current stock of market rate housing Restrict the conversion of housing units to vacation rentals occupied by lower- and moderate-income households in the southeast quadrant of the city where fair housing issues exist in greater concentrations Discourage the conversion of market rate housing units to vacation rentals, particularly in low-density higher-resourced areas Address the lack of affordable housing types in the city	HE3.1	Planning Department	General Fund (staff time)	Throughout the planning period

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Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-BB Special Housing Needs Rehabilitation Program The City shall actively pursue federal and State funding sources, including CDBG, Affordable Housing and Sustainable Communities (AHSC), Permanent Local Housing Allocation (PLHA), CalHome funds, HOME, and other grant sources to establish a program to support the rehabilitation needs of seniors and others with special housing needs, particularly on the eastern portion of the city where affordable units are generally concentrated and displacement risks are increased[Source: New Program]	Pursue funding to assist with rehabilitation costs for lower income households and seniors During the Planning Period, encourage the rehabilitation/conservation of: · 20 units accessible to seniors · 10 units accessible to persons with a disability	HE3.2	Planning and Finance Departments	CDBG, AHSC, PLHA, CalHome, HOME	Annually and as notices of funding availability are released.
H-CC Annual Progress Report The City will continue to review housing needs, conditions, achievements and challenges as part of the City's regular General Plan review and Annual Housing Element Progress Report, as required by State law. [Existing Program HE3.E]	Submit the Annual Progress Report to the State Department of Housing and Community Development and the Governor's Office of Planning and Research by April 1st of each year Provide transparency on housing-related actions and programs	HE3.3 HE4.6	Planning Department	General Fund (staff time)	Annually

Goal 4 Assistance to Support Affordable Housing

To provide technical and financial resources to support development of affordable housing in our community, especially housing that meets the needs of our local workforce, people with special housing needs, and people with moderate, low, and very low incomes.

Policies

HE 4.1 Develop permanent local sources of funding to support affordable housing. [Existing Policy HE 4.1]

HE 4.2 Aggressively pursue and 'leverage' State and Federal housing funds. [Existing Policy HE 4.2]

HE 4.3 Address farmworker housing needs. [Existing Policy HE 4.3]

HE 4.4 Support housing that meets special needs, including senior citizens and persons with disabilities. [Existing Policy HE 4.4]

HE 4.5 Explore methods to increase Housing Trust Fund money. [Existing Policy HE 4.5]

HE 4.6 Provide transparency regarding information on housing-related actions, fees, and programs. [New Policy]

HE 4.7 Provide local preference in the procurement process when municipal funds may be used for housing. [New Policy]

HE 4.8 Give preference to projects providing workforce housing affordable to up to 140 percent of the AMI. [New Policy].

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-DD Revenue Generation for Affordable Housing The City will continue to generate revenues for affordable housing through the Affordable Housing Trust Fund and Transient Occupancy Tax and will continue to use the revenue to support the development or rehabilitation of affordable housing. [Existing Program HE4.B, modified]	Support the development or preservation of five extremely low or very low-income units Address the lack of affordable housing types in the city	HE4.1 HE4.5	Planning Department	General Fund (staff time) Housing Trust Fund Transient Occupancy Tax	Throughout the planning period
H-EE Reduced Fees for Affordable Housing The City will continue to reduce, defer, or waive fees for affordable housing developments and will explore and adopt as appropriate higher incentives for affordable housing developments with units affordable to extremely low- and very low-income households. [Existing Program HE4.C, modified]	Reduce fees for 30 extremely-low or very low-income units Address the lack of affordable housing types in the city	HE4.1	Planning Department	General Fund Housing Trust Fund	Evaluate and adopt, as appropriate, potential additional incentives: by 2026
H-FF Extremely Low-Income Units The City will continue to prioritize the use of the Affordable Housing Trust Fund in support of the development and preservation of regulated affordable units for extremely low-income households. The City will immediately engage with developers interested in creating or preserving housing for extremely low-income households to discuss available incentives and any financial or technical assistance the City can provide. [Existing Program HE4.D]	Support the development or preservation of six units for extremely low-income households Address the lack of affordable housing types in the city	HE4.1	Planning Department	Housing Trust Fund	Engage prospective developers: immediately upon identification

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-GG Affordable Homeownership The City will continue to pursue mortgage revenue bonds and/or mortgage credit certificates to promote affordable homeownership opportunities for moderate- and lower-income households. The City shall evaluate these opportunities and engage with potential partnering jurisdictions or institutions annually. The City shall also engage with local mortgage brokers and real estate agents to identify existing programs providing downpayment loans or direct assistance to first-time homebuyers and shall make this information available on the city's website, as well as through up to two multi-lingual engagement events targeting the eastern portion of the city. [Existing Program HE4.E]	Research and identify potential funding sources in 2024 and annually thereafter with the goal of establishing a homeownership assistance program in 2026 Collect and publicize information on existing programs available to first-time and lower-income prospective homeowners through State, Federal, or non-profit agencies within 18 months of adoption of the Housing Element; hold up to two multi-lingual events on the eastern portion of the City by 2026 Assist three lower- or moderate-income households transition from rental housing to homeownership Address the lack of affordable housing types in the city	HE4.2	Planning and Finance Departments	General Fund (staff time)	Annually Identify funding for City led program: in 2024 and annually thereafter Collect and publicize information on existing programs: within 18 months of adoption Targeted engagement events: by 2026
H-HH Additional Funding The City will continue to pursue additional funding for affordable housing and will explore new options for affordable housing funding. [Existing Program HE4.F, modified]	Explore new funding sources every two years to support housing for lower- and moderate-income households, seniors, and residents with special housing needs Address the lack of affordable housing types in the city	HE4.1	Planning and Finance Departments	General Fund (staff time)	Explore new opportunities: Every two years

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-II Section 8 Subsidies The City will continue to partner with the City of Napa Housing Authority to provide rental assistance to low-, very low-, and extremely low-income households through Housing Choice Voucher (Section 8) rent subsidy certificates. [Existing Program HE4.G]	Support the City of Napa Housing Authority rental assistance efforts; engage the Housing Authority annually to explore opportunities Provide informational materials regarding Housing Choice Voucher subsidies on the City website by 2024 Address the lack of affordable housing types in the city	HE4.2	Planning Department	General Fund (staff time)	Engage the Housing Authority: annually Informational materials: by 2024
H-JJ Housing Coordinator While the City currently contracts with the City of Napa for Housing Authority services, the City will explore the possibility of establishing a full-time, shared Housing Coordinator for the up-valley communities to: promote development of new affordable housing in low-density higher-resourced areas, assist lower-income households obtain housing in higher resourced areas, and preserve existing affordable units. The City shall enter into a cost-sharing agreement, if feasible. The position would serve all of the up-valley communities, including Napa County. [Existing Program HE4.H]	Meet with potential partner jurisdictions a minimum of two times during the planning period to explore options Identify and procure funds to establish a shared Housing Coordinator for the up-valley communities to promote affordable development in low-density higher resourced areas, assist lower-income households obtain housing in higher-resourced areas, and preserve existing lower- and moderate-income units	HE4.2	City Manager Planning Department	General Fund (staff time) CDBG, AHSC, PLHA), CalHome, HOME, and other grant sources	Engage potential partners: by 2026 Identify potential funding: by 2026

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-KK Farmworker Housing Needs The City will contribute staff time and City resources, as appropriate, to countywide farmworker housing efforts that may occur during the Housing Element planning period. The City will reach out to affordable housing developers to support regional and City efforts to develop farmworker housing, including assisting with financing or applications, incentives and concessions, expedited review or other strategies to encourage the development of housing for farmworkers. [Existing Program HE4.I]	Support local and regional efforts to develop farmworker housing Assist in the development of one farmworker housing project during the planning period Address the lack of farmworker housing in the city	HE4.3	Planning Department	General Fund (staff time) Housing Trust Fund	Outreach to affordable housing developers by 2024 and every two years thereafter
H-LL Special Needs Housing Opportunities The City will encourage new developments to provide a portion of units to meet the special housing needs of seniors and persons with disabilities, including developmental disabilities, throughout the city. The City will provide information on available incentives on the City website and shall immediately engage individuals or agencies interested in special needs production to discuss opportunities and constraints specific to the parcel(s) being considered. [Existing Program HE4.J]	During the Planning Period, encourage the development of: · 10 units accessible to seniors · 5 units accessible to persons with disabilities Address the lack of affordable housing types throughout the city	HE4.4	Planning Department	General Fund (staff time)	Information to website: by 2025 Engage potential developers: immediately upon identification

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-MM Housing Information Transparency The City will, in accordance with AB 1483 (2019), obtain, maintain, update, and make publicly available information related to zoning ordinances, development standards, fees, exactions, affordability requirements, and fair housing laws from the Department of Housing and Community Development, State Fair Employment, and Housing Commission's enforcement program, as well as programs and funding sources for homeowners at risk of foreclosure, the State Historic Building Code, and information on energy conservation opportunities. The City will, as appropriate, share this information on the City website and/or in hard copy form at City offices. Any changes to such information shall be made public within 30 days of changes. The City will provide these items in Spanish, as funding and staff time allows. [New Program]	Create and share a digital information database in compliance with AB 1483 by 2024 Updated information is made publicly available within 30 days of changes Provide information in Spanish, as funding allows	HE4.6	Planning Department	General Fund (staff time)	Database: By 2024 and annually thereafter Update information: within 30-days of any changes
H-NN Funding for New Special Housing Needs The City shall actively pursue federal and State funding sources, including CDBG, Affordable Housing and Sustainable Communities (AHSC), Permanent Local Housing Allocation (PLHA), CalHome funds, HOME, and other grant sources to support the construction of housing for seniors and those with special housing needs. The City shall periodically review available housing programs to identify additional funding sources. [Source: New Program]	Pursue funding to assist with construction and rehabilitation needs of lower income households and seniors During the Planning Period, encourage the development of: · 20 units accessible to seniors · 10 units accessible to persons with disabilities	HE3.1 HE 4.1 HE4.2 HE4.4	Planning and Finance Departments	CDBG, AHSC, PLHA, CalHome, HOME	Annually and as notices of funding availability are release.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-OO Unit Conversion for Extremely Low-Income Households The City will continue to explore the potential of using Affordable Housing Trust Fund money to purchase existing housing for conversion to restricted affordable housing and will commit funding as appropriate. Priority for use of Affordable Housing Trust Fund monies will be given to the creation of housing affordable to extremely-low-income households, particularly within the western portion of the city, consistent with the commitment to overcome geographic income disparities. [Existing Program HE4.L]	Identify potential funding Engage with owners of local market rate multifamily units to discuss opportunities, if funding allows Assist in the conversion of two units from market rate to extremely low-income during the planning period Proactively work to overcome concentrations of lower- and moderate-income populations Address the lack of affordable housing types in the city	HE4.1	Planning Department	Housing Trust Fund General Fund (staff time)	Identify potential funding: annually Engage owners: immediately as funding and potential properties are identified
H-PP Surplus and Excess Public Land The City will, in accordance with AB 1486 (2019) and AB 1255 (2019), annually identify and inventory a list of sites owned by the City that have been sold, leased, or otherwise disposed of in the prior year. This inventory shall be publicly available and be included in the Housing Element annual report presented to the City Council and submitted to HCD. [New Program]	Regularly maintain an inventory of publicly-owned surplus or excess land on the City website Annually release information regarding publicly-owned sites that have been sold, leased, or disposed of	HE4.6	Planning Department	General Fund (staff time)	2023, with annual updates

Goal 5 Resource Conservation

To promote resource conservation by encouraging housing types and designs that use fewer resources (water, electricity, etc.) and therefore cost less to operate over time, supporting long-term housing affordability.

Policies

HE 5.1 Encourage alternative energy sources. [Existing Policy HE 5.1]

HE 5.2 Encourage energy and resource conservation. [Existing Policy HE 5.2]

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-QQ Green Building Ordinance The City shall update the Green Building Ordinance, as necessary, to meet or exceed periodic updates to the State's Green Building Standards Code (CalGreen). [Existing Program HE5.A, modified]	Ensure compliance with CalGreen throughout the planning period	HE5.1	Planning and Building Department	General Fund (staff time)	Throughout the planning period, as necessary
H-RR Alternative Energy Technologies The City will continue to encourage the use of alternative energy technologies and will explore incentives for the use of solar energy in new and rehabilitated housing. Incentives to adopt as appropriate include, but are not restricted to, ensuring a streamlined review process for applications, allowing applications to be submitted via email and paid by phone, deferred fees, and reduced applicable city standards. [Existing Program HE5.B, modified]	Encourage alternative energy technologies in new and existing developments Explore additional incentives for solar installation	HE5.1	Planning and Building Department	General Fund (staff time)	Explore and adopt incentives, as appropriate: by 2026
H-SS Alternative Energy Technology Information The City will continue to provide public information on energy conservation and alternative energy technologies to residential developers, contractors, and property owners. [Existing Program HE5.C]	Provide information on the City website and at City Hall regarding energy conservation, alternative energy technology options, possible sources of financing, and any applicable information regarding necessary local permits	HE5.1	Planning and Building Department	General Fund (staff time)	2023; updated annually thereafter

Implementation Program	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-TT Cost-Effective Energy Conservation The City will continue to require cost-effective energy conservation measures in all new and rehabilitated housing to promote long-term affordability for occupants. The City will adopt the State's new Energy Efficiency Standards as part of any update to the California Building Standards Code and ensure that all new housing units constructed in the City meet or exceed these standards. [Existing Program HE5.D]	Promote long-term affordability Adopt updated State energy efficiency and building code standards, as necessary, throughout the planning period	HE5.2	Planning and Building Department	General Fund (staff time)	Every three years beginning in 2023
H-UU Energy Conservation Measures The City will continue to participate in AB-811 programs and will explore additional state and federal sources of funding to finance local energy conservation measures. Sources of state and federal funds include, but are not limited to, the California Energy Commission State Energy Program and Energy Efficiency and Conservation Block Grant Program, and the Low-Income Home Energy Assistance Program. [Existing Program HE5.E]	Identify and procure additional funding to support energy conservation measures Provide information on available assistance programs on the City website by 2024 Assist three households, through financial or technical assistance, with the implementation of energy conservation measures	HE5.2	Planning and Finance Departments	General Fund (staff time) State and Federal Grant Funds	Throughout the planning period Explore funding: annually Provide information on assistance programs: by 2024
H-VV Water Conservation The City will continue to apply Municipal Code provisions pertaining to water resources, including requirements for water-efficient landscaping for new residential and commercial construction, as well as implementing the "Water Neutrality" policy for all new development. [Existing Program HE5.H]	Reduce water consumption Require water-efficient landscaping Implement the "Water Neutral" policy Implement the Water Efficient Landscape Ordinance (WELO)	HE5.2	Planning and Public Works Departments	General Fund (staff time)	Throughout the planning period

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Agenda Item #6.1.

Goal 6 Affirmatively Furthering Fair Housing

To assure that housing programs maximize opportunity and housing choice throughout the city and proactively work to overcome patterns of economic segregation and discrimination based upon age, sex, race, sexual orientation, religion, familial status, ethnic background, or disability. [Existing Goal, modified]

Policies

HE 6.1 Support equal housing opportunities for all residents of St. Helena. [Existing Policy HE 6.1]

HE 6.2 Support the fair housing services provider. [New Policy]

HE 6.3 Support regional efforts to affirmatively further fair housing. [New Policy]

HE 6.4 Ensure public investments are equitably distributed throughout the community. [New Policy]

HE 6.5 Consider affirmatively furthering fair housing goals in all housing related decisions. [New Policy]

Implementation Programs

Implementation programs for this goal have been included in a table beginning on the following page.

Implementation Programs	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-WW Affirmatively Furthering Fair Housing The City shall address disparities in housing needs and access to opportunity for all persons regardless race, color, religion, sex, national origin, familial status, disability gender, gender identify, gender expression, sexual orientation, marital status, ancestry, veteran or military status, source of income, and genetic information as protected categories by the California Fair Employment and Housing Act (Part 2.8 [commencing with Section 12900] of Division 3 of Title 2), Section 65008, and any other state and federal fair housing and planning law. The City identified barriers to fair housing through the Affirmatively Furthering Fair Housing Assessment. Actions the City will take to address the identified barriers and foster an inclusive community, include: · Concentrations of Lower- and Moderate-income Earning Populations: H-A, H-B, H-N, H-O, H-R, H-U, H-V, H-W and H-OO. · Insufficient Housing Stock for Farmworkers: H-E, H-H, H-I, and H-KK. · Lack of Affordable Housing Types: H-A, H-B, H-E, H-H, H-I, H-J, H-M, H-N, H-P, H-Q, H-V, H-X, H-AA, H-DD, H-EE, H-FF, H-GG, H-LL, H-NN, and H-OO. · Fair Housing Enforcement and Outreach: H-T, H-II, H-JJ, H-WW, and H-XX. · Limited Resources for Persons with Disabilities: H-BB, H-LL, and H-NN; as well as objectives D, F and G in this program.	A) Work to coordinate annual meetings with jurisdictions and fair housing providers in the county to assist with and participate in promoting fair housing opportunities through pursing potential funding opportunities and joint efforts aimed at educating the community about fair housing issues and resources B) Promote the availability of bi-lingual resources by ensuring that City-provided services and materials are available in Spanish and that information is included regarding the availability of interpretation or translation services C) Facilitate development of multifamily housing on the western portion of the city by providing developers with information on incentives for affordable multifamily development and maintaining a list of available sites (for metrics, see Program H-V) D) Use local permitting and approval processes to ensure all new multifamily construction, as well as ADUs, meet the accessibility requirements of the federal and state fair housing acts; with the goal of facilitating the development of 30 units accessible to seniors and other residents with special housing needs E) Affirmatively recruit a diverse and multi-lingual staff, as positions become available F) Work with Napa Valley Transportation Authority to explore lowering ridership costs for the VineGo paratransit system	HE6.1 HE6.2 HE6.3 HE6.4 HE6.5	City Council City Manager Planning Department	General Fund (staff time)	A and H: annually C: engage with developers twice within the planning period D: by 2027 F and G: Every two years

Implementation Programs	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
· Place-based Strategies for Community Preservation and Revitalization and Displacement Protection: H-A, H-I, H-J, H-N, H-Q, H-R, H-U, H-V, H-W, and H-WW. The City has included additional objectives with this program. The City shall monitor progress toward these objectives annually in the Annual Progress Report and shall implement additional measures as necessary. [New Program]	G) Work with the County of Napa to carry out an ADA self-evaluation and transition plan to remove barriers for persons with disabilities to facilities and programs in Napa County H) Prioritize capital improvement projects for public infrastructure improvements that facilitate affordable housing development in the eastern portion of the city				
H-XX Fair Housing Provider The City will continue to utilize and support Fair Housing Napa Valley as the City's fair housing service provider, responsible for implementing fair housing programs, receiving complaints, and providing referrals to available resources when necessary. The City will work with the Fair Housing Napa Valley to provide educational materials to educate real estate professionals, property owners and tenants on their rights and responsibilities and the resources available to address fair housing issues. [Existing Program HE6.A, modified]	Provide direct funding to Fair Housing Napa Valley with of goal of providing up to $80,000 over the planning period Support fair housing investigations with a goal of assisting with five investigations of existing affordable developments for rent in the southeast quadrant of the city and fair housing issues are more concentrated and displacement risk is higher Provide multi-lingual informational materials to the public regarding tenant rights, fair housing issues, and resources on the City's website and hold one multi-lingual engagement event to present the information targeting residents in the eastern portion of the city Provide a link to Fair Housing Napa Valley on the City's website	HE6.2	City Manager Planning Department	General Fund	Engage Fair Housing Napa Valley: annually Informational materials to City website: by 2024 Engagement event: 2025

Implementation Programs	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-YY Replacement Unit Program The City will adopt a policy and will require replacement housing units subject to the requirements of Government Code section 65915, subdivision (c)(3) on sites identified in the site inventory when any new development (residential, mixed-use or nonresidential) occurs on a site that is identified in the inventory meeting the following conditions: • currently has residential uses or within the past five years has had residential uses that have been vacated or demolished, and • was subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of low or very low-income, or • subject to any other form of rent or price control through a public entity's valid exercise of its police power, or • occupied by low or very low-income households	In order to mitigate the loss of affordable housing units, require new housing developments to replace all affordable housing units lost due to new development	HE3.1 HE6.1	Planning Department	General Fund	Implement: immediately Adopt policy: by January 31, 2024

Implementation Programs	Objectives	Implements What Policies	Who is Responsible	Potential Funding Source	Timeframe
H-ZZ Lot Consolidation To expand opportunities for additional affordable housing, the City will encourage the consolidation of small parcels to accommodate larger-scale and higher density developments that are compatible with existing neighborhoods. The sites inventory includes five parcels equating to 39 lower- and 39 moderate-income RHNA units. These sites were identified based on common ownership and contiguous lots. While all five parcels are within moderate resource areas, two of these parcels (site 9) are located on the western portion of the city, an area with fewer fair housing issues, and adjacent to Spring Street in proximity to high-quality transit opportunities. While these parcels will be processed by-right pursuant to Gov. Code section 65583(c)), the City will also implement other efforts to facilitate and encourage lot consolidation.	Post the sites on the City's website by October 2023 and provide list to interested developers when requested, and review annually for accuracy Develop and implement incentives for lot consolidation by January 2024 such as fee waivers, reduced development fees, expedited permit processing, greater density bonus incentives, and modifications to parking, height, or setback standards Facilitate lot consolidation for high density residential developments by providing appropriate assistance to developers to encourage negotiations between property owners Encourage the development of 39 lower- and 39 moderate income units during the planning period. To increase housing mobility and opportunities in areas where fair housing issues are less concentrated, encourage the development of 15 lower- and 15 moderate-income units on the western portion of the City	HE 1.3 HE 4.6 HE6.1	Planning Department	General Fund Housing Trust Fund	Post sites to website: by Oct. 2023 Implement incentives: by 2024
H-AAA Permit Streamlining Act The City shall amend the Municipal Code to specify who is responsible for making CEQA determinations and within the timeframes of PRC 21080.1 and PRC 21080.2; and determination of when the PSA is triggered per Government Code 65950(a)(5) the Permit Streamlining Act (PSA).	Amend the municipal code for compliance with State law within 18 months of adoption of the Housing Element	HE 1.3 HE 4.6	Planning Department	General Fund (staff time)	Within 18 months of adoption of the 2023-2031 Housing Element

Quantified Objectives

Quantified Objectives by Type

One of the requirements of State law (California Government Code, Section 65583[b]) is that the Housing Element contains quantified objectives for the maintenance, preservation, improvement, and development of housing. State law recognizes that the total housing needs identified by a community may exceed available resources and the community's ability to satisfy this need. Under these circumstances, the quantified objectives need not be identical to the total housing needs, however, the quantified objectives shall establish the number of housing units by income category that can be realistically constructed, rehabilitated, and conserved. The City has established quantifiable objectives in implementation programs throughout the policy document. This section summarizes new construction, conservation, and special needs housing objectives for the 2023-2031 planning period.

New Construction Objectives

Extremely low-income	33 units	166 lower-income units	302 total units
Very low-income	73 units		
Low-income	60 units		
Moderate-income	44 units	136 moderate and above-moderate units	
Above moderate-income	92 units		

Rehabilitation and Conservation Objectives

- Conservation of all existing affordable housing units.
- Conserve 200 manufactured homes at manufactured home parks.
- Rehabilitation of 20 units for seniors and 10 units for persons with a disability

Assistance for Special Needs Households

- 35 units of senior housing
- 18 units for persons with a disability
- 12 units for farmworkers
- Assist in the conversion of two units from market rate to extremely low-income during the planning period.
- Assist three lower- or moderate-income households transition from rental housing to homeownership

Quantified Objectives Summary Table

The City will strive to exceed the following targets for affordable housing development in St. Helena.

	Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
New Construction	33	73	60	44	92	302
Rehabilitation	10	10	5	5	0	30
Conservation/Preservation	0	120	100	231	0	451

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Part 2: Needs Assessment

Adopted

May 9, 2023

ST. HELENA
CALIFORNIA
HOUSING ELEMENT
2023 - 2031



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1. Introduction

Since 1969, California Housing Element Law has required that local governments develop plans to accommodate and facilitate housing for current and future residents, at all income levels.

Housing Element Purpose

The purpose of the Housing Element is to establish a comprehensive plan to address housing needs in St. Helena over the eight-year planning period between January 31, 2023, through January 31, 2031. The Housing Element sets the policies surrounding the development, rehabilitation, and preservation of housing units that meet the needs of St. Helena residents.

The Housing Element consists of two parts, the Housing Needs Assessment and a Housing Element Policy Document. The Housing Needs Assessment identifies and analyzes the existing and projected housing needs for St. Helena and also identifies sites for housing development that are adequate to accommodate the City's regional housing needs allocation. The Housing Policy document will state goals, policies, quantified objectives, and implementation programs for the development, rehabilitation, and preservation of housing, based upon the findings of the Housing Needs Assessment and input received through public outreach. Then, throughout the eight-year planning period, St. Helena will implement a set of programs to meet the goals included in the Housing Element Policy Document.

Authority

Housing Elements are required by section 65302(c) of the California Government Code. Housing Elements are one of seven mandatory General Plan Elements. Specific requirements for Housing Elements are set forth beginning at section 65580 of the Government Code, with additional guidance provided by the State Department of Housing and Community Development (HCD). The combination of the Housing Needs Assessment and the Housing Element Policy Document will address all applicable requirements of state law.

Status

The St. Helena City Council adopted the prior Housing Element in 2015 for the planning period ranging from January 31, 2015 through January 31, 2023. Upon review of the adopted Housing Element, HCD sent the City of St. Helena a letter of compliance on May 29, 2015.[1] The 2023-2031 Housing Element Update will plan for St. Helena's housing needs through the 8-year planning period of January 31, 2023, through January 31, 2031. While the City's policies and programs guide housing development during the planning period, the City receives credit for housing units that are built during the Regional Housing Need Assessment (RHNA) projection period, which is June 20, 2022, through December 31, 2030, a period of 8.5 years.[2]

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[1] *California Department of Housing and Community Development. Housing Element Review Letters. http://www.hcd.ca.gov/hpd/hrc/plan/he/he_review_letters/. Accessed on March 11, 2014.*

[2] *California Department of Housing and Community Development. Housing Element Update Schedule. https://www.hcd.ca.gov/community-development/housing-element/docs/6th-web-he-duedate.pdf. Accessed November 2021.*

Consistency with the General Plan

California Government Code Section 65300.5 requires that a general plan be internally consistent, meaning that no conflicts exist among the elements of the plan. Government Code section 65583(c) requires that a housing element describe how consistency has been achieved among the general plan elements. The most important aspect of consistency among general plan elements is that policies and implementation measures do not conflict but support one another to achieve the overall goals and vision of a general plan.

In preparing the 2023-2031 Housing Element, the City reviewed goals and policies in the various elements of the 2040 St. Helena General Plan. With the passage of SB 1035 in 2018, the City will need to update its Safety Element to include any new information on fire hazards, flood hazards, and climate adaptation and resiliency strategies. Program H-G commits the city to updating the Safety Element. Additionally, the City has committed to remove the Growth Management System through Program H-B, and will need to update the Zoning Code for consistency. Consistency with the remaining components of the 2040 General Plan has been achieved through the adoption of complementary policies in each of the elements that support the goals and policies of the other elements.

Changes to State Law

The following items represent substantive changes to State housing law since the City's last Housing Element was adopted and certified. While this is not an exhaustive list, these items are state mandates that must be addressed in the Housing Element.

Affordable Housing Streamlined Approval Process: Senate Bill 35 (2017)

SB 35 requires a streamlined, ministerial review process, or objective design standards, for qualifying multifamily, urban infill projects in jurisdictions that have failed to approve housing projects sufficient to meet their State-mandated RHNA. Among other requirements, to qualify for streamlining under SB 35, a project must incorporate one of two threshold levels of affordable housing: (1) 10 percent of the project units in jurisdictions that have not approved housing projects sufficient to meet their RHNA for above moderate-income housing or have failed to submit an annual progress report as required under state law; or (2) 50 percent of the project units in jurisdictions that have not approved housing projects sufficient to meet their RHNA for below moderate-income housing. Additionally, the Housing Element must describe the City's processing procedures related to SB 35.

The City is not subject to the requirements of SB 35 as it has successfully met its fair share of local housing needs for the fifth cycle, an accomplishment only shared with a small handful of jurisdictions statewide. The City has not adopted a streamlined approval process for multi-family units related to SB 35 or SB 330, however, it has drafted a process to comply with the law which is being codified as a part of the ongoing Zoning Code Update. The process incorporates objective design standards and ministerial review free of discretionary processes. Program H-F commits the City to amending the Zoning Code to provide a by-right streamlined review

process for affordable housing developments meeting state affordability thresholds, in compliance with SB 35 and SB 330..

Additional Housing Element Sites Analysis Requirements: Assembly Bill 879 (2017) and Assembly Bill 1397 (2017)

These bills require additional analysis and justification of the sites included in the sites inventory of the City Housing Element. The Housing Element may only count non-vacant sites included in one previous housing element inventory and vacant sites included in two previous housing elements if the sites are subject to a program that allows affordable housing by right. Additionally, the bills require additional analysis of non-vacant sites and additional analysis of infrastructure capacity, and by place size restrictions on all sites. The Housing Element sites inventory has been prepared in compliance with AB 879 and AB 1397.

Affirmatively Furthering Fair Housing: Assembly Bill 686 (2017)

AB 686 requires the City to administer its housing programs and activities in a manner to affirmatively further fair housing and not take any action that is inconsistent with this obligation. The City must take actions to overcome patterns of segregation, address disparities in housing needs and access to opportunity, and foster inclusive communities. The Housing Element must include an assessment of fair housing practices, an examination of the relationship of available sites to areas of high opportunity, and actions to affirmatively further fair housing. This Housing Element includes Program H-WW addressing fair housing and AFFH directly, and objectives to affirmatively further fair housing in programs throughout the Element. Appendix A: Affirmatively Furthering Fair Housing includes an analysis of fair housing in St, Helena.

No-Net-Loss Zoning: Senate Bill 166 (2017)

SB 166 amended the No-Net-Loss rule to require that the land inventory and site identification programs in the Housing Element include sufficient sites to accommodate the unmet RHNA. When a site identified in the Housing Element as available to accommodate the lower-income portion of the RHNA is actually developed for a higher income group, the City must either (1) identify, and rezone if necessary, an adequate substitute site or (2) demonstrate that the land inventory already contains an adequate substitute site. This Housing Element has been prepared in accordance with the No-Net-Loss rule and identifies sites that can accommodate 241 units in addition to the City's RHNA requirement of 256. Chapter 11 includes a detailed discussion of the sites inventory process.

Safety Element to Address Adaptation and Resiliency: Senate Bill 1035 (2018)

SB 1035 requires the General Plan Safety Element to be reviewed and revised to include any new information on fire hazards, flood hazards, and climate adaptation and resiliency strategies with each revision of the housing element. Program H-G of this Housing Element commits the City to updating the Safety Element within three years of certifying this Housing Element.

By Right Transitional and Permanent Supportive Housing: Assembly Bill 2162 (2018) and Assembly Bill 101 (2019)

AB 2162 requires the City to change its zoning to provide a "by right" process and expedited review for supportive housing. The bill prohibits the City from applying a conditional use permit or other discretionary review to the approval of 100 percent affordable developments that include a percentage of supportive housing units, either 25 percent or 12 units, whichever is greater. The change in the law applies to sites in zones where multifamily and mixed uses are permitted, including in nonresidential zones permitting multifamily use. The City currently permits transitional and supportive housing within all residential, commercial, and mixed-use zones, subject only to the same conditions as residential uses, in compliance with State law..

Additionally, AB 101 requires that a Low Barrier Navigation Center development be a use allowed by right in mixed-use zones and nonresidential zones permitting multifamily uses if it meets specified requirements. The City does not currently comply with this requirement. Program H-F commits the City to update the zoning code to allow low barrier navigation centers by right in areas zoned for mixed use as well as nonresidential zones permitting multifamily uses.

Accessory Dwelling Units: Assembly Bill 2299 (2016), Senate Bill 1069 (2016), Assembly Bill 494 (2017), Senate Bill 229 (2017), Assembly Bill 68 (2019), Assembly Bill 881 (2019), Assembly Bill 587 (2019), Senate Bill 13 (2019), and Assembly Bill 671 (2019)

In recent years, multiple bills have added requirements for local governments related to Accessory Dwelling Unit (ADU) regulation. The 2016 and 2017 updates to State law included changes pertaining to the allowed size of ADUs, permitting ADUs by right in at least some areas of a jurisdiction, and parking requirements related to ADUs. More recent bills reduce the time to review and approve ADU applications to 60 days and remove lot size and replacement parking space requirements. AB 68 allows an ADU and a junior ADU to be built on a single-family lot, if certain conditions are met. The State has also removed owner-occupancy requirements for ADUs, created a tiered fee structure that charges ADUs based on their size and location, and prohibits fees on units of less than 750 square feet. In addition, AB 671 requires the Housing Element to include plans to incentivize and encourage affordable ADU rentals. In 2020, the City adopted updated ADU regulations which streamlined the review process for ADU construction and conversion The St. Helena Zoning Code allows ADUs in all residential zoning districts, however, to achieve compliance with California Government Code Sections 65852.2 and 65852.22, the City must allow ADUs in all zones that allow for residential uses, including the AP Zone, and any mixed-use, and commercial zones. Additionally, several areas of Chapter 17.116.030 need to be revised for compliance with State law. This includes, but is not limited to, the definition of a cooking facility, definition of an efficiency kitchen, allowing both an ADU and JADU for conversions on a lot with an existing or proposed single-family dwelling, separate conveyance of an ADU or JADU, and restricting bedroom count.

The City is currently undertaking a comprehensive zoning code update that will address these compliance issues. Program H-F in this Housing Element commits the City to revising the code for compliance with State law by 2026.

Density Bonus: Assembly Bill 1763 (2019) and AB 2345 (2020)

AB 1763 amended California's density bonus law to authorize significant development incentives to encourage 100 percent affordable housing projects, allowing developments with 100 percent affordable housing units to receive an 80 percent density bonus from the otherwise maximum allowable density on the site. If the project is within half a mile of a major transit stop, a jurisdiction may not apply any density limit to the project. AB 2345 further amended California's density bonus law to allow residential projects with some on-site affordable housing to receive a density bonus of up to 50 percent. Specifically, a residential development is eligible for a 50 percent density bonus if 11 percent of the units are very low-income, 20 percent are low-income units, or 40 percent are moderate-income units. The affordable units must remain affordable for a minimum of 55 years. In addition to the density bonus, qualifying projects will receive four regulatory incentives or concessions, depending on how much of the development includes affordable units. Specifically:

- One incentive or concession for projects that include at least 10 percent of the total units for lower-income households, at least five percent for very low-income households, or at least 10 percent for persons and families of moderate-income in a common interest development.
- Two incentives or concessions for projects that include at least 17 percent of the total units for lower-income households, at least 10 percent for very low-income households, or at least 20 percent for persons and families of moderate-income in a common interest development.
- Three incentives or concessions for projects that include at least 24 percent of the total units for lower-income households, at least 15 percent for very low-income households, or at least 30 percent for persons and families of moderate-income in a common interest development.
- Four incentives or concessions for projects where one hundred percent of all units in the development, including total units and density bonus units, but exclusive of a manager's unit or units, are for lower income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including total units and density bonus units, may be for moderate-income households, as defined in Section 50053 of the Health and Safety Code. For these projects, if it is located within one-half mile of a major transit stop, the applicant also receives a height increase of up to three additional stories (33 feet).

The City of St. Helena currently establishes density bonus provisions for affordable housing in Chapter 17.144 (Affordable Housing). The provisions in that Chapter do not reflect the new maximum density bonus tier framework that was adopted by the State in 2020. Because of this, the City is not currently in compliance and has included Program H-F to commit the City to amend the Zoning Code for compliance with California Government Code Sections 65915 through 65918. The City is currently undertaking a Zoning Code Update. The Draft Zoning Code includes density bonus provisions that comply with State law. The Zoning Code Update is currently scheduled for adoption in summer/fall 2023.

Housing Crisis Act of 2019: Senate Bill 330

SB 330 enacts changes to local development policies, permitting, and processes that will be in effect through January 1, 2025. SB 330 places new criteria on the application requirements and processing times for housing developments; prevents localities from decreasing the housing capacity of any site, such as through downzoning or increasing open space requirements, if such a decrease would preclude the jurisdiction from meeting its RHNA housing targets; prevents localities from establishing non-objective standards; and requires that any proposed demolition of housing units be accompanied by a project that would replace or exceed the total number of units demolished. Additionally, any demolished units that were occupied by lower-income households must be replaced with new units affordable to households with those same income levels. The Housing Element must describe the City's processing procedures related to SB 330. Please see Chapter 8: Nongovernmental and Governmental Constraints for more information.

The City has adopted an SB 330 process and checklist to streamline the design and approval of by-right multi-family units within the community, in compliance with SB 330.

Surplus Land Act Amendments: Assembly Bill 1486 and AB 1255 (2019)

AB 1486 refines the Surplus Land Act to provide clarity and further enforcement to increase the supply of affordable housing. The bill requires the City to include specific information relating to surplus lands in the Housing Element and Housing Element Annual Progress Reports, and to provide a list of sites owned by the county that have been sold, leased, or otherwise disposed of in the prior year. AB 1255 requires the City to create a central inventory of surplus and excess public land each year. The City is required to transmit the inventory to the Department of Housing and Community Development and to provide it to the public upon request. The City has committed to transmitting the required information to HCD each year with their annual report in Program H-CC.

Housing Information Transparency: Assembly Bill 1483 (2019)

AB 1483 requires the City to publicly share information about zoning ordinances, development standards, fees, exactions, surplus public lands, fair housing resources, and affordability requirements. The City is also required to update such information within 30 days of changes. The Housing Element will report on the City's compliance with these requirements. Program H-NN specifically commits the City to providing updated information on a range of housing issues through their website and at City offices.

Emergency and Transitional Housing Act of 2019: Assembly Bill 139 (2019)

AB 139 established new criteria for evaluating the needs of the homeless population. The analysis must assess the capacity to accommodate the most recent homeless point-in-time count by comparing that to the number of shelter beds available on a year-round and seasonal basis, the number of beds that go unused on an average monthly basis, and the percentage of those in emergency shelters that move to permanent housing (see Chapter 7: subsection Persons Experiencing Homelessness). The bill also established new parking standards for emergency shelters. Lastly, the bill requires the Housing Element to include a review of the effectiveness of the

housing element goals, policies, and related actions to meeting the jurisdiction's special housing needs (see Chapter 2: Review of Previous Element).

The City is in compliance with State laws related to emergency shelters, supportive housing, and transitional housing. The City currently permits transitional and supportive housing within all residential, commercial, and mixed-use zones, subject only to the same conditions as residential uses, in compliance with State law. Additionally, emergency shelters are identified as a by-right use in the I and SC zoning districts.

Standardization of Sites Inventory Analysis and Reporting: Senate Bill 6 (2019)

SB 6 requires the City to electronically submit the sites inventory to HCD. The City will submit the final sites inventory to HCD with the adopted Housing Element. Program H-A commits the City to submitting an electronic copy of the inventory to HCD.

Evacuation Routes: Senate Bill 99 and AB 747 (2019)

Two recent bills, AB 747 and SB 99, require the General Plan Safety Element to be updated to identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios and to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes. The bill requires these updates to occur with the 2023-2031 Housing Element Update. Program H-G commits the City to updating to the Safety Element as necessary for compliance with SB 99 and AB 747 during the 6th Housing Element cycle.

Public Participation

Section 65583(c)(5) of the Government Code states that "The local government shall make diligent effort to achieve public participation of all the economic segments of the community in the development of the housing element, and the program shall describe this effort." Public participation played a critical role in the formulation and refinement of the County's housing goals and policies.

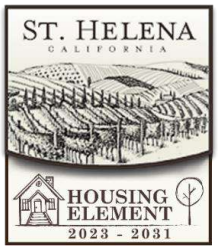
Housing issues affect the entire community – residents, employers, and the public and private sectors. The public participation requirement of housing element law presents an opportunity to engage constituents in a dialogue – defining problems and creating solutions. The inclusion of community stakeholders in the housing element public participation process helps ensure appropriate housing strategies are more efficiently and effectively evaluated, developed, and implemented. An inadequate public participation process may lead to community conflict or in worse case scenarios, anti- development initiatives, and NIMBYism. Successful public participation is important because a diverse cross section of the population can be engaged in defining the housing problem and in crafting community sensitive solutions. Another benefit of broad participation and true engagement of the public is that when it is time to adopt housing strategies and approve housing developments, a greater portion of the community has been involved and participated in the plan and more frequently will support its implementation. Meaningful participation creates stakeholders in the ultimate outcome of the process.

In response to the need for public participation, City planning staff worked with consultants to develop a robust community engagement program tailored to ensure the community and other stakeholders are engaged in the process and are given ample opportunities to provide input. The key objective of the community engagement program is to maximize opportunities for everyone interested in the Housing Element to participate. The engagement program includes branding, a project website, business cards, newsletters and eblasts, announcements on the City website and social medial, multiple workshops, a Housing Element Focus Group, and Planning Commission and City Council study sessions and hearings. This section summarizes our engagement program.

In an effort to Affirmatively Further Fair Housing (AFFH), the City reached out to a broad range of stakeholders, including not just housing developers and residents, but also to Spanish speakers and those working to address fair housing issues and the lack of affordable housing citywide. Throughout the Update, the Project team asked focus group members, workshop participants, the Planning Commission, and the City Council about fair housing issues in the community. The City has incorporated this feedback into Program H-WW: Affirmatively Further Fair Housing, as well as into a variety of programs throughout the Policy Document.

Branding

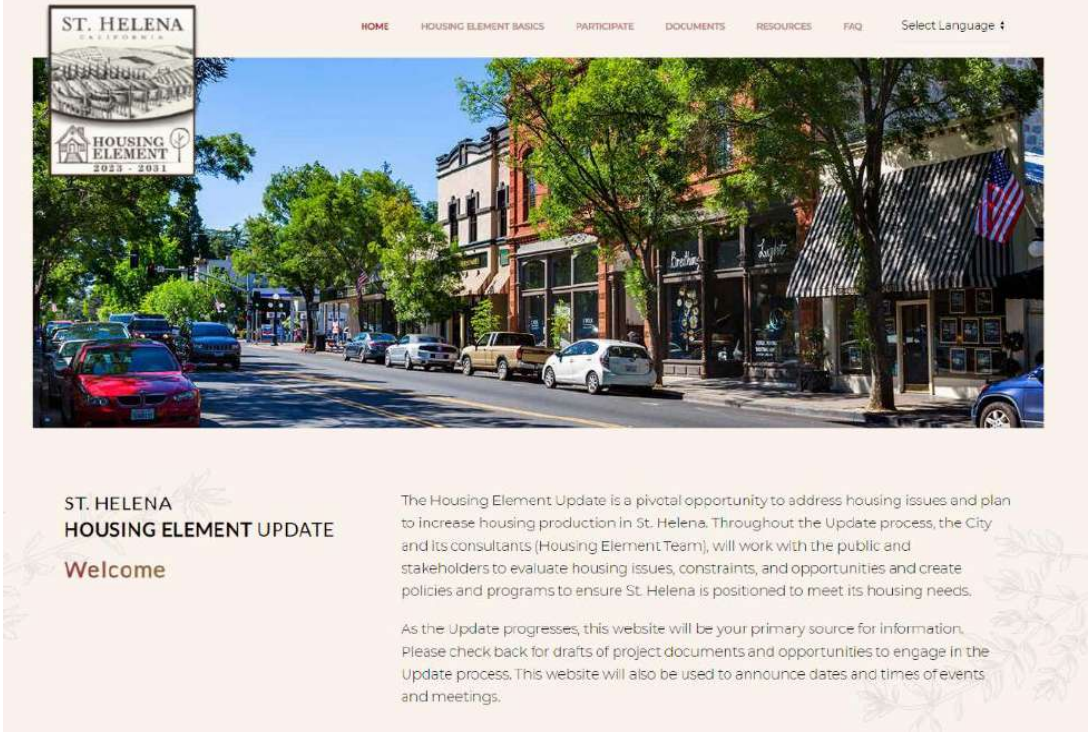
A branding package was prepared for the project. This included a project logo and style templates for all work products, maps, presentations, and publicity materials. The common branding helps to build recognition for the project and ensure that this effort is distinct in the minds of the community. The logo to the right will be used on all materials developed as part of the Housing Element Update.



Housing Element Website

During the development and review of the Housing Element, the City created and maintained a website dedicated to the 2023-2031 Housing Element Update. This website provided easy access to information on the project, including the Housing Element information/Frequently Asked Questions, the project newsletters, and Zoom meeting info. Project documents were posted to the website and comments were encouraged through the provided "Comments" button on each page. A link on the website allowed residents to sign up for the email list. The website also featured a Google Translate menu allowed readers to translate the website into Spanish. Lastly, an accessibility widget was incorporated into the website allowing readers to adjust text size and spacing, contrast, and a number of other aspects of the website to suit the reader's needs.

https://sthelenahousing.com



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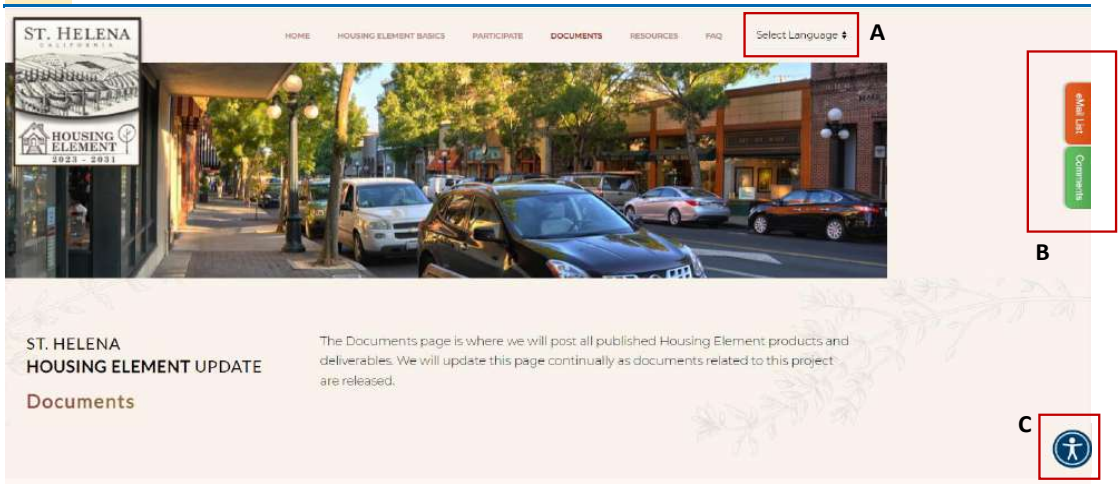


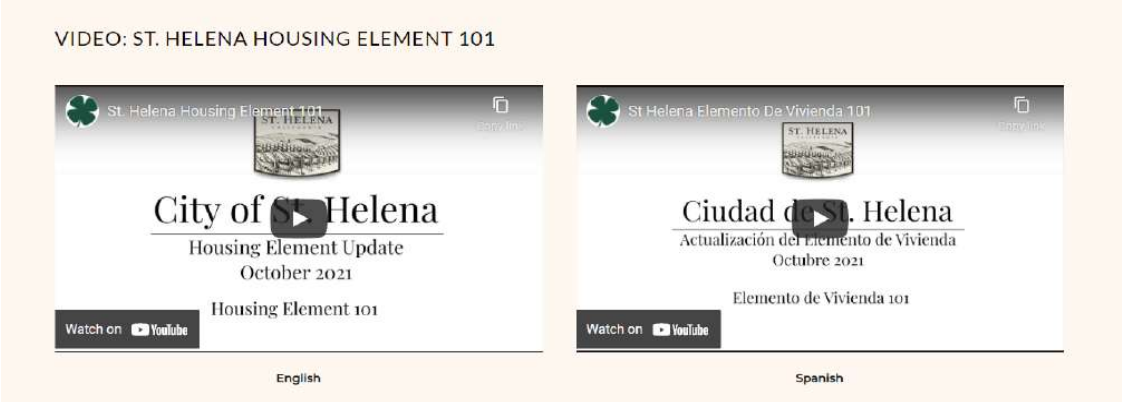
A: Google Translate Tool: This tool allows users to translate the entire website into Spanish.

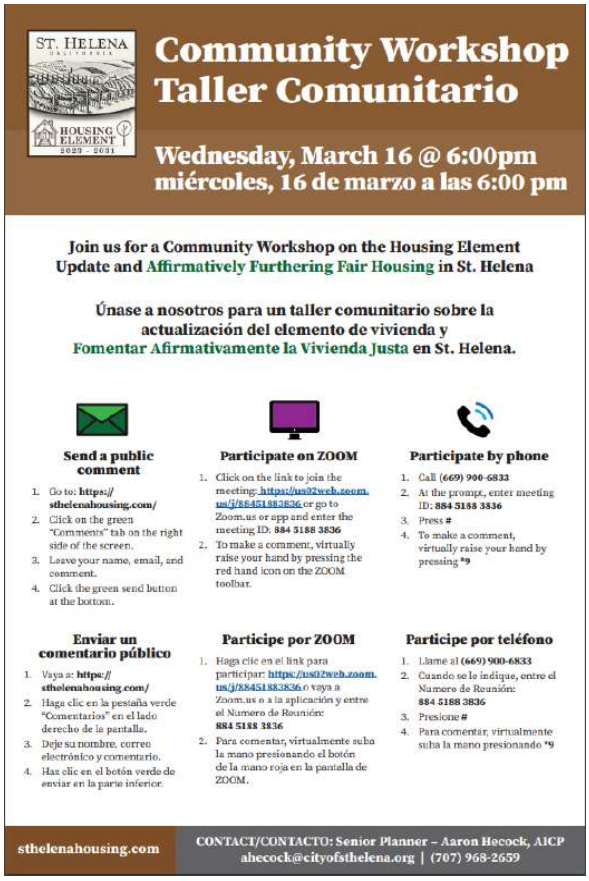
B: Email and Contact Buttons: These buttons allow users to join the project email list or provide a comment to the project Team.

C: Accessibility Widget: This widget allows users to choose visibility options for greater accessibility

https://sthelenahousing.com/basics

The project website features a Housing Element 101 video, presented in English and Spanish.





In addition to eblasts and Facebook posts, meetings were announced via the website. Flyers were posted for each event in English and Spanish.



For those unable to attend, event materials, presentations, and videos are posted to the Participate page.

Project Business Cards

To encourage the use of the project website, business cards were made up for the Project. The cards were provided to the City and can be handed out to those looking for additional information on the Housing Element Update. Each card lists the project website address and a QR Code that can direct users to that website.





Newsletters and Email Notifications (eBlasts)

During the Housing Element development, two newsletters will be developed and distributed. The newsletters will be designed to give the community a better understanding of the Update process and the draft Housing Element. Both newsletters will be published in both English and Spanish and made available from the project website.

Newsletter #1: Housing Element Update Overview

Newsletter #1 describes what a housing element is, how and why it is being updated, the project schedule, and how to get involved in the Update process. The newsletter also describes the other components of the project, including General Plan amendments, Safety Element update, and the environmental analysis. The newsletter will publicize upcoming community engagement opportunities and the project website.

Newsletter #2: HCD Review Draft Housing Element

Newsletter #2 will provide a summary of the key findings and changes in the HCD Review Draft Housing Element, particularly key changes to policies and programs, any proposed changes to land use designations (locations or density ranges), and what these changes mean for their community.

Email notifications (eblasts) are sent out to announce upcoming events and the release of project-related documents. Email addresses were compiled from those requesting notification from the City and from those signing up on the project website and at project events. As of May 2022, the Housing Element email list has 32 subscribers.

Images of Newsletter #1 and an eBlast are included on the following page.



NEWSLETTER #1: HOUSING ELEMENT OVERVIEW

St. Helena Housing Element Update!

We are excited to announce that in February 2021, the City of St. Helena kicked off the update to the City's Housing Element. The update is scheduled to take approximately two years, and throughout the process, we invite the public to be part of the planning process and provide input on how St. Helena should provide housing over the planning period (2023-2031).

What is a Housing Element?

Since 1969, every jurisdiction in California has been required to have a Housing Element as part of their General Plan. Unlike other mandatory General Plan elements, the Housing Element must be updated every eight years and is subject to review and approval by the California Department of Housing and Community Development (HCD). Major components of the Housing Element include a housing needs assessment, the identification of sites for housing at all income levels, a review of constraints to housing, and updated policies and programs to carry out the goals of the updated element.

The City's current 2014-2022 Housing Element was adopted in 2015 and was part of the 5th Cycle of housing element updates in the State. This update for the 2023-2031 Housing Element is part of the 6th Cycle of housing element updates. Between the 5th and 6th Cycles, the State has passed over a dozen of new housing laws, many of which aim to lower barriers to building affordable housing. These will all be addressed with this update.

Another major addition to the 6th Cycle Housing Element Update is the inclusion of an Affirmatively Furthering Fair Housing analysis. This analysis will examine housing practices in the city to identify any areas that may perpetuate housing inequities in the community. Once identified, the Housing Element will create policies and programs to help work towards more equitable housing practices.

Visit the Project Website to:

- Stay informed
- Find out about upcoming meetings and events
- Sign-up for email updates
- Share your ideas

sthelenahousing.com

Have questions?

City of St. Helena
Aaron Hecock, Senior Planner
ahecock@cityofsthelena.org



BOLETÍN #1: RESUMEN DEL PLAN DE VIVIENDA ELEMENTAL

¡Actualización del Plan de Vivienda Elemental en St. Helena!

Nos complace anunciar que, en febrero de 2021, la Ciudad de St. Helena inició la actualización del Plan de Vivienda Elemental de la Ciudad. La actualización está programada para tomar aproximadamente dos años, y a lo largo del proceso, invitamos al público a ser parte del proceso de planificación y proporcionar información sobre cómo St. Helena debe proporcionar vivienda durante el período de planificación (2023-2031).

¿Qué es el Plan de Vivienda Elemental?

Desde 1969, todas las jurisdicciones de California están obligadas a tener un Elemento de Vivienda como parte de su Plan General. A diferencia de otros elementos obligatorios del Plan General, el Elemento de Vivienda debe actualizarse cada ocho años y está sujeto a revisión y aprobación por el Departamento de Vivienda y Desarrollo Comunitario de California (HCD). Los principales componentes del Elemento de Vivienda incluyen una evaluación de las necesidades de vivienda, la identificación de sitios para vivienda en todos los niveles de ingresos, una revisión de las limitaciones a la vivienda, y políticas y programas actualizados para llevar a cabo los objetivos del elemento actualizado.

El actual Elemento habitacional 2014-2022 de la ciudad fue adoptado en 2015 y formó parte del 5º Ciclo de Actualizaciones de Elementos habitacionales en el Estado. Esta actualización para el Elemento habitacional 2023-2031 forma parte del 6º Ciclo de actualizaciones del Plan de Vivienda Elemental. Entre los ciclos 5 y 6, el Estado ha aprobado más de una docena de nuevas leyes de vivienda, muchas de las cuales tienen como objetivo reducir las barreras a la construcción de viviendas asequibles. Todos ellos se abordarán con esta actualización.

Otras de las principales novedades del Plan de Vivienda Elemental del 6º Ciclo es la inclusión de un análisis afirmativo de vivienda justa. Este análisis examinará las prácticas de vivienda en la ciudad para identificar cualquier área que contribuya a perpetuar las desigualdades de vivienda en la comunidad. Una vez identificado, el Plan de Vivienda Elemental, creará políticas y programas para ayudar a conseguir que el desarrollo de viviendas sea más equitativo.

Visite el sitio web del proyecto para:

- Manténgase informado
- Más información sobre las próximas reuniones y eventos
- Registrarse para actualizaciones por correo electrónico
- Comparte tus ideas

sthelenahousing.com

¿Tiene preguntas?

Ciudad de St. Helena
Aaron Hecock, Planificador Principal
ahecock@cityofsthelena.org



CITY OF ST. HELENA

2023-2031 Housing Element

Reminder:
Community Workshop #3
Today, Wednesday, March 16th!

Join us for a Community Workshop on the Housing Element Update and Affirmatively Furthering Fair Housing in St. Helena!

WHAT IS AFFIRMATIVELY FURTHERING FAIR HOUSING (AFFH)?

Affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws.

- California Department of Housing and Community Development

The duty to affirmatively further fair housing extends to all of the City's activities and programs relating to housing and community development. Join us at the workshop to learn more.

Wednesday, March 16, 2022
6:00 pm

Participate on ZOOM

1. To join the meeting: **CLICK HERE** or go to Zoom.us or app and enter the meeting ID: **884 5188 3836**

2. *To make a comment, virtually raise your hand by pressing the red hand icon on the ZOOM toolbar.*

Participate by phone

1. Call **(669) 900-6833**

2. At the prompt, enter meeting ID: **884 5188 3836**

3. Press #

4. Press *9 to speak.

Email a Public Comment

1. Email your comment to: **publiccomment@cityofsthelena.org**

2. In the subject line include: 'Comment on Housing Sites'

Click Here to download the event flyer.

St. Helena 2023-2031 Housing Element

CONTACT:
Senior Planner – Aaron Hecock, AICP
ahecock@cityofsthelena.org | (707) 968-2659

Public Workshops

Throughout the Housing Element Update, City staff worked with the consultant team to hold community workshops at critical points in the process.

Workshop #1: Housing Element Basics

On September 16, 2021 the City held a community workshop to introduce the housing element and discuss housing needs, opportunities, and constraints in St. Helena.





The workshop presentation highlighted engagement efforts and let participants know how they can connect with the Project Team.

During the Workshop, participants were prompted to comment on housing needs, issues, and constraints in the community. Several public comments were received and are documented below. These comments and information provided during this discussion were used to inform and confirm data in the Needs Assessment. Additionally, input related to sites and constraints were considered in the development of the initial sites inventory. Finally, comments related to housing needs helped to inform implementation actions and priorities. The City has included a number of programs to address constraints, incentivize affordable and special needs housing development, and encourage workforce and missing middle housing opportunities.

Comment
Jenny
▪ Shortage of affordable housing compounded by 2020 fires. ▪ Rents have increased but wages haven't kept up. ▪ Many residents are struggling to pay rent. ▪ There is a long waiting list for affordable housing (5 year waiting list) ▪ Smoke Free housing is needed, as 2nd hand smoke is an issue in multifamily housing
Nancy
▪ Demand is such that large-scale developments are needed. ▪ Overcrowding is an issue in the city. ▪ Many St. Helena workers commute into the city because they can't afford to live here.
Joe
▪ Multifamily is challenging as affordability is difficult to make cost effective. Subsidies are required to create housing that is affordable. Financing for these projects is difficult. ▪ Affordable projects move slowly and this increases costs. ▪ Market partners may be able to help solve the housing problem. ▪ What in the zoning code can be changed to help reduce costs? ▪ Development standards such as Density, Parking, Height, and Water Neutrality, as well as fees, can be obstacles to development. ▪ NIMBY opposition and land costs can be constraints. ▪ Sites: feasibility is a problem and owners need to be engaged. ▪ Larger sites are located near the urban limit, but density is needed near city center. Height limits should be reconsidered. ▪ Main Street has commercial/retail vacancies. Potential for housing as mixed use. ▪ 900 Crane is for sale and may be a potential site. ▪ Can we expedite rezones for housing? ▪ Multifamily areas that only allow up to a triplex are a constraint. We need to allow more building forms. ▪ Please clear as many hurdles to development as possible.
Ester
▪ Many properties are small and can't hold larger projects. Lot consolidation may be needed. Adams St. property could be a potential low-income housing site.
Paul
▪ Please consider public safety issues and make sure that sites are feasible and safe.

Workshop #2: Housing Opportunity Sites

On January 20, 2022, the City held a Community Workshop to discuss the Housing Element Update and available housing sites in St. Helena. Following the workshop, a map of potential sites was posted to the Housing Element website and the City encouraged residents and stakeholders to submit through the "Comments" button.

The table below shows public input received at the event and how each participant's input was incorporated into the Draft Housing Element.



Comment	Response
Jeff Farmer: Consider closed catholic school. Some talk with church officials there. Also, the city corp yard. It may be available. ADUs, concern about lack of ADU rentals	The City investigated potential sites and considered ADU affordability trends in the sites inventory.

Comment	Response
Norma: Potential sites: corner of Fulton and east of the railroad tracks, both the north and south side of Fulton. What happened with the big property by vineyard valley (Hunter project). Regarding Pope, there is another site east toward college there may be a big vacant site to consider.	The City investigated potential sites based on public comments and revised the inventory, as necessary.
Joe McGrath: 1998 Spring Street just changed hands and may have a vineyard lease. The 3-acre site. McCorkle sites have a pending contract and may have other plans One other McCorkle site was just renovated Fulton site had interest for housing development in the past. Other sites to consider: across from corps yard on Charter Oak. Consider this please.	The City considered the constraints and sites mentioned here.
Jordan Bentley: 1998 Spring Street changed hands and has a vineyard lease. Please provide a list of properties that can be developed.	The City investigated the constraint mentioned here. The City also provided a list of properties with online map via the project website.
Pat Friday: Crane is a good place for housing. Keep it. Across from Episcopal church, there is a vacant parcel that used to be a church. This may be a possibility. Walking distance to everything. Spring Street across from the cemetery there is a big area of vacant land.	The City investigated potential sites based on public comments and revised the inventory, as necessary.

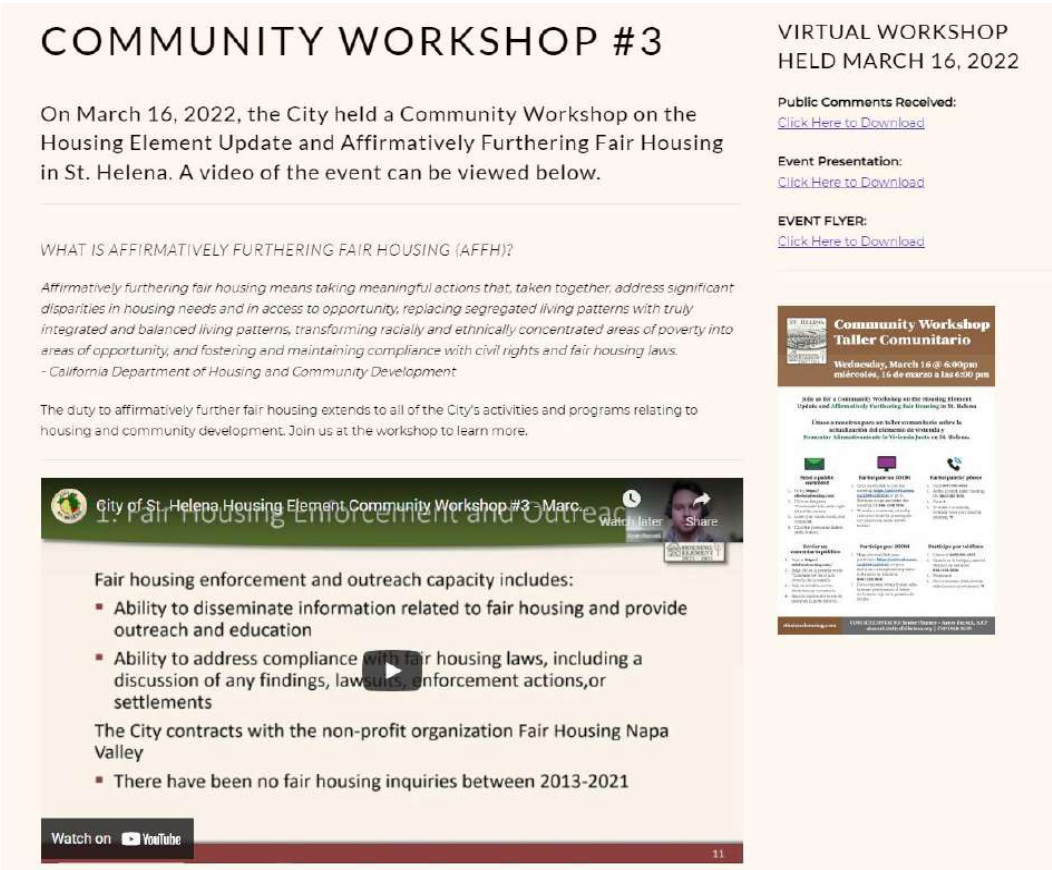
Comment	Response
Rick Crebs: Consider workforce housing for the missing middle types and incomes.	The City considered workforce and missing middle housing in crafting the Policy Document. Several programs are included to respond to these topics specifically.
Mary Stephenson: Concern that ADUs are not being rented. Over 40 percent of land in city limits is in vineyards. How much of this is zoned for housing? Can we look at these and create a long-term plan? What will remain in vineyard and what will remain in housing? The process to rezone is expensive and time-consuming Lots of expensive houses with ADUs that won't be rented. It's an extension of the main house.	The City considered ADU affordability trends in the sites inventory and are working to promote ADU development through implementation programs. Additionally, the City included a program to explore the removal of the Urban Limit Line.
John Sales: Site on Crane Avenue by the creek has a major power line running across the property. This has to be dealt with before housing can be built on the site.	The City considered the constraint mentioned here and revised the sites inventory accordingly.
Jennifer La Liberte: North Crane: there's another parcel close to the one considered. Consider this. Suggests we include this site if Crane Avenue site is included.	The City investigated potential sites based on public comments and revised the inventory, as necessary.

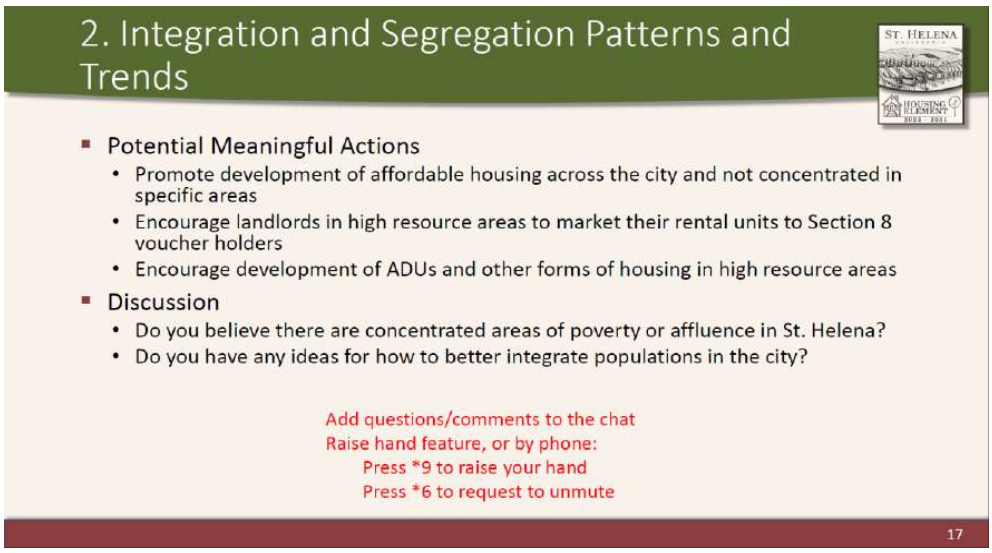
Comment	Response
Tracy McBride: The City needs low income housing that is ownership based. On the map on your website. The lower income sites are east of main street and site 9 is west of main street. Keep this site to disperse lower income sites around the city. How can we incentivize housing development? With by-right this can make things easier if nothing is developed and the site is reused in the next round. Adams St and church sites: why can't we use these sites? Are churches really harder to redevelop?	The City investigated potential sites based on public comments and revised the inventory, as necessary. The City also worked to provide sites consistent with the goals of AFFH. The City also crafted a number of implementation programs that work to incentivize development of lower and moderate income housing.
Joe McGrath: PG&E property on Mitchell: Consider the site. Adams: would subdivision help the political situation?	The City investigated potential sites based on public comments and revised the inventory, as necessary. The City Council is considering a number of options for the Adams Street property.
Jennifer La Liberte: Please let the public know which sites have been ruled out and why.	The City included information about sites investigated but not selected in the materials posted to the project website following the event.
Nancy Dervin Encourages the City to include feasible sites. Some sites could be higher density and available to lower income families. The site map shows moderate on west site and lower on the east side of town. Is there a disparity between east and west? Please don't force the lowest income earners into the most-dense areas of the city. Mix up housing opportunities.	The City considered feasibility in the selection of each site. Additionally, the City investigated opportunities for density increases at each site. The City also worked to provide sites consistent with the goals of AFFH.

Comment	Response
Steve Goldfarb: Adams Street. Why not include it? Advantages to this property: publicly owned (it can be sold). Please include this. It's feasible. Subdivision may be necessary, and it can house a lot of people across a lot of income categories.	The City Council is considering a number of options for the Adams Street property.
Pat Friday: We need to develop Adams Street; agrees that the property may need to be subdivided.	The City Council is considering a number of options for the Adams Street property.
Norma Ferriz: Consider vineyards that are further out than the city center. The edges of town may have potential for housing.	The City included a program in the DraftHousing Element to explore the removal of the Urban Limit Line.
Tracy McBride: Consider new laws regarding subdivision of sf homes (SB 9).	The City encourages lot splits and ADU development consistent with SB9. The Housing Element includes a program committing the City to allowing and incentivizing SB 9 projects.

Workshop #3: Affirmatively Furthering Fair Housing

On March 16, 2022, the City held a Community Workshop on the Housing Element Update and Affirmatively Furthering Fair Housing (AFFH) in St. Helena. The workshop included an introduction to AFFH, a presentation of initial findings and potential actions, and opportunities for the public to join the discussion and provide comments.





An example slide from the workshop presentation. Presentation available at sthelenahousing.com

The following is a summary of comments that emerged through the public discussion and comment period of the workshop, as well as how the comments informed the Draft Housing Element

Comment	Response
The city needs more housing units and people.	The City has provided sites with capacity to meet the RHNA and to incentivize development citywide.
There is no evidence that ADUs accommodate affordable units.	The City considered ADU affordability trends in the development of the sites inventory and worked to incentivize accessory dwelling units and affordable rental ADUs through implementation programs.
The City of Napa has technical assistance and funding for people that agree to deed restrict ADUs and the City of St. Helena should look at this program.	The City has investigated these and other incentives to the construction of affordable rental ADUs, and has included an implementation program committing the City to providing incentives and technical assistance to support the construction of these units.
The City should have policies that promote both low- and moderate-income housing units.	The City has included implementation programs with objectives aimed at promoting housing for households of all incomes, including moderate-income households.
The cost of construction makes it difficult for the private market to accommodate affordable housing and public financing can help produce deed restricted units.	This comment supports the findings of the constraints analysis. The City provides funding and loans to assist in the development of affordable housing.
Requiring a CUP for multi-family project in the Medium Density district limits opportunities for more units.	The City is currently (2022) exploring changes to development standard through the comprehensive zoning code update.

Focus Group Meetings

As part of the Housing Element Update project, the City formed a Focus Group to assist in the development and review of the Housing Element and Safety Element. The Focus Group served as a technical working group that assisted in generating ideas and commenting on direction. Recommendations from the Focus Group were used to revise drafts of the Housing and Safety Elements and provide recommendations to the Planning Commission and City Council.

The members of the Focus Group were as follows:

- City Councilmember Paul Dohring
- Planning Commissioner Autumn Anderson
- Planning Commissioner Rosaura Segura
- Jennifer La Liberte (Our Town St. Helena)
- Mary Koberstein (Former Councilmember)

The Focus Group was active throughout the Update project. The following provides an overview of meetings.

Past Meetings

Focus Group Meeting #1: Housing Element Overview

Provided an overview of the Housing Element process and project schedule. Collected expectations for the project and insights on housing issues, priorities, and concerns that informed the Needs Assessment. The Focus Group provided critical input related to the most pressing housing needs in the community and encouraged the City to pursue sites that are feasible and can provide capacity for a larger number of units.

Focus Group Meeting #2: Preparing for the Housing Element

Discussed results of Community Workshop #1 and the integration of community input into the Housing Element Update. Reviewed the next steps in the Update with a focus on site assessment. The Focus Group reviewed the engagement strategy and provided ideas for additional outreach efforts.

Focus Group Meeting #3: Sites Assessment Review

Discussed the results of the vacant and underutilized sites inventory and reviewed sites inventory methodology and assumptions. Focus Group input provided guidance on individual sites, capacity assumptions, and feasibility of affordable unit production.

Focus Group Meeting #4: Public Input on the Sites Assessment

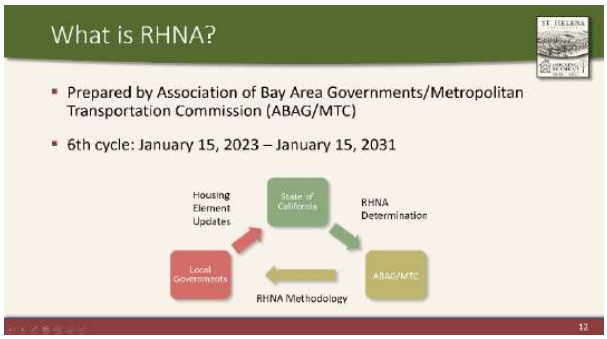
Discussed the results of Community Workshop #2 and how to address community concerns in the Housing Element. The Focus Group considered public comment and provided additional direction on each site. Following this final Focus Group Input, the sites inventory was revised and presented to the City Council for final direction.

Public Meetings with City Leadership

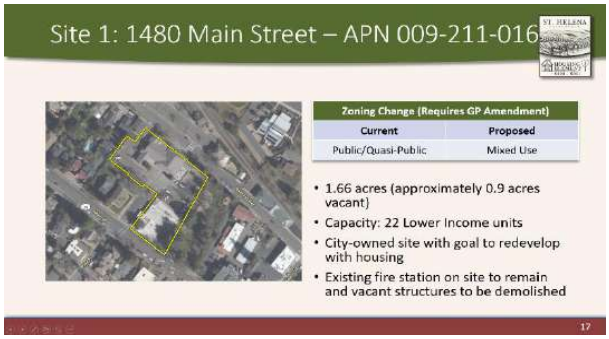
Past Meetings

Planning Commission/City Council
Joint Study Session 1: Housing Element Overview
Held March 23, 2021

Provided an overview of the Housing Element process, project schedule, and project expectations. Discuss housing issues, priorities, and concerns.



Planning Commission/City Council
Joint Study Session 2: Sites Assessment
Held February 22, 2022



Discussed the RHNA and the sites inventory process and presented a walkthrough of potential housing opportunity sites. Discussed the results of Community Workshop #2 and public input on housing sites. Commissions and Councilmembers provided input on sites included in the draft sites inventory and reviewed each for potential constraints. The draft sites inventory was revised according to direction taken during this meeting in the preparation of the public review draft.

Planning Commission/City Council Joint Study Session: Public Review Draft Housing Element
Held July 21, 2022

Solicited input on the Public Review Draft Housing Element. Discussed next steps, HCD review, revisions, and remaining project schedule. Input from this event informed the City's response to comments on the Public Review Draft, discussed in Appendix B.

Future Meetings

- **Planning Commission Public Hearing: Recommendation for Adoption**
  To present the Draft Housing and Safety Elements, associated General Plan and Zoning Code Amendments, and responses to comments from previous Planning Commission and City Council Public Hearings and seek recommendation for adoption to City Council.

- **City Council Adoption Hearing: Adopt Housing and Safety Elements**
  To present the Final Housing and Safety Elements, associated General Plan and Zoning Code Amendments, and responses to comments from previous Planning Commission and City Council Public hearings and seek adoption of the Housing and Safety Elements from City Council.

Other Outreach Activities

St. Helena set out to collect as much feedback as possible from the community, from their general concerns and ideas to where new housing could go. It was also important to us to consider community outreach best practices and consult and partner with organizations working in the community, to ensure we were reaching as many people as possible and doing so thoughtfully.

Sites Inventory Mapping Exercise

As discussed in the summary of Workshop #2 above, the City produced an interactive online map that allowed residents and stakeholders to view and comment on potential housing opportunity sites. The online map was posted for more than a month following the workshop and the City encouraged all those interested in the Housing Element to submit their comments. The City incorporated comments on potential housing sites into the Sites Inventory by removing or revising constrained sites and considering additional sites with potential for residential uses.

Equity Advisory Group

In alignment with community outreach best practices, it was important to include the guidance of and foster partnerships with community organizations to help ensure everyone's voices were heard during the Housing Element update. In response, an Equity Advisory Group (EAG) was formed consisting of 15 organizations or leaders across the region that are advancing equity and affordable housing. A stipend of $1,500 was originally provided for meeting four to five times over 12 months to advise on Housing Element outreach and helping get the word out to the communities they work with.

After meeting twice in 2021, it was decided the best use of the EAG moving forward would be to provide more focused support in 2022 based on jurisdiction need and organization expertise. To date, EAG members have facilitated and hosted community meetings in partnership with 21 Elements, collected community housing stories to put a face to housing needs, advised on messaging, and amplified events and activities to their communities. The EAG continue to work collaboratively with jurisdictions and deepen partnerships, as well as connect community members to the Housing Element Update process. All participating organizations are featured on the Let's Talk Housing website and include the following:

- Ayudando Lations A Soñar (ALAS) www.alashmb.org
- Community Legal Services www.clsepa.org
- El Comite de Vecinos del Lado Oeste (El Comite) www.tenantstogether.org/resources/el-comité-de-vecinos-del-lado-oeste-east-palo-alto
- EPACANDO www.epacando.org
- Faith in Action www.faithinaction.org/federation/faith-in-action-bay-area/
- Housing Choices www.housingchoices.org
- Housing Leadership Council www.hlcsmc.org
- Menlo Together www.menlotogether.org
- Nuestra Casa www.nuestracasa.org
- One San Mateo www.onesanmateo.org
- Peninsula for Everyone www.peninsulaforeveryone.org
- Puente de la Costa Sur www.mypuente.org
- San Mateo County Health www.gethealthysmc.org
- Youth Leadership Institute www.yli.org/region/san-mateo
- Youth United for Community Action www.youthunited.net

Over six sessions, the EAG discussed explicit and implicit barriers to obtaining and maintaining affordable housing and this document outlines key findings, repeated themes, and recommendations from the EAG to the Napa Sonoma Collaborative. Key findings include:

- The current approach to housing policies throughout the region is ad hoc and piecemeal and what is really needed is a holistic approach to housing and homelessness issues
    - Affordable homeownership is missing from the conversation
    - Transitional and supportive housing as a more integrated part of the whole conversation is missing
    - The traditional paradigm of designing affordable housing should be changed at the educational level; design professionals should be educated to think holistically about designing communities and integrating affordable housing patterns into community design
- A lack of community trust leads to a lack of honest and transparent communication and engagement between local governments, partner agencies and the community members
- Additional housing costs are not factored into the affordable housing definition
    - The official definition of affordable housing does not include all related housing costs
        i. Those who live in deed-restricted affordable housing face food shortages, high insurance rates, and rising utility costs to name a few, which are not factored into the official definition of affordable housing. Yet these are costs that must be included in an already strained budget
    - Supercommuting leads to higher gas costs and more wear and tear on cars but is necessary to find and maintain affordable housing
    - The housing situation within the region leads to students working to support their families, creating an unintended consequence of students dropping out of their educational careers and/or leaving the community after they matriculate from High School since they cannot afford housing
    - Onerous regulation leads to displacement
- Affordable homeownership is missing from the conversation as renting is not a sustainable approach for all and it prevents people from accessing the "American Dream"
- The lack of affordable and safe housing due to high development costs, loss of units due to disasters, and/or gentrification are some of the contributing factors to the housing crisis within the region.
- Discrimination is both subtle and overt
    - Tenants are susceptible to landlords taking advantage of them due to a very specific cocktail of issues including but not limited to:
        i. Language barriers
        ii. Cultural Barriers
        iii. Stereotypes
        iv. Disabilities
        v. Income
    - Discrimination is a multilayered situation:

    i. Tenants in substandard/unhealthy housing live in precarious situations and are afraid to complain due to the fear of being evicted (which means that they live in substandard living conditions)
    ii. There is a very real fear that rents will increase if tenants complain about substandard situations
  - Stereotypes associated with low-income tenants and voucher holders are a real barrier to obtaining housing
    i. Criminal backgrounds and subsidies contribute to stereotypes which make landlords leery of renting.
    ii. SB 329 makes it illegal to reject housing vouchers, however, it still occurs
  - Discrimination is hard to determine since there aren't enough vacancies to even apply for housing
- The lack of available land coupled with regulations and high impact fees are contributing factors to astronomical development costs

The City considered these key findings in the development of the Needs Assessment and Policy Document. The Policy Document includes programs focused on regional coordination on housing issues, increasing affordable homeownership opportunities, providing transparency on housing-related decisions and actions, removing governmental constraints, incentivizing affordable housing construction, and working with Fair Housing Napa Valley to provide fair housing services.

2. Review of the Existing Housing Element

This section examines the effectiveness of the 2015 Housing Element, the progress made in achieving the goals, objectives and policies outlined in the Housing Element, along with a discussion of the Element's appropriateness given current conditions within the City of St. Helena. This evaluation will inform the policies and programs developed as part of the 2023-2031 Housing Element Update.

Housing Production During the 2015-2023 Planning Period

The City's RHNA for the 2015-2023 planning period was for eight units affordable to very low-income households, five units affordable to low-income households, five units affordable to moderate income households, and 13 units affordable to above moderate-income households, for a total of 31 housing units. Table 1 compares units permitted and constructed to the 5th cycle RHNA. Between 2015 and 2021, the City permitted a total of 110 units, including seven very low-, nine low-, and four moderate-income units. All permitted projects have been constructed.

Table 1 Progress Toward the 5th Cycle RHNA

	Very Low	Low	Moderate	Above Moderate	Total
RHNA	8	5	5	13	31
Permitted Units	7	9	4	90	110

Source: City of St. Helena, 2021 Housing Element Annual Progress Report, 2022.

Progress toward the Lower Income Housing Goals

The City has issued building permits for the Turley Flats affordable housing project, an 8-unit multifamily project with loan funding from the Affordable Housing Trust Fund (all low income), and occupancy of all units occurred in 2019. Further, the City has issued building permits for the Brenkle Court 8-unit affordable housing project (two very-low and six low income). In 2020, the City approved a deed restricted affordable housing project (four low to very-low income and one moderate income) at 963 Pope Street. The combined affordability of these units is expected to help the City make significant progress toward meeting these unit counts.

Most of the housing permitted during this planning period was above moderate-income housing. Between 2015 and 2021, 90 of the 110 units constructed were above moderate-income units.

Progress in Implementation

The 2015 Housing Element established the six goals with coordinated policies and implementing programs, organized around the following goal areas:

1. A Diversity of Housing to Meet Local Needs
2. Efficient Land Use and High-Quality Neighborhoods
3. Conservation of Existing Housing
4. Assistance to Support Affordable Housing
5. Resource Conservation
6. Equal Housing Opportunities

Table 2 provides a detailed evaluation of the implementing programs that support each of these goals, and the subsequent sections discuss the extent to which the 2015 Housing Element policies and implementing programs helped the City of St. Helena meet the goals.

Diversity of Housing to Meet Local Needs

Facilitate development of a variety of housing types to meet the full range of housing needs in our community, with particular emphasis on housing for our local workforce, people with special housing needs, and people with extremely low, very low, low and moderate incomes.

In order to supply a diversity of housing types to meet local needs, the 2015 Housing Element developed Policies 1.1 through 1.6 and implementing Actions 1.A through 1.K. Policies 1.1 through 1.6 focus on ensuring that the City provides a sufficient supply of residential land to meet the housing needs of the community, encouraging and facilitating the development of affordable housing, removing constraints to housing production, and providing workforce and mixed-use development near downtown. In line with these policies, the City proceeded with successfully implementing Actions 1.A through 1.K, which range from large efforts, such as streamlining approvals for affordable multifamily projects and providing priority access to water and sewer infrastructure to development with affordable units, to smaller efforts, such as encouraging non-traditional housing types. While many of these programs were completed, the City did not revise the definition of "family" within the Municipal Code for consistency with State law and must include a program in the 2023-2031 Housing Element to address this compliance issue.

Efficient Land Use and High-Quality Neighborhoods

Make efficient use of land within the Urban Limit Line to protect agricultural lands, promoting compact, well-designed developments that 'fit in' with existing neighborhoods and contribute to the overall livability of our community. Encourage a balance of housing types throughout the entire community.

Policies 2.1 through 2.6 encourage higher density development where appropriate, mixed-use development, second units, and a variety of housing type throughout the community. These policies are supported by Implementing Actions 2.A through 2.P. Most notable among these actions is the progress towards incentivizing

higher density housing (Action 2.A), which has been supported by the removal of the Use Permit requirement for multi-family housing in the High Density Residential land use designation and Housing Opportunity Sites located on parcels designated Medium Density Residential. Additionally, the City has implemented state-mandated ADU regulations (Action 2.I) and integrated a mixed-use land use designation into the 2040 General Plan (Action 2.H). While some of these programs were completed with the recent General Plan Update, programs related to zoning changes are being undertaking in the current (2022) comprehensive Zoning Code update. These programs should be continued in the 2023-2031 Housing Element.

Conservation of Existing Housing

Improve and conserve existing housing, with particular attention to the rehabilitation and retention of existing affordable units.

Policies 3.1 and 3.2 are designed to conserve the existing housing stock through restricting conversion of rental units to condominiums and to monitor housing conditions citywide. Actions 3.A through 3.E implement these policies. Actions 3.A, 3.C, and 3.D help protect current housing stock by working to limit conversion to more limited uses, such as vacation rentals, or to nonresidential uses. Action 3.B implements an affordable housing impact fee to help monetarily incentivize the conversion of existing housing units. Action 3.E describes reporting requirements and commits the City to producing an annual Housing Element progress report, as required by HCD. Since the last Housing Element, the City has implemented a Housing Impact Fee, actively limits short-term rentals to twenty five units, and continuously looks for methods to promote the conservation of existing housing.

Assistance to Support Affordable Housing

Provide technical and financial resources to support development of affordable housing in our community, especially housing that meets the needs of our local workforce, people with special housing needs, and people with moderate, low, and very low incomes.

Policies 4.1 through 4.5, as well as Implementing Actions 4.A through 4.L, are designed to support this goal of actively assisting affordable housing growth, especially for special needs groups, such as farmworkers, seniors, and persons with disabilities. The City has made significant efforts to provide financial incentives, including reducing the application and impact fees for affordable housing projects and will continue to do so into the foreseeable future. During the 5th cycle, the City committed substantial amounts of Affordable Housing Trust Fund monies (approximately $2,450,000) to three different affordable housing projects (Turley Flats, Brenkle Court, and 963 Pope), anticipated to result in the construction and/or occupancy of 21 new affordable housing units in St. Helena through 2021. The City has also passed Measure E, which increased the Transit Occupancy Tax rate by one percent, which generates further funds towards affordable housing. Estimated annual revenue from this measure is approximately $280,000. Since 2015, the City has fully funded all funding requests made by affordable housing developers to assist with the design and construction of affordable housing units within St. Helena.

Resource Conservation

Promote resource conservation by encouraging housing types and designs that use fewer resources (water, electricity, etc.) and therefore cost less to operate over time, supporting long-term housing affordability.

The City of St. Helena took an active role in promoting the use of alternative energy sources and encouraging energy conservation, as targeted by Policies 5.1 and 5.2 and Programs 5.A through 5.H. During the 5th cycle, the City implemented these actions by adopting the 2019 State Building Codes, including the CALGreen Building Code, creating a "Rapid Permit" procedure for solar installations, and adopting a "water neutral" policy for new development. Additionally, the City is engaged with the Napa Valley Transportation Authority to adopt a countywide bicycle and pedestrian plan, which works to increase accessibility and promote tourism across the county while reducing vehicles on the road.

Equal Housing Opportunities

Assure that housing programs maximize choice, avoid economic segregation and avoid discrimination based upon age, sex, race, sexual orientation, religion and ethnic background

The sixth and final goal has one policy and two implementing programs, which commit the City to supporting Fair Housing Napa Valley as the City Fair Housing Provider. The City works with Fair Housing Napa Valley to provide information to the public regarding the rights and responsibilities and resources available to address fair housing issues. The City provides funding to Fair Housing Napa Valley and responds to all referrals from the agency. This governmental cooperation between local and county level agencies allows for enhanced coordination to combat housing insecurity across the region.

In the upcoming cycle, the City should be strengthened to promote a proactive approach to fair housing consistent with the State's requirements related affirmatively further fair housing (AFFH). Additional policies and programs will be needed to address fair housing issues. Additionally, the City should analyze all goals, policies, and programs through the lens of AFFH, and should apply fair housing objectives as appropriate.

Effectiveness of 2015 Housing Element

As discussed in the preceding section and in Table 2, the City implemented many policies and programs to facilitate housing production. Most importantly, the City has made great strides in securing additional funding for affordable housing and working with local stakeholders and county organizations to improve housing accessibility. From preserving existing housing and promoting the expansion of multifamily housing through relaxed regulation, the City recognizes the severity of the housing crisis and has worked progressively to do its part in adding housing towards meeting and exceeding RHNA goals. However, in some cases, the City did not have the necessary staff resources or funding to implement programs. While the 2040 General Plan Update process required significant staff time and delayed implementation of some Municipal Code amendments, the City is currently (2022) undertaking a comprehensive Zoning Code update that will address the remaining code amendment implementation measures during the 6th cycle. As the code update draws to its conclusion, the City

will have more resources available to implement remaining implementation actions, which have been continued in the 2022 Housing Element Update.

Effectiveness in Meeting the Needs of Special Needs Populations

The previous Housing Element had one program targeting special needs populations, Program 1.F. Program 1.F calls for the fast-tracking of housing developments that meet lower income and special needs populations. During the fifth cycle, 13 units of deed restricted affordable housing units were approved. No housing developments specifically tailored to the needs of special needs communities, such as seniors and farmworkers, were approved or built during the planning period. The previous housing element also contained the following quantified objectives tailored towards Special Needs Households:

- Assist in the acquisition of low-interest loans to 10 first-time homebuyers.
- 20 percent of new units to meet senior needs.
- 10 percent of new units accessible to persons with disabilities.
- Purchase of 3 existing housing units and conversion to regulated affordable housing for lower-income households.

The City of St. Helena did not meet any of the previously listed quantified objectives during the fifth cycle. However, the City made significant progress with the construction of 8 units of market-rate housing that was fully compliant with Americans with Disabilities Act (ADA) requirements. This equates to 7.3 percent of new units being accessible to persons with disabilities during the fifth cycle.

The 2023 Housing Element Update provides new and updated programs to commit the City new actions that work to meet the needs of special needs populations. Program H-E, a revised version of Program 1.F, commits the City to providing a streamlined ministerial review process for special needs housing, with a goal of encouraging the development of 6 units for seniors, farmworkers, or persons with disabilities. Program H-BB, a new program, commits the City to pursuing funding to assist with rehabilitation costs for lower income households and seniors. Program H-KK specifically commits the City to supporting efforts to improve access to farmworker housing in the City and region. Program H-LL commits the City to encouraging developers to include units dedicated to those with special housing needs in new developments. Finally, Program H-NN commits the City to pursue funding to assist with funding new housing projects for populations with special needs.

Table 2 Program Implementation Status pursuant to GC Section 65583

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE1.A	Continue to exempt permits for regulated affordable units as well as second units from Growth Management System	Ongoing	The City currently exempts all units, including affordable housing units and Accessory Dwelling Units from the Growth Management system in compliance with current state law. This provision will be removed in a future zoning code update.	Modify to reflect removal of the GMS
HE1.B	Review and possibly amend the Growth Management System to encourage the production of regulated affordable and workforce housing units.	2017	The City Council reviewed the Growth Management system in 2016 (as required) and provided direction to update and potentially amend the GMS Ordinance, after the 2040 General Plan update is completed. Given that the only multi-family housing applications reviewed by the City in recent years have been approved, it does not appear that the current GMS Ordinance is affecting the development of workforce housing. As explained above, the Growth Management System will be removed from the Municipal Code as part of the comprehensive zoning code update.	Modify to reflect removal of the GMS, merge with HE1.A
HE1.C	Give projects that include affordable housing units priority access to water and sewer resources over other new projects should the capacity of the local water or sewer systems become inadequate to meet the full demand for new connections.	Ongoing	The City provides priority access to water and sewer resources to projects to affordable housing projects.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE1.D	Revise the permitting process to streamline the review of affordable housing and market rate multifamily projects.	2016	In an effort to implement this Goal, the City has removed the Use Permit requirement for multi-family housing in the High Density Residential (HR) zone and all of the Housing Opportunity Sites (Key Housing Sites, see Section 17.40.020(N)) located within the Medium Density Residential (MR) zone and has established a streamlined approval process consistent with SB35 and SB330. Further, as mentioned above, affordable housing units are not subject to the GMS Ordinance limitations.	Delete
HE1.E	Work with private property owners/developers to plan for road and utility improvements necessary to support housing on key opportunity sites, in the event these sites are developed.	Ongoing	The City is continually looking for grant and other funding opportunities to off-set the costs of infrastructure Further, the 2040 General Plan update and current Capital Improvement Program provide direction and discussion regarding needed infrastructure improvements.	Keep
HE1.F	When possible, fast-track housing developments that meet lower income and special housing needs.	Ongoing	The City is committed to expediting any affordable housing applications that are submitted for review and action. Eight owner-occupied affordable housing units were approved by the City in Dec. 2016 (Self-Help Affordable Housing Project called the Brenkle Ct. Project from Our Town St. Helena (OTSH)). Building permits for each unit were issued in 2019. An additional five deed restricted affordable units were approved in 2020 however building permits have not yet been issued.	Modify
HE1.G	Maintain the local preference policy to possibly include people needed for work during city emergencies.	2017	No revisions to the current local preference policy for affordable housing units has been made as of yet.	Delete

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE1.H	Explore, and adopt as appropriate, a program to address the housing needs of "workforce" households, which have incomes above 120 percent of AMI, but are still unable to afford market rate housing.	2017	The City Council has expressed an interest in reviewing housing needs Citywide. Pending development applications anticipated to increase the demand for employee housing are being asked to make efforts to address the housing impacts associated with their individual developments.	Modify and Expand
HE1.I	Implement a program to provide financial assistance for the development of second units in exchange for affordability restrictions that will provide workforce housing.	Ongoing	The City Council has expressed an interest in finding ways to deed restrict and/or incentivize the use of ADUs as rental units.	Keep
HE1.J	Encourage development of co-housing, ecohousing, 'green' manufactured homes and other 'nontraditional' forms of housing. Ensure these housing types are addressed in the development of design guidelines to streamline to approval process.	Ongoing	The City Council has expressed an interest in reviewing housing needs Citywide now that the 2040 St Helena General Plan has been adopted. In addition, the Comprehensive Zoning Code update includes standards for small lot development and standards to encourage a variety of housing types.	Keep
HE1.K	Amend the Zoning Ordinance to define "family" as one or more persons living together as a single housekeeping unit in a dwelling unit. The definition should not distinguish between related and unrelated individuals and should not impose a numerical limit on the # of persons that constitute a family.	Ongoing	No revisions to the current zoning code definition of family have been made as of yet as the comprehensive zoning code update is still underway. However, all City actions are made in keeping with California State law, as it has precedence over any in-consistent locally adopted land use definitions.	Required Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.A	Provide incentives for higher density housing. Explore possible incentives for building attached market rate housing units for rent and for sale.	Ongoing	In an effort to implement this Goal, the City has removed the Use Permit requirement for multi-family housing in the High Density Residential land use designation and all of the Housing Opportunity Sites located within other land use designations (Medium Density Residential). In addition, the City has created an SB 330 Checklist to further streamline the design and approval of by-right multi-family units within the community.	Keep
HE2.B	Study potential modifications to the Zoning Ordinance to facilitate higher density housing [and discourage construction of oversize homes]. Modify the Zoning Ordinance to encourage higher density developments [and restrict construction of large single-family units], including current floor area ratios and yard and setback requirements.	Ongoing	The City Council has expressed an interest in reviewing housing needs Citywide. The comprehensive zoning code update is in progress and these items will be addressed as part of that effort.	Keep
HE2.C	Amend regulations to discourage exemptions from the minimum density requirements. The City shall discourage exemptions for minimum density requirements and establish mitigation measures for exemptions in the Zoning Ordinance.	Ongoing	The comprehensive zoning code update is in progress and these items will be addressed as part of that effort. However, all City actions are made in keeping with California State law, as it has precedence over any in-consistent locally adopted land use definitions.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.D	Modify section 17.100 of the Zoning Ordinance to rename the Mobilehome Park Overlay District to "Manufactured Housing Overlay District". Develop policies to streamline the review process for this overlay district on residential land for projects that create land-ownership opportunities for residents. Support giving residents the right of first refusal if an existing park is to be sold.	Ongoing	No revisions to the current zoning code have been made yet as the comprehensive zoning code update is currently underway. However, all City actions are made in keeping with California State law and any request to implement a Manufactured Housing Overlay District would be reviewed as such.	Delete
HE2.E	Amend the "Subdivisions" section of the Municipal Code. The City will amend Title 16 of the Municipal Code to prevent subdivision activity from effectively resulting in lower densities and a loss of potential housing units on the site.	Ongoing	No revisions to the current "Subdivisions" section of the Municipal Code have been made as of yet. The City Council has expressed an interest in reviewing housing needs Citywide.	Delete
HE2.F	Update the General Plan Land Use Element in consideration of the established Housing Element land use goals and policies. Amend General Plan Elements concurrent with adoption of the General Plan Update as needed to ensure internal consistency.	2015	The St Helena 2040 General Plan update incorporates the adopted 2015 Housing Element. The Housing Element and General Plan are consistent.	Modify for required Safety Element Update

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.G	Promote both 'vertical' and 'horizontal' mixed-use. Encourage mixed-use developments that combine compatible uses on the same site, either in the same structure or adjacent structures. Amend the Zoning Ordinance accordingly. Amendments to the Zoning Ordinance include permitting the FAR for the residential component of a mixed-use development to be 'additive' rather than within the established FAR for that zone, and allowing commercial and residential users to 'share' their parking, resulting in a lower overall parking requirement. Requirements for covered parking should also be reconsidered.	2017	The St Helena 2040 General Plan update incorporates the adopted 2015 Housing Element. This update includes the creation of a mixed-use land use designation and will be followed by a comprehensive zoning code update, intended to create and implement the development criteria set for mixed use development within St Helena.	Revise for zoning code consistency

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.H	Explore the possibility of allowing mixed use and live/work units in non-residential zoning districts. Explore and adopt as appropriate modifications to non-residential Zones that would permit, either as of right or as a conditional use, residential uses including mixed use and integrated live/work units. Analyze requirements that commercial projects provide housing for a portion of the employment that will be generated on site. The City will study and determine what portion of employment generated will require housing, whether housing will be required on-site or allowed off-site, if pricing for the non-inclusionary units will be tied to anticipated salaries for employees in the commercial portion of the project, and if in-lieu fees will be permitted for smaller sized projects. Explore and adopt as appropriate development incentives such as higher density and height allowances, a streamlined design review process, and financial incentives, including fee reductions and waivers and contributions from the City's Housing Trust Fund, to encourage employers to provide on-site employee housing.	2017	The St Helena 2040 General Plan update includes the creation of a mixed-use land use designation. The comprehensive zoning code update will create and implement the development criteria for mixed-use development within St Helena.	Delete

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.I	Review and revise development standards pertaining to second units. Ensure that the development of second units is physically and financially feasible in targeted areas. Give particular attention to parking standards, setbacks, and impact fees.	Ongoing	In 2020, the City adopted updated ADU regulations which streamlined the review process for ADU construction and conversion, in keeping with the requirements of State law. The St Helena 2040 General Plan update was adopted in May 2019. A comprehensive zoning code has begun and will include additional direction regarding the development of Accessory Dwelling Units.	Delete
HE2.J	Provide financial assistance for second unit development. Incentives might include low interest loans or fee waivers.	2020	The City of St. Helena has amended its zoning ordinance to be compliant with state law with regards to ADUs, their permitting, and reduced impact fees.	Modify and Expand
HE2.K	Target specific areas for second unit incentives. Create incentives to construct second units in the medium density areas near downtown. Incentives to adopt as appropriate include, but are not restricted to, fast tracking development applications, deferred development fees, and reduced parking and/or other city standards.	Ongoing	The City of St. Helena has amended its zoning ordinance to be compliant with state law with regards to ADUs, their permitting, and reduced impact fees.	Keep
HE2.M	Link financial incentives and development standard variances to affordability requirements for second units. Require that either the main house or the second unit is used as a rental unit that is affordable to moderate or below moderate households whenever the City assists in development through financial incentives or by granting a variance.	Ongoing	The City Council has expressed an interest in reviewing housing needs Citywide which is expected to occur along with the comprehensive zoning code update. The City has also begun its 6th Cycle Housing Element Update which will identify Key Housing Opportunity Sites and potential rezoning opportunities withing the City.	Modify

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE2.N	Respond to complaints regarding illegal units. The City will work with the property owners to help bring illegal units up to code and to abate the use of non-habitable buildings as living units	Ongoing	While the City does not have a dedicated Code Enforcement Department, Planning and Community Improvement Department staff is responsible for responding to Code Enforcement complaints and prioritize life and safety issues, such as substandard housing, in these efforts. Additional Code Enforcement improvements have been identified as an element of the adopted City Council goals.	Keep
HE2.O	Identify appropriate 'target' areas for conversion of single-family homes to multi-unit dwellings, Identify areas, zoning districts, or specific sites where conversion would be appropriate or desirable.	Ongoing	A majority of the City's residential land is designated as Medium Density Residential, allowing conversion of existing SFD to MFD at a density of 5.1-16 units per acre. The City has also begun its 6th Cycle Housing Element Update which will identify Key Housing Opportunity Sites and potential rezoning opportunities withing the City. The 6th Cycle Housing Element identifies sites for rezoning to increase density and encourage affordable housing production.	Delete
HE2.P	Develop a program to encourage affordable housing in clusters of 4-6 units on Infill parcels on west side of town. The City will post an inventory of available sites on the City's website. City will explore and adopt as appropriate incentives to encourage affordable housing clusters, including, but not limited to priority permitting processing, reduced or waived development fees, reduced parking and/or other city standards, and an additional density bonus.	Ongoing	The City Council has expressed an interest in reviewing housing needs Citywide and have prioritized creation of a Citywide Housing Strategy as one of the Council Goals. This is expected to occur along with the comprehensive zoning code update. Incentives for the development of these units including parking ratio reductions, will be included as a part of this review. Further, a majority of the City's residential land is designated as Medium Density Residential, allowing conversion of existing SFD to MFD at a density of 5.1-16 units per acre. The City has also begun its 6th Cycle Housing Element Update which will identify Key Housing Opportunity Sites and potential rezoning opportunities withing the City.	Delete

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE3.A	Restrict conversion of rental units to condominiums. Current policy allows conversion to condominiums under certain circumstances when the vacancy rate is high. The presence of second homes results in an inflated vacancy rate. The policy should be further studied to reflect a general guiding principle of preserving the affordable housing stock while eliminating the current linkage to vacancy rates.	Ongoing	The City will endeavor to work the Napa Housing Authority to create regulations to restrict the conversion of rental units to condominiums.	Keep
HE3.B	Charge an affordable housing impact fee whenever housing units are converted to other uses. Exempt conversion projects that create affordable for-sale housing from this impact fee.	Ongoing	The City currently charges an Housing Impact Fee. Further, the City Council has expressed an interest in reviewing housing needs Citywide and have prioritized creation of a Citywide Housing Strategy as one of the Council Goals. This is expected to occur concurrently with the comprehensive zoning code update.	Keep
HE3.C	Address the potential loss of assisted units. Identify assisted properties at risk of conversion to market rates and work with the property owners and/or other parties to ensure that they are conserved as affordable housing.	Ongoing	The City Council has expressed an interest in reviewing housing needs; the maintenance of assisted units will be a part of this discussion.	Modify based on current at-risk units
HE3.D	Continue to limit the conversion of market rate housing to vacation rentals. Abate the use of illegal vacation rentals, including time shares and fractional interests.	Ongoing	The City strictly limits the use of residential units for short-term rental (STR) use to a maximum of 25 STR units within the City. Funds collected from these units are utilized to assist with active and aggressive enforcement of these limitations. This enforcement continued to be a priority throughout the planning period.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE3.E	Review housing needs, achievements and challenges as part of the City's regular General Plan review. As required by State law, submit a progress report to the State Department of Housing and Community Development and Governor's Office of Planning and Research by April 1st of each year.	Annually	This report is being done as a part of this Goal and as of 2021 reporting year (submitted April 2022), the City of St. Helena is up to date on its reporting requirements regarding Housing Element implementation with the Office and HCD.	Keep
HE4.A	Review and possibly amend the inclusionary housing ordinance to: Adjust the inclusionary housing ordinance to require further distribution of affordable units within the various income categories… Balance collecting housing impact fees with the requirement to construct affordable housing, either on or off site depending on the size of the site and other site conditions, for larger commercial developments… Increase as appropriate residential construction in-lieu fees and/or create a sliding scale for larger houses. Add an above moderate-income workforce housing component to the Inclusionary Housing Ordinance requirements.	Ongoing	The City Council has expressed an interest in reviewing housing needs Citywide. Potential revisions to the inclusionary housing requirements will be included as a part of this review.	Delete

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE4.B	Generate Revenues for Affordable Housing through the Transient Occupancy Tax. Either increase the Transient Occupancy Tax or increase the number of transient occupancy rooms and apply the increased revenue to support affordable housing.	Ongoing	The City passed Measure E which increased the Transit Occupancy Tax rate by 1% and those funds raised go towards affordable housing.	Keep
HE4.C	Reduce, defer, or waive fees for affordable housing developments. The City will establish a set of criteria for project eligibility to have fees reduced, deferred or waived. The City will explore and adopt as appropriate higher incentives for affordable housing developments with units affordable to extremely low and very low income households.	Ongoing	Since 2010, the City has made significant efforts to provide financial incentives, including reducing the application and impact fees for affordable housing projects and will continue to do so into the foreseeable future. Since 2016, the City committed substantial amounts of Affordable Housing Trust Fund monies (approximately $2,450,000) to three different affordable housing projects, anticipated to result in the construction and/or occupancy of 21 new affordable housing units in St. Helena through 2021. Since 2015, the City has fully funded all funding requests made by an affordable housing developers to assist with the design and construction of affordable housing units within St. Helena.	Keep
HE4.D	Prioritize the use of Housing Trust Funds in support of the development and preservation of regulated affordable units for extremely low-income households.	Ongoing	Since 2010, the City has made significant efforts to provide financial incentives, including reducing the application and impact fees for affordable housing projects and will continue to do so into the foreseeable future. Since 2016, the City committed substantial amounts of Affordable Housing Trust Fund monies (approximately $2,450,000) to three different affordable housing projects, anticipated to result in the construction and/or occupancy of 21 new affordable housing units in St. Helena through 2021. Since 2015, the City has fully funded all funding requests made by an affordable housing developers to assist with the design and construction of affordable housing units within St. Helena.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE4.E	Pursue mortgage revenue bonds and/or mortgage credit certificates. Promote affordable homeownership opportunities for moderate- and lower-income households.	Ongoing	The City continues to look for options to incentivize affordable housing development, and will expand these efforts as a part of continued Citywide housing review.	Keep
HE4.F	Pursue additional funding for affordable housing. Explore other options for affordable housing funding, including a real property transfer tax and Housing Trust Fund contributions from the wine and hospitality industry in Napa Valley.	Ongoing	Since 2010, the City has made significant efforts to provide financial incentives, including reducing the application and impact fees for affordable housing projects and will continue to do so into the foreseeable future. In 2018, the City joined with all municipalities in Napa County, put Measure E on the ballot, requesting voter approval of a special tax to increase Transit Occupancy Taxes on hotels by one percent, with these additional funds being for the sole purpose of housing. This measure was approved and went into effect January 1, 2019. Estimated annual revenue from this measure is approximately $280,000.	Keep
HE4.G	Continue Section 8 rent subsidy certificates. Work with the City of Napa Housing Authority to provide continued rental assistance to low, very low and extremely low-income households.	Ongoing	The City continues to contract with the City of Napa for Housing Authority services, including Section 8.	Keep
HE4.H	Explore the possibility of establishing a full-time, shared Housing Coordinator for the up-valley communities to promote development of new affordable housing and enter into a cost-sharing agreement if feasible. The position would serve all of the up-valley communities, including Napa County.	Ongoing	The City continues to contract with the City of Napa for Housing Authority services, including Section 8.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE4.I	Address farmworker housing needs. The City will contribute staff time and City resources, as appropriate, to countywide farmworker housing efforts that may occur during the Housing Element planning period. The City will reach out to affordable housing developers to support regional and City efforts to develop farmworker housing, including assisting with financing or applications, incentives and concessions, expedited review or other strategies to encourage the development of housing for farmworkers.	Ongoing	The City continues to look for options to incentivize affordable housing development, and will expand these efforts as a part continued Citywide housing review.	Keep
HE4.J	Establish regulations requiring that a portion of units in all new developments meet the special housing needs of seniors and persons with disabilities, including developmental disabilities. Target 20 percent of new housing units to meet senior household needs and 10 percent accessible to persons with disabilities.	Ongoing	The City continues to look for options to incentivize affordable housing development, and will expand these efforts as a part continued Citywide housing review. A recent eight-unit market rate project (632 McCorkle) approved within the City will provide two fully compliant ADA units.	Delete
HE4.K	The City shall participate with mediation between property owners if needed to facilitate affordable housing. The City will provide staff resources and/or work with affected parties along with an outside mediator if necessary to address issues raised by community members in response to affordable housing development applications.	Ongoing	The City continues to look for options to incentivize affordable housing development, and will expand these efforts as a part continued Citywide housing review.	Delete

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE4.L	Explore the potential of using Housing Trust Fund money to purchase existing housing for conversion to restricted affordable housing and commit funding as appropriate. Priority use of Housing Trust Fund monies will be given to the creation of housing affordable to extremely low-income households.	Ongoing	Since 2010, the City has made significant efforts to provide financial incentives, including reducing the application and impact fees for affordable housing projects and will continue to do so into the foreseeable future. Since 2016, the City committed substantial amounts of Affordable Housing Trust Fund monies (approximately $2,450,000) to three different affordable housing projects, anticipated to result in the construction and/or occupancy of 21 new affordable housing units in St. Helena through 2021. Since 2015, the City has fully funded all funding requests made by an affordable housing developers to assist with the design and construction of affordable housing units within St. Helena.	Keep
HE5.A	Adopt a Green Building Ordinance. The City shall adopt building code standards that meet or exceed the State's Green Building Standards Code. The Planning and Building Department shall coordinate this effort with the Climate Protection Task Force.	Ongoing	The City adopted the most recent standard building code updates in 2017 and again in 2019 and will continue to do so as updates are required.	Keep
HE5.B	Encourage use of alternative energy technologies. Create incentives for the use of solar energy in new and rehabilitated housing. Incentives to adopt as appropriate include, but are not restricted to, ensuring a streamlined review process for applications, deferred fees, and reduced applicable city standards.	Ongoing	The City currently issues building permits for solar panel installation, backup battery installation, and electric vehicle charging infrastructure under the "Rapid Permit" category and will continue to do so into the foreseeable future. The City has extended services for Solar Permits to be submitted via email and paid over the phone to expedite further the process and reduce the number of trips into City Hall to get the permit.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE5.C	Provide public information on alternative energy technologies for residential developers, contractors, and property owners. The City will provide information on its web site and/or at City Hall regarding alternative energy technology options, possible sources of financing, and any applicable information regarding necessary local permits.	Ongoing	The City currently provides Green Building Code information upon request and has updated the City website, allowing additional information to be provided on an on-going basis.	Keep
HE5.D	Require cost-effective energy conservation measures in all new and rehabilitated housing to promote long-term affordability for occupants. The City will adopt the State's new Energy Efficiency Standards as part of any update to the California Building Standards Code and ensure that all new housing units constructed in the City meet or exceed these standards.	Tri-Annually	The City continues to work toward concurrent building code adoption along with standard building code updates. The last update being January 1, 2020, with adoption of the 2019 Code Standards.	Keep

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE5.E	Provide low-interest loans for implementation of energy conservation measures. The City will identify a source of loan funds to provide energy conservation assistance to homeowners and homebuilders. The City will continue to participate in AB-811 programs and will explore additional state and federal sources of funding to finance local energy conservation measures. Sources of state and federal funds include, but are not limited to, the California Energy Commission State Energy Program and Energy Efficiency and Conservation Block Grant Program, and the Low Income Home Energy Assistance Program.	Ongoing	No additional ability to provide loans from City funds have been identified as of yet, however the City continues to seek opportunities to assist home owners with low-cost options for energy conservation.	Keep
HE5.F	Provide public information on alternative energy technologies for residential developers, contractors, and property owners. The City will provide information on its website and/or City Hall regarding alternative energy technology options, possible sources of financing, and any applicable information regarding necessary local permits.	Ongoing	The City currently provides Green Building Code information upon request and has recently updated the City website, allowing additional information to be provided on an on-going basis. In 2018, the City added information regarding solar panel installation, backup battery installation, and electric vehicle charging infrastructure to the City's website to ease access to the requirements and incentives available.	Delete or merge with 5.C

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
HE5.G	Require bicycle and pedestrian amenities and connectivity to surrounding areas, in all new housing developments. Support programs to develop more local and regional walking and biking trails. In addition to requiring bicycle and pedestrian connectivity in all new residential developments, the City will provide staff time in support of regional trail programs.	Ongoing	The City engaged with the Napa Valley Transportation Authority on the adoption of a county wide bicycle and pedestrian plan. Further, the City has engaged with the Vine Trail organization in an effort to assist with implementation of the best route for the trail through St Helena. The City has established a Trails Committee and a Trails and Open Space Plan to promote pedestrian connectivity has been drafted and is expected to be adopted by the City Council in 2023. Finally, it is anticipated the comprehensive zoning code update, will include additional requirements for bicycle parking.	Delete
HE5.H	Continue to apply Municipal Code provisions pertaining to water resources. City will continue to require water-efficient landscaping for new residential and commercial construction, as well as implementing the Water Use Efficiency and Use Guidelines.	Ongoing	The City has adopted a "Water Neutral" policy for all new development (Municipal Code Chapter 13.12) and continues to implement a Water Efficient Landscape Ordinance (MWELO) in keeping with anticipated State requirements.	Keep
HE6.A	Provide educational materials at City Hall, through the press and directly to interested parties to educate real estate professionals, property owners and tenants on their rights and responsibilities and the resources available to address fair housing issues.	Ongoing	The City works with Fair Housing Napa Valley to put on an annual housing workshop to highlight the rights and responsibilities of tenants and landlords, in addition to discussing affordable housing challenges generally.	Keep
HE6.B	Continue to utilize and support Fair Housing Napa Valley for implementing fair housing programs, receiving complaints, and providing referrals to available resources when necessary.	Ongoing	The City contracts with Fair Housing Napa Valley to support fair housing and allocates direct funding as part of the budget process for their assistance.	Merge with 6.A

#	Implementation Actions	Timeframe	Status of Program Implementation	Recommen-dation
Goal 3 Quantified Objective:	Assist in the acquisition of low-interest loans for rehabilitation, including energy conservation, of 10 lower-income housing units by January 31, 2023, of the end of the Housing Element planning period (two extremely low income, two very low income, three low income, and three moderate income households).	12/31/2022	City was awarded $500,000 HOME funds grant in 2017 and initiated implementation of a program to make 0-interest, 0-payment 30-year loans for rehabilitation work to owners of deed restricted homes. To date, the City has expended or committed approximately $448,000 of these funds to assist 18 low-income homeowners and continues to roll out funds as loans are repaid. The City was awarded another $500,000 in HOME funds in 2020 however the City is waiting for approval from HCD to begin processing loan requests as they review the updated guidelines and environmental documentation.	Establish new Quantified Objectives in the Housing Element Update
Goal 1- Quantified Objective:	Construct four units of affordable housing to Extremely-Low income households; four units of housing affordable housing to Very Low Income households; five units for Low Income households; five units for Moderate Income households; and 13 units for above Moderate Income households by October 31, 2022 (31 total RHNA).	12/31/2022	The City has issued building permits for the Turley Flats affordable housing project, an 8-unit multifamily project with loan funding from the Affordable Housing Trust Fund (all low income). Occupancy of all units occurred in 2019. Further, the City has issued building permits for the Brenkle Court 8-unit affordable housing project (two very-low and six low income). In 2020, the City approved a deed restricted affordable housing project (four low to very-low income and one moderate income) at 963 Pope Street. The combined affordability of these units is expected to help the City make significant progress toward meeting these unit counts.	Establish new Quantified Objectives in the Housing Element Update
Goal 4 Quantified Objective:	Reduce, defer or waive fees for 18 housing units affordable to extremely low, low, very low- and moderate-income households.	12/31/2022	The City has both reduced and deferred fees (through a loan from the Affordable Housing Trust Fund) for the Turley Flats Affordable Housing Project, an 8-unit multi-family development at 1105 Pope St, the Brenkle Court 8-unit affordable housing project access off of McCorkle, and the 5-unit affordable housing project at 963 Pope Street. Combined, the City has reduced, deferred or waived fees for 21 affordable housing units as of Jan. 1, 2022.	Establish new Quantified Objectives in the Housing Element Update

3. Demographic and Economic Trends

In order to understand the current housing needs of St. Helena residents, this section examines historic, current, and projected population, household, and employment trends. The figures for St. Helena are compared with the equivalent figures for Napa County and the Bay Area, to frame the St. Helena figures within the trends of the greater region.[3]

The data for the analysis of population, household characteristics, and employment come from the last four decennial Censuses, the 2015-2019 American Community Survey, the U.S. Department of Housing and Urban Development's (HUD) 2013-2017 Comprehensive Housing Affordability Strategy, the California Department of Housing and Community Development's (HCD) 2020 5th Cycle Annual Progress Report Permit Summary, the California Department of Finance's (DoF) 2020 E-5 series, and the 2010-2021 California Employment Development Department (EDD) Local Area Unemployment Statistics.

The Association of Bay Area Governments (ABAG) supplied an HCD Preapproved Data Package that included the vast majority of the data included in this analysis. Additionally, ABAG, in coordination with Baird + Driskell Community Planning provided a Housing Needs Data Report that directly informed this section of the Needs Analysis.[4]

The Bay Area continues to see growth in both population and jobs, which means more housing of various types and sizes is needed to ensure that residents across all income levels, ages, and abilities have a place to call home. While the number of people drawn to the region over the past 30 years has steadily increased, housing production has stalled, contributing to the housing shortage that communities are experiencing today. In many cities, this has resulted in residents being priced out, increased traffic congestion caused by longer commutes, and fewer people across incomes being able to purchase homes or meet surging rents.

The 2023-2031 Housing Element Update provides a roadmap for how to meet our growth and housing challenges. Required by the state, the Housing Element identifies the existing housing conditions and community needs, reiterates goals, and creates a plan for more housing. The Housing Element is an integral part of the General Plan, which guides the policies of St. Helena.

This section presents information regarding population, household, and income trends between 2010 and 2019, with some additional analysis for the period between 2000 and 2010.

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[3] For the purposes of this Housing Needs Assessment, the Bay Area is defined to include the following counties in the Association of Bay Area Governments (ABAG): Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano.

[4] ABAG/MTC Staff and Baird + Driskell Community Planning, Housing Needs Data Report: St. Helena, May 2021.

Key Findings

- **Population**. Generally, the population of the Bay Area continues to increase because of natural growth and the strong economy drawing new residents to the region. The population of St. Helena increased by 2.1 percent from 2000 to 2020, which is lower than the growth rate of the Bay Area.
- **Age.** In 2019, St. Helena's youth population under the age of 18 was 1,050 and senior population 65 and older was 1,636. These age groups represent 17.2 percent and 26.8 percent, respectively, of St. Helena's population.
- **Race/Ethnicity.** In 2020, 65.1 percent of St. Helena's population was White while 1.6 percent was African American, 1.3 percent was Asian, and 30.9 percent was Hispanic or Latinx. People of color in St. Helena comprise a proportion below the overall proportion in the Bay Area as a whole.
- **Employment.** St. Helena residents most commonly work in the Health & Educational Services industry. From January 2010 to January 2021, the unemployment rate in St. Helena increased by 1.3 percentage points. Since 2010, the number of jobs located in the jurisdiction decreased by 2,620 (32.4 percent). Additionally, the jobs-household ratio in St. Helena has decreased from 3.47 jobs per household in 2002 to 2.23 in 2018.

Population Trends

The Bay Area is the fifth-largest metropolitan area in the nation and has seen a steady increase in population since 1990, except for a dip during the Great Recession. Many cities in the region have experienced significant growth in jobs and population. While these trends have led to a corresponding increase in demand for housing across the region, the regional production of housing has largely not kept pace with job and population growth. Table 3 shows population growth trends. In 2020, the population of St. Helena was estimated to be 6,073. From 1990 to 2000, the population increased by 19.2 percent, while it decreased by 2.3 percent during the first decade of the 2000s. In the most recent decade, the population increased by 4.5 percent to 6,073. The population of St. Helena makes up 4.4 percent of Napa County.[5]

Table 3 Population Growth Trends

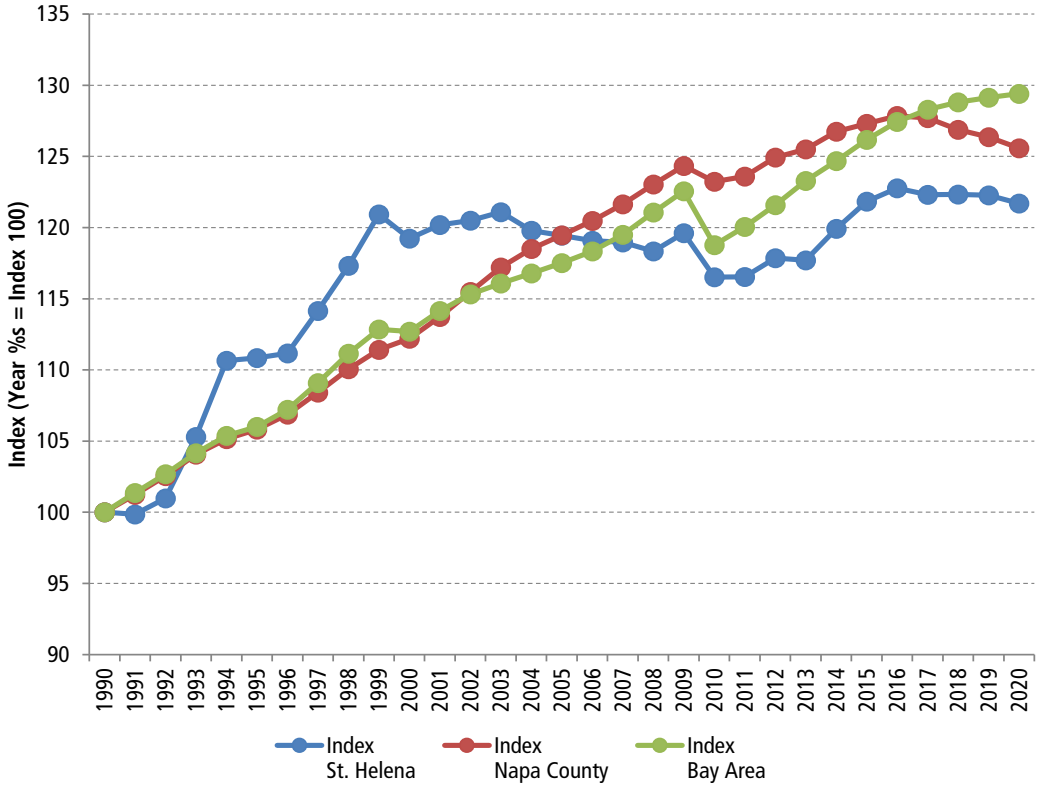
	1990	1995	2000	2005	2010	2015	2020
St. Helena	4,990	5,531	5,950	5,960	5,814	6,079	6,073
Napa County	110,765	117,216	124,279	132,314	136,484	141,010	139,088
Bay Area	6,020,147	6381961	6,784,348	7,073,912	7,150,739	7,595,694	7,790,537

Source: California Department of Finance, E-5 series, 2020.

[5] *To compare the rate of growth across various geographic scales, Figure 1 shows population for the jurisdiction, county, and region indexed to the population in the year 1990. This means that the data points represent the population growth (i.e. percent change) in each of these geographies relative to their populations in 1990.*

Figure 1 displays population growth trends indexed to the population in the year 1990. Since 2000, St. Helena's population has increased by 2.1 percent; this rate is below that of the region as a whole, at 14.8 percent. In St. Helena, roughly 8.7 percent of its population moved during the past year, a number 4.8 percentage points smaller than the regional rate of 13.4 percent.

Figure 1 Population Growth Trends, Indexed to 1990



Source: California Department of Finance, E-5 series Note: The data shown on the graph represents population for the jurisdiction, county, and region indexed to the population in the first year shown. The data points represent the relative population growth in each of these geographies relative to their populations in that year.
For some jurisdictions, a break may appear at the end of each decade (1999, 2009) as estimates are compared to census counts. DOF uses the decennial census to benchmark subsequent population estimates.
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-01.

Household Trends

As shown in Table 4, between 1990 and 2020, the number of households in St. Helena increased moderately, by an average 0.73 percent annually, however much of this growth occurred prior to the year 2000. From 1990 and 2000, the number of households increased at a rate of 2.1 percent annually. Between 2000 and 2010, this rate decreased to an increase of only 0.1 percent annually, or about 21 households per year. The rate increased slightly to an average of 0.5 percent per year between 2010 and 2020, or about 105 households per year. In

contrast, the number of Napa County households grew by one percent annually between 2010 and 2020, representing an increase of about 5,000 households per year.

Table 4 Household Trends

Household Trends	1990	2000	2010	2020	Average Annual Growth 1990-2000	Average Annual Growth 2000-2010	Average Annual Growth 2010-2020
St. Helena	2,138	2,380	2,401	2,866	1.2%	0.1%	2.0%
Napa County	41,312	45,402	48,876	48,484	1.1%	0.8%	-0.1%

Source: Census 1990, 2000, 2010, 2020.

Average Household Size

Average household size (Table 5) is a function of the number of people living in households divided by the number of occupied housing units in a given area. In general, a decline or increase in average household size signals that the population and the number of households are growing at different rates. Overall, the average household size in St. Helena was slightly smaller than in Napa County in 1990, 2000, and 2010 and considerably smaller in 2020. With the number of households growing, and a slight drop in population in St. Helena between 2000 and 2020, average household sizes fell from 2.48 to 2.38 persons per household between 2000 and 2010 and then to 2.08 persons per household by 2020. In contrast, the population in Napa County increased more rapidly than the number of households, leading to increases in the average household size from 2.62 to 2.69 persons per household between 2000 and 2010 and up to 2.78 by 2020.

Table 5 Average Household Size, St. Helena and Napa County

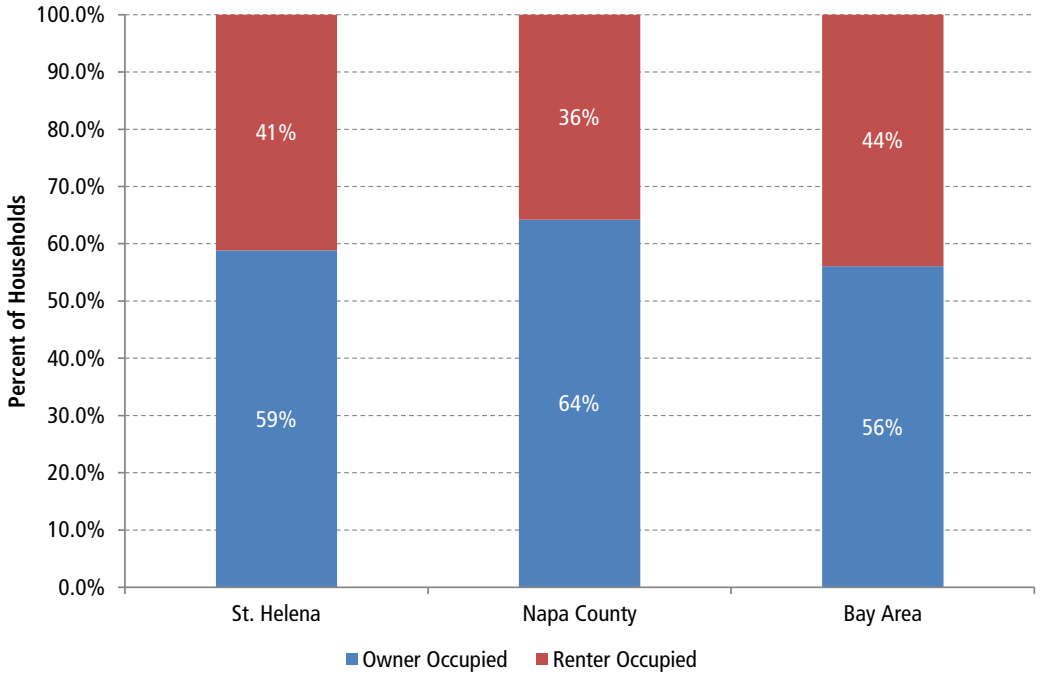
	1990	2000	2010	2020
St. Helena	2.31	2.48	2.38	2.08
Napa County	2.54	2.62	2.69	2.78

Source: Census 1990, 2000, 2010, 2020.

Household Tenure

The number of residents who own their homes compared to those who rent their homes can help identify the level of housing insecurity – ability for individuals to stay in their homes – in a city and region. Generally, renters may be displaced more quickly if prices increase. In St. Helena there are a total of 2,702 housing units, and fewer residents rent than own their homes: 41.2 percent versus 58.8 percent (Figure 2). By comparison, 35.8 percent of households in Napa County are renters, while 44 percent of Bay Area households rent their homes.

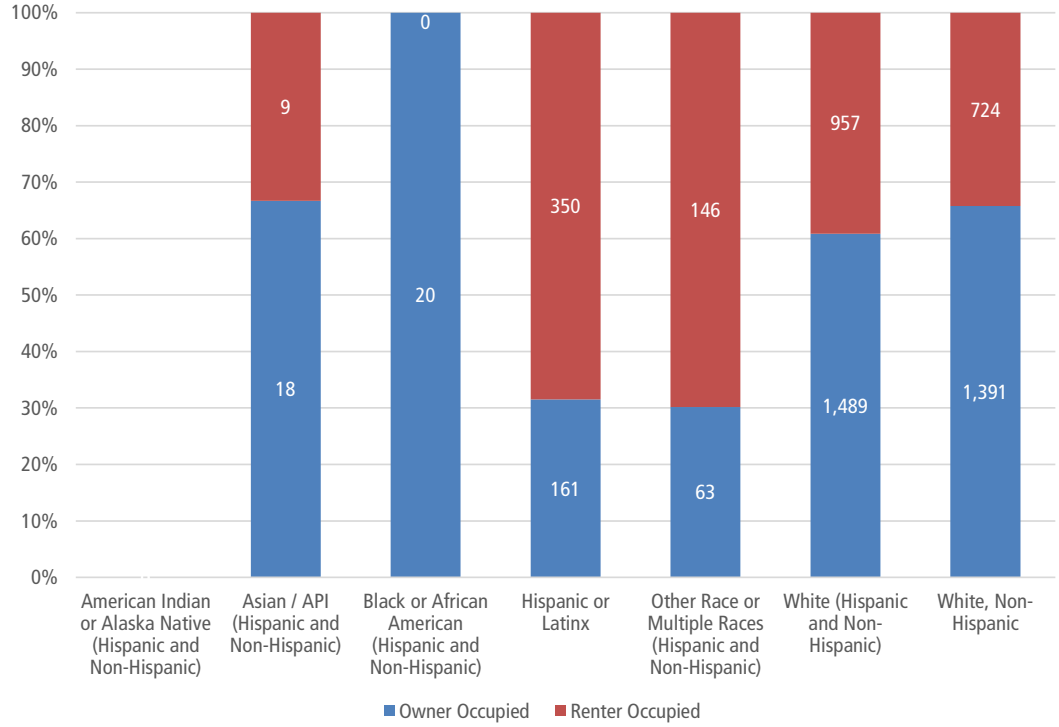
Figure 2 Housing Tenure



Universe: Occupied housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25003 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-16.

Homeownership rates often vary considerably across race/ethnicity in the Bay Area and throughout the country. These disparities not only reflect differences in income and wealth but also stem from Federal, State, and local policies that limited access to homeownership for communities of color while facilitating homebuying for white residents. While many of these policies, such as redlining, have been formally disbanded, the impacts of race-based policy are still evident across Bay Area communities. Figure 3 shows housing tenure by race. In St. Helena, 100.0 percent of Black households owned their homes, while homeownership rates were 66.7 percent for Asian households, 31.5 percent for Hispanic or Latinx households, and 60.9 percent for White households. Notably, recent changes to state law require local jurisdictions to examine these dynamics and other fair housing issues when updating their Housing Elements.

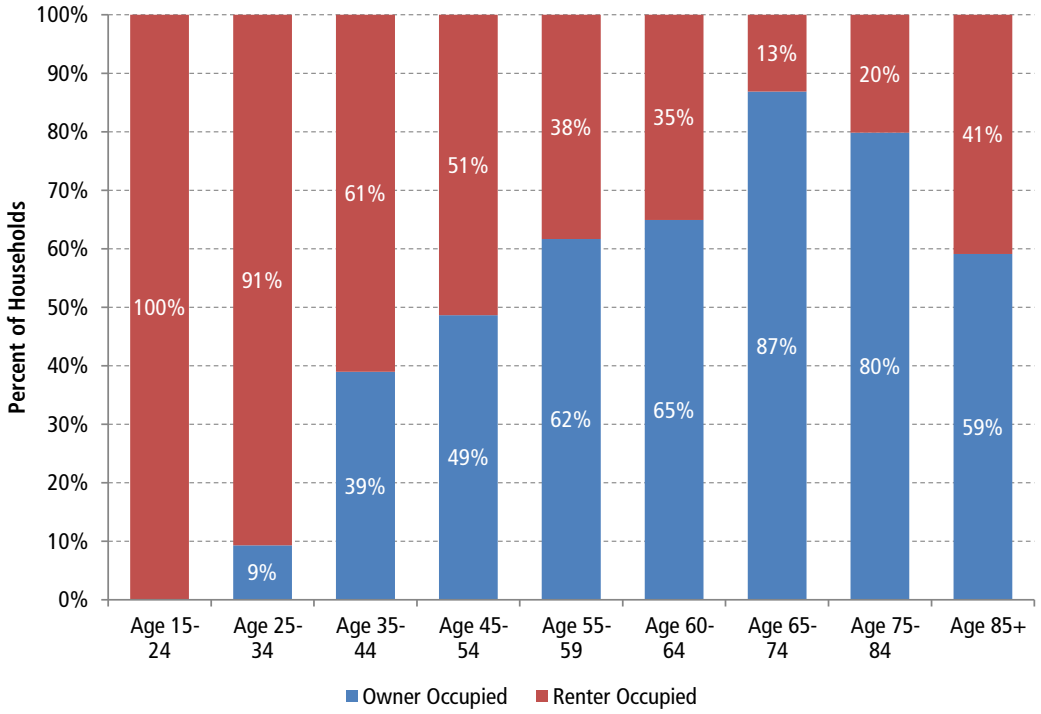
Figure 3 Housing Tenure by Race of Householder



Universe: Occupied housing units
Notes: For this table, the Census Bureau does not disaggregate racial groups by Hispanic/Latinx ethnicity. However, data for the white racial group is also reported for white householders who are not Hispanic/Latinx. Since residents who identify as white and Hispanic/Latinx may have very different experiences within the housing market and the economy from those who identify as white and non-Hispanic/Latinx, data for multiple white sub-groups are reported here. The racial/ethnic groups reported in this table are not all mutually exclusive. Therefore, the data should not be summed as the sum exceeds the total number of occupied housing units for this jurisdiction. However, all groups labelled "Hispanic and Non-Hispanic" are mutually exclusive, and the sum of the data for these groups is equivalent to the total number of occupied housing units.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25003(A-I)For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-20.

The age of residents who rent or own their home can also signal the housing challenges a community is experiencing. Younger households tend to rent and may struggle to buy a first home in the Bay Area due to high housing costs. At the same time, senior homeowners seeking to downsize may have limited options in an expensive housing market. In St. Helena, 75.1 percent of householders between the ages of 25 and 44 are renters, while 19.7 percent of householders over 65 are (Figure 4).

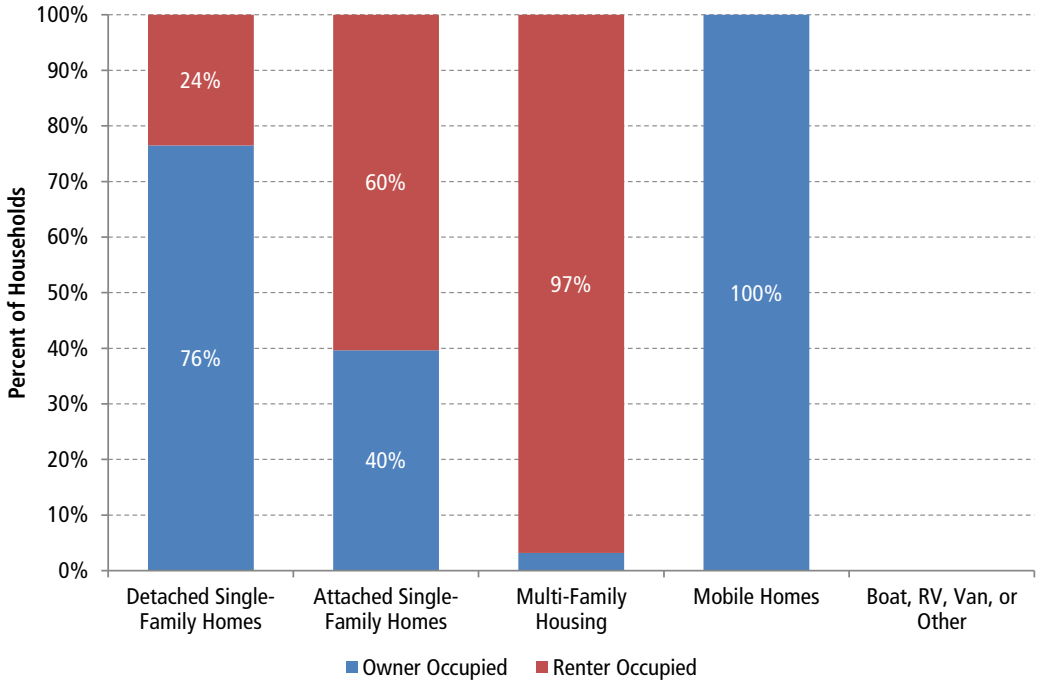
Figure 4 Housing Tenure by Age



Universe: Occupied housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25007 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-18.

In many cities, homeownership rates for households in single-family homes are substantially higher than the rates for households in multi-family housing. In St. Helena, 76.5 percent of households in detached single-family homes are homeowners, while 3.2 percent of households in multi-family housing are homeowners (Figure 5).

Figure 5 Housing Tenure by Housing Type



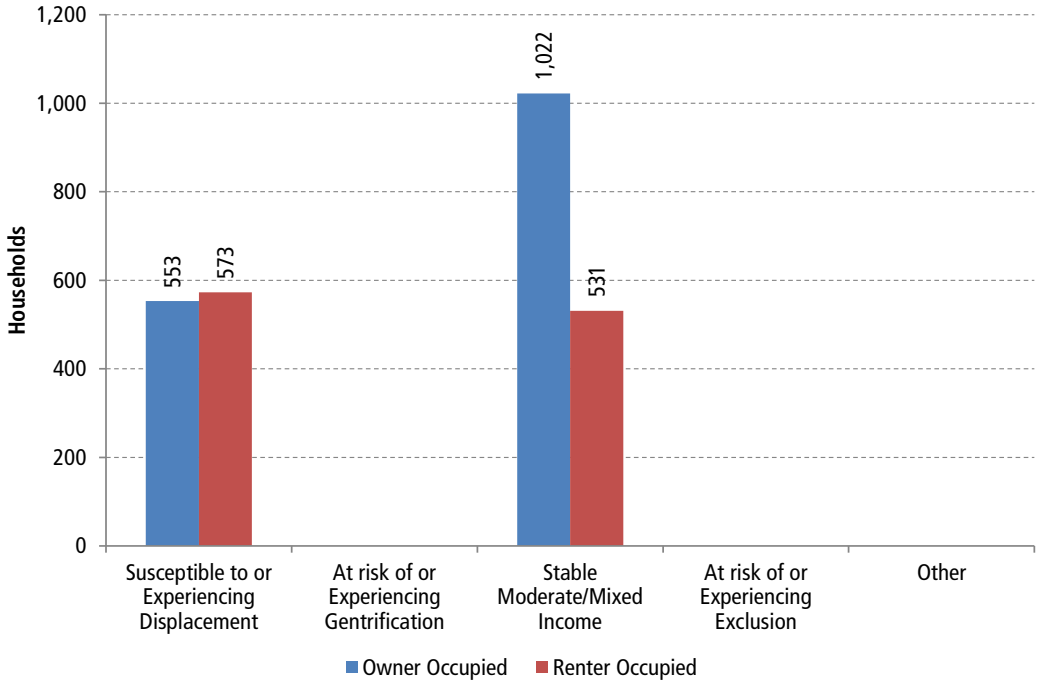
Universe: Occupied housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25032 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-22.

Households by Displacement Risk

Because of increasing housing prices, displacement is a major concern in the Bay Area. Displacement has the most severe impacts on low- and moderate-income residents. When individuals or families are forced to leave their homes and communities, they also lose their support network.

The University of California, Berkeley has mapped all neighborhoods in the Bay area, identifying their risk for gentrification. They find that in St. Helena, 42.0 percent of households live in neighborhoods that are susceptible to or experiencing displacement and 0.0 percent live in neighborhoods at risk of or undergoing gentrification. Figure 6 shows households by displacement risk and tenure.

Figure 6 Households by Displacement Risk and Tenure



Universe: Households
Notes: Displacement data is available at the census tract level. Staff aggregated tracts up to jurisdiction level using census 2010 population weights, assigning a tract to jurisdiction in proportion to block level population weights. Total household count may differ slightly from counts in other tables sourced from jurisdiction level sources. Categories are combined as follows for simplicity: At risk of or Experiencing Exclusion: At Risk of Becoming Exclusive; Becoming Exclusive; Stable/Advanced Exclusive At risk of or Experiencing Gentrification: At Risk of Gentrification; Early/Ongoing Gentrification; Advanced Gentrification Stable Moderate/Mixed Income: Stable Moderate/Mixed Income Susceptible to or Experiencing Displacement: Low-Income/Susceptible to Displacement; Ongoing Displacement Other: High Student Population; Unavailable or Unreliable Data
Source: Urban Displacement Project for classification, American Community Survey 5-Year Data (2015-2019), Table B25003 for tenure.
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-25.

Equally important, some neighborhoods in the Bay Area do not have housing appropriate for a broad section of the workforce. UC Berkeley estimates no households in St. Helena are in neighborhoods where low-income households are likely to be excluded due to prohibitive housing costs.[6]

[6] *More information about this gentrification and displacement data is available at the Urban Displacement Project's webpage: https://www.urbandisplacement.org/. Specifically, one can learn more about the different gentrification/displacement typologies shown in Figure 18 at this link: https://www.urbandisplacement.org/sites/default/files/typology_sheet_2018_0.png. Additionally, one can view maps that show which typologies correspond to which parts of a jurisdiction here: https://www.urbandisplacement.org/san-francisco/sf-bay-area-gentrification-and-displacement*

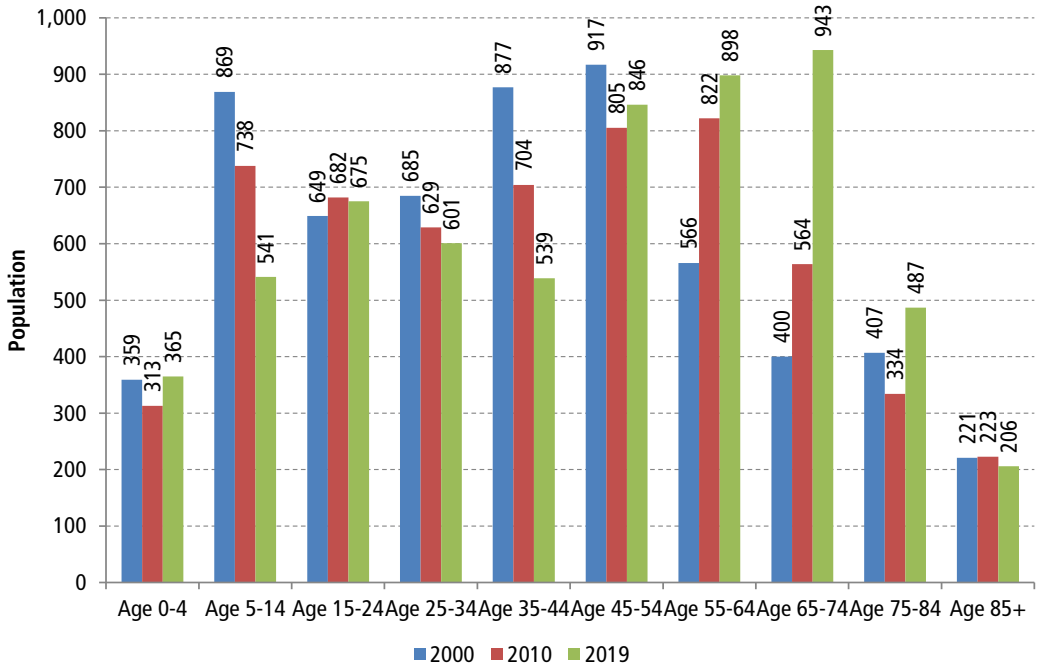
Demographic Trends

Age Distribution

The distribution of age groups in a city shapes what types of housing the community may need in the near future. An increase in the older population may mean there is a developing need for more senior housing options, while higher numbers of children and young families can point to the need for more family housing options and related services. There has also been a move by many to age-in-place or downsize to stay within their communities, which can mean more multifamily and accessible units are also needed.

Figure 7 shows population growth trends. In St. Helena, the median age in 2000 was 39.2; by 2019, this figure had increased, landing at around 49 years. More specifically, the population of those under 14 has decreased since 2010, while the 65- and-over population has increased.

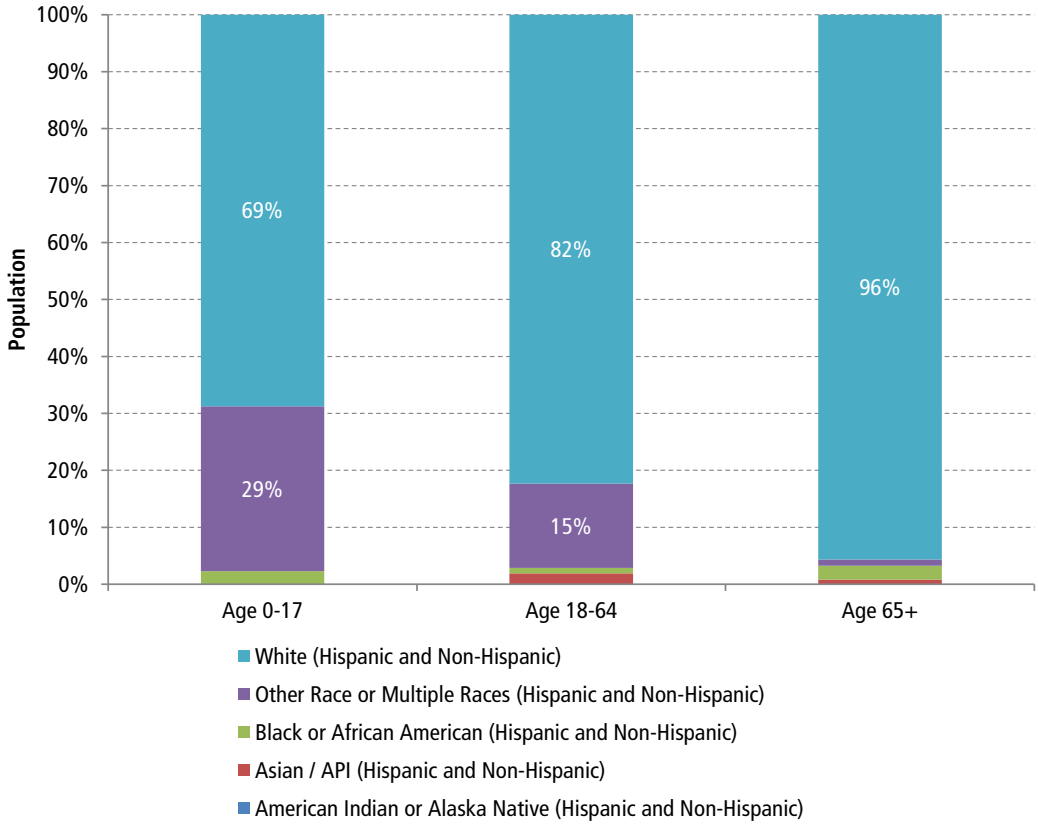
Figure 7 Population Growth Trends



Universe: Total population
Source: U.S. Census Bureau, Census 2000 SF1, Table P12; U.S. Census Bureau, Census 2010 SF1, Table P12; U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B01001
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-04.

Looking at the senior and youth population by race can add an additional layer of understanding, as families and seniors of color are even more likely to experience challenges finding affordable housing. People of color make up 4.3 percent of seniors and 31.2 percent of youth under 18 (Figure 8).

Figure 8 Senior and Youth Population by Race

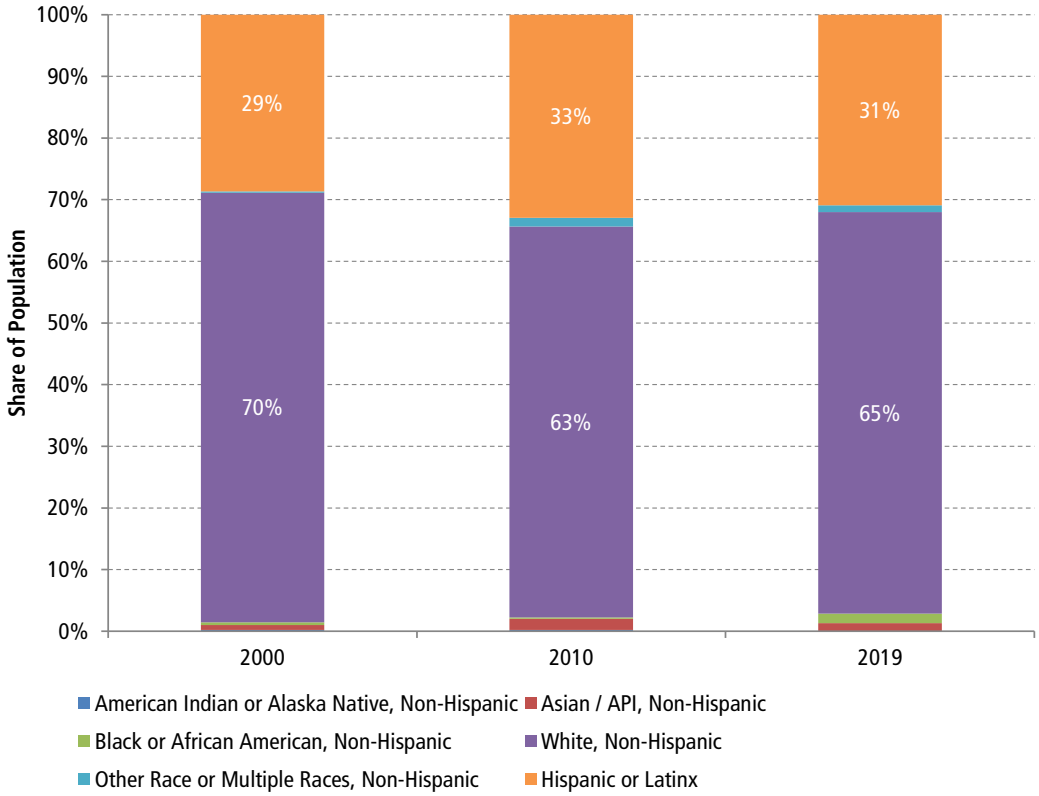


Universe: Total population
Notes: In the sources for this table, the Census Bureau does not disaggregate racial groups by Hispanic/Latinx ethnicity, and an overlapping category of Hispanic / non-Hispanic groups has not been shown to avoid double counting in the stacked bar chart.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B01001(A-G)
For the data table behind this figure, please refer to the Data Packet Workbook, Table SEN-02.

Race and Ethnicity

Understanding the racial makeup of a city and region is important for designing and implementing effective housing policies and programs. These patterns are shaped by both market factors and government actions, such as exclusionary zoning, discriminatory lending practices and displacement that has occurred over time and continues to impact communities of color today. Since 2000, the percentage of residents in St. Helena identifying as White has decreased – and by the same token the percentage of residents of all other races and ethnicities has increased – by 4.6 percent, with the 2019 population standing at 3,973. In absolute terms, the Hispanic or Latinx population increased the most while the White, Non-Hispanic population decreased the most. Figure 9 shows population trends by race.

Figure 9 Population by Race, St. Helena, 2000-2019



Universe: Total population
Notes: Data for 2019 represents 2015-2019 ACS estimates. The Census Bureau defines Hispanic/Latinx ethnicity separate from racial categories. For the purposes of this graph, the "Hispanic or Latinx" racial/ethnic group represents those who identify as having Hispanic/Latinx ethnicity and may also be members of any racial group. All other racial categories on this graph represent those who identify with that racial category and do not identify with Hispanic/Latinx ethnicity.
Source: U.S. Census Bureau, Census 2000, Table P004; U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B03002
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-02.

Income

Household Income Distribution

Despite the economic and job growth experienced throughout the region since 1990, the income gap has continued to widen. California is one of the most economically unequal states in the nation, and the Bay Area has the highest income inequality between high- and low-income households in the state.[7]

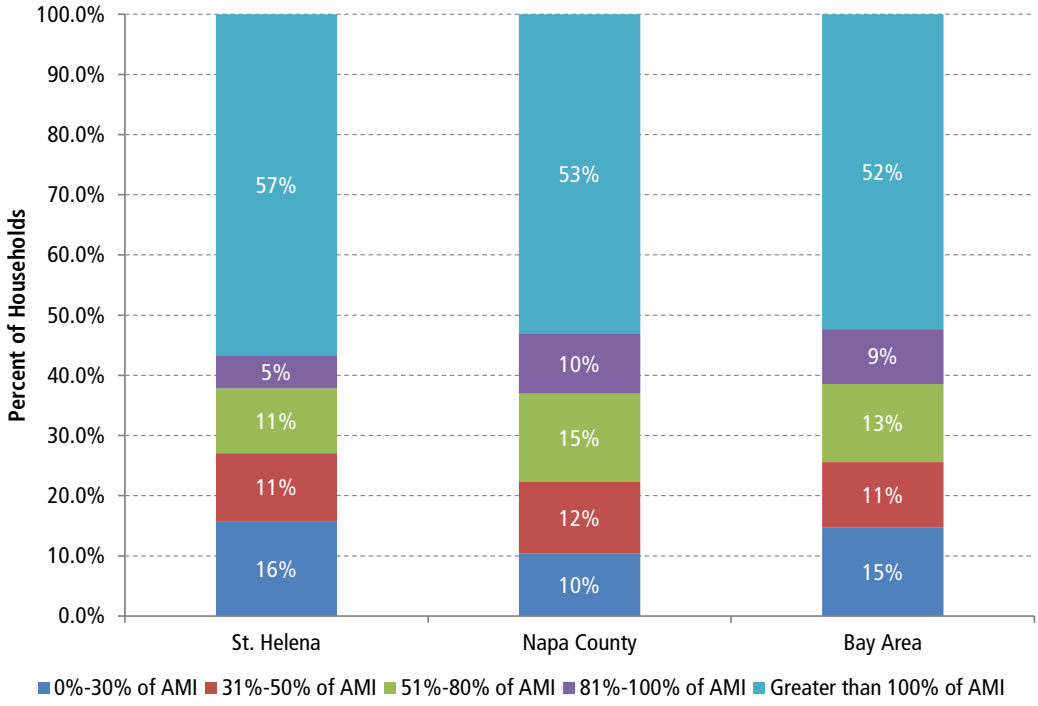
[7] *Bohn, S.et al. 2020. Income Inequality and Economic Opportunity in California. Public Policy Institute ofCalifornia.*

Household Income Categories

The Department of Housing and Urban Development defines income categories as a percentage of the Area Median Income (AMI). Households whose income equals 30 percent or less of the AMI are considered extremely low-income; households with incomes between 30 and 50 percent of the AMI are classified as very low-income; and those between 50 and 80 percent of the AFI are low-income. The CHAS data set also provides information on households earning between 80 and 100 percent of the AMI and households with incomes above 100 percent of the AMI.

In St. Helena, 56.8 percent of households make more than 100 percent of the Area Median Income (AMI)[8], compared to 15.8 percent making less than 30 percent of AMI, which is considered extremely low-income (Figure 10).

Figure 10 Households by Household Income Level



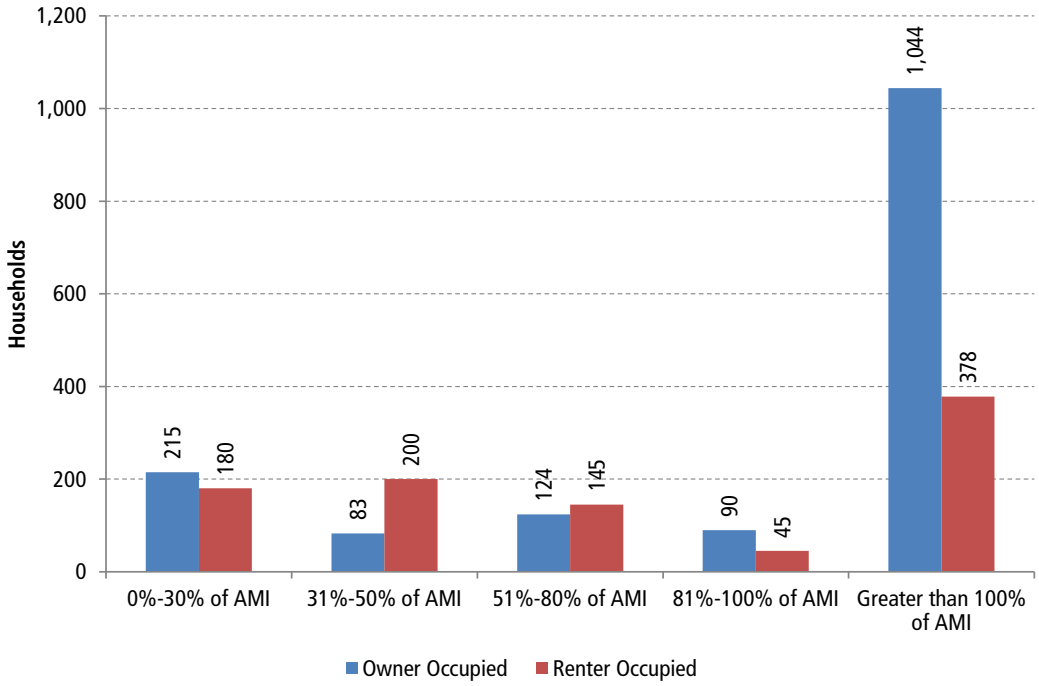
Universe: Occupied housing units
Notes: Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County),

[8] *Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County), and Vallejo-Fairfield Metro Area (Solano County). This is then adjusted for household size.*

and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located. The data that is reported for the Bay Area is not based on a regional AMI but instead refers to the regional total of households in an income group relative to the AMI for the county where that household is located. Local jurisdictions are required to provide an estimate for their projected extremely low-income households (0-30 percent AMI) in their Housing Elements. HCD's official Housing Element guidance notes that jurisdictions can use their RHNA for very low-income households (those making 0-50 percent AMI) to calculate their projected extremely low-income households. As Bay Area jurisdictions have not yet received their final RHNA numbers, this document does not contain the required data point of projected extremely low-income households. The report portion of the housing data needs packet contains more specific guidance for how local staff can calculate an estimate for projected extremely low-income households once jurisdictions receive their 6th cycle RHNA numbers.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table ELI-01.

Throughout the region, there are disparities between the incomes of homeowners and renters. Typically, the number of low-income renters greatly outpaces the amount of housing available that is affordable for these households. In St. Helena, the largest proportion of renters falls in the Greater than 100 percent of AMI income group, while the largest proportion of homeowners are found in the Greater than 100 percent of AMI group (Figure 11).

Figure 11 Household Income Level by Tenure

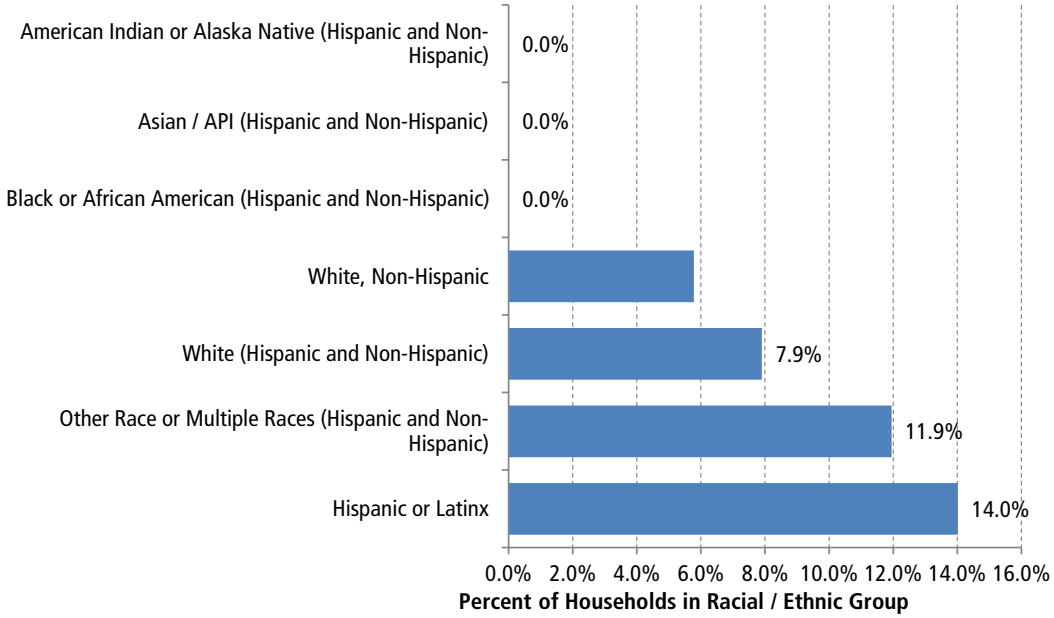


Universe: Occupied housing units
Notes: Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County),

and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-21.

Currently, people of color are more likely to experience poverty and financial instability as a result offederal and local housing policies that have historically excluded them from the same opportunities extended to white residents.[9] These economic disparities also leave communities of color at higher risk for housing insecurity, displacement or homelessness. In St. Helena, Other Race or Multiple Races (Hispanic and Non-Hispanic) residents experience the highest rates of poverty, followed by White (Hispanic and Non-Hispanic) residents (Figure 12).

Figure 12 Poverty Status by Race



Universe: Population for whom poverty status is determined
Notes: The Census Bureau uses a federally defined poverty threshold that remains constant throughout the country and does not correspond to Area Median Income. For this table, the Census Bureau does not disaggregate racial groups by Hispanic/Latinx ethnicity. However, data for the white racial group is also reported for white householders who are not Hispanic/Latinx. Since residents who identify as white and Hispanic/Latinx may have very different experiences within the housing market and the economy from those who identify as white and non-Hispanic/Latinx, data for multiple white sub-groups are reported here. The racial/ethnic groups reported in this table are not all mutually exclusive. Therefore, the data should not be summed as the sum exceeds the population for whom poverty status is determined for this jurisdiction. However, all groups labelled "Hispanic and Non-Hispanic" are mutually exclusive, and the sum of the data for these groups is equivalent to the population for whom poverty status is determined.

[9] *Moore, E., Montojo, N. and Mauri, N., 2019. Roots, Race & Place: A History of Racially Exclusionary Housing the San Francisco Bay Area. Hass Institute.*

Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B17001(A-I) For the data table behind this figure, please refer to the Data Packet Workbook, Table ELI-03.

Extremely Low-Income Households

In St. Helena, 56.8 percent of households make more than 100 percent of the Area Median Income (AMI), compared to 15.8 percent making less than 30 percent of AMI, which is considered extremely low-income (see Figure 10). Regionally, more than half of all households make more than 100 percent AMI, while 15 percent make less than 30 percent AMI. In Napa County, 30 percent AMI is the equivalent to the annual income of $27,950 for a family of four. Many households with multiple wage earners – including food service workers, full-time students, teachers, farmworkers, and healthcare professionals – can fall into lower AMI categories due to relatively stagnant wages in many industries.

Within the Housing Element, cities must estimate the extremely low-income housing need in the community. Based on HCD guidance, the City of St. Helena estimates that approximately 52 extremely low-income housing units are needed in the planning period. This estimate was calculated based on HCD guidance, as 50 percent of the very low-income housing need, as identified by the RHNA (Table 6).

Table 6 St. Helena Regional Housing Needs Allocation

Geography	Very Low Income (<50 percent of AMI)	Low Income (50%-80 percent of AMI)	Moderate Income (80%-120 percent of AMI)	Above Moderate Income (>120 percent of AMI)
St. Helena	104	59	26	67

[1] Per HCD guidance, the extremely low-income need in St. Helena is estimated at 50 percent of the very low income RHNA requirement, or approximately 52 units.

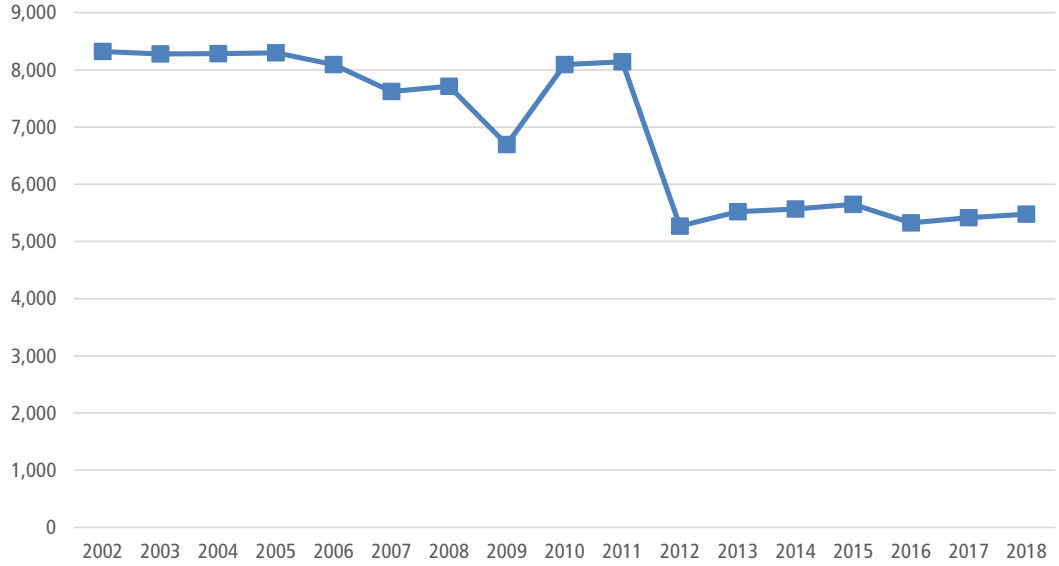
Employment Trends

Balance of Jobs and Workers

A city houses employed residents who either work in the community where they live or work elsewherein the region. Conversely, a city may have job sites that employ residents from the same city, but more often employ workers commuting from outside of it. Smaller cities typically will have more employed residents than jobs and export workers, while larger cities tend to have a surplus of jobs and import workers. To some extent the regional transportation system is set up for this flow of workers to the region's core job centers. At the same time, as the housing affordability crisis has illustrated, local imbalances may be severe, where local jobs and worker populations are out of sync at a sub-regional scale.

One measure of this is the relationship between workers and jobs. A city with a surplus of workers "exports" workers to other parts of the region, while a city with a surplus of jobs must conversely "import" them. Between 2002 and 2018, the number of jobs in St. Helena decreased by 34.2 percent (Figure 13).

Figure 13 Jobs in St. Helena



Universe: Jobs from unemployment insurance-covered employment (private, state and local government) plus United States Office of Personnel Management-sourced Federal employment
Notes: The data is tabulated by place of work, regardless of where a worker lives. The source data is provided at the census block level. These are crosswalked to jurisdictions and summarized.
Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Workplace Area Characteristics (WAC) files, 2002-2018
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-11.

There are 3,005 employed residents, and 5,476 jobs[10] in St. Helena - the ratio of jobs to resident workers is 1.82; St. Helena is a net importer of workers. Figure 14 shows the balance when comparing jobs to workers, broken down by different wage groups, offering additional insight into local dynamics. A community may offer employment for relatively low-income workers but have relatively few housing options for those workers - or conversely, it may house residents who are low wage workers but offer few employment opportunities for them. Such relationships may cast extra light on potentially pent-up demand for housing in particular price categories. A surplus of jobs relative to residents in a given wage category suggests the need to import those workers, while conversely, surpluses of workers in a wage group relative to jobs means the community will export those workers to other jurisdictions. Such flows are not inherently bad, though over time, sub-regional imbalances may appear.

St. Helena has more low-wage jobs than low-wage residents (where low-wage refers to jobs paying less than $25,000). This disparity implies that, every day, low wage workers commute to St. Helena from their residences outside of the city. At the other end of the wage spectrum, the city has more high-wage jobs than high-wage residents (where high-wage refers to jobs paying more than $75,000). This figure suggests that high-wage

[10] *Employed residents in a jurisdiction is counted by place of residence (they may work elsewhere) while jobs in a jurisdiction are counted by place of work (they may live elsewhere). The jobs may differ from those reported in Figure 5 as the source for the time series is from administrative data, while the cross-sectional data is from a survey.*

workers are also commuting into St. Helena. Since both high wage workers and low wage workers are faced with commuting into St. Helena for work, it suggests a lack of housing, both market-rate and affordable, within the city. (Figure 14).[11]

Figure 14 Workers by Earnings, by Jurisdiction as Place of Work and Place of Residence

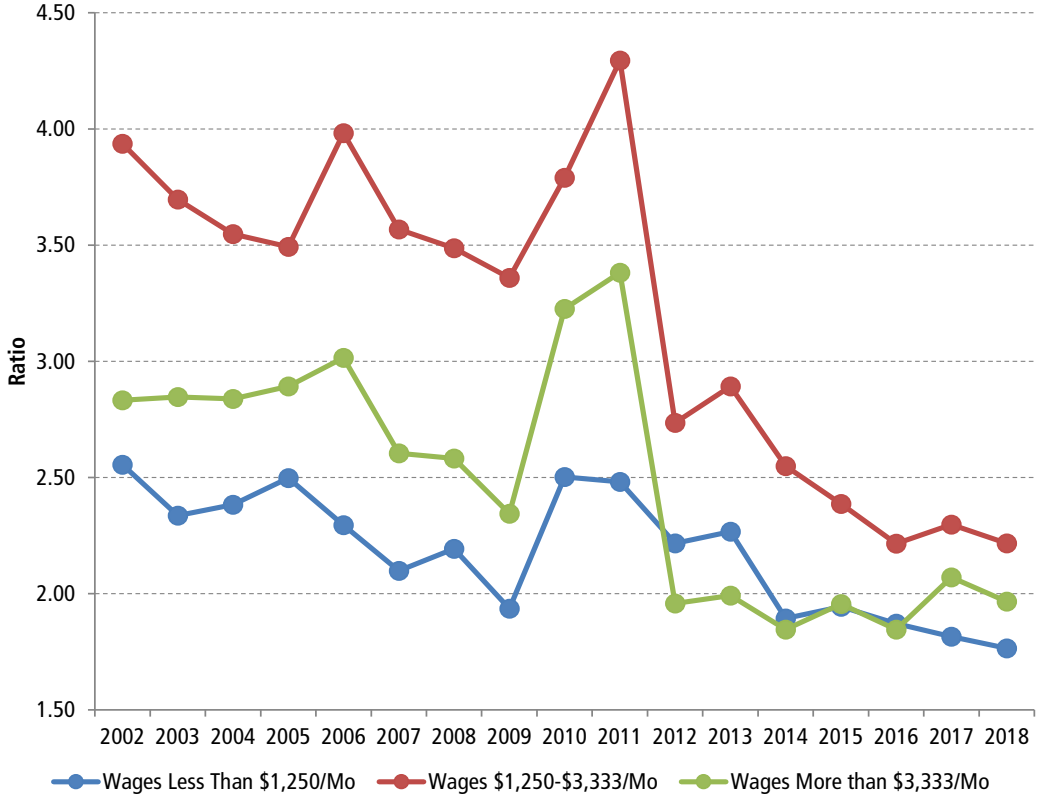


Universe: Workers 16 years and over with earnings
Source: U.S. Census Bureau, American Community Survey 5-Year Data 2015-2019, B08119, B08519 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-10.

Figure 15 shows the balance of a jurisdiction's resident workers to the jobs located there for different wage groups as a ratio instead - a value of one means that a city has the same number of jobs in a wage group as it has resident workers - in principle, a balance. Values above one indicate a jurisdiction will need to import workers for jobs in a given wage group. At the regional scale, this ratio is 1.04 jobs for each worker, implying a modest import of workers from outside the region (Figure 15).

[11] *The source table is top-coded at $75,000, precluding more fine grained analysis at the higher end of the wage spectrum.*

Figure 15 Jobs-Worker Ratios, By Wage Group

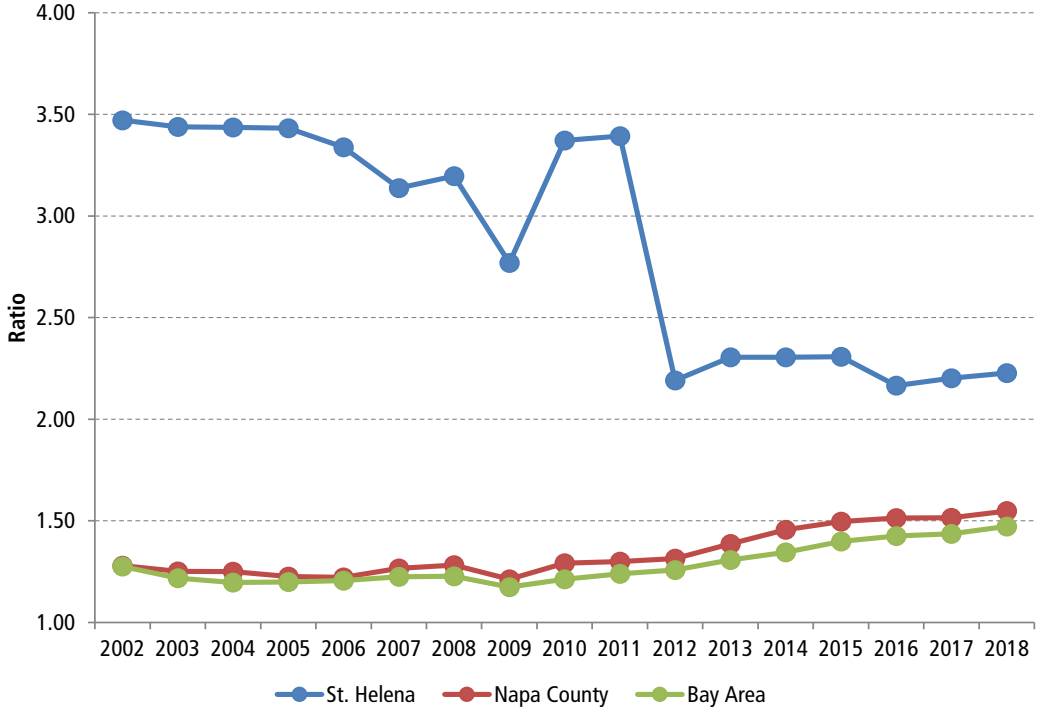


Universe: Jobs in a jurisdiction from unemployment insurance-covered employment (private, state and local government) plus United States Office of Personnel Management-sourced Federal employment
Notes: The ratio compares job counts by wage group from two tabulations of LEHD data: Counts by place of work relative to counts by place of residence. See text for details.
Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Workplace Area Characteristics (WAC) files (Jobs); Residence Area Characteristics (RAC) files (Employed Residents), 2010-2018
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-14.

Such balances between jobs and workers may directly influence the housing demand in a community. New jobs may draw new residents, and when there is high demand for housing relative to supply, many workers may be unable to afford to live where they work, particularly where job growth has been in relatively lower wage jobs. This dynamic not only means many workers will need to prepare for long commutes and time spent on the road, but in the aggregate, it contributes to traffic congestion and time lost for all road users.

If there are more jobs than employed residents, it means a city is relatively jobs-rich, typically also with a high jobs to household ratio. Thus, bringing housing into the measure, the jobs-household ratio in St. Helena has decreased from 3.47 in 2002, to 2.23 jobs per household in 2018 (Figure 16).

Figure 16 Jobs-Household Ratio

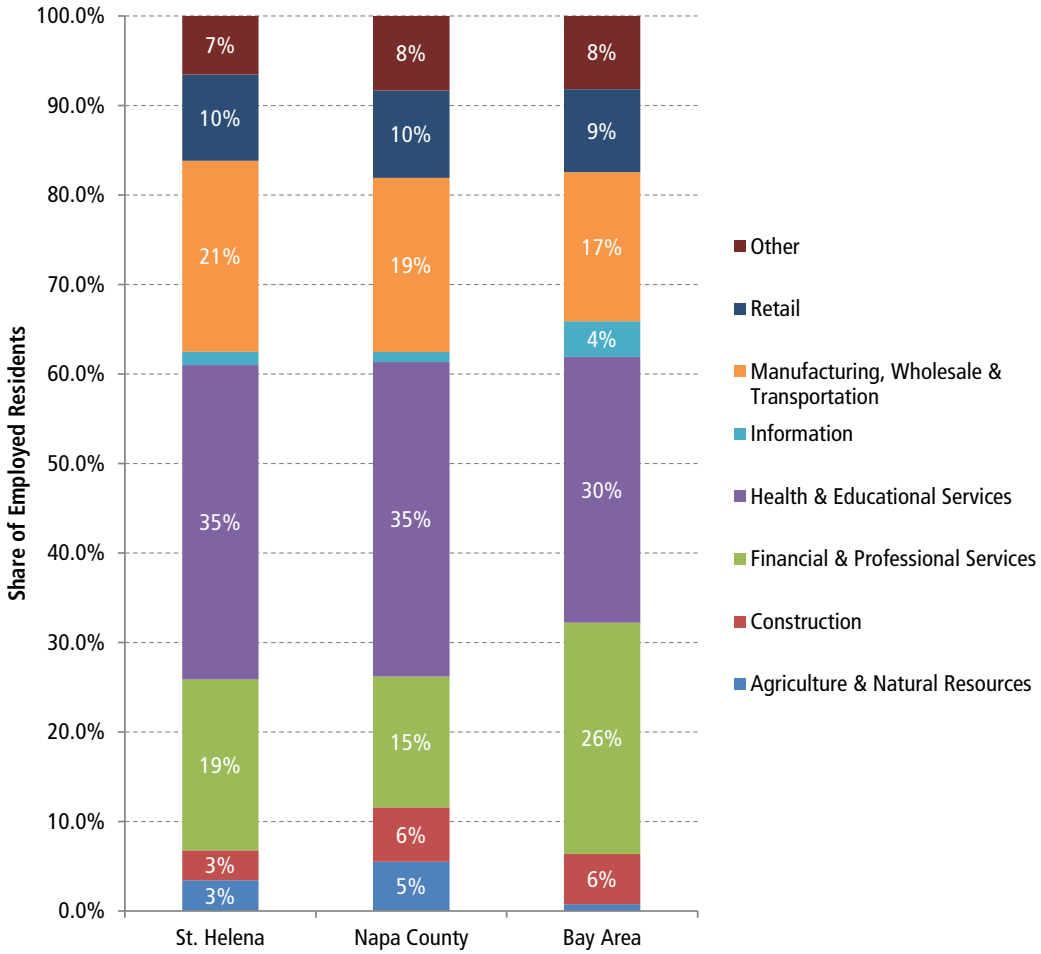


Universe: Jobs in a jurisdiction from unemployment insurance-covered employment (private, state and local government) plus United States Office of Personnel Management-sourced Federal employment; households in a jurisdiction
Notes: The data is tabulated by place of work, regardless of where a worker lives. The source data is provided at the census block level. These are crosswalked to jurisdictions and summarized. The ratio compares place of work wage and salary jobs with households, or occupied housing units. A similar measure is the ratio of jobs to housing units. However, this jobs-household ratio serves to compare the number of jobs in a jurisdiction to the number of housing units that are actually occupied. The difference between a jurisdiction's jobs-housing ratio and jobs-household ratio will be most pronounced in jurisdictions with high vacancy rates, a high rate of units used for seasonal use, or a high rate of units used as short-term rentals.
Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Workplace Area Characteristics (WAC) files (Jobs), 2002-2018; California Department of Finance, E-5 (Households)
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-13.

Employment by Industry

In terms of sectoral composition, the largest industry in which St. Helena residents work is Health & Educational Services, and the largest sector in which Napa residents work is Health & Educational Services (Figure 17). For the Bay Area as a whole, the Health & Educational Services industry employs the most workers of any sector.

Figure 17 Resident Employment by Industry

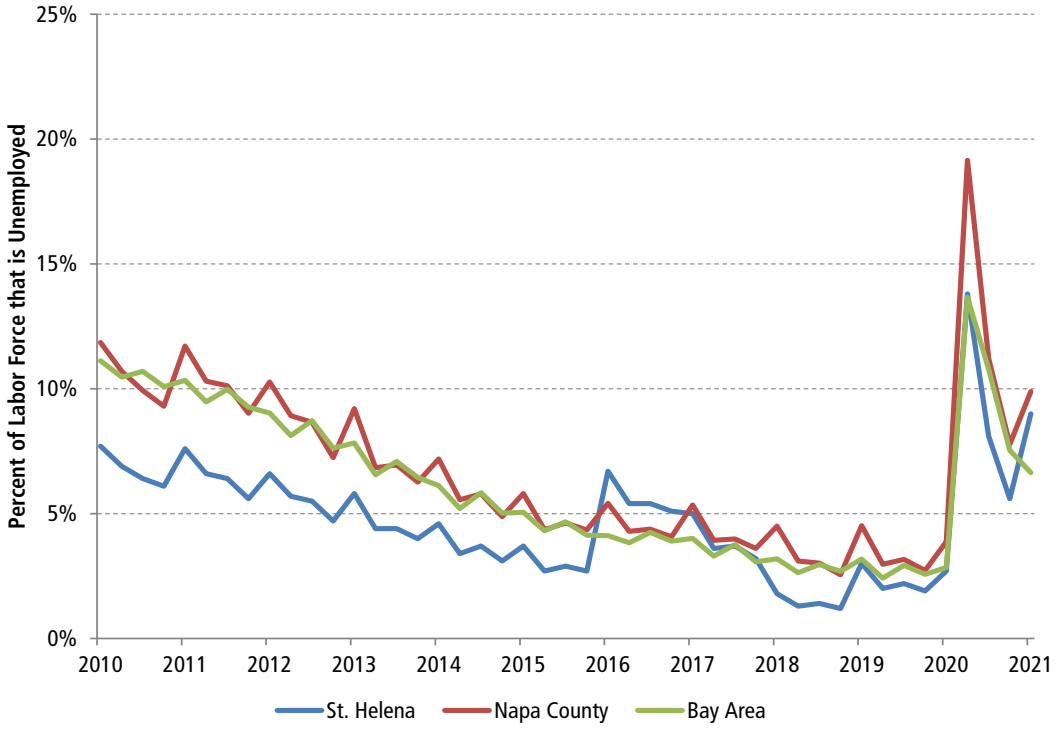


Universe: Civilian employed population age 16 years and over
Notes: The data displayed shows the industries in which jurisdiction residents work, regardless of the location where those residents are employed (whether within the jurisdiction or not). Categories are derived from the following source tables: Agriculture & Natural Resources: C24030_003E, C24030_030E; Construction: C24030_006E, C24030_033E; Manufacturing, Wholesale & Transportation: C24030_007E, C24030_034E, C24030_008E, C24030_035E, C24030_010E, C24030_037E; Retail: C24030_009E, C24030_036E; Information: C24030_013E, C24030_040E; Financial & Professional Services: C24030_014E, C24030_041E, C24030_017E, C24030_044E; Health & Educational Services: C24030_021E, C24030_024E, C24030_048E, C24030_051E; Other: C24030_027E, C24030_054E, C24030_028E, C24030_055E
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table C24030 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-06.

Unemployment

Figure 18 shows the unemployment rate for St. Helena, Napa County, and the Bay Area. In St. Helena, there was a 1.3 percentage point increase in the unemployment rate between January 2010 and January 2021. Jurisdictions through the region experienced a sharp rise in unemployment in 2020 due to impacts related to the COVID-19 pandemic, though with a general improvement and recovery in the later months of 2020.

Figure 18 Unemployment Rate



Universe: Civilian noninstitutional population ages 16 and older
Notes: Unemployment rates for the jurisdiction level is derived from larger-geography estimates. This method assumes that the rates of change in employment and unemployment are exactly the same in each sub-county area as at the county level. If this assumption is not true for a specific sub-county area, then the estimates for that area may not be representative of the current economic conditions. Since this assumption is untested, caution should be employed when using these data. Only not seasonally-adjusted labor force (unemployment rates) data are developed for cities and CDPs.
Source: California Employment Development Department, Local Area Unemployment Statistics (LAUS), Sub-county areas monthly updates, 2010-2021.
For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-15.

4. Population and Employment Projections

This section uses population, household, and employment projections provided by the Association of Bay Area Governments (ABAG), the California Department of Finance (DoF), and Plan Bay Area. Data specific to St. Helena is used when available (typically from Plan Bay Area 2040) and is supplemented by regional projections for North Napa County (Calistoga, St. Helena, and Yountville) and the Bay Area, available through the recently (2021) released Plan Bay Area 2050.

Key Findings

- ABAG anticipates much higher growth across the Bay Area than in St. Helena. While Plan Bay Area 2050 projects a 35 percent increase in total population from 2015 to 2050 (approximately 2.7 million new residents) across the nine counties of the Bay Area, it projects less than one percent growth in Calistoga, St. Helena, and Yountville.

Population

While Plan Bay Area 2050 does not provide jurisdiction-specific population projections, Plan Bay Area 2040 (2017) projected a 17 percent increase in total population from 2010 to 2040 for St. Helena, which translates to 1,550 new residents, as shown in Table 7. Countywide, Plan Bay Area 2040 projected a similar increase of 16 percent for Napa County.

Table 7 St. Helena, Population Totals and Projections, 2010-2040, Plan Bay Area 2040

Year	2010	2015	2020	2025	2030	2035	2040	Percent Change (2010-2040)
St. Helena	5,830	5,920	6,085	6,415	6,655	6,715	6,800	+17%
Napa County	135,880	136,885	141,240	146,130	151,445	155,860	158,050	+16%

Source: Plan Bay Area 2040.

For comparison, the DoF projects a countywide increase of seven percent in total population between 2010 to 2050, which translates to 9,463 new Napa County residents (Table 8).

Table 8 Department of Finance Population Projections, Napa County, 2010-2050

Year	2010	2015	2020	2025	2030	2035	2040	2045	2050	Percent Change
St. Helena	136,587	141,390	138,711	140,748	143,223	145,444	146,602	146,641	146,050	+7%

Source: California Department of Finance. Demographic Research Unit. Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.

ABAG anticipates much higher growth across the Bay Area then in St. Helena. While Plan Bay Area 2050 projects a 35 percent increase in total population from 2015 to 2050 (approximately 2.7 million new residents)

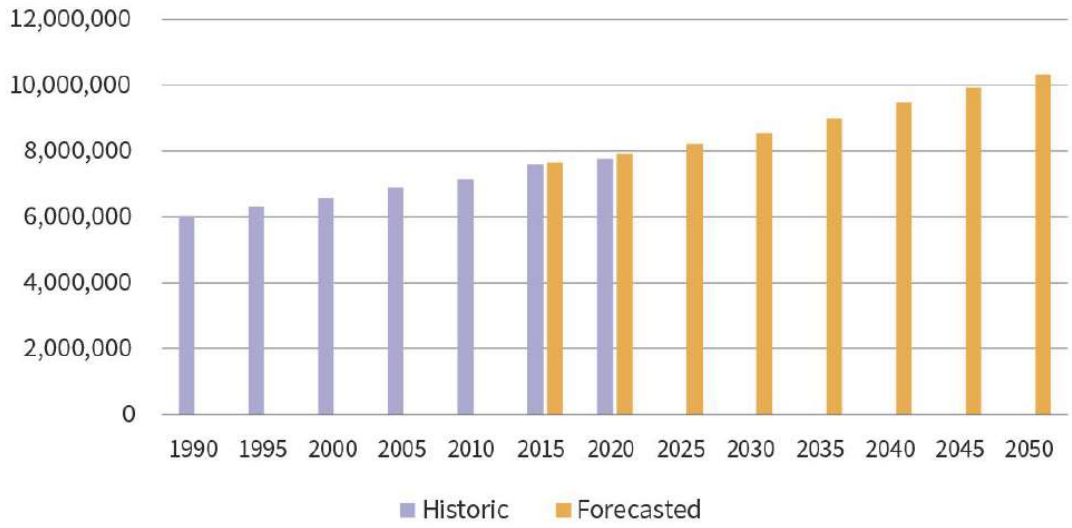
across the nine counties of the Bay Area, the Plan projects less than one percent growth in the North Napa County superdistrict (including Calistoga, St. Helena, and Yountville). Table 9 and Figure 19 show Plan Bay Area 2050 population projections for the Bay Area. While the Plan includes this regional population totals, data for individual subregions, termed superdistricts, is provided for households and jobs rather than population. For more information, please see the discussions on household and job projections below.

Table 9 Plan Bay Area 2050 Population Projections, Bay Area, 2015-2050

	2015	2020	2025	2030	2035	2040	2045	2050	Percent Change
Bay Area	7,660,000	7,940,000	8,230,000	8,560,000	9,010,000	9,490,000	9,930,000	10,330,000	+35%

Source: California Department of Finance. Demographic Research Unit. Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.

Figure 19 Bay Area, Population Totals and Projections, 1990-2050, Plan Bay Area 2050.



Source: Plan Bay Area 2050.

Households

In 2017, Plan Bay Area 2040 projected a one percent increase in total households from 2010-2040 in St. Helena, which translates to 300 or more new households (Table 10). Similarly, Plan Bay Area 2050 projects that the number of households in the Northern Napa County superdistrict (including Calistoga, St. Helena, and Yountville) will grow by less than one percent by 2050, compared to 51 percent growth in the projected number of households in the Bay Area (Table 11).

Table 10 Table 2: St. Helena, Household Totals and Projections, 2010-2040, Plan Bay Area 2040

	2010	2015	2020	2025	2030	2035	2040
Total Households	2,150	2,400	2,425	2,490	2,620	2,705	2,700

For 2010, the base year, a tabulation from the 2010 pre-run microdata, designed to approximate (but may still differ from) Census 2010 counts, is used. Numbers may not add to totals due to rounding. 2015 are modeled estimates, not observed.
Source: Plan Bay Area 2040.

Table 11 Household Projections by Region, 2015-2050

Region	2015	2050	Growth	Percent Growth	Share of Regional Growth
North Napa County	16,000	16,000	0	<1%	0%
Bay Area	2,677,000	4,043,000	1,366,000	+51%	100%

Source: Plan Bay Area 2050.

Jobs

According to Plan Bay Area 2040, ABAG projected in increase of 280 jobs (five percent increase) between 2010 and 2040, which calculates to an annual average growth rate of 0.8 percent (Table 12). Employment is projected to increase in three categories: retail (+27 percent), Information, Government, and Construction (+12 percent), and Health, Educational, and Recreational Services Jobs (+5 percent). In contrast, ABAG expects that employment in the areas of manufacturing and wholesale; agriculture and natural resources, and financial and professional services to stagnate or slightly decrease. Countywide, Plan Bay Area 2040 projected an increase of 12,765 jobs (18 percent increase) at annual average employment growth rate of 2.8 percent in the same time period.

Table 12 Job Totals and Projections, St. Helena and Napa County, 2010-2040

Year	2010	2015	2020	2025	2030	2035	2040	Percent Change (2010-2040)
St. Helena	5,700	5,750	5,765	5,805	5,820	5,820	5,980	5%
Napa County	70,680	70,880	71,905	72,580	74,255	77,260	83,355	18%

Source: Plan Bay Area 2040.

Plan Bay Area 2050, however, projects that employment in the North Napa County superdistrict will decrease by 4,000 jobs by 2050 (Table 13). Employment in the region is assumed to be constrained based on limited job centers and transit options, as well as current and potential future wildfire impacts. Regionally however, the Bay Area job totals are projected to increase by 35 percent between 2015 and 2050, which coincides with the expected Bay Area population growth during that time (also 35 percent). This increase translates to 1,403,000 new jobs.

Table 13 Job Totals and Projections, North Napa County and the Bay Area, 2015-2050

Region	2015	2050	Growth	Percent Growth	Share of Regional Growth
North Napa County	24,000	20,000	-4,000	<1%	0%
Bay Area	4,005,000	5,408,000	1,403,000	35%	100%

Source: Plan Bay Area 2050.

5. Housing Conditions

The following section details the housing conditions in St. Helena and, where available, compares the data to Napa County and the Bay Area. Data sources include the Census, the American Community Survey, DoF, HUD, including the Comprehensive Housing Affordability Strategy (CHAS) dataset, and HCD).

ABAG supplied an HCD Preapproved Data Package that provided much of the data included in this analysis for the City. Additionally, ABAG, in coordination with Baird + Driskell Community Planning provided a Housing Needs Data Report that directly informed this section of the Needs Analysis.[12]

Key Findings

- **Number of Homes.** The number of new homes built in the Bay Area has not kept pace with the demand, resulting in longer commutes, increasing prices, and exacerbating issues of displacement and homelessness. The number of homes in St. Helena increased, 4.4 percent from 2010 to 2020, which is above the growth rate for Napa County and below the growth rate of the region's housing stock during this time period.

- **Home Prices.** A diversity of homes at all income levels creates opportunities for all St. Helena residents to live and thrive in the community.

  - **Ownership.** The largest proportion of homes had a value in the range of $1 million-$1.5 million in 2019. Home prices increased by 118.2 percent from 2010 to 2020.

  - **Rental Prices.** The typical contract rent for an apartment in St. Helena was $1,470 in 2019. Rental prices increased by 15.7 percent from 2009 to 2019. To rent a typical apartment without cost burden, a household would need to make $59,160 per year.

- **Housing Type.** It is important to have a variety of housing types to meet the needs of a community today and in the future. In 2020, 63.9 percent of homes in St. Helena were single family detached, 6.1 percent were single family attached, 6.2 percent were small multifamily (2-4 units), and 18.4 percent were medium or large multifamily (5+ units). Between 2010 and 2020, the number of single-family units increased more than multi-family units. Generally, in St. Helena, the share of the housing stock that is detached single family homes is above that of other jurisdictions in the region.

- **Vacancy Rate.** Vacant units make up 17.4 percent of the overall housing stock in St. Helena. The rental vacancy rate stands at 3.1 percent, while the ownership vacancy rate is 5.3 percent. Of the vacant units, the most common type of vacancy is for seasonal, recreational, or occasional use. This statistic highlights how St. Helena contains many "second homes," which may sit unoccupied for a majority of the year. Additionally, with the increasing popularity of short-term rental sites, such as

[12] *ABAG/MTC Staff and Baird + Driskell Community Planning, Housing Needs Data Report: St. Helena, May 2021.*

AirBNB, at vacation destinations such as Napa Valley, many homes may be vacant in the sense of not having permanent residents.

- **Overcrowding.** Overcrowding often disproportionately impacts low-income households. 2.5 percent of very low-income households (below 50 percent AMI) experience severe overcrowding, while none of the households above 100 percent of the AMI experience this level of overcrowding.

- **Cost Burden.** The U.S. Department of Housing and Urban Development considers housing to be affordable for a household if the household spends less than 30 percent of its income on housing costs. A household is considered "cost-burdened" if it spends more than 30 percent of its monthly income on housing costs, while those who spend more than 50 percent of their income on housing costs are considered "severely cost-burdened." In St. Helena, 21.1 percent of households spend 30-50 percent of their income on housing, while 16.6 percent of households are severely cost burden and use the majority of their income for housing. Lower-income, Latinx, and large households are disproportionally impacted by housing cost burdens.[13]

Existing Housing Conditions

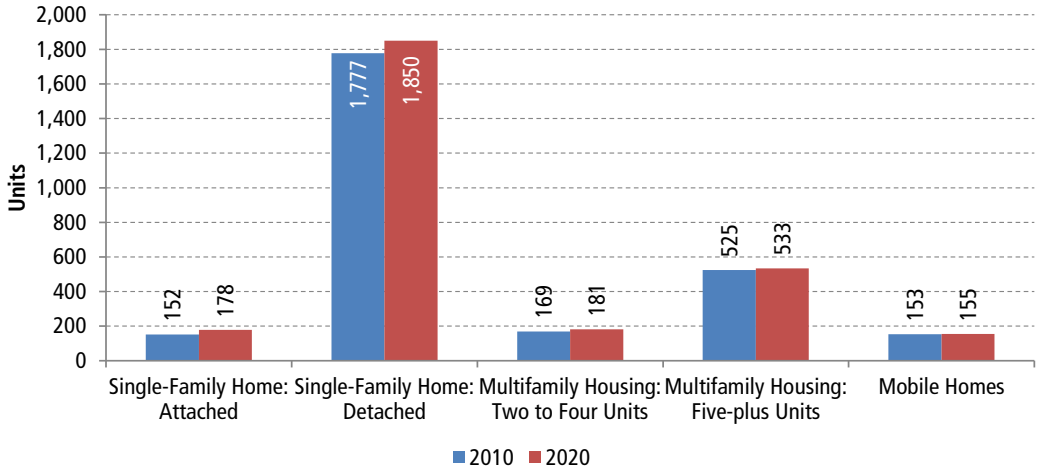
Housing Stock Characteristics

In recent years, most housing produced in the region and across the state consisted of single-family homes and larger multi-unit buildings. However, some households are increasingly interested in "missing middle housing" – including duplexes, triplexes, townhomes, cottage clusters and accessory dwelling units (ADUs). These housing types may open up more options across incomes and tenure, from young households seeking homeownership options to seniors looking to downsize and age-in-place.

The housing stock of St. Helena in 2020 was made up of 63.9 percent single family detached homes, 6.1 percent single family attached homes, 6.2 percent multifamily homes with two to four units, 18.4 percent multifamily homes with five or more units, and 5.4 percent mobile homes (Figure 20). In St. Helena, the housing type that experienced the most growth between 2010 and 2020 was the detached single-family home.

[13] *Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25070; U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release.*

Figure 20 Housing Type Trends



Universe: Housing units
Source: California Department of Finance, E-5 series
For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-01.

Age of Housing Stock

Production has not kept up with housing demand for several decades in the Bay Area, as the total number of units built and available has not come close to meeting the population and job growth experienced throughout the region. According to American Community Survey estimates, in St. Helena, the largest proportion of the housing stock was built 1960 to 1979, with 1,217 units constructed during this period (Figure 21). Since 2010, 1.9 percent of the current housing stock was built, which is 63 units. Between 2015 and 2019, 74 housing units were issued permits in St. Helena. During this time, 73.0 percent of permits issued in St. Helena were for above moderate-income housing, 5.4 percent were for moderate-income housing, and 21.6 percent were for low- or very low-income housing (Table 14).

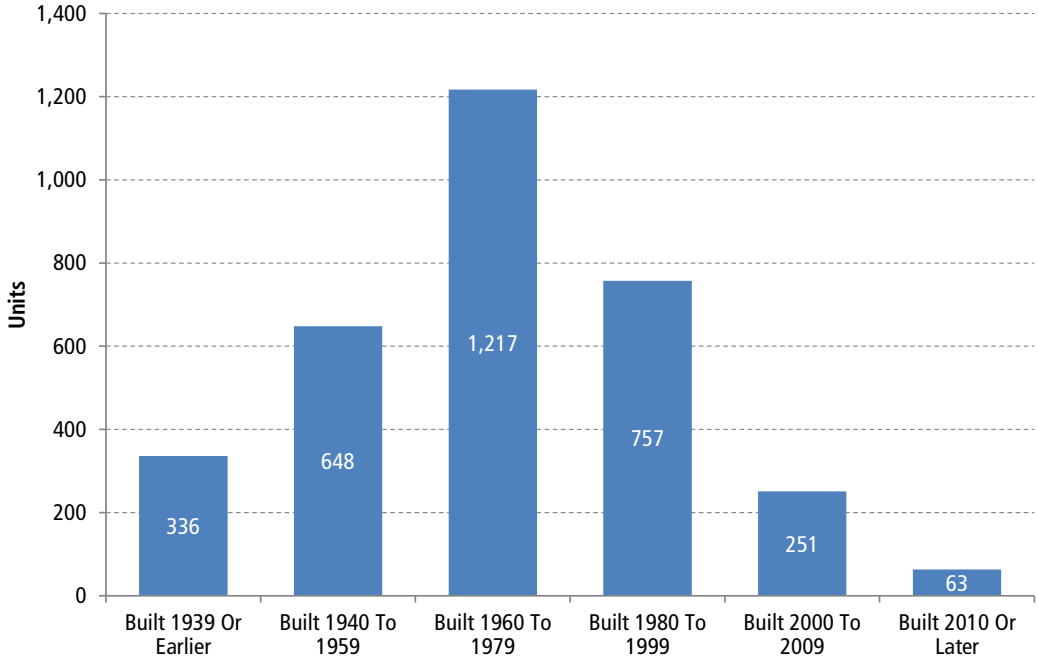
Table 14 Housing Permitting from 2015-2019 St. Helena

Income Group	Value
Above Moderate-Income Permits	54
Low Income Permits	9
Very Low-Income Permits	7
Moderate Income Permits	4

Source: California Department of Housing and Community Development (HCD), 5th Cycle Annual Progress Report Permit Summary (2020)

According to City records, however, these American Community Survey estimates are low. As reported in Table 1 above, the City permitted 110 units between 2015 and 2021, of which all units have been constructed.

Figure 21 Housing Units by Year Structure Built



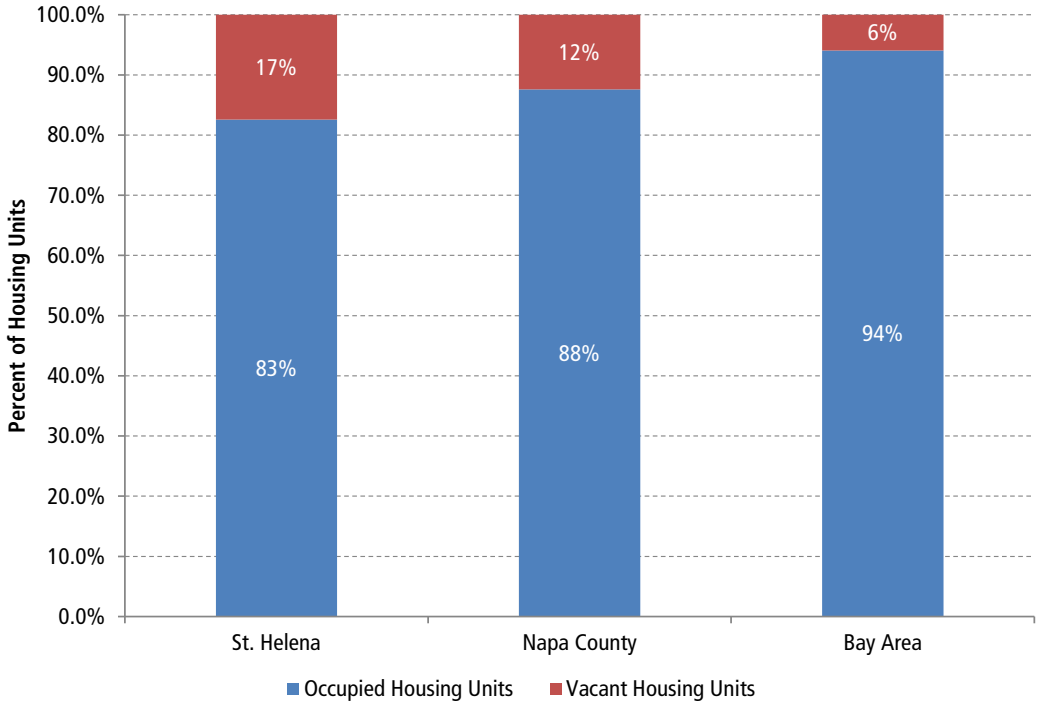
Universe: Housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25034 For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-04.

Occupancy Rates

Vacant units make up 17.4 percent of the overall housing stock in St. Helena (Figure 22). The rental vacancy rate stands at 3.1 percent, while the ownership vacancy rate is 5.3 percent. Of the vacant units, the most common type of vacancy is for seasonal, recreational, or occasional use. Figure 23 shows the distribution of vacancies by type.[14]

[14] *The vacancy rates by tenure is for a smaller universe than the total vacancy rate first reported, which in principle includes the full stock (17.4%). The vacancy by tenure counts are rates relative to the rental stock (occupied and vacant) and ownership stock (occupied and vacant) - but exclude a significant number of vacancy categories, including the numerically significant other vacant.*

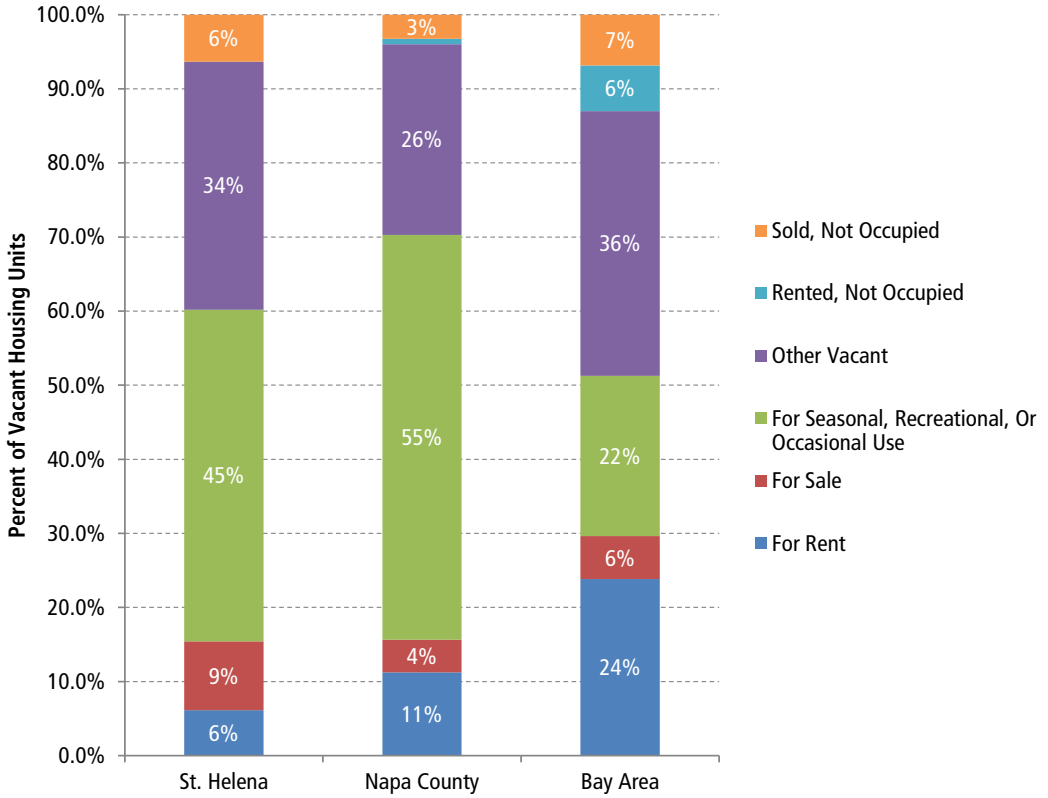
Figure 22 Occupancy Status



Universe: Housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25002Throughout the Bay Area, vacancies make up 2.6 percent of the total housing units, with homes listed for rent; units used for recreational or occasional use, and units not otherwise classified (other vacant) making up the majority of vacancies. The Census Bureau classifies a unit as vacant if no one is occupying it when census interviewers are conducting the American Community Survey or Decennial Census. Vacant units classified as "for recreational or occasional use" are those that are held for short- term periods of use throughout the year. Accordingly, vacation rentals and short-term rentals like AirBnB are likely to fall in this category. The Census Bureau classifies units as "other vacant" if they are vacant due to foreclosure, personal/family reasons, legal proceedings, repairs/renovations, abandonment, preparation for being rented or sold, or vacant for an extended absence for reasons such as a work assignment, military duty, or incarceration.[15] In a region with a thriving economy and housing market like the Bay Area, units being renovated/repaired and prepared for rental or sale are likely to represent a large portion of the "other vacant" category.

[15] *For more information, see pages 3 through 6 of this list of definitions prepared by the Census Bureau: https://www.census.gov/housing/hvs/definitions.pdf.*

Figure 23 Vacant Units by Type



Universe: Vacant housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25004 For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-03.

Throughout the Bay Area, vacancies make up 2.6 percent of the total housing units, with homes listed for rent; units used for recreational or occasional use, and units not otherwise classified (other vacant) making up the majority of vacancies. The Census Bureau classifies a unit as vacant if no one is occupying it when census interviewers are conducting the American Community Survey or Decennial Census. Vacant units classified as "for recreational or occasional use" are those that are held for short- term periods of use throughout the year. Accordingly, vacation rentals and short-term rentals like AirBnB are likely to fall in this category. The Census Bureau classifies units as "other vacant" if they are vacant due to foreclosure, personal/family reasons, legal proceedings, repairs/renovations, abandonment, preparation for being rented or sold, or vacant for an extended absence for reasons such as a work assignment, military duty, or incarceration. In a region with a thriving economy and housing market like the Bay Area, units being renovated/repaired and prepared for rental or sale are likely to represent a large portion of the "other vacant" category

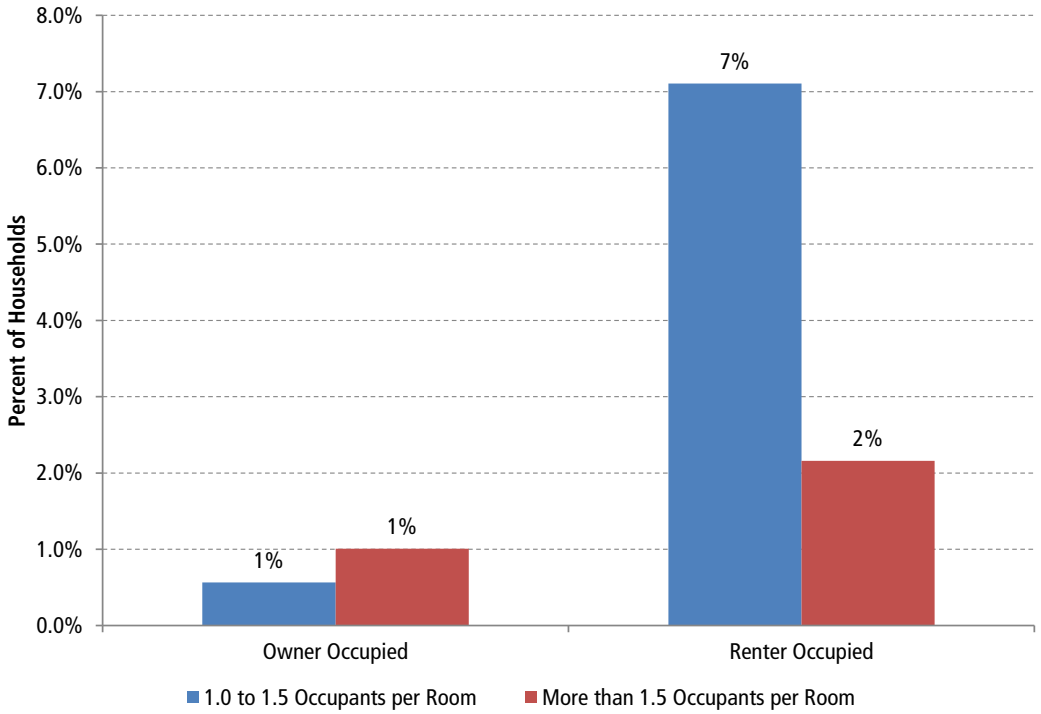
Overcrowding

Overcrowding occurs when the number of people living in a household is greater than the home was designed to accommodate. There are several different standards for defining overcrowding, but this report uses the Census Bureau definition, which is more than one occupant per room (not including bathrooms or kitchens).

Additionally, the Census Bureau considers units with more than 1.5 occupants per room to be severely overcrowded.

Overcrowding is often related to the cost of housing and can occur when demand in a city or region is high. In many cities, overcrowding is seen more amongst those that are renting, with multiple households sharing a unit to make it possible to stay in their communities. In St. Helena, 2.2 percent of households that rent are severely overcrowded (more than 1.5 occupants per room), compared to 1.0 percent of households that own (Figure 24). In St. Helena, 7.1 percent of renters experience moderate overcrowding (1 to 1.5 occupants per room), compared to 0.6 percent for those own.

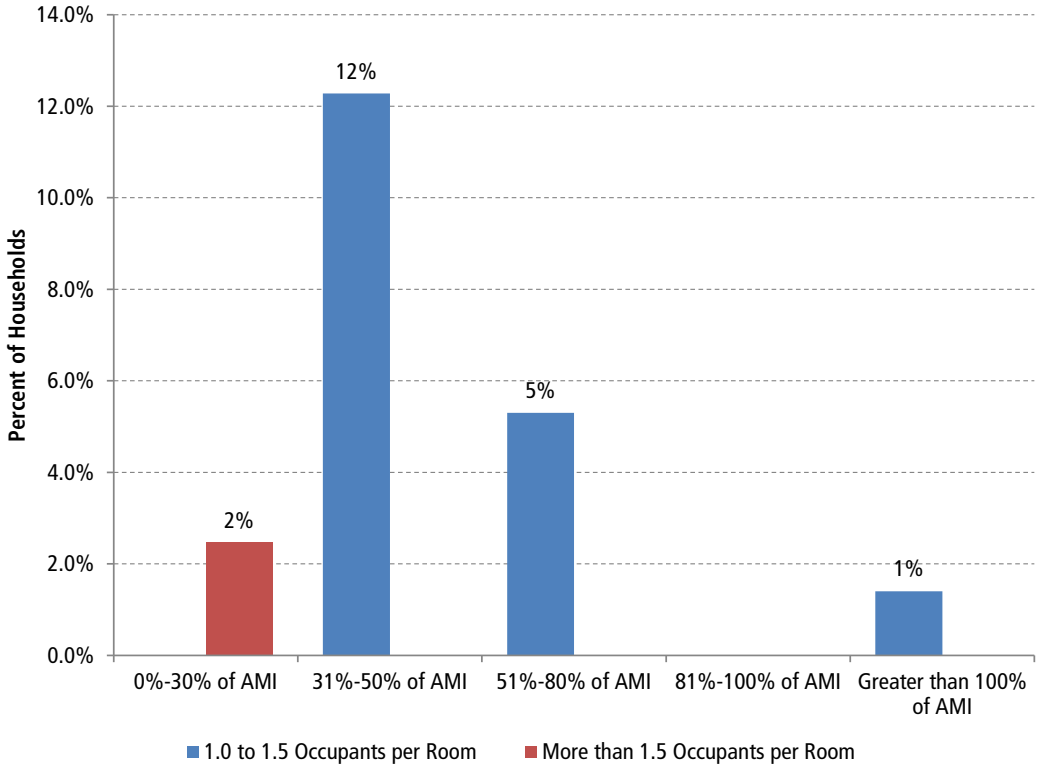
Figure 24 Overcrowding by Tenure and Severity



Universe: Occupied housing units
Notes: The Census Bureau defines an overcrowded unit as one occupied by 1.01 persons or more per room (excluding bathrooms and kitchens), and units with more than 1.5 persons per room are considered severely overcrowded.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-01.

Overcrowding often disproportionately impacts low-income households. 2.5 percent of very low-income households (below 50 percent AMI) experience severe overcrowding, while 0.0 percent of households above 100 percent experience this level of overcrowding (Figure 25).

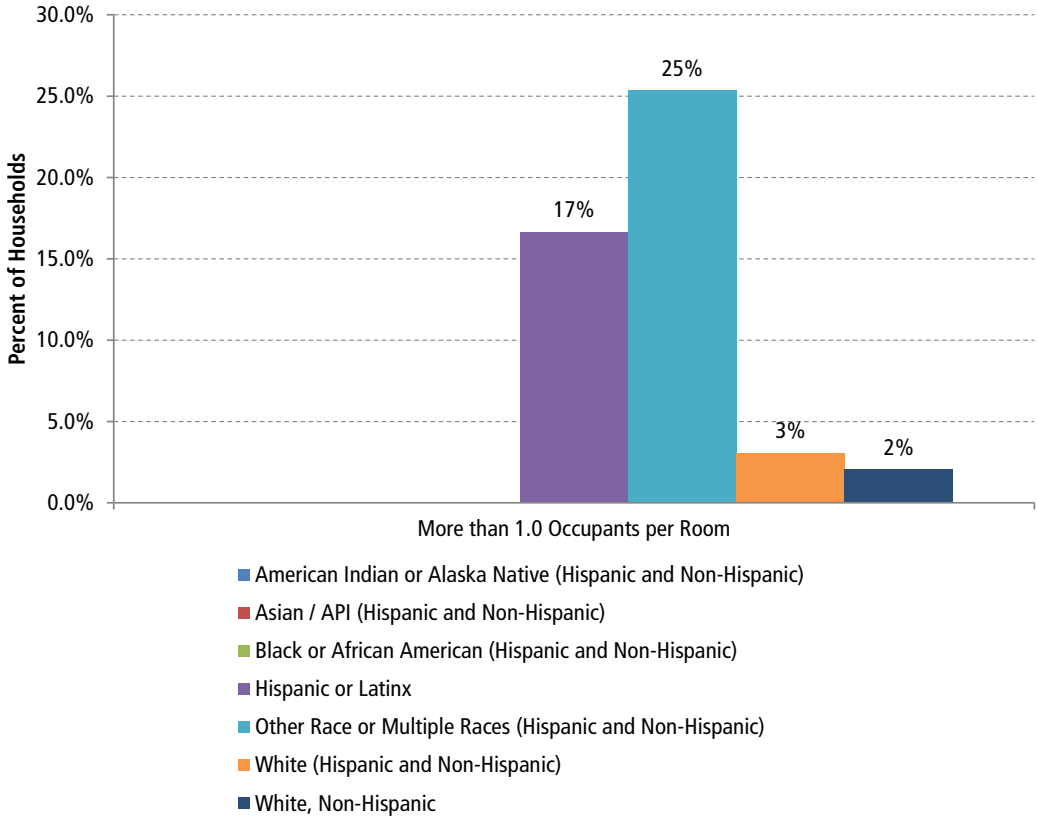
Figure 25 Overcrowding by Income Level and Severity



Universe: Occupied housing units
Notes: The Census Bureau defines an overcrowded unit as one occupied by 1.01 persons or more per room (excluding bathrooms and kitchens), and units with more than 1.5 persons per room are considered severely overcrowded. Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County), and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-04.

People of color tend to experience overcrowding at higher rates than White residents. In St. Helena, the racial group with the largest overcrowding rate is other race or multiple races (Hispanic and Non-Hispanic) (Figure 26).

Figure 26 Overcrowding by Race



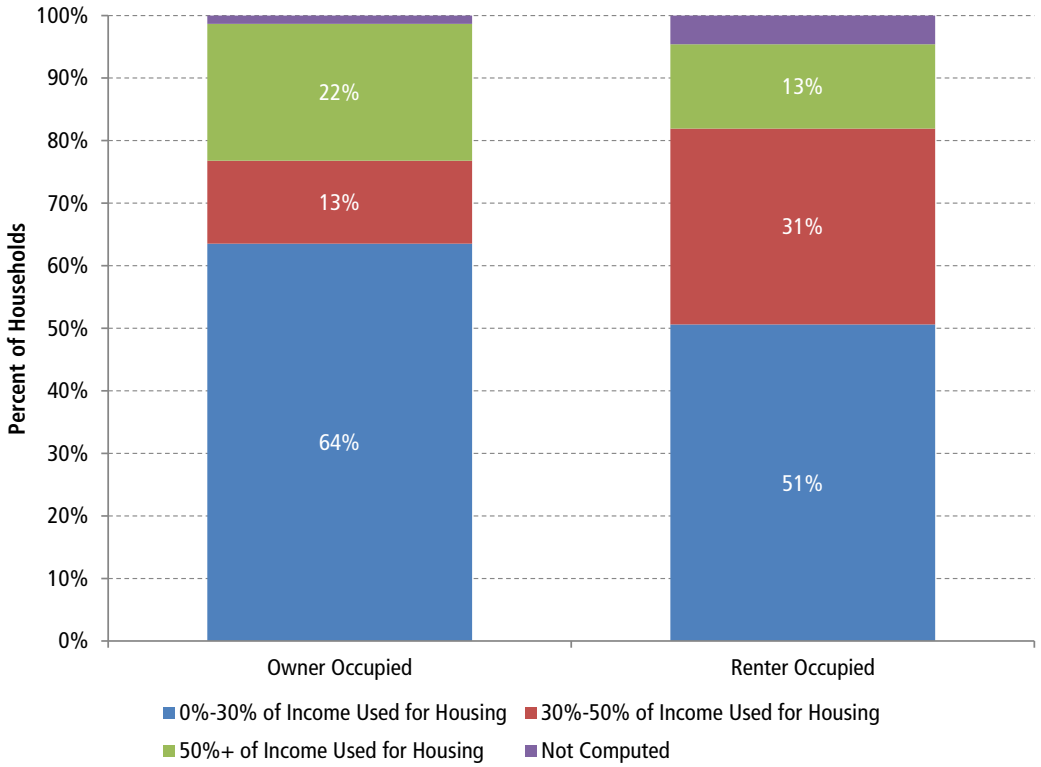
Universe: Occupied housing units
Notes: The Census Bureau defines an overcrowded unit as one occupied by 1.01 persons or more per room (excluding bathrooms and kitchens), and units with more than 1.5 persons per room are considered severely overcrowded. For this table, the Census Bureau does not disaggregate racial groups by Hispanic/Latinx ethnicity. However, data for the white racial group is also reported for white householders who are not Hispanic/Latinx. Since residents who identify as white and Hispanic/Latinx may have very different experiences within the housing market and the economy from those who identify as white and non-Hispanic/Latinx, data for multiple white sub-groups are reported here. The racial/ethnic groups reported in this table are not all mutually exclusive. Therefore, the data should not be summed as the sum exceeds the total number of occupied housing units for this jurisdiction. However, all groups labelled "Hispanic and Non-Hispanic" are mutually exclusive, and the sum of the data for these groups is equivalent to the total number of occupied housing units.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25014 For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-03.

Housing Cost Burden

A household is considered "cost-burdened" if it spends more than 30 percent of its monthly income on housing costs, while those who spend more than 50 percent of their income on housing costs are considered "severely cost-burdened." Low-income residents are the most impacted by high housing costs and experience the highest rates of cost burden. Spending such large portions of their income on housing puts low-income households at higher risk of displacement, eviction, or homelessness.

Renters are often more cost-burdened than owners. While the housing market has resulted in home prices increasing dramatically, homeowners often have mortgages with fixed rates, whereas renters aremore likely to be impacted by market increases. When looking at the cost burden across tenure in St. Helena (Figure 27), 31.3 percent of renters spend 30 percent to 50 percent of their income on housing compared to 13.3 percent of those that own. Additionally, 13.5 percent of renters spend 50 percent or more of their income on housing,while 21.9 percent of owners are severely cost-burdened.

Figure 27 Cost Burden by Tenure

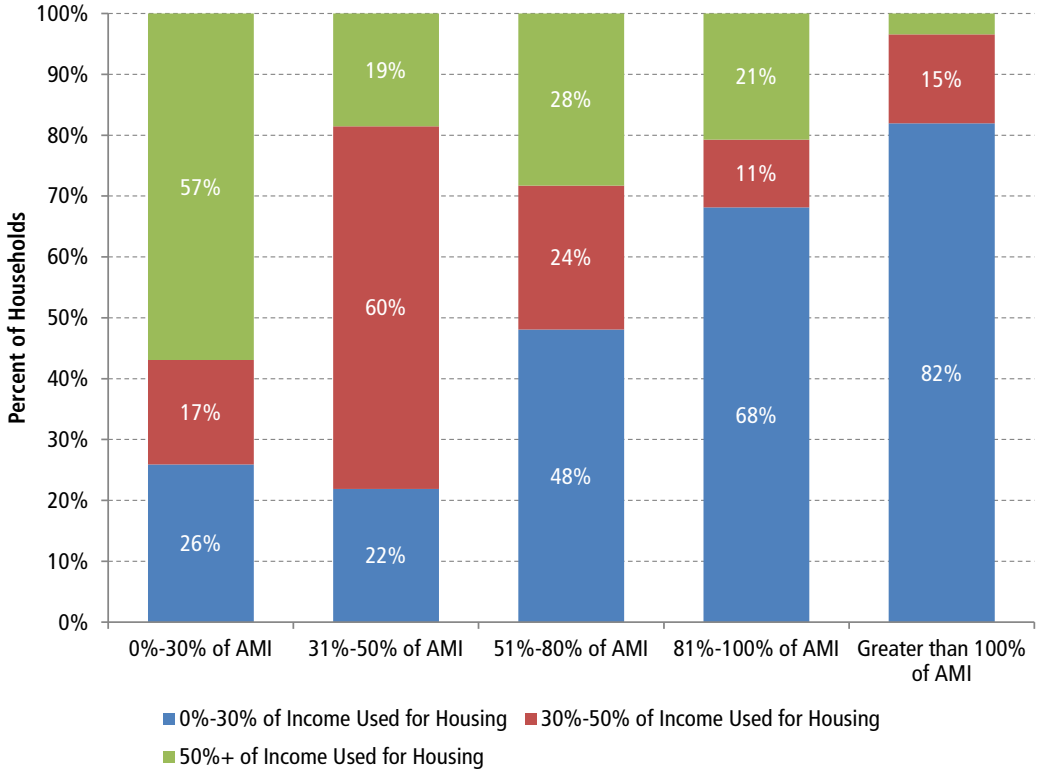


Universe: Occupied housing units
Notes: Cost burden is the ratio of housing costs to household income. For renters, housing cost is gross rent (contract rent plus utilities). For owners, housing cost is "select monthly owner costs", which includes mortgage payment, utilities, association fees, insurance, and real estate taxes. HUD defines cost-burdened households as those whose monthly housing costs exceed 30 percent of monthly income, while severely cost-burdened households are those whose monthly housing costs exceed 50 percent of monthly income.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25070, B25091 For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-06.

In St. Helena, 16.6 percent of households spend 50 percent or more of their income on housing, while 21.1 percent spend 30 to 50 percent. However, these rates vary greatly across income categories (Figure 28). For example, 56.9 percent of St. Helena households making less than 30 percent of AMI spend the majority of their income on housing. For St. Helena residents making more than 100 percent of AMI, just 3.4 percent are severely

cost-burdened,and 81.9 percent of those making more than 100 percent of AMI spend less than 30 percent of their income on housing.

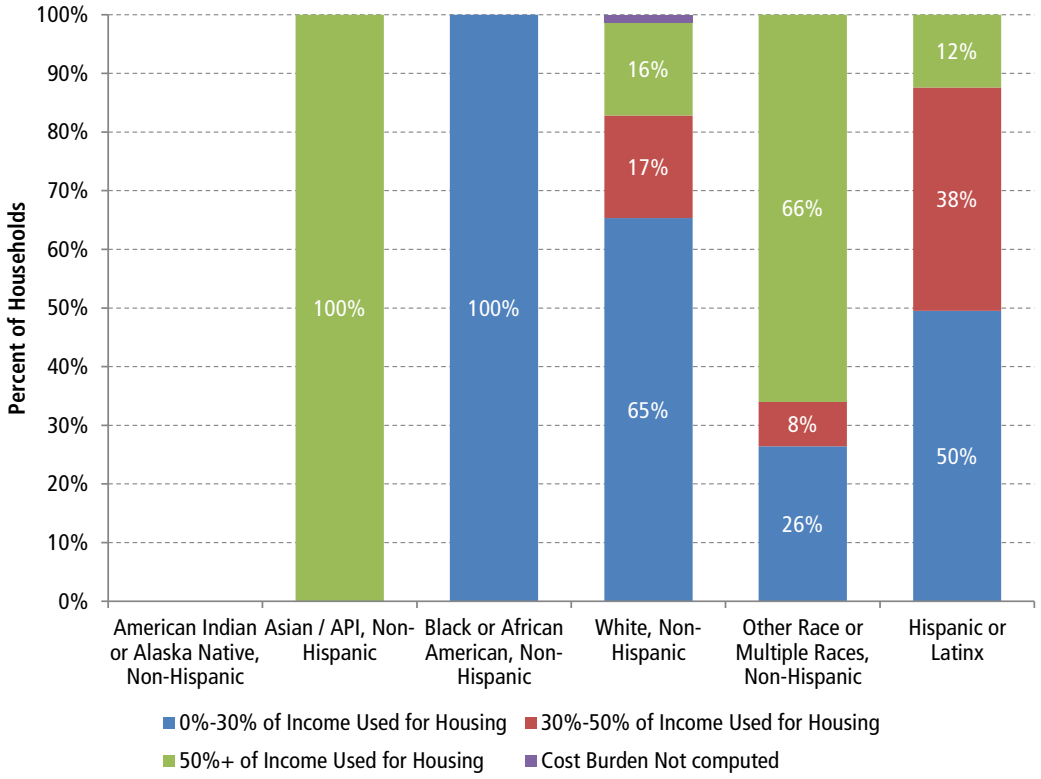
Figure 28 Cost Burden by Income Level



Universe: Occupied housing units
Notes: Cost burden is the ratio of housing costs to household income. For renters, housing cost is gross rent (contract rent plus utilities). For owners, housing cost is "select monthly owner costs", which includes mortgage payment, utilities, association fees, insurance, and real estate taxes. HUD defines cost-burdened households as those whose monthly housing costs exceed 30 percent of monthly income, while severely cost-burdened households are those whose monthly housing costs exceed 50 percent of monthly income. Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County), and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release.
For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-05.

Hispanic or Latinx residents are the most cost burdened with 38.1 percent spending 30 percent to 50 percent of their income on housing, and Asian / API, Non-Hispanic residents are the most severely cost burdened with 100.0 percent spending more than 50 percent of their income on housing (Figure 29).

Figure 29 Cost Burden by Race



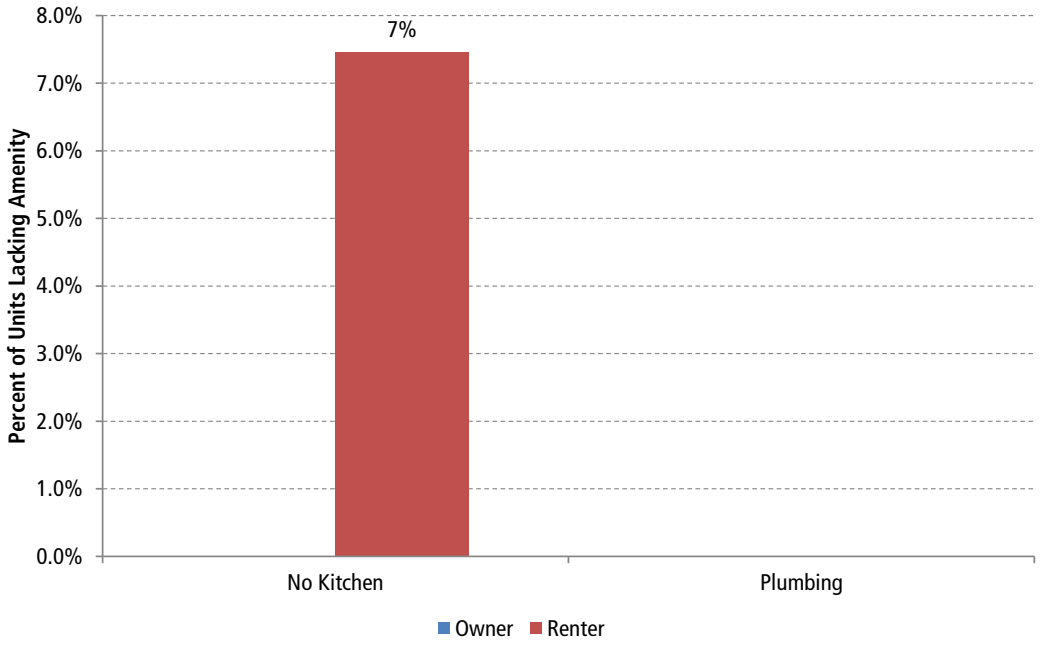
Universe: Occupied housing units
Notes: Cost burden is the ratio of housing costs to household income. For renters, housing cost is gross rent (contract rent plus utilities). For owners, housing cost is "select monthly owner costs", which includes mortgage payment, utilities, association fees, insurance, and real estate taxes. HUD defines cost-burdened households as those whose monthly housing costs exceed 30 percent of monthly income, while severely cost-burdened households are those whose monthly housing costs exceed 50 percent of monthly
income. For the purposes of this graph, the "Hispanic or Latinx" racial/ethnic group represents those who identify as having Hispanic/Latinx ethnicity and may also be members of any racial group. All other racial categories on this graph represent those who identify with that racial category and do not identify with Hispanic/Latinx ethnicity.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-08.

Physical Housing Conditions

In general, the condition of the housing stock in St. Helena is good. This is primarily due to the high value of residential property, recent new construction, and minor to extensive remodeling which has been performed within the last ten years. Property owners are motivated to keep housing in good condition because of the high value of houses and rents.

Housing costs in the region are among the highest in the country, which could result in households, particularly renters, needing to live in substandard conditions in order to afford housing. Generally, there is limited data on the extent of substandard housing issues in a community. However, American Community Survey data (Figure 30) gives a sense of some of the substandard conditions that may be present in St. Helena. For example, 7.5 percent of renters in St. Helena reported lacking a kitchen and no renters lack plumbing. No owners reported lacking either a kitchen or plumbing.

Figure 30 Substandard Housing Issues, St. Helena, 2019



Universe: Occupied housing units
Notes: Per HCD guidance, this data should be supplemented by local estimates of units needing to be rehabilitated or replaced based on recent windshield surveys, local building department data, knowledgeable builders/developers in the community, or nonprofit housing developers or organizations.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25053, Table B25043, Table B25049
For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-06.

There are scattered areas where housing condition can be an issue. City staff estimates approximately two percent of the single-family houses and one percent of multi-family units need replacement. These units have improvement costs that exceed the estimated replacement cost. Approximately four percent of single-family houses (approximately 85 units) and two percent of multifamily units (approximately 15 units) are in need of significant rehabilitation, which is defined as having major deficiencies that may require immediate repair. About five percent of the housing stock needs limited rehabilitation (approximately 140 units). These structures exhibit minor repair need and are not considered to have major safety issues.

6. Housing Market Conditions

This section provides information on the private housing market in St. Helena and assesses the market's ability to accommodate the housing needs of residents. ABAG supplied an HCD Preapproved Data Package that provided data on home values, affordability, and contract rents in the City. Additionally, ABAG, in coordination with Baird + Driskell Community Planning provided a Housing Needs Data Report that directly informed this section of the Needs Analysis.[16]

Key Findings

- **Home Values.** Home values in St. Helena are high. The typical home value (December 2020) was $1,665,790 in St. Helena, $768,410 in Napa County and $1,077,230 the Bay Area.

- **Affordability.** The current market conditions in St. Helena enable only above moderate-income households to purchase homes, though affordable rental and for-sale housing complexes in St. Helena provide 256 units of affordable housing.

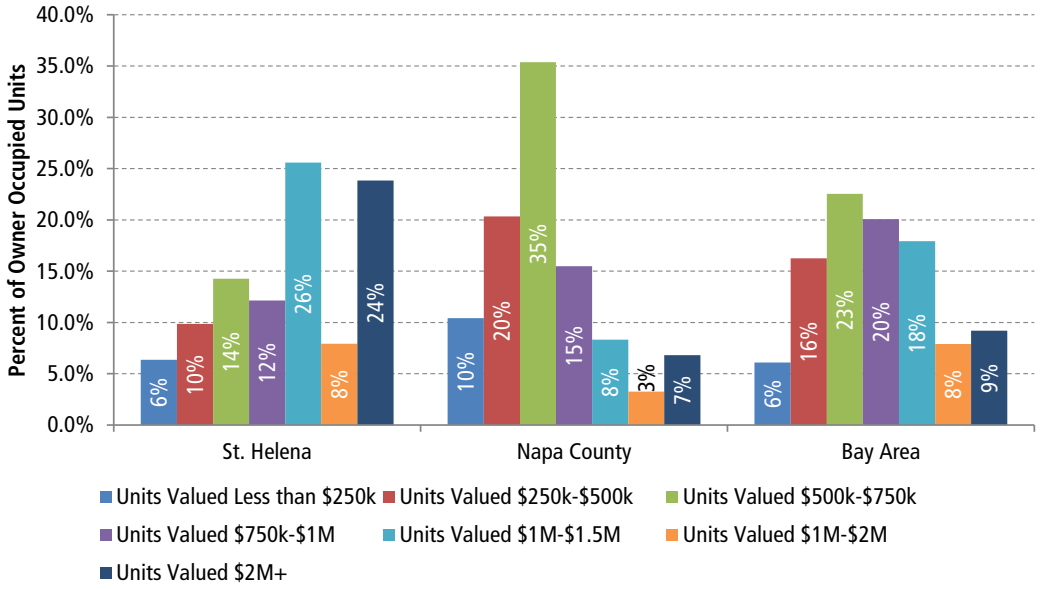
For-Sale Housing

Home prices reflect a complex mix of supply and demand factors, including an area's demographic profile, labor market, prevailing wages and job outlook, and land and construction costs. In the Bay Area, the costs of housing have long been among the highest in the nation. The typical home value in St. Helena was $1,665,790 by December of 2020, per data from Zillow. The largest proportion of homes were between $1 million and $1.5 million (Figure 31). By comparison, the typical home value is $768,410 in Napa County and $1,077,230 the Bay Area, with the largest share of units valued $500,000 to $750, 000.

The region's home values have increased steadily since 2000, besides a decrease during the Great Recession. The rise in home prices has been especially steep since 2012, with the median home value in the Bay Area nearly doubling during this time. Since 2001, the typical home value has increased 156.7 percent in St. Helena from $648,900 to $1,665,790. This change is above the change in Napa County, and above the change for the region (Figure 32).

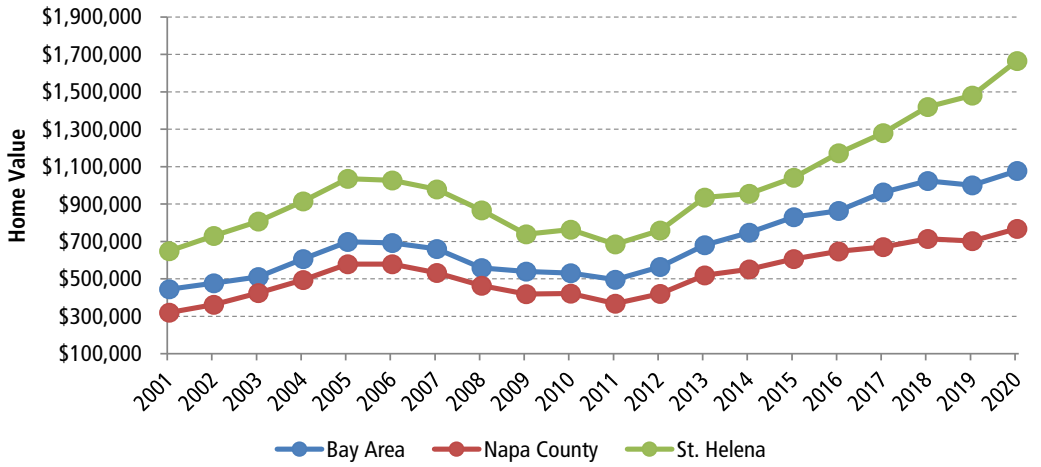
[16] *ABAG/MTC Staff and Baird + Driskell Community Planning, Housing Needs Data Report: St. Helena, May 2021.*

Figure 31 Home Values of Owner-occupied Units



Universe: Owner-occupied units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25075 For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-07.

Figure 32 Zillow Home Value Index (ZHVI)



Universe: Owner-occupied housing units
Notes: Zillow describes the ZHVI as a smoothed, seasonally adjusted measure of the typical home value and market changes across a given region and housing type. The ZHVI reflects the typical value for lower to moderate valued homes in a

neighborhood. Specifically, the ZHVI is based upon the valuations of homes between 35th to 65th percentile range on a standardized curve encompassing all owner-occupied housing units, including both single-family homes and condominiums.

More information on the ZHVI is available from Zillow. The regional estimate is a household-weighted average of county-level ZHVI files, where household counts are yearly estimates from DOF's E-5 series For unincorporated areas, the value is a population weighted average of unincorporated communities in the county matched to census-designated population counts.
Source: Zillow, Zillow Home Value Index (ZHVI)
For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-08.

Affordable Home Purchase Prices

Table 15 examines affordability in another way. Instead of presenting the income required to buy a market rate house in St. Helena, Table 15 examines how much very low-, low-, and moderate-income households in St. Helena could afford to pay for housing, along with the corresponding maximum affordable home price. The table assumes 10 percent down payment, modeling a situation that is more typical of first-time homebuyers who have not amassed sufficient financial resources to make a larger down payment. These buyers are more likely to be in need of affordable housing options than the typical buyers of market rate housing in St. Helena. The lower down payment amount requires the owner to buy mortgage insurance.

As shown, in the case of a three-person household, the affordable home price varies from approximately $203,461 for very low-income, to $325,372 for low-income, and $406,922 for moderate income households. The income limits increase with household size, and a six-person household with very low, low, or moderate income can afford to buy a home priced at $262,243, $419,548, and $542,493, respectively. Based on this data and current market prices, lower-income households have very few options for purchasing a home in St. Helena, while moderate-income households may be able to afford to purchase a condominium or a small single-family home.

Table 15 Affordable Home Purchase Prices by Income Level, Napa County

Extremely Low-Income Households at 30 percent of Median Family Income

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Number of Persons	1	1.5	3	4	6	7.5
Income Level	$22,950	$24,550	$29,500	$32,750	$38,000	$39,300
Max. Monthly Gross Rent [1]	$574	$614	$738	$819	$950	$983
Max. Purchase Price [2]	$95,004	$101,627	$122,118	$135,572	$157,304	$162,686

Very Low-Income Households at 50 percent of Median Family Income

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Number of Persons	1	1.5	3	4	6	7.5
Income Level	$38,200	$40,950	$49,150	$54,600	$63,350	$65,500
Max. Monthly Gross Rent (1)	$955	$1,024	$1,229	$1,365	$1,584	$1,638
Max. Purchase Price (2)	$158,132	$169,516	$203,461	$226,022	$262,243	$271,143

Low-Income Households at 80 percent of Median Family Income

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Number of Persons	1	1.5	3	4	6	7.5
Income Level	$61,150	$65,500	$78,600	$87,350	$101,350	$104,850
Max. Monthly Gross Rent (1)	$1,529	$1,638	$1,965	$2,184	$2,534	$2,621
Max. Purchase Price (2)	$253,136	$271,143	$325,372	$361,593	$419,548	$434,036

Median-Income Households at 100 percent of Median Family Income

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Number of Persons	1	1.5	3	4	6	7.5
Income Level	$76,450	$81,900	$98,300	$109,200	$126,650	$131,050
Max. Monthly Gross Rent (1)	$1,911	$2,048	$2,458	$2,730	$3,166	$3,276
Max. Purchase Price (2)	$316,472	$339,033	$406,922	$452,043	$524,279	$542,493

Moderate-Income Households at 120 percent of Median Family Income

	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Number of Persons	1	1.5	3	4	6	7.5
Income Level	$91,750	$98,300	$117,950	$131,050	$152,000	$157,250
Max. Monthly Gross Rent/Payments (1)	$2,294	$2,458	$2,949	$3,276	$3,800	$3,931
Max. Purchase Price (2)	$379,808	$406,922	$488,265	$542,493	$629,218	$650,951

Note: Based on 2021 Napa County Area Family Income (Family of 4) of $109,200, per State income limits .
[1]Assumes that 30 percent (35 percent for moderate) of income is available for either: monthly rent, including utilities; or mortgage payment, taxes, mortgage insurance, and homeowners' insurance.
[2]Assumes 90.0 percent loan at 5.0 percent annual interest rate and 30-year term; assumes taxes, mortgage insurance, and homeowners' insurance account for 20 percent of total monthly payments.
Source: Mintier Harnish, 2021.

Current Market Rate For-Sale Housing

Since 2019, the price of for-sale housing in St. Helena has shifted even higher, making home ownership practically unattainable to working class residents of St. Helena. All single-family homes are for sale at prices greater than $1,000,000. The median price of for-sale housing is $1,872,500 and the average price of for-sale housing is $2,965,458, which are both prices unaffordable to lower- and moderate-income households. Currently there are only four units listed for under $1,000,000: three mobile homes and one condominium.

Table 16 Residential Properties for Sale, January 2023

Address	Bedroom	Bathrooms	Square Footage	For-Sale Price	Cost per Square Foot
1210-1250 Oakwood Ln	6	8	6,800	$10,880,000	$1,600.00
1933 Spring St	2	2	1,664	$7,995,000	$4,804.69
1817 Main St	6	6	7,000	$5,500,000	$785.71
1057 Pratt Ave	6	7	3,979	$4,950,000	$1,244.03
2490 Spring Mountain Rd	3	4	4,210	$3,600,000	$855.11
1820 Spring Mountain Rd	3	3	2,520	$3,500,000	$1,388.89
1721 Scott St	3	3	1,950	$2,999,000	$1,537.95
1648 Scott St	3	2	1,458	$2,850,000	$1,954.73
704 Hunt Ave	3	3	2,426	$2,450,000	$1,009.89
1434 Sylvaner Ave	3	2	1,968	$2,250,000	$1,143.29
1362 Stockton St	3	2	1,682	$1,895,000	$1,126.63
1626 Tainter St	2	2	1,758	$1,850,000	$1,052.33
1186 Meadowcreek Cir	3	2	2,078	$1,795,000	$863.81
1291 Sylvaner Ave	3	2	1,511	$1,650,000	$1,091.99
1727 Crinella Dr	3	2	1,683	$1,395,000	$828.88
1344 Magnolia Ave	3	3	2,082	$1,375,000	$660.42
24 Volker Ct	3	2	1,320	$1,150,000	$871.21
1382 Park St	3	2	1,800	$1,084,000	$602.22
16 Henry Ct	2	2	1,000	$1,075,000	$1,075.00
945 Hunt Ave	2	3	1,212	$790,000	$651.82
16 San Juan Ct	2	2	1,440	$439,000	$304.86
55 Laguna Seca Ct	2	2	1,512	$365,000	$241.40
10 Los Robles Ct	2	2	1,248	$360,000	$288.46

Source: Zillow.com, January 9, 2023.

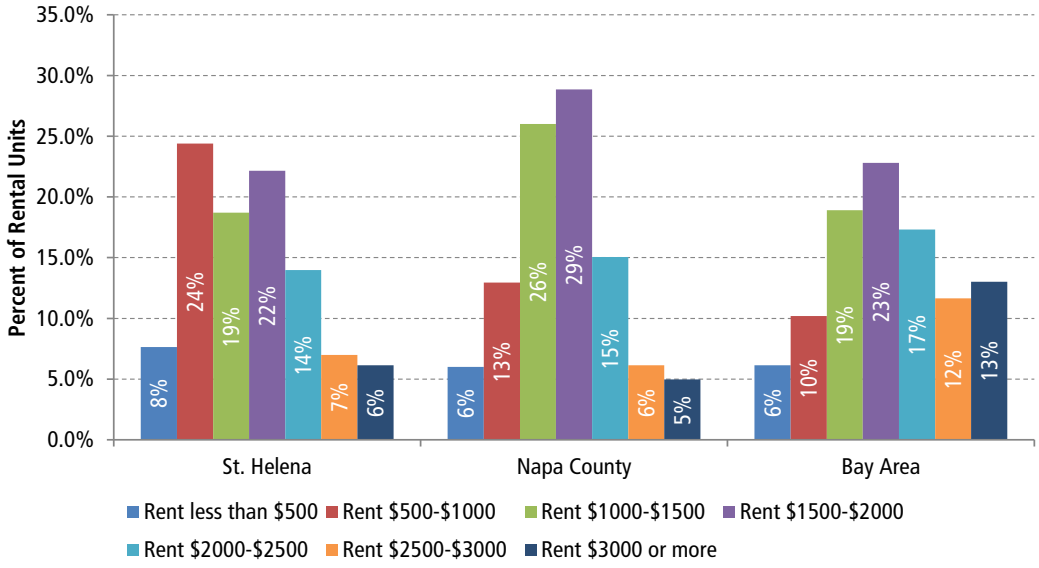
Rental Housing

Similar to home values, rents have also increased dramatically across the Bay Area in recent years. Regionwide, some renters were priced out, evicted, or displaced, particularly communities of color. Residents finding

themselves in one of these situations may have had to choose between commuting long distances to their jobs and schools or moving out of the region, and sometimes, out of the state.

In St. Helena, the largest proportion of rental units rented in the $500 to $1000 per month category, totaling 24.4 percent, followed by 22.2 percent of units renting in the $1500 to $2000 per month category (Figure 33). Both countywide, and in the Bay Area as a whole, the largest share of units is in the $1500 to $2000 per month category.

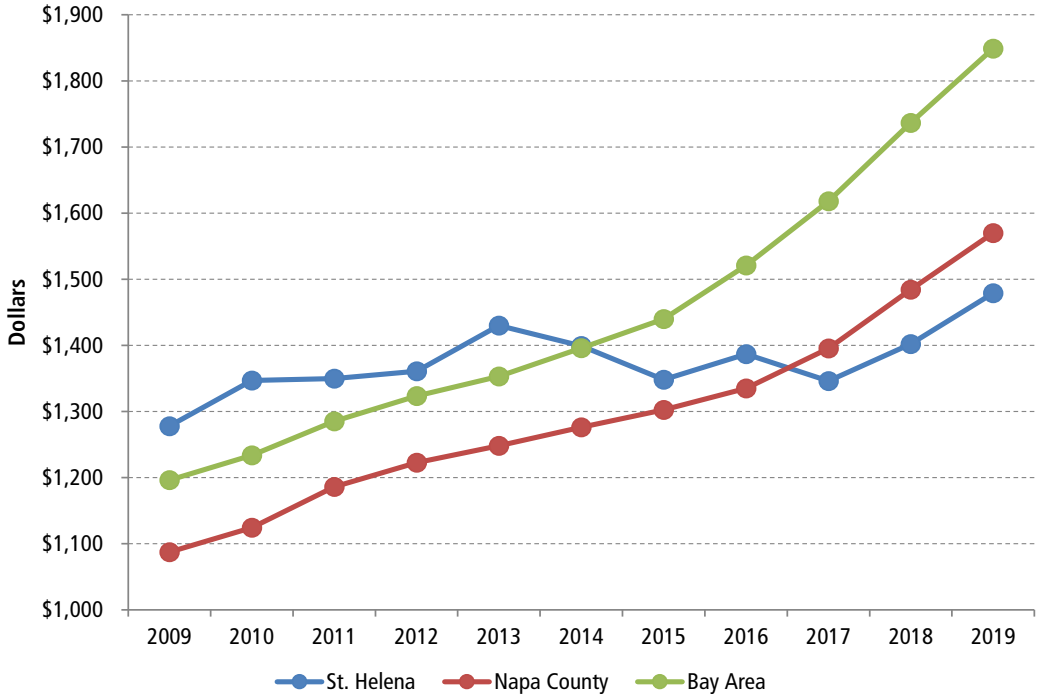
Figure 33 Contract Monthly Rents for Renter-occupied Units



Universe: Renter-occupied housing units paying cash rent
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25056 For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-09.

Since 2009, the median rent has increased by 15.7 percent in St. Helena, from $1,390 to $1,470 per month (Figure 34). In Napa County, the median rent has increased 23.0 percent , from $1,270 to $1,560 per month. The median rent in the region has increased significantly during this time from $1,200 to $1,850 per month, a 54 percent increase.

Figure 34 Median Contract Monthly Rent



Universe: Renter-occupied housing units paying cash rent
Notes: For unincorporated areas, median is calculated using distribution in B25056.
Source: U.S. Census Bureau, American Community Survey 5-Year Data releases, starting with 2005-2009 through 2015-2019, B25058, B25056 (for unincorporated areas). County and regional counts are weighted averages of jurisdiction median using B25003 rental unit counts from the relevant year.
For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-10.

Affordable Rental Rates

In addition to maximum home purchase price, Table 15 also calculates maximum monthly gross rent. This calculation assumes that 30 percent (35 percent for moderate) of income is available for either: monthly rent, including utilities; or mortgage payment, taxes, mortgage insurance, and homeowners' insurance. Among three-person households, the maximum monthly gross rent that can be paid is calculated at $1,229 for very low-income households, $1,965 or low-income households, and $2,458 for moderate income households. While a studio, one-bedroom, and some of the two-bedroom market rate apartments in St. Helena are affordable to low income and a portion of very low-income households, they are in limited supply. Average apartment rents throughout Napa County are only affordable to low-, moderate-, and above moderate- households. In addition, single family rental units are significantly more expensive and are affordable only to above moderate-income households.

Affordable Housing Complexes

Table 17 lists affordable housing complexes and units in St. Helena, which are shown on Figure 35. These include four rental complexes, five for-sale subdivisions, and 13 regulated affordable units in the City, that increase the supply of housing and focus on meeting the housing needs unmet by the private housing market

- The rental complexes noted in Table 17 provide 214 units of affordable housing to St. Helena residents. Waiting lists for affordable units can be quite long. For instance, as of January 2022, Hunt's Grove Apartments has a five-year waiting list[17] and Stonebridge has a three to four year waiting list.[18] Recently, the City has reduced and deferred fees for a five-unit affordable project at 963 Pope Street, which is currently under construction.

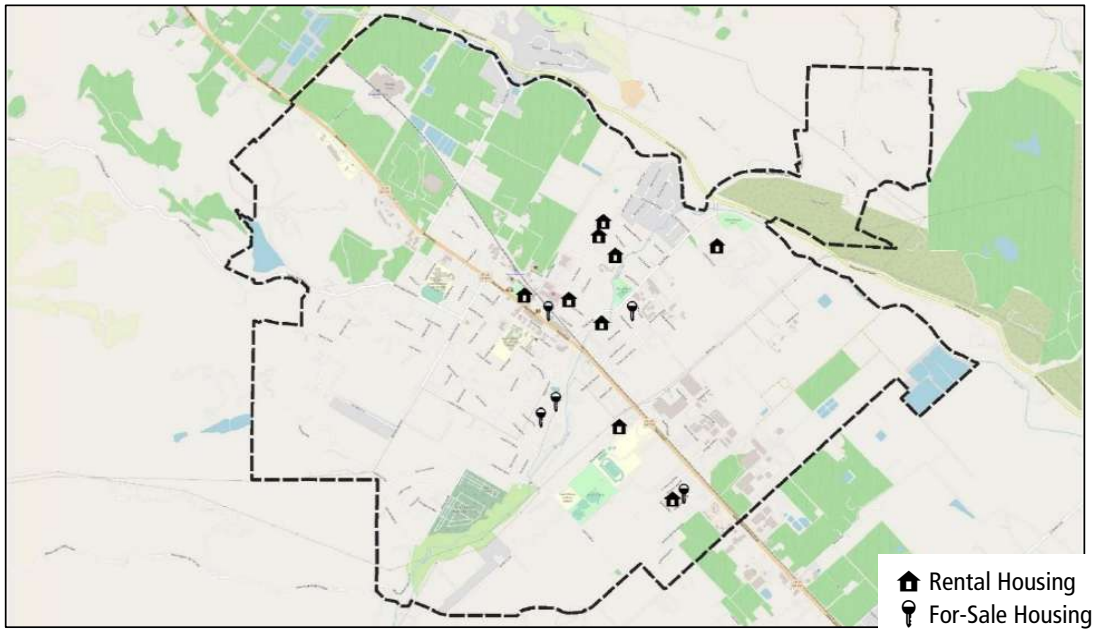
- The five for-sale subdivisions (Marietta Townhomes, Wallis Subdivision, Magnolia Oaks, and Brenkle Court) provide 41 affordable for-sale units with deed restrictions. The City of St. Helena contributed funds to the Marietta townhomes in 1997, including $130,000 in silent second mortgages and $12,500 in building fees. The City also reduced fees and contributed significant funds to the Brenkle Court development in 2016 and approved an additional five deed-restricted affordable units at this location in 2020.

- The 13 regulated affordable apartments in the City are incorporated into the Wydown Hotel, Hunt Street Apartments, Turley Flats, and Grayson Avenue Apartments. The City has both reduced and deferred fees (through a loan from the Affordable Housing Trust Fund) for the Turley Flats Affordable Housing Project, an 8-unit multi-family development.

In addition, mobile home parks like Vineyard Valley, although not officially regulated as affordable housing, do represent a housing option in St. Helena that is affordable to moderate income households.

[17] *Personal communication, January 26, 2022.*
[18] *Personal communication. January 26, 2022.*

Figure 35 Map of Affordable Housing Units, St. Helena



Source: City of St. Helena, 2022. Map data from OpenStreetMap.org Contributors.

Table 17 Affordable Rental Housing Units, St. Helena

Name	Affordable Units	Bedrooms/ Bathrooms	Special Needs	Current Owner	Funding Sources	Status	Affordability Requirement
Hunts Grove	56	14 - 1 bdr/1 bath 28 - 2 bdr/1 bath 14 - 3 bdr/2 bath	n.a.	Bridge Housing	9 percent Tax Credit Equity; Residential Housing Construction Program; Bank of American, First Nationwide Bank, City of St. Helena, First Financial Management	Active	Low and Very Low Income
Stonebridge Apts.	78	8 - 1 bdr/1 bath 23 - 2 bdr/1 bath 28 - 3 bdr/2 bath 8 - 4 bdr/2 bath	n.a.	EAH Nonprofit Housing Corporation	9 percent Tax Credit Equity; HCD; Residential Housing Construction Program; City of St. Helena; Federal Home Loan Bank, Affordable Housing Program	Active	Low and Very Low Income
Woodbridge Apts.	49	48 - 1 bdr/1 bath 2 - 2 bdr/1 bath	Senior Citizens	Woodbridge RAL	CHFA, Section 8	Active	Very Low Income
Magnolia Oaks	14	10 - 2 bdr apartments 4- 1 bdr second units	n.a.	n.a.	Developer Financed	Active	Low and Moderate Income
Wydown Hotel	1	1 - 1 bdr	n.a.	Wydown Hotel	Developer Financed	Active	Very Low Income
Hunt Street Apartments	2	Studio	n.a.	Jack Ibrahim	Owner Financed	Active	Very Low Income
Turley Flats	8	2-3 bdr multifamily	n.a.	n.a.	Private Financing, City and County Loans		
Grayson Apartments	2	2 bdr/1 bath	n.a.	n.a.	Private funds	Active	Low and Moderate Income
Christine Apartments	4	2 bdr/1 bath	n.a.	Our Town St. Helena	Private funds	Active	Very Low and Low Income
					RENTAL TOTAL		214

Source: City of St. Helena, 2022.

Table 18 Affordable For-Sale Housing Units, St. Helena

Name	Affordable Units	Bedrooms/ Bathrooms	Special Needs	Current Owner	Funding Sources	Status	Affordability Requirement
Wallis Subdivision	20	2bdr/2 bath	n.a.	n.a.	Developer Financed	Active	Moderate Income
Marietta Townhomes	10	Unknown	n.a.	n.a.	Napa Valley Community; City of St. Helena	Active	Moderate Income
Sherwin	1	4 bdr single family	n.a.	n.a.	Developer Financed	Active	Moderate Income
Magnolia Oaks	2	3 bdr single family	n.a.	n.a.	Developer Financed	Active	Moderate Income
Brenkle Court	8	3bdr/1.5 bath	n.a.	n.a.	City and County Loans, USDA & sweat equity	Under Construction	Low and Moderate Income
					FOR SALE TOTAL		41

Source: City of St. Helena, 2022.

Current Market Rate Rental Housing

Since the release of the 2019 ACS data, the cost of rental housing in St. Helena has increased dramatically. For most looking to move to St. Helena, the price of market rate housing is almost entirely out of reach. Based on Zillow data, there are two available apartments for rent in St. Helena posted for a contract rent rate of $1,850 and $2,150. Several detached single-family homes are listed for rent at prices which are wholly out of reach of lower, moderate, and most above moderate-income households. The average market rent rate of available single-family homes is $8,356 per month and the median rent is $6,450 per month.

Table 19 Residential Properties for Rent, January 2023

Address	Bedroom	Bathrooms	Square Footage	Monthly Rent	Cost per Square Foot
709 Hunt Ave	4	4	2,915	$24,500	$8.40
679 Dowdell Ln	4	3.5	2,800	$22,000	$7.85
466 Pratt Ave	4	5	4,789	$15,000	$3.13
489 Fulton Ln	3	2	1,645	$14,000	$8.51
1316 Sulphur Springs Ave	3	2	1,648	$9,500	$5.76
925 Pratt Ave	3	3	2,523	$8,500	$3.37
1860 Quail Ct	2	2.5	2,433	$6,500	$2.67
911 Chiles Ave	3	2.5	2,217	$6,500	$2.93
1320 Elmhurst Ave	3	2	1,512	$6,450	$4.27
1629 Madrona Ave	4	3	2,746	$6,000	$2.18
963 McCorkle Ave	3	2	1,378	$5,900	$4.28
1091 Mariposa Ln	3	2	1,316	$5,500	$4.18
1220 Peppertree Cir	3	2	1,450	$4,650	$3.21

1969 Vineyard Ave	3	2	1,000	$4,400	$4.40
1328 Magnolia Ave	3	3	2,082	$3,800	$1.83
210 Nemo Ct	2	2	2,000	$3,200	$1.60
1444 Edwards St, Unit C	2	1	N/A	$2,150	N/A
1444 Edwards St, Unit B	1	1	N/A	$1,850	N/A

Source: Zillow.com, January 9, 2023.

"At Risk" Units

State law requires an analysis of the risk of conversion of affordable housing to market-rate housing within the next ten years. The 2009 Housing Element identified one affordable housing complex, the Woodbridge Apartments, as at-risk for losing its federal subsidies. In 2013, the City worked with the property owners and CalHFA to re-finance and renovate 50 units of affordable housing. Through this effort the Woodbridge Apartment Complex will continue to offer regulated affordable housing through November 2067. The 2014-2022 Housing Element reported no units at-risk of conversion.

The California Housing Partnership provides information on affordable housing developments subsidized through HUD, the U.S. Department of Agriculture, the Low-Income Housing Tax Credit Program, and public housing. Table 20, shows data on assisted affordable units with information on the estimated affordability end year and an estimation of at-risk status. As shown on the table, the California Housing Partnership's Preservation Database (2020) does not identify any affordable housing developments with subsidies expiring during the 2023-2031 planning period.

Table 20 Assisted Affordable Housing Developments by Conversion Risk Status, St. Helena

Universal ID	Name	Address	Zip	Affordable Units	Total Units	Funding Program	Estimated Affordability End Year	Risk Level
CA00001362	Woodbridge Village Apartments	727 Hunt Avenue	94574	49	50	LIHTC; HUD; CalHFA	2067	Low
CA00002539	Hunt's Grove Apartments	548 Hunt Avenue	94574	56	56	LIHTC; HCD	2047	Low
CA00002582	Stonebridge Apartments	990 College Ave	94574	78	80	LIHTC; HCD	2068	Low

Source: California Housing Partnership Preservation Database, 2021.

7. Special Housing Needs

California Government Code Section 65583 (a) (7) requires an analysis of any special housing needs, "such as those of the elderly, persons with disabilities, large families, farm workers, families with female heads of household, and families and persons in need of emergency shelter."[19] This section provides estimates of the prevalence of each of these special needs populations, discusses special housing concerns, and analyzes their housing cost burdens within St. Helena to the extent that available data allows. Data sources include the HCD Preapproved Data Package and Housing Needs Data Report prepared for St. Helena by ABAG, as well as the U.S. Census Bureau, American Community Survey.

Key Findings

- **People with Disabilities.** In St. Helena, people with disabilities make up around 12 percent of the total population. Children (under 18) make up around 38 percent of the developmentally disabled population, while adults make up around 62 percent. Most of the developmentally disabled population reside with their parent, family, or guardian.

- **Senior Households.** Senior households represent a higher percentage of the total households in St. Helena, at about 39 percent of households in the City. There is a large income disparity between seniors who rent housing and seniors who own their home. Most seniors who rent make 0 to 30 percent of AMI, and sixty-eight percent of senior households in this income category have housing cost burdens. By contrast, most seniors who own make greater than 100 percent of AMI; thirteen percent of senior households in this category experience housing cost burdens.

- **Large Households.** In St. Helena, most large households are renters. Among units with three or more bedrooms in St. Helena, approximately 77 percent renter occupied. In St. Helena, 43.2 percent of large family households experience a cost burden of 30 to 50 percent, and an additional 6.8 percent of households spend more than half of their income on housing.

- **Female-headed households.** Female-headed households in St. Helena make up 10 percent of the total population, while married-couple family households make up around 42 percent. In St. Helena, around 23 percent of female-headed households with children fall below the federal poverty line, while around 18 percent of female-headed households without children fall below the federal poverty line.

- **Farmworkers**. The number of permanent farm workers in Napa County has increase from 2,916 in 2002 to 4,290 in 2017, while the number of seasonal farm workers decreased from 7,855 to 5,734. The migrant worker student population totaled 20 during the 2019-20 school year, an increase of two students since the 2016-17 school year.

[19] *California Government Code Section 65583 (a) (7) at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65583. Accessed March 20, 2022.*

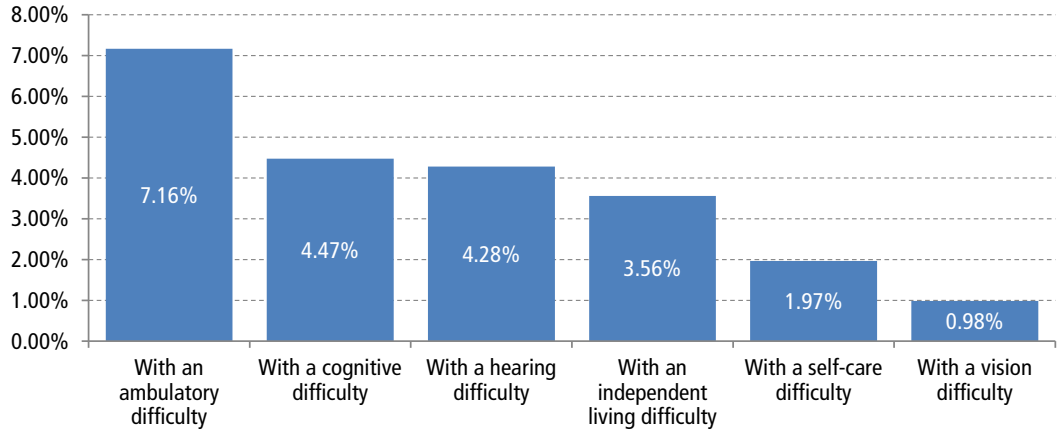
- **Persons experiencing homelessness.** According to a Point in Time Count provided by the Chief of Police, there is one homeless person who resides in St. Helena. Countywide, many of the persons experiencing homelessness report chronic substance abuse or mental illness.

People with Disabilities

People with disabilities face additional housing challenges. Encompassing a broad group of individuals living with a variety of physical, cognitive and sensory impairments, many people with disabilities live on fixed incomes and need specialized care, yet often rely on family members for assistance due to the high cost of care.

When it comes to housing, people with disabilities are not only in need of affordable housing but accessibly designed housing, which offers greater mobility and opportunity for independence. Unfortunately, the need typically outweighs availability, particularly in a housing market with such high demand. People with disabilities are at a high risk for housing insecurity, homelessness, and institutionalization, particularly when they lose aging caregivers. Figure 36 shows the rates at which different disabilities are present among residents of St. Helena. Overall, 11.9 percent of people in St. Helena have a disability of any kind.

Figure 36 Disability by Type



Universe: Civilian noninstitutionalized population 18 years and over
Notes: These disabilities are counted separately and are not mutually exclusive, as an individual may report more than one disability. These counts should not be summed. The Census Bureau provides the following definitions for these disability types: Hearing difficulty: deaf or has serious difficulty hearing. Vision difficulty: blind or has serious difficulty seeing even with glasses. Cognitive difficulty: has serious difficulty concentrating, remembering, or making decisions. Ambulatory difficulty: has serious difficulty walking or climbing stairs. Self-care difficulty: has difficulty dressing or bathing. Independent living difficulty has difficulty doing errands alone such as visiting a doctor's office or shopping.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B18102, Table B18103, Table B18104, Table B18105, Table B18106, Table B18107.
For the data table behind this figure, please refer to the Data Packet Workbook, Table DISAB-01.

Existing Resources

In-Home Supportive Services (IHSS), offered by Napa County, is a helpful resource to help allow persons with disabilities to find the help they need. IHSS offers personal in-home care services to low income aged, blind, and persons with disabilities who are at risk for out-of-home placement.

Gaps in Resources and Action Items

To address the unmet needs of people with disabilities in St. Helena, Programs H-BB, H-LL, and H-NN are included to directly improve housing accessibility and increase housing options for persons with disabilities. Program H-BB commits the City to pursuing State and Federal grants to gain funds necessary to construct and rehabilitate housing units accessible to persons with a disability. Program H-NN includes funding to assist with construction and rehabilitation of homes accessible to those with special housing needs. Program H-LL is designed to encourage developers to incorporate the needs of persons with disabilities.

People Living with Developmental Disabilities

Developmental disabilities are defined as severe, chronic, and attributed to a mental or physical impairment that begins before a person turns 18 years old. This can include Down's Syndrome, autism, epilepsy, cerebral palsy, and mild to severe mental retardation. Some people with developmental disabilities are unable to work, rely on Supplemental Security Income, and live with family members. In addition to their specific housing needs, they are at increased risk of housing insecurity after an aging parent or family member is no longer able to care for them. Table 21 contains data on people with developmental disabilities in St. Helena. In St. Helena, of the population with a developmental disability, children under the age of 18 make up 38.1 percent, while adults account for 61.9 percent.

Table 21 People with Developmental Disabilities by Age, St. Helena

Age Group	Total
Age 18+	12
Age Under 18	20
Total	32

Universe: Population with developmental disabilities
Notes: The California Department of Developmental Services is responsible for overseeing the coordination and delivery of services to more than 330,000 Californians with developmental disabilities including cerebral palsy, intellectual disability, Down syndrome, autism, epilepsy, and related conditions. The California Department of Developmental Services provides ZIP code level counts. To get jurisdiction-level estimates, ZIP code counts were crosswalked to jurisdictions using census block population counts from Census 2010 SF1 to determine the share of a ZIP code to assign to a given jurisdiction.
Source: California Department of Developmental Services, Consumer Count by California ZIP Code and Age Group (January 2022)

Existing Resources

There are several housing types appropriate for people living with a development disability: rent subsidized homes, licensed and unlicensed single-family homes, inclusionary housing, Section 8 vouchers, special programs for home purchase, HUD housing, and SB 962 homes. The design of housing-accessibility modifications, the proximity to services and transit, and the availability of group living opportunities represent some of the types

of considerations that are important in serving this need group. Incorporating 'barrier-free' design in all, new multifamily housing (as required by California and Federal Fair Housing laws) is especially important to provide the widest range of choices for disabled residents. Special consideration should also be given to the affordability of housing, as people with disabilities may be living on a fixed income. The most common living arrangement for individuals with disabilities in St. Helena is the home of a parent, family member, or guardian (Table 22).

People living with developmental disabilities often face problems finding employment or a supportive housing. In Napa, Sonoma, and Solano counties, North Bay Regional Center aids those with developmental disabilities with the process of gaining employment and establishing independence, along with providing general community access and family support. North Bay Regional Center is one of twenty-one Regional Centers in California dedicated to assisting those with developmental disabilities. North Bay Regional Center is based out of the Napa County Airport Business Park located north of American Canyon, which is accessible from St. Helena via the 10 and 11 bus lines.

Gaps in Resources and Action Items

Recently, an eight-unit market rate fully ADA compliant housing development was completed in St. Helena, providing some much-needed housing to persons with special needs. The City wishes to encourage more ADA compliant developments to address the unmet needs of people with developmental disabilities. To pursue this goal, Program H-LLis included in the Housing Element to encourage new developments to allocate a portion of units being built to meet the needs of special needs groups, including people with developmental disabilities.

Table 22 People with Developmental Disabilities by Residence

Residence Type	Total
Home of Parent / Family /Guardian	31
Foster / Family Home	0
Independent / Supported Living	<11
Intermediate Care Facility	0
Community Care Facility	0
Other	0

Universe: Population with developmental disabilities
Notes: The California Department of Developmental Services is responsible for overseeing the coordination and delivery of services to more than 330,000 Californians with developmental disabilities including cerebral palsy, intellectual disability, Down syndrome, autism, epilepsy, and related conditions. The California Department of Developmental Services provides ZIP code level counts. To get jurisdiction-level estimates, ZIP code counts were crosswalked to jurisdictions using census block population counts from Census 2010 SF1 to determine the share of a ZIP code to assign to a given jurisdiction.
Source: California Department of Developmental Services, Consumer Count by California ZIP Code and Residence Type (January 2022)

Seniors

Senior households often experience a combination of factors that can make accessing or keeping affordable housing a challenge. They often live on fixed incomes and are more likely to have disabilities, chronic health conditions and/or reduced mobility.

Senior Households

Table 23 shows data for households by age of householder for occupied housing units. As shown, in St. Helena, approximately 39 percent of households are 65 and older.

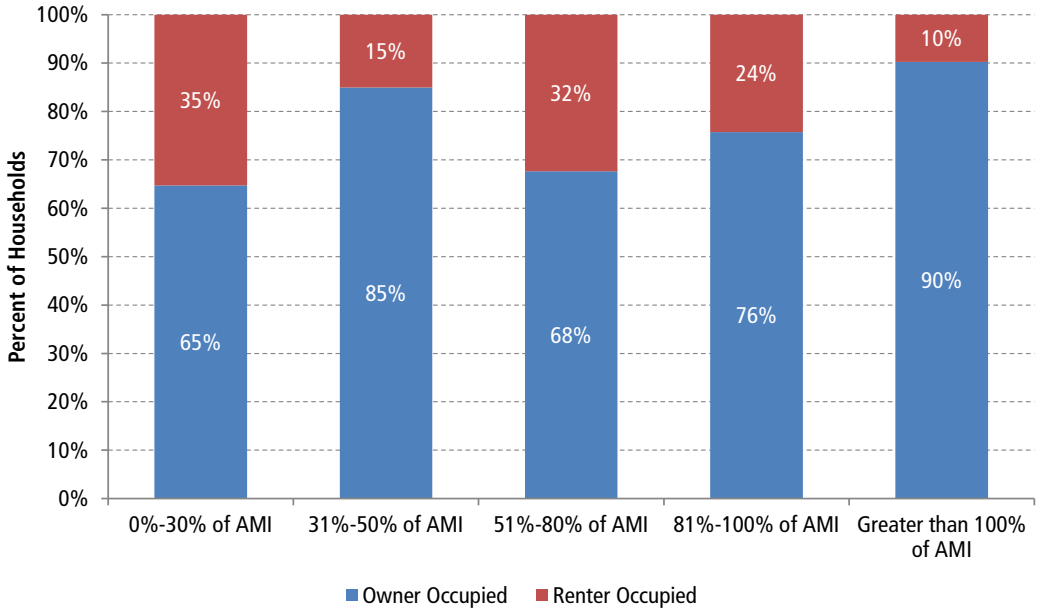
Table 23 Households by Age

Age	Number	Total by Grouping	Percent
Age 15-24	37	1,646	61%
Age 25-34	247		
Age 35-44	272		
Age 45-54	510		
Age 55-59	352		
Age 60-64	228		
Age 65-74	525	1,056	39%
Age 75-84	377		
Age 85+	154		
Total	2,702	2,702	100%

Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25007

Seniors who rent may be at even greater risk for housing challenges than those who own, due to income differences between these groups. The largest proportion of senior households who rent make 0-30 percent of AMI, while the largest proportion of senior households who are homeowners falls in the income group Greater than 100 percent of AMI (Figure 37).

Figure 37 Senior Households by Income and Tenure

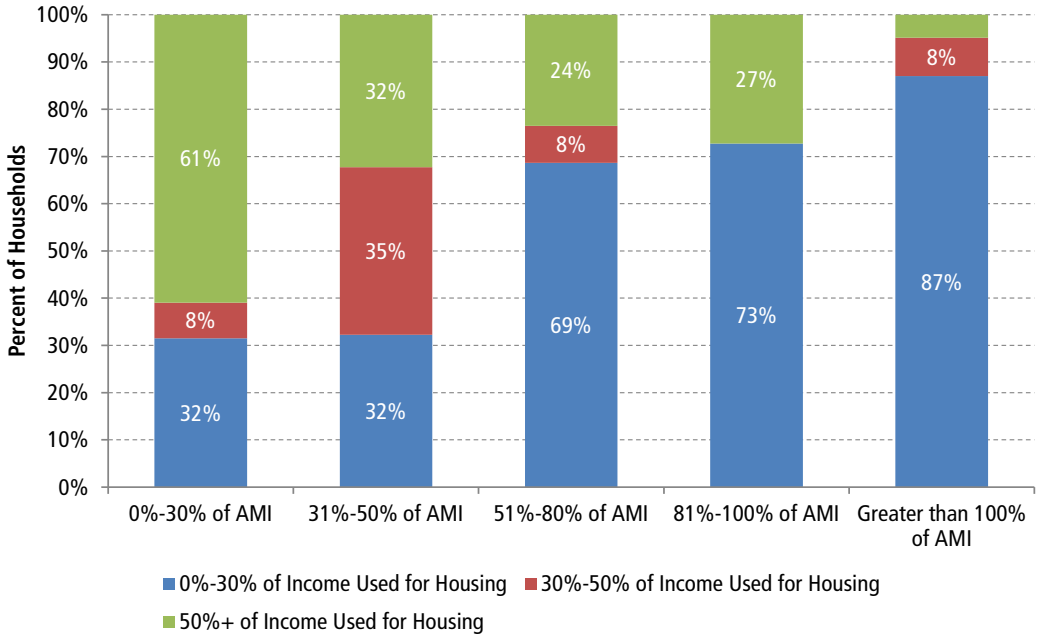


Universe: Senior households
Notes: For the purposes of this graph, senior households are those with a householder who is aged 62 or older. Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County), and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table SEN-01.

Elderly Housing Cost Burden

When cost-burdened seniors are no longer able to make house payments or pay rents, displacement from their homes can occur, putting further stress on the local rental market or forcing residents out of the community they call home. Understanding how seniors might be cost-burdened is of particular importance due to their special housing needs, particularly for low-income seniors. 60.9 percent of seniors making less than 30 percent of AMI are spending the majority of their income on housing. For seniors making more than 100 percent of AMI, 87.0 percent are not cost-burdened and spend less than 30 percent of their income on housing (Figure 38).

Figure 38 Cost-Burdened Senior Households by Income Level



Universe: Senior households
Notes: For the purposes of this graph, senior households are those with a householder who is aged 62 or older. Cost burden is the ratio of housing costs to household income. For renters, housing cost is gross rent (contract rent plus utilities). For owners, housing cost is "select monthly owner costs", which includes mortgage payment, utilities, association fees, insurance, and real estate taxes. HUD defines cost-burdened households as those whose monthly housing costs exceed 30% of monthly income, while severely cost-burdened households are those whose monthly housing costs exceed 50% of monthly income. Income groups are based on HUD calculations for Area Median Income (AMI). HUD calculates the AMI for different metropolitan areas, and the nine county Bay Area includes the following metropolitan areas: Napa Metro Area (Napa County), Oakland-Fremont Metro Area (Alameda and Contra Costa Counties), San Francisco Metro Area (Marin, San Francisco, and San Mateo Counties), San Jose-Sunnyvale-Santa Clara Metro Area (Santa Clara County), Santa Rosa Metro Area (Sonoma County), and Vallejo-Fairfield Metro Area (Solano County). The AMI levels in this chart are based on the HUD metro area where this jurisdiction is located.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table SEN-03.

Existing Senior Housing Resources

Within St. Helena, there are 159 senior housing units, as shown on Table 24. With approximately 1,056 seniors households in the city, the city has a need for both market rate and affordable senior living facilities. The largest senior living facility, locally owned Silverado Orchards, has a residential capacity of 103. This facility is not income restricted. The only income restricted senior living facility, Woodbridge Village, has 50 units, with most being one-bedroom units. As a stark representation of the high demand and low supply of affordable senior living units, according to a manager at Woodbridge Village, there is a waiting list stretching several years to live in their affordable senior housing complex.

Table 24 Senior Housing Units, St. Helena.

Facility Name	Address	Tenure	Number of Units	Income Restriction
Silverado Orchards	601 Pope Street	Rent	103	No
Saint Helena Home Care	2011 Olive Avenue	Rent	6	No
Woodbridge Village	727 Hunt Avenue	Rent	50	Yes

Source: City of St. Helena, 2022; U.S. News, 2016.

Gaps in Resources and Action Items

Given the high proportion of St. Helena households that are senior, especially seniors aged 75 and older, it is important to work to address their housing needs. The Rianda house provides seniors with a meeting place and valuable information on topics ranging from housing and income-assistance to medical referrals, as a welcome and positive resource for seniors in St. Helena. There are still many needs of seniors that are not being met, however, and changes to St. Helena's housing policies could make it easier for seniors to age in place. Often, when seniors are released from a hospital stay and return to their own homes, they have trouble navigating inside the home and getting to neighborhood services like the grocery store and doctor's office.

The 2023-2031 Housing Element includes three programs directly related the senior housing.

- Program H-BB commits the City to pursuing funding for costs specifically associated with housing rehabilitation for lower income households and seniors. Such funding can help with the conservation of 20 units accessible to seniors, along with other units for persons with a disability.
- Program H-LL commits the city to encouraging new developments accessible to persons with special needs, which includes seniors. This program specifies 10 senior-accessible units being constructed in the next Planning Period.
- Program H-NN commits the City to pursuing federal and State funding for costs associated with both new construction and rehabilitation for lower-income households and seniors. Such funding can support the development of 20 units accessible to seniors.

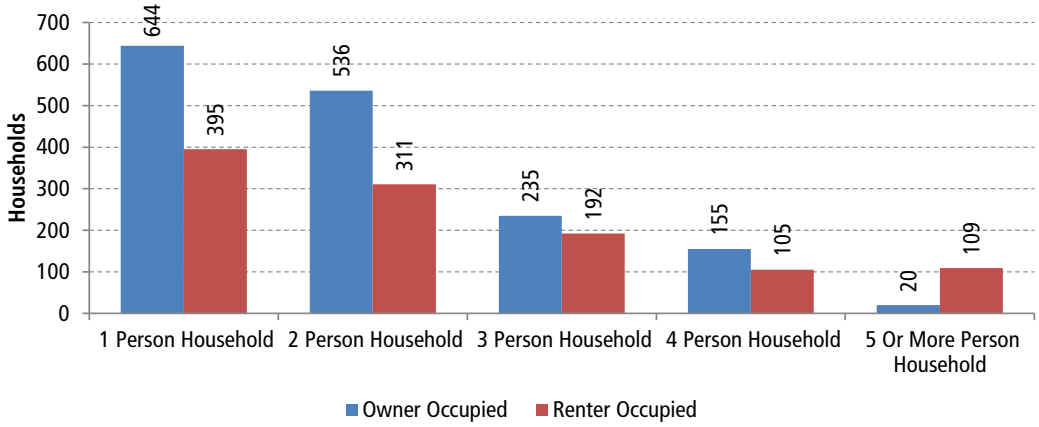
Additional policies and programs that the City should consider include zoning that encourages families to consider ADUs and JADUs to accommodate their aging relatives or caregivers. Such policies could also provide for more elder-friendly neighborhoods, improved lighting to increase visibility, and safe accessible sidewalks and walking paths.

Large Households

Large households often have different housing needs than smaller households. If a city's rental housing stock does not include larger apartments, large households who rent could end up living in overcrowded conditions. In St. Helena, for large households with five or more persons, most units (84.5 percent) are renter occupied

(Figure 39). In 2017, 47.3 percent of large households were very low-income, earning less than 50 percent of the area median income (AMI).

Figure 39 Household Size by Tenure

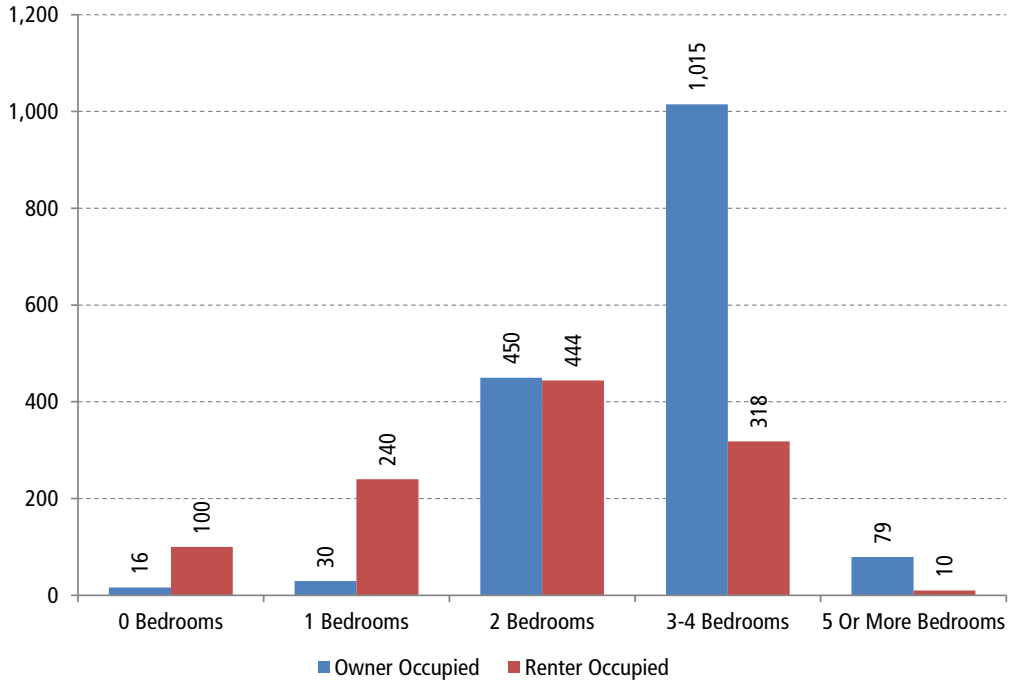


Universe: Occupied housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25009 For the data table behind this figure, please refer to the Data Packet Workbook, Table LGFEM-01.

Existing Resources

The unit sizes available in a community affect the household sizes that can access that community. Large families are generally served by housing units with three or more bedrooms, of which there are 1,422 units in St. Helena. Among these large units with three or more bedrooms, 23.1 percent are owner-occupied and 76.9 percent are renter occupied (Figure 40).

Figure 40 Housing Units by Number of Bedrooms



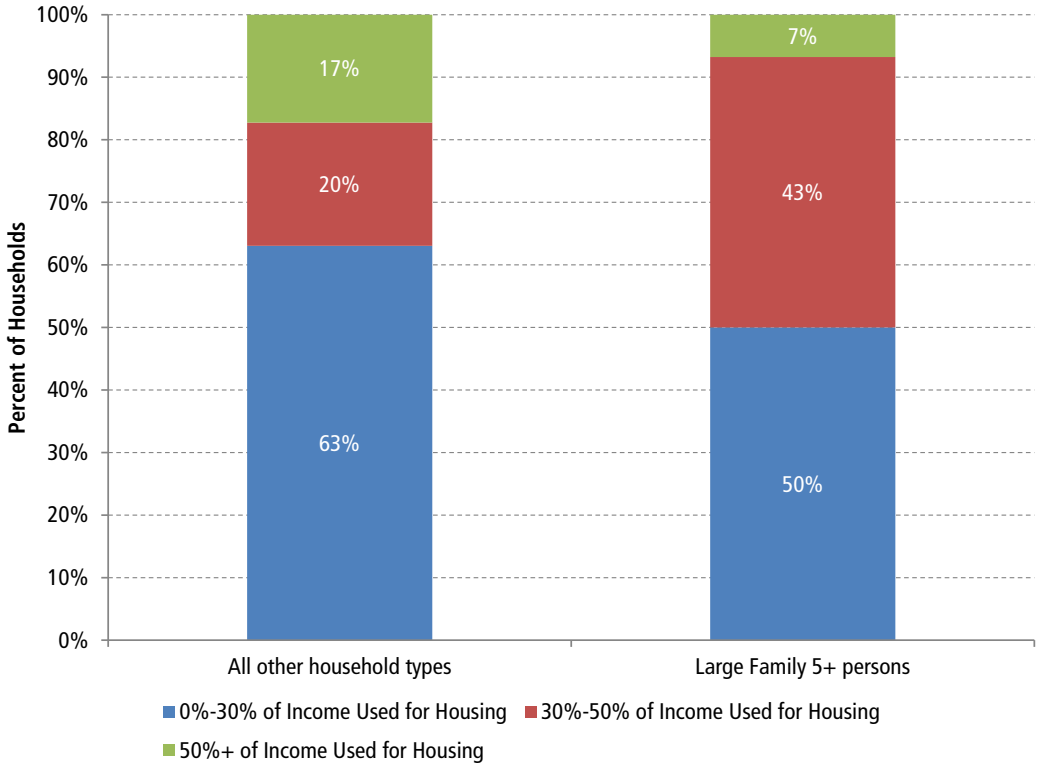
Universe: Housing units
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B25042 For the data table behind this figure, please refer to the Data Packet Workbook, Table HSG-05.

Gaps in Resources

Large family households often have special housing needs due to a lack of adequately sized affordable housing available. The higher costs required for homes with multiple bedrooms can result in larger families experiencing a disproportionate cost burden than the rest of the population and can increase the risk of housing insecurity.

In St. Helena, 43.2 percent of large family households experience a cost burden of 30 to 50 percent, while 6.8 percent of households spend more than half of their income on housing. Some 19.7 percent of all other households have a cost burden of 30 to 50 percent, with 17.2 percent of households spending more than 50 percent of their income on housing (Figure 41).

Figure 41 Cost Burden by Household Size

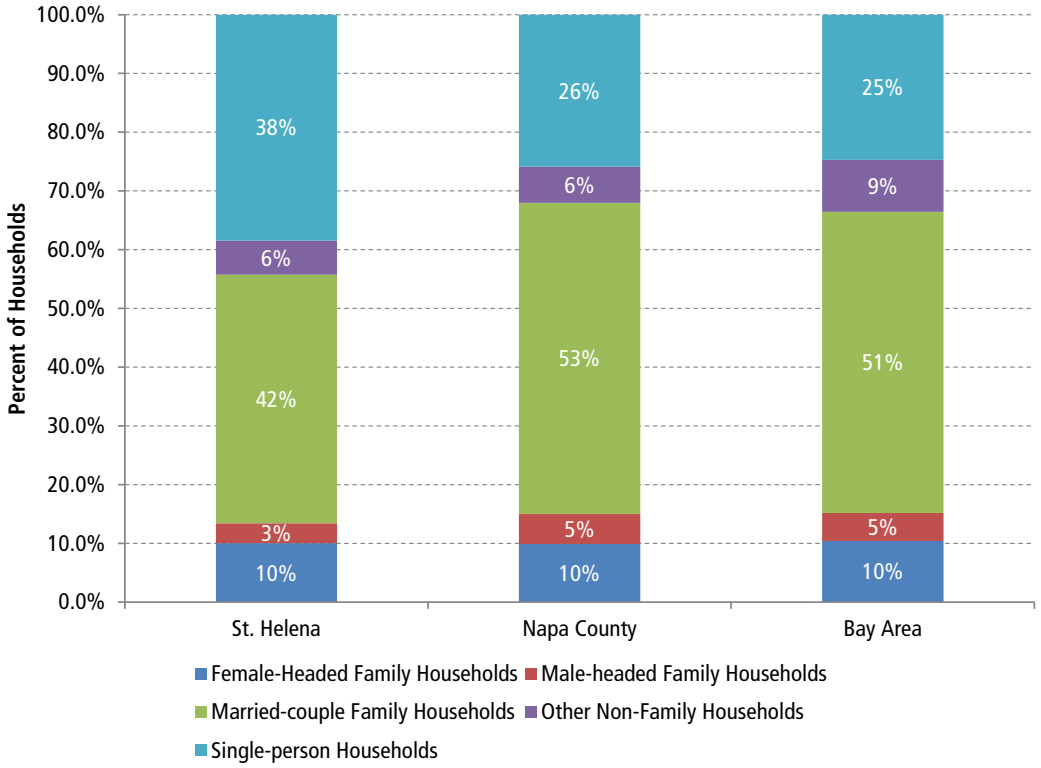


Universe: Occupied housing units
Notes: Cost burden is the ratio of housing costs to household income. For renters, housing cost is gross rent (contract rent plus utilities). For owners, housing cost is "select monthly owner costs", which includes mortgage payment, utilities, association fees, insurance, and real estate taxes. HUD defines cost-burdened households as those whose monthly housing costs exceed 30 percent of monthly income, while severely cost-burdened households are those whose monthly housing costs exceed 50 percent of monthly income.
Source: U.S. Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) ACS tabulation, 2013-2017 release
For the data table behind this figure, please refer to the Data Packet Workbook, Table OVER-09.

Female-Headed Households

Households headed by one person are often at greater risk of housing insecurity, particularly female- headed households, who may be supporting children or a family with only one income. In St. Helena, the largest proportion of households is Married-couple Family Households at 42.3 percent of total, while Female-Headed Households make up 10.0 percent of all households (Figure 42).

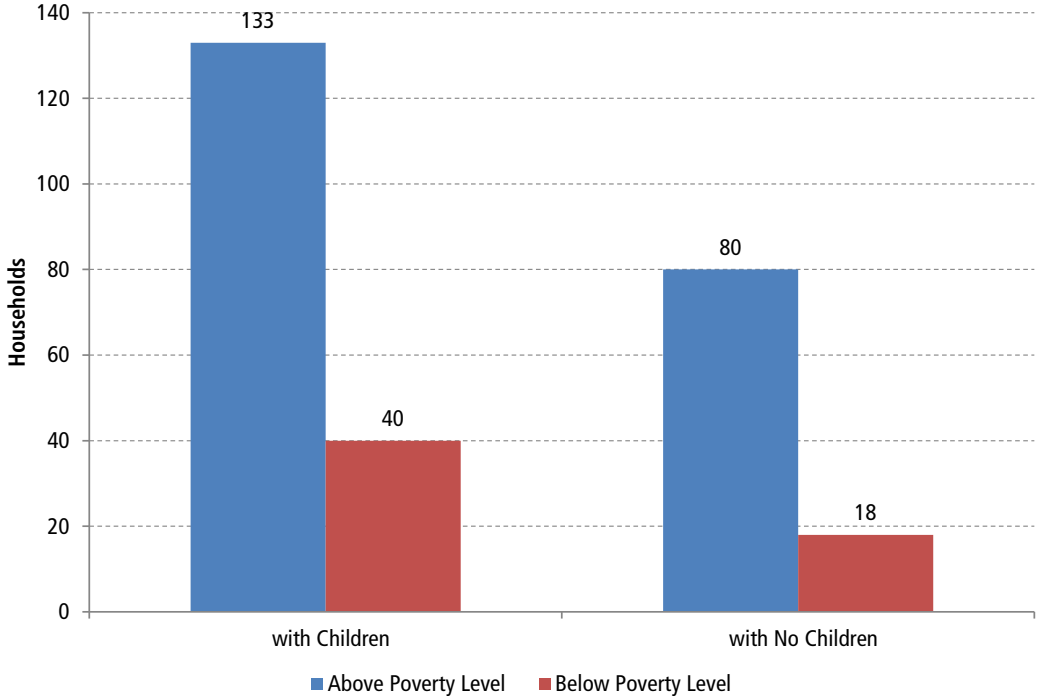
Figure 42 Household Type



Universe: Households
Notes: For data from the Census Bureau, a "family household" is a household where two or more people are related by birth, marriage, or adoption. "Non-family households" are households of one person living alone, as well as households where none of the people are related to each other.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B11001 For the data table behind this figure, please refer to the Data Packet Workbook, Table POPEMP-23.

Female-headed households with children may face unique housing challenges, with pervasive gender inequality resulting in lower wages for women. Moreover, the added need for childcare can make finding a home that is affordable more challenging. In St. Helena, 40 female-headed households with children fall below the Federal Poverty Line, while 18 female-headed households without children live in poverty (Figure 43).

Figure 43 Female-Headed Households by Poverty Status



Universe: Female Households
Notes: The Census Bureau uses a federally defined poverty threshold that remains constant throughout the country and does not correspond to Area Median Income.
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B17012 For the data table behind this figure, please refer to the Data Packet Workbook, Table LGFEM-05.

Existing Resources

As discussed previously, childcare is a major concern for female-headed households, especially those with very young toddlers who need constant care and supervision. In St. Helena, the St. Helena Preschool For All, Inc. provides scholarships to low-income families to allow their children will be able to attend two years of preschool from ages 3 to 4. St. Helena Preschool for All, Inc. also partners with local childcare facilities, including Mila's Preschool and Childcare Center, to help facilitate their program.

Gaps in Resources and Action Items

St. Helena's northwestern area contains a higher proportion of female single-parent households compared to the rest of St. Helena and most of Napa County. As such, the City recognizes the importance of meeting the needs of female-headed households within the city. A major cost to female-headed households and single-parent households is transportation. All sites in the sites inventory of this Housing Element, which projects possible housing locations for the planning period, are located within walking distance of the no. 10 bus route, which enables direct connection to Napa or Calistoga. Additionally, all sites are within proximity of the central commercial district of St. Helena, which allows for cheaper, easier access to markets and commercial services.

Farmworkers

Across the state, housing for farmworkers has been recognized as an important and unique concern. Farmworkers generally receive wages that are considerably lower than other jobs and may have temporary housing needs. Finding decent and affordable housing can be challenging, particularly in the current housing market.

Table 25 estimates the migrant worker student population between 2016 and 2020. In St. Helena, the migrant worker student population totaled 20 during the 2019-20 school year, an increase of two students since the 2016-17 school year. The trend for the region for the past few years has been a decline of 2.4 percent in the number of migrant worker students since the 2016-17 school year. The change at the county level is a 19.4 percent increase in the number of migrant worker students since the 2016-17 school year.

Table 25 Migrant Worker Student Population

Academic Year	St. Helena	Napa County	Bay Area
2016-17	18	903	4,630
2017-18	12	1173	4,607
2018-19	22	1,090	4,075
2019-20	20	1,078	3,976

Universe: Total number of unduplicated primary and short-term enrollments within the academic year (July 1 to June 30), public schools
Notes: The data used for this table was obtained at the school site level, matched to a file containing school locations, geocoded and assigned to jurisdiction, and finally summarized by geography.
Source: California Department of Education, California Longitudinal Pupil Achievement Data System (CALPADS), Cumulative Enrollment Data (Academic Years 2016-2017, 2017-2018, 2018-2019, 2019-2020)
This table is included in the Data Packet Workbook as Table FARM-01.

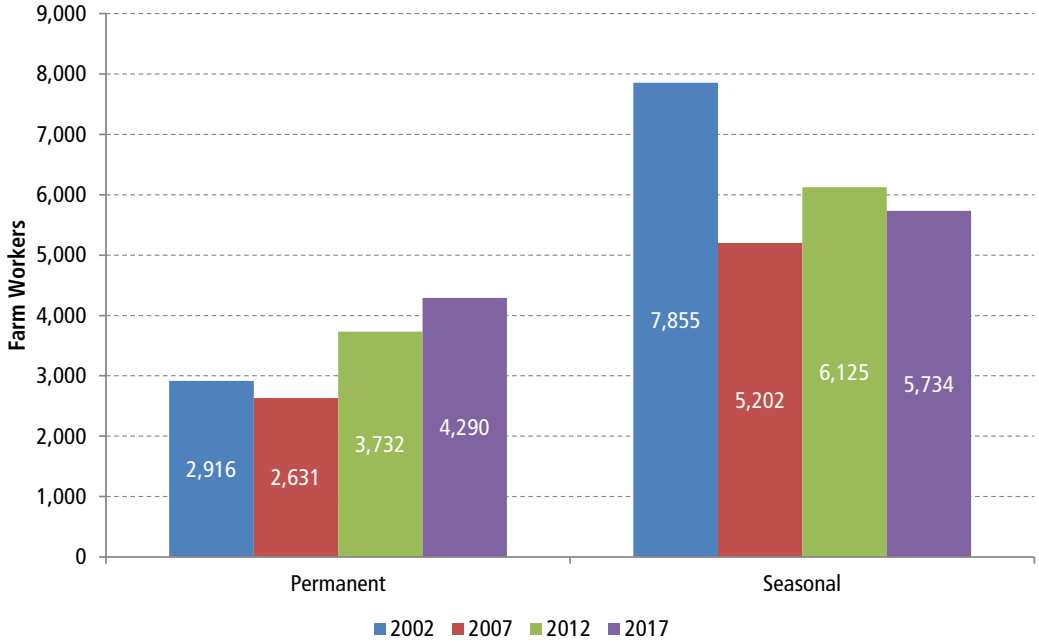
Table 26 presents an estimate of the total farmworkers in Napa County. Since 2007, the county has seen an increase in farmworker jobs. As of 2017, the county is reported to have more than 10,000 hired farm workers, of which 43 percent worked more than 150 days. The number of permanent farm workers in Napa County has increased since 2002, totaling 4,290 in 2017, while the number of seasonal farm workers has decreased, totaling 5,734 in 2017 (Figure 44). Notably, hired farm workers in Napa County represent a large proportion of the Bay Area's permanent (24.8 percent) and seasonal (31.4 percent) farm workers (Table 26).

Table 26 Farm Labor, Napa County

	2002	2007	2012	2017	County Distribution	Percent of Total Bay Area Farmworkers
Permanent	2,916	2,631	3,732	4,290	43%	24.80%
Seasonal	7,855	5,202	6,125	5,734	57%	31.40%
Totals	10,771	7,833	9,857	10,024	100%	28.20%

Universe: Hired farm workers (including direct hires and agricultural service workers who are often hired through labor contractors)
Notes: Farm workers are considered seasonal if they work on a farm less than 150 days in a year, while farm workers who work on a farm more than 150 days are considered to be permanent workers for that farm.
Source: U.S. Department of Agriculture, Census of Farmworkers (2002, 2007, 2012, 2017), Table 7: Hired Farm Labor

Figure 44 Farm Labor by County, Napa County



Universe: Hired farm workers (including direct hires and agricultural service workers who are often hired through labor contractors)
Notes: Farm workers are considered seasonal if they work on a farm less than 150 days in a year, while farm workers who work on a farm more than 150 days are permanent workers for that farm.
Source: U.S. Department of Agriculture, Census of Farmworkers (2002, 2007, 2012, 2017), Table 7: Hired Farm Labor For the data table behind this figure, please refer to the Data Packet Workbook, Table FARM-02.

Existing Resources

Five different kinds of housing exist for farmworkers in Napa County: farmworker centers, owned and operated by the Napa County Housing Authority (NCHA); private accommodations designated for agriculture employees that accommodate five or more employees and are monitored by the Napa County Department of Environmental Management; private accommodations designated as farm labor dwellings accommodating fewer than five residents, private apartments or other housing rented or owned by farmworkers; and affordable housing projects subsidized by the County and by incorporated cities, some of which have units set aside specifically for farmworker households.

Gaps in Resources and Action Items

Given the special housing needs of farmworkers in the region, the Housing Element contains Program H-H, which specifically encourages the development of more workforce or farmworker housing during the planning period through various incentives. Of the discussed incentives, most impactful is the City's commitment to explore opportunities to use funds from the City's Housing Trust Fund to help assist in the construction of farmworker housing. Additionally, programs H-E, H-I, H-KK, H-LL, H-NN also commit the City to exploring a variety of methods to better meet the housing needs of special needs households, including farmworkers.

Extremely Low-Income Households

Extremely-low income households are defined as households that make less than 30 percent of AMI, which equates to $27,950 for a family of four. Approximately 395 households in St. Helena are extremely-low income households, which includes 215 homeowners and 180 renters (see Figure 11). The City currently estimates that there is a need for 52 additional housing units for extremely low-income households in the current planning period, which is 50 percent of projected very low-income housing needs (see Table 6).

Existing Resources

Currently, St. Helena has an estimated 214 units of deed restricted affordable housing, listed on Table 17. This figure stretches across the need for extremely low, very low, low, and moderate-income housing. Given that there are 52 units needed for extremely low-income households, there is clearly a lack of adequate housing supply for extremely-low income households.

Beyond the availability of deed restricted affordable housing, there are a variety of resources available to assist extremely-low-income households with their recurring expenses. Extremely low-income households who are enrolled in the Supplemental Nutritional Assistance Program (SNAP), or any other qualifying government program, are eligible to be enrolled in the PG&E CARE Program, which allows for the lowest available electricity rates. Additionally, when households are enrolled in CARE, they are also permitted access to a fifty percent discount on their bill from the St. Helena Water District. The City also offers hardship payment agreements that can be arranged in person at City Hall to prevent water or sewer shutoff.

Gaps in Resources and Action Items

To help address the needs of extremely low-income households, numerous programs are included in this Housing Element to commit the City to preserving and expanding access to affordable housing to extremely low-income households. Program H-EE commits the city to continue reducing, deferring, or waiving the development fees for extremely low- and very low-income units. Program H-FF commits the City to prioritizing using the Affordable Housing Trust Fund to preserve existing or develop new extremely low-income housing units. H-II commits the City to continue supporting and participating in the Section 8 housing program with the City of Napa Housing Authority. Program H-OO commits the City to exploring the possibility of working with property owners of market rate multifamily complexes to convert some units to extremely low-income deed-restricted units.

Persons Experiencing Homelessness

Homelessness remains an urgent challenge in many communities across the state, reflecting a range of social, economic, and psychological factors. Rising housing costs result in increased risks of community members experiencing homelessness. Far too many residents who have found themselves housing insecure have ended up unhoused or homeless in recent years, either temporarily or longer term.

Addressing the specific housing needs for the unhoused population remains a priority throughout the region, particularly since homelessness is disproportionately experienced by people of color, people with disabilities, those struggling with addiction and those dealing with traumatic life circumstances. According to the City of St. Helena, there is one homeless person who resides in St. Helena. This data was provided by a point in time assessment by the Police Chief of the St. Helena Police Department in 2021.

Gaps in Resources

Countywide, the most common type of household experiencing homelessness is those without children in their care. Among households experiencing homelessness that do not have children, 53.7 percent are unsheltered. Of homeless households with children, most are sheltered in transitional housing (Table 27).

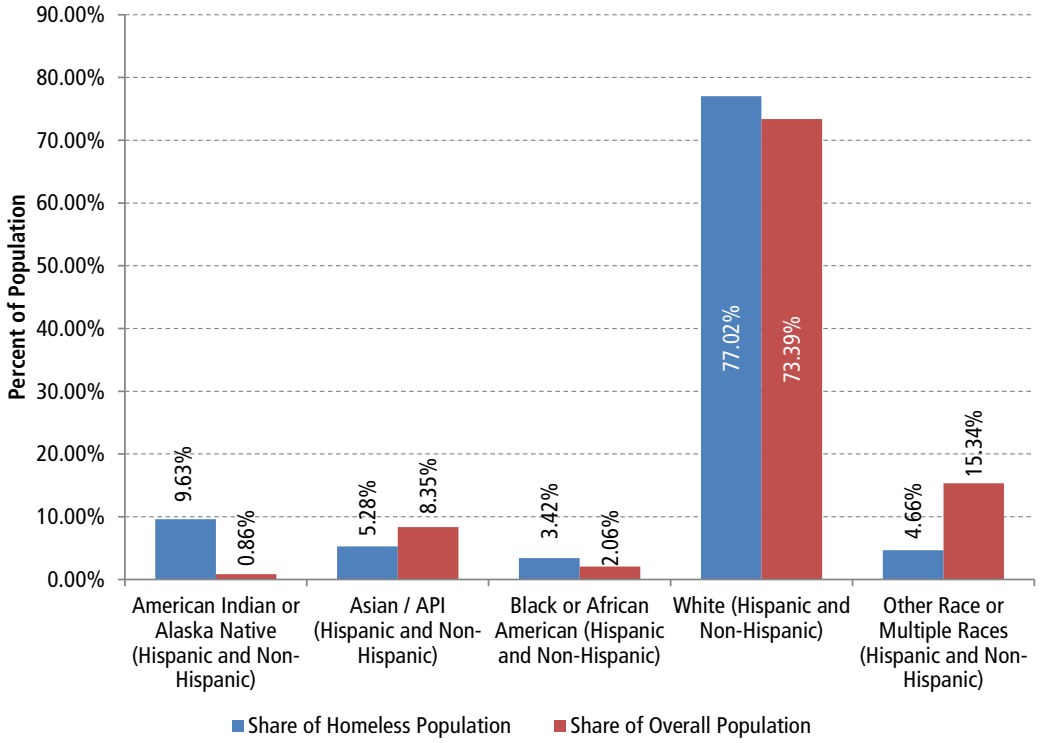
Table 27 Homelessness by Household Type and Shelter Status, Napa County

	People in Households Composed Solely of Children Under 18	People in Households with Adults and Children	People in Households without Children Under 18
Sheltered - Emergency Shelter	0	13	119
Sheltered - Transitional Housing	0	34	6
Unsheltered	0	5	145

Universe: Population experiencing homelessness
Notes: This data is based on Point-in-Time (PIT) information provided to HUD by CoCs in the application for CoC Homeless Assistance Programs. The PIT Count provides a count of sheltered and unsheltered homeless persons on a single night during the last ten days in January. Each Bay Area county is its own CoC, and so the data for this table is provided at the county-level. Per HCD's requirements, jurisdictions will need to supplement this county-level data with local estimates of people experiencing homelessness.
Source: U.S. Department of Housing and Urban Development (HUD), Continuum of Care (CoC) Homeless Populations and Subpopulations Reports (2019)
For the data table behind this figure, please refer to the Data Packet Workbook, Table HOMELS-01.

People of color are often disproportionately impacted by homelessness, particularly Black residents of the Bay Area. In Napa County, White (Hispanic and Non-Hispanic) residents represent the largest proportion of residents experiencing homelessness and account for 77.0 percent of the homeless population, while making up 73.4 percent of the overall population (Figure 45).

Figure 45 Racial Group Share of General and Homeless Populations, Napa County

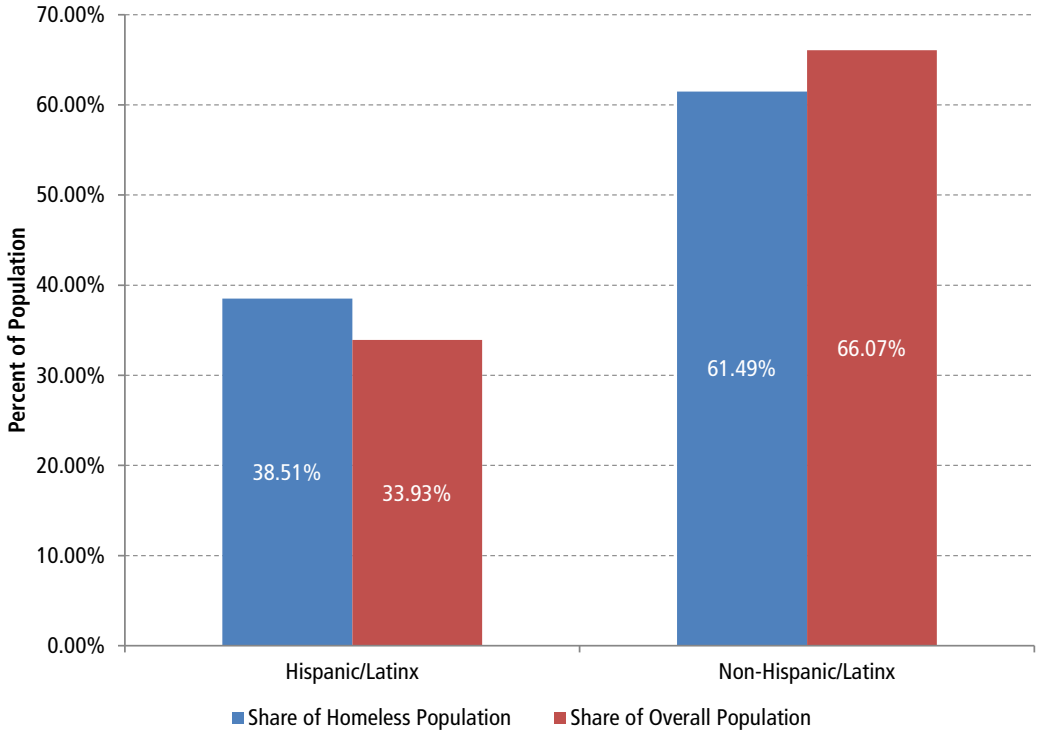


Universe: Population experiencing homelessness

Notes: This data is based on Point-in-Time (PIT) information provided to HUD by CoCs in the application for CoC Homeless Assistance Programs. The PIT Count provides a count of sheltered and unsheltered homeless persons on a single night during the last ten days in January. Each Bay Area county is its own CoC, and so the data for this table is provided at the county-level. Per HCD's requirements, jurisdictions will need to supplement this county-level data with local estimates of people experiencing homelessness. HUD does not disaggregate racial demographic data by Hispanic/Latinx ethnicity for people experiencing homelessness. Instead, HUD reports data on Hispanic/Latinx ethnicity for people experiencing homelessness in a separate table. Accordingly, the racial group data listed here includes both Hispanic/Latinx and non-Hispanic/Latinx individuals.
Source: U.S. Department of Housing and Urban Development (HUD), Continuum of Care (CoC) Homeless Populations and Subpopulations Reports (2019); U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B01001(A-I)
For the data table behind this figure, please refer to the Data Packet Workbook, Table HOMELS-02.

In Napa County, Latinx residents represent 38.5 percent of the population experiencing homelessness, while Hispanic or Latinx residents comprise 33.9 percent of the general population (Figure 46).

Figure 46 Hispanic or Latinx Share of General and Homeless Populations, Napa County



Universe: Population experiencing homelessness
Source: U.S. Department of Housing and Urban Development (HUD), Continuum of Care (CoC) Homeless Populations and Subpopulations Reports (2019); U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B01001(A-I)
For the data table behind this figure, please refer to the Data Packet Workbook, Table HOMELS-03.

Many of those experiencing homelessness are dealing with severe issues – including mental illness, substance abuse and domestic violence – that are potentially life threatening and require additional assistance. In Napa County, homeless individuals are commonly challenged by severe mental illness, with 177 reporting this condition (0). Of those, some 44.1 percent are unsheltered, further adding to the challenge of handling the issue.

Table 28 Characteristics for the Population Experiencing Homelessness, Napa County

	Chronic Substance Abuse	HIV/AIDS	Severely Mentally Ill	Veterans	Victims of Domestic Violence
Sheltered - Emergency Shelter	70	0	91	8	11
Sheltered - Transitional Housing	0	0	8	0	4
Unsheltered	91	1	78	6	17

Universe: Population experiencing homelessness
Source: U.S. Department of Housing and Urban Development (HUD), Continuum of Care (CoC) Homeless Populations and Subpopulations Reports (2019)

In St. Helena, there were no reported students experiencing homelessness in the 2019-20 school year (Table 29). Napa County has seen a 29.1 percent decrease in the population of students experiencing homelessness, and the Bay Areas as a whole experienced an 8.5 percent decrease. However, during the 2019-2020 school year, there were still some 13,718 students experiencing homelessness throughout the region, adding undue burdens on learning and thriving, with the potential for longer term negative effects.

Table 29 Students in Local Public Schools Experiencing Homelessness

Geography	2016-17	2017-18	2018-19	2019-20
St. Helena	0	0	0	0
Napa County	381	433	249	270
Bay Area	14,990	15,142	15,427	13,718

Universe: Total number of unduplicated primary and short-term enrollments within the academic year (July 1 to June 30), public schools
Notes: The California Department of Education considers students to be homeless if they are unsheltered, living in temporary shelters for people experiencing homelessness, living in hotels/motels, or temporarily doubled up and sharing the housing of other persons due to the loss of housing or economic hardship. The data used for this table was obtained at the school site level, matched to a file containing school locations, geocoded and assigned to jurisdiction, and finally summarized by geography.
Source: California Department of Education, California Longitudinal Pupil Achievement Data System (CALPADS), Cumulative Enrollment Data (Academic Years 2016-2017, 2017-2018, 2018-2019, 2019-2020)

Existing Resources & Action Items

Given the documented need for emergency shelters in Napa County, St. Helena is subject to Government Code Section 65583(a) (4). This code section, which became effective as of January 1, 2008, requires jurisdictions to designate zoning districts adequate for facilities to accommodate the identified need for emergency shelters, wherein emergency shelters must be allowed without a conditional use or other discretionary permit.[20] [21] The City is in compliance, as emergency shelters are currently a permitted use by-right in the Service Commercial and Industrial zones.

[20] *Building Block for Effective Housing Elements, "Adequate Sites Inventory and Analysis: Zoning for Emergency Shelters and Transitional Housing". http://www.hcd.ca.gov/hpd/housing_element2/SIA_variety.php. Accessed February 14, 2014.*
[21] *Senate Bill 2, Chapter 633. Amendment to Acts 655582, 65583 and 65589.5. Approved by Governor on October 13, 2007. Effective January 1, 2008. Accessed February 17, 2014.*

The City is in compliance with State laws related to emergency shelters, supportive housing, and transitional housing. Emergency shelters are identified as a by-right use in the I and SC zoning districts. According to a Point in Time Count provided by the Chief of Police, there is one homeless person who resides in St. Helena. There are several parcels in these zones that can accommodate an emergency shelter, including APN 009-580-022-000 (I zoning district) and APN 009-194-005-000 (SC zoning district). These parcels are vacant, habitable, and in proximity to transportation and services. Combined, they total 1.48 acres and can provide capacity for 15 beds, by conservative assumption of 10 beds/acre. In addition, the City must allow transitional housing, as defined in Section 50675.2 of the Health and Safety Code, and supportive housing, as defined in Section 50675.14 of the Health and Safety Code, as residential uses. As required by state law, transitional and supportive housing must be subject only to the same permitting process as other similar residential uses in the same zone without undue special regulatory requirements. For example, a proposed multifamily supportive housing project would be subject to the same permitting process as any other similar multifamily development in the same zoning district. As required, the City allows transitional and supportive housing in all residential, commercial, and mixed use districts, subject only to the requirements of residential uses.

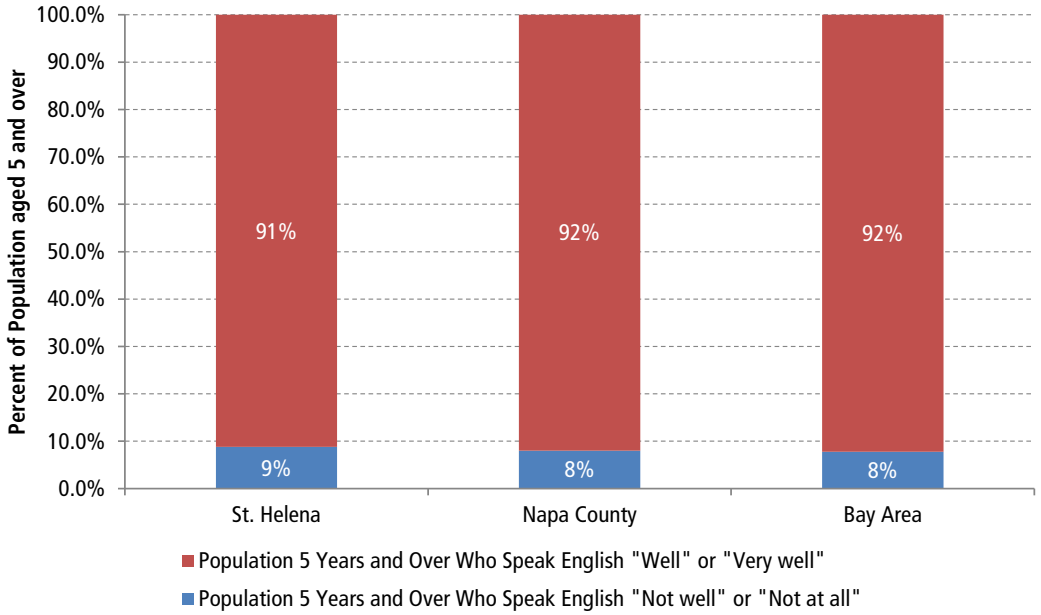
Emergency shelters, transitional housing, and supportive housing are subject to subjective design review, which poses a significant constraint to development. To overcome this constraint, Program H-F commits the City to adopting objective design standards, as well as a by-right streamlined review process for affordable housing developments meeting state affordability thresholds, in compliance with SB 35 and SB 330.

Non-English Speakers

California has long been an immigration gateway to the United States, which means that many languages are spoken throughout the Bay Area. Since learning a new language is universally challenging, it is not uncommon for residents who have immigrated to the United States to have limited English proficiency. This limit can lead to additional disparities if there is a disruption in housing, such as an eviction, because residents might not be aware of their rights, or they might be wary to engage due to immigration status concerns.

Figure 47 shows population data by English proficiency. In St. Helena, nine percent of residents five years and older identify as speaking English not well or not at all, which is slightly higher than the proportion for Napa County. Throughout the region the proportion of residents five years and older with limited English proficiency is nine percent.

Figure 47 Population with Limited English Proficiency



Universe: Population five years and over
Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B16005For the data table behind this figure, please refer to the Data Packet Workbook, Table AFFH-03.

8. Non-governmental and Governmental Constraints

Constraints on the development of housing are divided into non-governmental constraints and governmental constraints. Non-governmental constraints include the price of land, cost of construction, flooding, conservation easements and long-term vineyard leases, and a lack of rental accessory dwelling units. Potential governmental constraints include land use controls, codes and code enforcement, on and off-site improvements, fees and exactions, processing and permit procedures, and regulations affecting housing for persons with disabilities.

Key Findings

- The possible non-governmental constraints discussed include the price of land, cost of construction, flooding, conservation easements and long-term vineyard leases, and a lack of rental accessory dwelling units. Land costs represent a significant component of the cost of housing development in St. Helena because the high price of vacant land. The cost of construction in St. Helena higher than the state average and further constrains development. Overall housing production costs for both single-family and multiple-family rental development indicate that a subsidy would probably be necessary for some moderate-income households, and all lower income households to own or rent new units in St. Helena.

- The governmental controls analyzed in this section were land use controls, codes and enforcements, on-and off-site improvements, fees and exactions, processing and permit procedures, and regulations affecting housing for persons with disabilities. The land use controls including zoning and current General Plan land use designations do not constrain residential development; however, some changes are necessary to streamline the design review process.

- The Growth Management System (GMS) does not appear to place an undue burden on market rate development, since there has never been a year when the demand for residential building permits has exceed the number of available permits. Furthermore, housing projects affordable to households at up to 120 percent of AMI are exempt from the GMS. Due to recent state laws, the GMS is not currently enforceable.

- The on- and off-site improvement standards related to water, sewer, parking, and other miscellaneous regulations impact housing development in a variety of different ways. Sewer capacity is sufficient to support additional development. Water capacity during a normal year is sufficient and is expected to remain sufficient through 2023, but there will always be water shortages in dry years. The City has demonstrated its commitment to providing water and sewer service to affordable housing developments, and has included a program committing the City to continue to do so throughout the planning period.

- Neither the building codes nor the building fees represent a governmental constraint to development. St. Helena adopted the 2019 California Building Codes Standards, and although they have made some

changes to the Code such as seismic control measures, these changes were necessary for safety and do not unduly affect housing production. The fee structure for both single-family and multiple-family development reflects the costs of the development to the City, and therefore does not present an unnecessary constraint on residential development.

- The City works diligently to process applications quickly and without unnecessary delay. Permitting and processing procedures and timelines for residential development, both single and multifamily, are not a constraint to development.

Non-governmental Constraints

Price of Land

According to Zillow.com, there were approximately eighteen vacant lots for sale in St. Helena in March 2022, though many are large and in undeveloped rural areas. Sales are reported between $229,000 and $17,500,000 for properties ranging in size from less than one acre to 280 acres. A public comment made during a community workshop indicated that larger vacant sites tend to be located near or beyond the urban limit.

Table 30 Price of Vacant Land, March 2022

Site	Acres	List Price	Price per Acre
10 Acres or Less	0.35	$525,000	$1,500,000
	0.74	$595,000	$804,054
	1.00	$375,000	$375,000
	1.00	$225,000	$225,000
	1.00	$975,000	$975,000
	1.08	$450,000	$416,667
	1.14	$5,000,000	$4,385,965
	1.58	$475,000	$300,633
	2.40	$1,000,000	$416,667
	5.01	$1,850,000	$369,261
	10.00	$2,695,000	$269,500
Total	25.30	$14,165,000	$559,881

Site	Acres	List Price	Price per Acre
More Than 10 Acres	15.90	$3,995,000	$251,258
	23.09	$2,950,000	$127,761
	32.00	$17,500,000	$546,875
	92.72	$229,000	$2,470
	110.63	$1,795,000	$16,225
	160.69	$549,500	$3,420
	280.00	$649,000	$2,318
Total	715.03	$27,667,500	$38,694

Source: Zillow.com, accessed March 28, 2022.

Construction Costs

Construction costs include both hard costs, such as labor and materials, and soft costs, including architectural and engineering services and development fees. Average residential construction costs in St. Helena begin at $300 to $700 per square foot, which is higher than statewide averages, which are currently ranging between $131 per square foot to $195 per square foot.[22] High-end, custom-built single-family homes, both locally and statewide, can cost more than $500 per square foot. Soft costs (including architectural and engineering fees, property taxes during construction, city and utility fees, and construction loan interest and fees) typically increase these costs by approximately 35 to 40 percent. Construction costs can be higher if lots require substantial site work due to steep slopes, unstable soils, waterways, and other environmental concerns.

Public comments made during Housing Element workshops indicated that construction costs are a major constraint to the production of affordable housing, and that 100 percent affordable projects are not profitable without public subsidies, grant funding, or other public investment.

Flooding

Napa Valley areas near the Napa River and along some of its tributaries are prone to flooding. Napa River flows are largely influenced by precipitation; peak flows generally occur in January and February. Some of the worst flooding in the immediate area of St. Helena has occurred in and around the Vineyard Valley Mobilehome Park, which is near the confluence of Sulphur Creek and the Napa River. Flood hazards also exist in the York Creek and Sulphur Creek Watersheds in St. Helena.

[22] *Local estimate provided by city staff communication with Joe McGrath in March 2022. Statewide estimate sourced from: ProMatcher Home Construction, California Home Construction Costs & Prices, provided at https://home-builders.promatcher.com/cost/california.aspx*

All new construction and substantial improvements in special flood hazard areas as defined by the Federal Emergency Management Agency are required to comply with the provisions of Municipal Code Chapter 15.52 "Flood Damage Prevention." The development standards are intended to meet, if not exceed, minimum National Flood Insurance Program (NFIP) criteria for requirements for floodplain management regulations. New development in these areas is required to assure that proposed development: 1) is designed or modified and anchored to prevent flotation, collapse and lateral movement of the structure; 3) uses construction materials and utility equipment that are resistant to flood damage; and 4) uses construction methods that minimize flood damage. In addition, projects must be elevated 18 inches above the base flood elevation.

Conservation Easements and Vineyard Leases

Agricultural land in St. Helena is valued for both a productive agricultural land and as open space that helps shape the character of St. Helena. Focus Group members and community workshop participants expressed, however, that conservation easements and long-term vineyard leases are a barrier housing production in the City. Sites included in the available sites inventory were screened for these constraints.

Lack of Rental Accessory Dwelling Units (ADUs)

While ADUs are often a less expensive housing option, Focus Group members and community workshop participants expressed that many ADUs in the City are not being rented, but are being used as additional square footage for the primary resident, a friend, a relative, or as a vacation rental. Programs H-Q, H-R, and H-S, work to encourage and incentivize development of accessory dwelling units.

Availability of Financing

A number of funding opportunities are currently available to support affordable housing development and the creation and preservation of homeownership opportunities. The Department of Housing and Community Developments lists active programs with current funding available to developers, non-profits, and local governments online. Statewide programs available for affordable housing development include Community Development and Block Grant (CDBG), Emergency Solutions Grants (ESG), HOME Investments Partnerships Programs (HOME), Housing for Healthy California (HHC), and the Multifamily Housing Program (MHP), among others. Programs available for homeowners or to assist in the creation or preservation of homeownership opportunities include CalHome, the Foreclosure Interventions Housing Preservation Program, and Homeownership Super NOFA. For a complete list, please see https://www.hcd.ca.gov/programs-active. Additionally, policies and programs under Goal 4: Assistance to Support Affordable Housing work to address non-governmental constraints by committing the City to seek additional funding opportunities to support affordable housing development, work to reduce fees for developers for affordable housing developers, and pursue mortgage credit certificates to assist prospective homeowners.

Governmental Constraints

Local government can directly influence housing production cost through land use controls, building codes, on and off-site improvement standards, fees and exactions, processing and permit procedures, regulations affecting housing for persons with disabilities, locally adopted ordinances, and with government codes and enforcement. This section discusses each of these topics and identifies the governmental controls that may adversely affect housing production.

Land-Use Controls

St. Helena has a variety of land use controls to maintain the standard of living, local environment, and safety of its residents. The two major instruments dictating land use control in the City are the Zoning Code and General Plan, which affect housing production because they determine the location, amount of land, development standards, and density of housing. These tools, as well as the City's agricultural preservation measures are discussed in this section.

Preservation of Agricultural Land

One major overarching theme and goal of the City's land use controls is to encourage in-fill development while preserving land for agriculture. The agricultural soils of St. Helena are identified as Prime Farmland by the California State Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. The wines produced from the grapes in this region achieve international recognition for their superb quality, sustaining an industry at the heart of the City and region's economy.

Roughly one-half of the 3,254 acres within the incorporated limits of the City are considered urbanized area. This portion of the St. Helena is defined by an Urban Limit Line (ULL) which denotes the area within which urban development is allowed. Cities use ULLs to establish where they intend to encourage and discourage land development through public-infrastructure investments, land-use regulations, land acquisitions, and other actions. Within the ULL, cities typically adopt land use policies that encourage urban development (i.e., in-fill development). Outside the ULL, cities set aside lands to be used for less urban land uses, such as preserving land for agriculture and open space. There are 1,779 acres of land outside of the ULL, but inside the incorporated limits of the City of St. Helena. Most of this land is farmed and planted for vineyards.

Zoning Code

Title 17 of the St. Helena Municipal Code outlines both the residential and nonresidential zoning designations. Table 31 provides a list of all of the residential zoning districts as well as information on the rights and requirements associated with each district. Residential uses are permitted, subject to design review, in the following zones: Twenty-Acre Agriculture (A-20), Winery (W), Woodland Watershed (WW), Agricultural Preserve (AP), Low Density Residential One Acre Minimum (LR-1A), Low Density Residential (LR), Medium Density Residential (MR), and High Density Residential (HR). Table 31 shows permitted residential uses by zoning district.

Table 31 Zoning Districts that Permit Residential Uses

Residential Use	Zoning District							
	A-20	W	WW	AP	LR-1A	LR	MR	HR
Agricultural Employee Housing	P	P	P	P	P	P	P	P
Dwelling, Accessory Dwelling Unit (ADU)	P	P	P	-	P	P	P	P
Dwelling, Duplex (new)	-	-	-	-	-	-	UP	P
Dwelling, Multiple-Family	-	-	-	-	-	-	-	P
Dwelling, Multiple-Family (key housing sites only)	-	-	-	-	-	-	P	P
Dwelling, Single-Family	P	P	P	P	P	P	P	P
Dwelling, Triplex (new)	-	-	-	-	-	-	UP	P
Intermediate Care Facility (seven or more persons)	-	-	-	-	UP	UP	UP	UP
Intermediate Care Facility (six or fewer persons)	-	-	-	-	P	P	P	P
Mobile/Manufactured Homes	-	-	-	-	P	P	P	P
Residential Care Facility (seven or more persons)	-	-	-	-	UP	UP	UP	UP
Residential Care Facility (six or fewer persons)	-	-	-	-	P	P	P	P
Single Room Occupancy	-	-	-	-	-	-	-	P
Supportive Housing	P	P	P	P	P	P	P	P
Transitional Housing	P	P	P	P	P	P	P	P
P = Permitted; UP = Use Permit Required; (-) = Not Permitted								

Source: City of St. Helena, 2022.
Note: For an expanded table with more uses, notes on conditions, and zones where residential uses are conditionally permitted, see Table 42.

In terms of units per acre, the lowest allowable density is in the AP district. The AP district permits, by right, one single-family dwelling per lot, agricultural employee housing (up to 36 beds or 12 units), supportive housing, and transitional housing. The A-20 and W districts allow one single-family dwelling and one second unit by right on 20 acres of land. With a Use Permit, these districts can accommodate more than one single-family dwelling, as well as farm labor housing above the initially permitted density. Both the LR and LR-1A districts permit by right single-family dwellings, mobile and manufactured homes, and intermediate and residential care facilities for six or fewer persons. In addition, both districts permit as a conditional use single-family dwellings at less than one unit per acre and intermediate and residential care facilities for seven or more persons.

The MR district allows the same uses as the LR district and also allows duplexes and triplexes with a Use Permit. Unlike the previously mentioned districts, the MR district allows multiple-family dwelling projects that are located on "key sites" subject to design review. The HR district, in addition to allowing the same residential uses as the LR and MR districts, permits multiple-family dwellings, apartments, and dwelling groups containing four units or less. With a Use Permit, structures with more than four units, multiple-family dwellings,

apartments, and dwelling groups are permitted. The HR district is the only district that permits single room occupancy units (SROs).

In addition to the residential districts described above, some overlay districts can affect the type and amount of housing that can be built, including the Planned Development, Rural-Residential, Specific Plan, Historic Preservation, and Mobile Home Park overlay district. An overlay district expands upon the regulations already set by the underlying zoning district. For example, the Planned Development Overlay District (PD) allows for a wider variety of development, including mixed-use development not otherwise allowed in the Zoning Code. The PD zone is often applied to large pieces of land and requires approval of a rezoning and a conditional use permit application.

Table 32 shows density and intensity ranges allowed in the Zoning Code for each zoning district in dwelling units per acre (du/ac), or Floor Area Ratio (FAR) for commercial districts. Table 33 shows development standards by zoning district. As shown, density is allowed up to 28 dwelling units per acre and development standards are minimal, required setbacks for residential development are between 10 and 30 feet, depending on the zone, and minimum unit sizes are not regulated in residential zones. Further, the HDR zone, the City's primary multifamily zone, allows three-story developments up to 35 feet in height. Finally, the City is in the process of creating a new Mixed-Use zone to increase residential capacity in previously commercial and professional office districts.

Development standards related to maximum lot coverage and height pose potential constraints to multifamily affordable housing development. Currently the City allows 45 percent lot coverage and a maximum height of 30 feet in the MR and HR zones. Due to the potential to constraint affordable housing development, the City has, in the proposed Draft Zoning Code and in Program H-N: Zoning to Facilitate Higher Density Housing included development standards and actions, respectively, that commit the City to increasing lot coverage to 55 percent and maximum height to 42' (three stories) in the HR zone and on multifamily sites in the MR zone. Please note that the MR zone is a single-family zone, but the zoning code has been updated to allow multifamily uses on housing opportunity sites identified in the 5th Cycle Housing Element Update. Additionally, the program commits the City to allowing minor modifications to these standards that can be approved by the Community Development Director without a public hearing. Minor modifications should include up to 10 percent modification to maximum lot coverage and up to five percent (or two feet, whichever is greater) modification in maximum height.

Table 32 Density/Intensity Standards by Zoning District

Residential Zoning District	Corresponding General Plan Land Use Designation(s)	Minimum Density of Land Use Designation	Maximum Density of Land Use Designation
A-20	Agriculture	Min. 5 acres/parcel	Max. 40 acres/parcel
W	Woodland and Watershed	Min. 5 acres/parcel	No maximum
WW	Woodland and Watershed	Min. 5 acres/parcel	No maximum
AP	Agriculture	Min. 5 acres/parcel	Max. 40 acres/parcel
LR-1A	Low Density Residential	1.0 du/ac	5.0 du/ac
LR	Low Density Residential	1.0 du/ac	5.0 du/ac
MR	Medium Density Residential	5.1 du/ac	16.0 du/ac
HR	Higher Density Residential	16.1 du/ac	28.0 du/ac
CB	Central Business	N/A	Max. FAR 2.0
SC	Service Commercial	N/A	Max. FAR 0.5
BPO	Business and Professional Office	N/A	Max. FAR 0.5
Mixed Use[1]	Mixed Use	12 du/ac	20 du/ac

1: The City has adopted a new mixed-use designation within the 2040 General Plan Update and has released a Draft Comprehensive Zoning Code Update that includes a new Mixed-Use zone. Because the sites inventory assumes rezoning land to the new Mixed-Use zoning district, mixed-use development standards are shown in this table based on the October 2022 Public Review Draft Zoning Code.
Source: City of St. Helena, 2022.

Table 33 Development Standards by Zone

Residential Zone	LR	LR-1A	MR	HR
Development Standards				
Maximum lot coverage	35%	35%	45%	45%
Maximum height of principal building	30 feet	30 feet	30 feet	30 feet (if 4 du or less) 35 feet (if 5 du or more)
Maximum height of accessory building	15 feet	15 feet	15 feet	15 feet
Maximum floor area ratio (FAR)	Dictated by Parcel Size See SHMC 17.32.070	Dictated by Parcel Size See SHMC 17.32.060	Dictated by Parcel Size See SHMC 17.40.070	Dictated by Parcel Size See SHMC 17.40.070
Maximum width	=< 60% of lot width, subject to further requirements in SHMC 17.32.060	=< 60% of lot width, subject to further requirements in SHMC 17.32.030	=< 60% of lot width, subject to further requirements in SHMC 17.32.030	N/A
Minimum Unit Size	N/A	N/A	N/A	N/A
Minimum standards for parcels except for flag lots and small lots				
Lot Area	7,000 sq feet	1 acre	7,000 sq ft	7,000 sq ft
Lot width	70 feet	70 feet	70 feet	70 feet
Lot frontage	70 feet	70 feet	70 feet	70 feet
Minimum standards for structures with a maximum height of twenty-five (25) feet or less				
Front setback	20 feet	20 feet	20 feet	20 feet
Side setback	20 feet	20 feet	20 feet	20 feet

Side yard	10 feet	10 feet	10 feet	10 feet
Rear yard	20 feet	20 feet	20 feet	20 feet
Minimum standards for structures with a maximum height greater than twenty-five (25) feet and thirty (30) feet or less				
Front setback	30 feet	30 feet	30 feet	N/A
Side setback	30 feet	30 feet	30 feet	
Side yard	15 feet	15 feet	15 feet	
Rear yard	30 feet	30 feet	30 feet	

Nonresidential Zones				
Non-Residential Zone	**CB**	**SC**	**BPO**	**Mixed Use[1]**
Development Standards				
Maximum lot coverage	10,000 sq feet. of floor	10,000 sq feet of floor area	N/A	Max. 15,000 sq feet per building
Maximum height of principal building	35 feet or 30 feet if abutting residential use	35 feet	30 feet	Pitched roof: 45 ft/3 stories; 30 ft/2 stories within 20 feet of a residential district. Flat roof: 40 ft/3 stories; 26 ft/2 stories within 20 feet of a residential district
Maximum height of accessory building	35 feet or 30 feet if abutting residential use	35 feet	N/A	16 feet
Maximum floor area ratio (FAR)	2.0	0.5 by General Plan designation	0.5 by General Plan designation	1.0, inclusive of residential uses
Maximum width	N/A	N/A	N/A	Min. 50% of lot width
Minimum Unit Size	200 sq feet	200 sq feet	N/A	N/A
Lot Area	5,000 sq feet	10,000 sq feet	7,000 sq ft	5,000 sq ft
Lot width	N/A	70 feet	N/A	45 feet
Lot frontage	N/A	70 feet	N/A	70 feet
Minimum Setbacks				
Front setback	0 feet, or 10 feet if abutting residential use	35 feet	20 feet	Nonresidential: Max 10 feet; Residential: No setback allowed north of Mitchell Dr.; 5-15 ft everywhere else
Side setback	0 feet, or 10 feet if abutting residential use	25 feet	10 feet	0 feet on street side; 10 ft. abutting a residential district
Side yard	0 feet, or 10 feet if abutting residential use	10 feet/floor	10 feet	N/A
Rear yard	0 feet, or 10 feet if abutting residential use	15 feet, or 20 feet if abutting residential use	15 feet	0 ft; 10 ft. abutting a residential district

** The standards contained in this table are "typical" and are for illustrative purposes only. More specific development regulations and exceptions may apply. See Chapter 17 (Zoning) of the Municipal Code for additional development standards and requirements.*
1: The City has adopted a new mixed-use designation within the 2040 General Plan Update and has released a Draft Comprehensive Zoning Code Update. Because the sites inventory assumes rezoning land to the new Mixed Use zoning district, mixed-use development standards are shown in this table based on the October 2022 Public Review Draft Zoning Code.
Source: St. Helena Municipal Code, Title 17; St. Helena Public Review Draft Zoning Code Update, October 2022.

Overlay Zones

The Zoning Code outlines standards for several overlay zones that allow residential uses. The following summarizes each of these overlay zones.

Historic Preservation Overlay Zone. The purpose of the HP overlay district regulations is to preserve the unique architectural character of those certain specific structures which have contributed to the city's historic development. No permits for remodeling or demolition shall be issued for properties within the HP district which would result in exterior changes to building facades, structures, or to passage ways providing inter-accessibility within a block, unless such change is approved by the planning commission. When it can be demonstrated to the satisfaction of the Planning Commission and City Council that preservation and/or restoration of designated properties cannot and is not economically viable, the City may grant certain incentives in the form of relaxation of certain provisions of this chapter only when it can be shown that such relaxation makes preservation or restoration economically feasible. The HP overlay zone does not impose additional development standards beyond those of the base zoning district.

Mobilehome Park Overlay (MHP) District. The purpose of the MHP mobilehome park overlay district is to provide, when combined with an underlying residential zoning district, a place which allows the establishment and operation of mobilehome parks. The city of St. Helena's MHP mobilehome park regulations are intended to complement and be subordinate to state law. The state law governing mobilehome parks is entitled the "Mobilehome Parks Act" and may be found in Division 13, Parts 2.1 and 2.3 of the California Health and Safety Code. Mobilehome park regulations are contained in the California Code of Regulations, Title 25, Division 1, Chapters 2 and 2.2. The city of St. Helena does not assume responsibility for the enforcement of the regulations contained therein and all mobilehome parks within the city remain subject to the jurisdiction of the California Housing and Community Development Department in its role as the enforcement agency for the above described State laws. Nothing contained in this chapter shall be construed to abrogate, void or minimize such other pertinent regulations and all pertinent state and city regulations concerning the development and operation of mobilehome parks shall be observed. Mobilehomes located within areas of special flood hazard are required to be in compliance with Chapter 15.52, Flood Damage Prevention. The MHP overlay district does not impose additional development standards beyond that of the base zoning district.

Planned Development Overlay (PD) District. It is the purpose of the PD planned development overlay district to encourage high quality, innovative and creative development in the city. The PD planned development overlay district is intended to provide for the consideration and approval of development plans

which serve public objectives more fully than development permitted under conventional zoning regulations. Planned development overlay districts are typically characterized by (in whole or in part): significant variations from the standards of the zoning ordinance, mixed land uses, a variety of housing types, the assembly of small parcels of land into a larger more effective unit, the preservation of open space, natural features or historical structures and structures with diverse building setbacks, lot sizes and building heights. The PD planned development overlay district may be combined with any existing zoning district provided both design and the proposed uses including density for residential land use designations can be found consistent with the policies of the General Plan. Development standards applicable to the zoning district which the planned development district is being combined shall be required unless modified in conjunction with approval of the planned development overlay district. The city shall address issues related to landscaping, parking, site design, ingress and egress, signage, lighting, relationship to adjoining properties and land uses, setbacks and yards and any other items toward achieving an integrated and compatible project within the city and environs.

Specific Plan Overlay (SP) District. The SP district is established to implement the policies of the general plan which call for the preparation and adoption of specific plans in certain areas of the community described in the general plan. In addition, the SP district is established to provide the city with the ability to require and/or to implement specific plans when the city council finds it necessary and appropriate. When applied to properties in advance of the adoption of a specific plan, the SP district serves to alert individuals to the requirement for a specific plan. When applied to properties after the adoption of a specific plan it serves to alert individuals to the policies and regulations of a specific plan. No new development will be approved within the specific plan areas designated in the general plan until a specific plan meeting the requirements of Section 65451 of the Government Code, has been adopted by the city. The city council may determine that a site development plan for a specific property may be prepared in-lieu of a specific plan for the entire specific plan area. The site development plan shall be prepared and adopted prior to approval of new development. The site development plan shall include an analysis of infrastructure improvements as determined during review of a pre-application pursuant to Section 17.84.030. Based on the pre-application review, the city council shall determine the scope of the proposed specific plan or site development plan. The proposed specific plan or site development plan and associated documents shall be prepared under the supervision of the city with all costs paid by the property owners unless the city determines that all or a portion of the costs will be paid by the city. The SP Overlay district does not impose additional development standards, however standards for any specific plan should be developed under the supervision of the City, as stated previously.

Rural Residential Overlay (RR) District. It is the purpose of the RR rural-residential overlay district to identify those parcels within the city which are not serviced by city water or sewer and which have the ability to subdivide into additional parcels. Minimum lot sizes which are larger than the minimum lot sizes established for the underlying zoning district are required for parcels which do not have city water or sewer services. The following regulations shall apply in all districts with which are combined RR district. The only uses permitted shall be those uses permitted in the district with which the RR district is combined; provided, however, where water is available from a private well, the land may not be subdivided into less than one acre or if water is available from a mutual or utility company the land may be subdivided into parcels of twenty thousand (20,000)

square feet or greater as determined by the health officer of the city; or if sanitation and public water are available the land may be subdivided into parcels not less than ten thousand (10,000) square feet. "Health officer of the city" as used in this section, is defined to mean the official or officials of the city charged with the duty of enforcing the health ordinances of the city and the official or officials of any other governmental agency with whom the city has contracted for the enforcement of such ordinances.

Please note, the Rural Residential Overlay (RR) District is being deleted through the Comprehensive Zoning Code Update currently (2023) underway and scheduled for adoption in fall 2023.

General Plan

St. Helena adopted the current General Plan in 2019. The General Plan has a planning horizon of 2040. The city of St. Helena consists of approximately 3,254 acres. Of that total, 19 percent are designated for residential uses, four percent for commercial uses, 2.5 percent for business/industrial uses, and 69 percent for open space and agriculture.[23] Not all the land within the City Limits are available for development; rather approximately 1,475 acres within the Urban Limit Line (ULL) are eligible for development.[24] Thirteen land use designations cover the land in St. Helena.

The ULL contains land use designations including Low, Medium, and High Density Residential, Central Business, Service Commercial, Industrial, Business and Professional Office, Parks and Recreation, Public/Quasi-Public, Open Space and Agriculture. Some land outside, yet contiguous to the ULL has a General Plan designation of Urban Reserve (UR) indicating that it should be considered first if land outside the ULL is needed for development. All lands with a UR land use designation are zoned A-20.

Residential Growth Management System

The Residential Growth Management System (GMS) limits the number of building permits available for residential growth each year.[25] The stated purpose of the system is "to regulate the residential growth of the City to approximately two percent per year, while providing for both market rate and affordable housing units."[26] The GMS previously instituted a cap of 2,800 units by 2010, which resulted in a restriction of nine permits being issued per year. Program H-B commits the city to removing the GMS from the Zoning Code, thus removing this governmental constraint and further encouraging the construction of housing to meet RHNA goals.

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[23] City of St. Helena General Plan Update 2040, Chapter Two Land Use and Growth Management. https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3505/final_plan_compiled.pdf January 27, 2022.

[24] City of St. Helena General Plan Update 2040, Chapter Two Land Use and Growth Management. https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3505/final_plan_compiled.pdf January 27, 2022.

[25] City of St. Helena Municipal Code. Chapter 17.152. http://www.codepublishing.com/CA/sthelena/. Accessed on January 27, 2022.

[26] City of St. Helena Municipal Code. Chapter 17.152. http://www.codepublishing.com/CA/sthelena/. Accessed on January 27, 2022.

Requests to Develop Below Allowable Density

During the previous housing element cycle (2014-2023) there were no requests to develop housing opportunity sites below allowable density.

Building Codes and Enforcement

For the purpose of establishing proper regulations for the administration of the various codes covered in the Building Code, the City has adopted Chapter 1 of the California Building Code, Chapter 1 of the Plumbing Code, Chapter 1 of the Mechanical Code, and Annex H of the Electrical Code, 2019 Edition, excepting additions, revisions and omissions listed in Section 15.08.020 of the Municipal Code. The major local amendments included the continuation of St. Helena's program for the seismic retrofit of unreinforced buildings and the requirement that all new construction install an approved automatic fire-suppression sprinkler system. Existing residential structures that undergo additions or repairs equal to at least 50 percent of the existing floor area, and units experiencing a change in occupancy to a more hazardous use, also require the installation of an approved sprinkler system.[31] Otherwise, Title 15 of the St. Helena Municipal Code closely adheres to the 2019 California Building Standards Code and places no greater constraints on housing development than any other jurisdiction in the State that follows this model code.

The City has the power to inspect and declare unsafe any structure or piece of equipment, be it existing or under-construction, that does not meet specific Municipal Code standards. These include, but are not limited to, structures with insufficient modes of egress; structures that are unsafe or that have been made structurally unsound due to fire, earthquake, or other natural disaster; buildings that are deemed a public nuisance; and buildings that have been constructed or maintained in violation of local or state law. Once a building has been declared unsafe, the building official may issue notice that the structure be repaired, vacated, or demolished within a reasonable amount of time and with the appropriate permits.[32]

The enforcement of building codes within the City of St. Helena is centered on the inspection of new construction and remodels or renovations requiring building permits. However, for existing structures, City Staff prioritizes code enforcement complaints according to the severity of the violation on the community and individuals. Situations that appear to pose a serious risk to health and safety are given top priority; others are pursued in the order in which they are received, as resources are available. In most cases for non-emergency complaints, a warning letter or courtesy notice is sent to the alleged violator to verify the status of the potential compliant and to obtain compliance. The purpose of this first step is to inform the alleged violator that there is a possible code violation on their property and to give them time to correct it. If the violation still exists after the correction date, the inspector will conduct a subsequent inspection and send a follow up notice with additional correction time. Staff provides detailed instructions on how a violation can be corrected and will

[31] *Municipal Code, 15.36.060 Fire protection systems.*
[32] *City of St. Helena. St. Helena Municipal Code, Title 15. http://www.codepublishing.com/CA/sthelena/. Accessed January 31, 2022.*

meet with the property owner as necessary to assist in getting the violation corrected. The City also contracts with the Napa Housing Authority who assists property owners and tenants with any issues that may arise.

On/Offsite Improvement Standards

The St. Helena Municipal Code lists requirements for new development related t, streets and roadways, including , street widths, sidewalks, curbs, and gutters, as well as water and sewer connections and parking requirements.

Street and Roadway Improvements

The City of St. Helena Standard Specifications for Public Improvements governs the requirements for public infrastructure improvements. Developers are completely responsible for the cost of these general improvements to the properties.

Residential street widths in St. Helena follow the specifications outlined in Table 34. The requirements for street widths in St. Helena do not serve as barriers to housing production as they are significantly less than the requirements of nearby jurisdictions which have much more housing stock available. The City of St. Helena Standard Specifications for Public Improvements allows for developers to construct subdivisions with narrower streets, thus allowing for more homes with less acreage reserved for rights-of-way.

Table 34 Residential Street Width Requirements

Type	St. Helena	Napa Yountville	American Canyon
Residential			
Single-Family Residence	16′	Standard: 56′ (both sides parking) Rural: 29′ With Parking: 48′	40′
2-10 units	20′		
11-60 units	25′		
Over 60 units	30′		
Non-residential			
One-way access drive	16′	60′ to 82′	Not Applicable
Two-way access drive	25′		

Source: Section 902, City of St. Helena Standard Specifications for Public Improvements, 2015.

Sidewalks

According to the City of St. Helena Standard Specifications for Public Improvements, Standard No. 315, the minimum standard sidewalk width is four feet in residential areas and 10 feet in business or commercial areas. This sidewalk standard is compliant with Americans with Disabilities Act (ADA) standards and are only what is necessary for the activities occurring in their respective areas. Curbs are required to be designed with a six-inch top, 12-inch gutter, and six-inch rise above the roadway surface. The sidewalk, curb, and gutter standards do not pose a constraint to housing development.

Landscaping

Landscaping is required for projects subject to design review and the Water Efficient Landscape Ordinance. All open space and common areas are required to be landscaped and landscaping plans must be approved through the design review process. Further, St. Helena requires compliance with California's Model Water Efficient Landscape Ordinance (MWELO), which focuses on several goals, including water conservation and environmental quality. Although the MWELO requirements add additional planning cost to projects, they are State mandated requirements.

Landscaping requirements work to ensure efficient water use and basic environmental quality, health, and safety and are not a constraint to development. However, subjecting landscaping plans to the design review process constrains the development of affordable housing. Through the current (2022) comprehensive zoning code update, the City is revising the code to provide a ministerial review process for projects meeting objective design standards, including standards addressing landscaping.

Street Signs

Street signs are not a required improvement to developments to be paid for by the developer. Street signs, and other signs, are subject to the requirements of Municipal Code Section 17.112.

Other

Other miscellaneous improvements required by the City of St. Helena can include curb, gutter and sidewalk treatments, fire hydrants, and street trees. When new development fronts a public street, the developers may be required to provide curb, gutter, and sidewalk treatments to the specifications supplied by the Public Works Director.[33] If the Fire Chief or Public Works Director decides that there is not sufficient supply of fire hydrants nearby, new development would cover the cost of additional hydrants as necessary.[34] Finally, if a new development fronts a planting strip, the owner must care for and maintain the trees and other vegetation in the strip.

Sewer

The City of St. Helena owns the Wastewater Treatment Plant, which provides secondary-level treatment for domestic and commercial wastewater within the City. The plant has a permitted average dry weather treatment capacity of 0.5 million gallons per day (mgd) and can treat up to 2.8 mgd during wet weather.[35] In 2016, the City initiated planning efforts to upgrade the existing Plant in order to meet stricter environmental requirements. Working with the Regional Water Resources Control Board, the City developed a strategy to

[33] *Municipal Code 12.08.090 Plans and specifications.*
[34] *Municipal Code 16.32.110 Fire protection.*
[35] *California Regional Water Quality Control Boar San Francisco Bay Region. Order No. R2-0210-0105, NPDES No. CA0038016. http://www.waterboards.ca.gov/rwqcb2/board_decisions/adopted_orders/2010/R2-2010-0105.pdf.*

meet the new requirements, and began construction of the needed improvements in 2022. Construction is expected to be completed by fall 2023. [36]

Per Chapter 727, Statutes of 2004 (SB 1087), sewer providers must grant priority for service allocations to proposed development that include housing units affordable to lower-income households. Local public and private wastewater service providers must adopt written policies and procedures that grant priority for service hook-ups to developments that help meet the community's share of the regional need for lower-income housing. In addition, the law prohibits wastewater service providers from denying, conditioning the approval, or reducing the amount of sewer service for an application for development that includes housing units affordable to lower-income households unless written findings are made as specified in Government Code Section 65589.7(c).

Water

The City has three sources of potable water: Bell Canyon Reservoir, water purchased from the City of Napa under a long-term water supply contract, and groundwater from City-owned and operated wells. Bell Canyon Reservoir is the City's primary source of potable water. Bell Canyon is an on-stream reservoir with a physical storage capacity of 2,384 acre-feet, although the maximum amount of water that is available annually to the City is 992 acre-feet (AF). The City also purchases significant water quantities from the City of Napa through a contract, expiring in 2035, which guarantees delivery of a minimum of 600 AF per year. Additionally, the City pumps groundwater from its two wells. The City seeks to limit groundwater withdrawals to 450 AF in normal years.

The City calculates a safe annual yield for its water system as "the quantity of water which can be reliable delivered on an annual basis through most rainfall years, including a dry year (rainfall at 22" to 25.9") without undue hardship on water customers through water shortage restrictions. The City defines "undue hardship" as three or more consecutive months of Phase II water restrictions or Phase III water restrictions. Based on water supplies available in 2020, the City estimates the safe annual yield of its water system is 992 AF.

In 2011, the City adopted a new Water Shortage Emergencies Ordinance. The ordinance establishes three water shortage emergency phases with increasing water use restrictions. Phase I water regulations are triggered when the supply/usage balance is in deficit, meaning that the five-year rolling average of total water usage exceeds the safe annual yield of the City's water system. Under Phase I regulations, water customers are prohibited from expanding or installing new water-using appliances, plumbing, or improvements, such as landscaping and pools, unless the installation will result in no increase in water use. Replacement fixtures must be water efficient. In addition, new water connections for new development may only be approved if the projected water demand for the project can be offset by a corresponding reduction in the existing water

[36] *City of St. Helena. Initial Study. WWTRP Phase I Upgrades Project. November 2020.*
https://www.cityofsthelena.org/sites/default/files/fileattachments/public_works/page/2831/st._helena_wwtrp_public_initial_study_compiled.pdf
Accessed January 28, 2022.

demand on the city water system. New development proposals may demonstrate that the project is water-neutral through a combination of on-site water conservation measures, off-site retrofitting or well water.

Phase II water shortage emergency regulations include all Phase I regulations plus mandatory conservation measures. Under Phase II, residential water users are limited to 65 gallons per person per day. An additional allocation of 2,500 gallons per month for single-family homes landscape irrigation is provided during the April through October billing cycle. Multiple-family or mobile home occupants are permitted up to 70 gallons per day per 1,000 square feet of landscaped area or for dedicated irrigation meters, a 60 percent limit of current reference evapotranspiration. There are strict penalties for non-compliance of these mandatory conservation measures. In addition, no new water connections are permitted during a Phase II water emergency. Phase III water shortage emergency regulations limit water use further to 60 gallons per person per day, and place additional limits on landscape irrigation.[37]

The City has adequate water supply to meet current demand, however the effects of climate change will likely reduce water supply from current sources. The City needs to obtain new water supplies and/or achieve more water savings in order to reliably meet future water demand. At the same time, the City recognizes that any new water supply, even if forthcoming, is likely to be expensive, potentially increasing the unit cost of potable water. The main emphasis within the General Plan (regarding water supply) is on conservation, seeking to reduce demand by all classes of users.

According to the City's Water Shortage Emergency Ordinance, if the City's water balance pursuant to the safe yield calculation is in deficit, then the City must comply with Phase I water restrictions. Most importantly, this requires that any new water demand, such as from a new residential project, must be completely offset by a reduction in current water demand, to the satisfaction of the Director of Public Works. Phases II and III involve the imposition of mandatory water restrictions on customers. If Phase II appears imminent, the City Council must appoint a Water Board which, if Phase II is implemented, will work with the Director of Public Works to ensure compliance by all sectors (residential, commercial, and industrial) with Phase II restrictions. Phase III restrictions are severe.

Per Chapter 727, Statutes of 2004 (SB 1087), water providers must grant priority for service allocations to proposed developments that include housing units affordable to lower-income households. Public and private water providers must adopt written policies and procedures that grant priority for service hook-ups to developments that help meet the community's share of the regional need for lower-income housing. In addition, the law prohibits water providers from denying, conditioning the approval, or reducing the amount of water service for an application for development that includes housing affordable to lower-income households unless written findings are made as specified in Government Code Section 65589.7(c). A city may deny, condition, or reduce water services to developments that include lower-income housing units if the city does not

[37] *City of St. Helena. Report to the City Council. June, 23 2020. https://sthelena.civicweb.net/document/41860/2020 Accessed January 28, 2022.*

have "sufficient water supply" as defined in Government Code Section 66473.7(a) (2) or is operating under a water shortage emergency as defined in Section 350 of the Water Code.

The 2040 General Plan contains Implementation Action PF1-J that commits the City to granting projects that include affordable housing units priority access to water resources over other new projects should the capacity of local water systems become inadequate to meet the full demand for new connections.

Parking

St. Helena is a rural jurisdiction with limited public transport options, making commuting by automobile a common practice among residents of all income groups. Some local employers, such as wineries located off of the State Highways, only have access through roadways without suitable sidewalks or bus service. Thus, for residential developments in St. Helena, it is necessary to have some adequate amount of parking to sustain regular life for residents of the rural town. Additionally, within neighborhoods, it is important to keep enough cars off the street due to some streets having little to no parking availability. For example, many streets in St. Helena's older neighborhoods only offer one-side parking and some roads on the edges of town have no paved side parking at all.

Residential parking requirements vary according to the number of dwelling units, as follows:

- One to two dwelling units: Minimum of two spaces per unit, with one of the spaces in a garage or carport.
- Three or more dwelling units (studio and one bedroom units): One covered space plus a half space per unit
- Three or more dwelling units (two or more bedroom units): One covered space plus one additional whole space per unit
- Rooming, boarding, or lodging house: Minimum of one space per room, and two spaces for the owner-occupied unit.
- Mobile home: Minimum of two spaces per unit plus centralized space for guest parking.[38]

Exceptions to these requirements are provided for housing subject to the affordable housing ordinance (see Locally Adopted Ordinances for more details). Some examples of parking minimum exceptions include projects built for senior citizens and deed-restricted affordable projects built with funding from the Federal or State government.[39] For all other uses not covered in the Municipal Code or State Density Bonus Law, the Planning Commission has the power to set the parking requirements based upon the general parking guidelines of the City.

The City of St. Helena's parking standards do not impose undue constraints to development of multifamily uses with two or more bedrooms. As shown in Table 35, when compared to other nearby jurisdictions, St. Helena's housing requirements are not only less restrictive, but much less complex. However, parking standards for

[38] *Municipal Code 17.124.030 Minimum on-site parking requirements*
[39] *Municipal Code 17.144 Affordable Housing*

multifamily uses with three or more studio or one-bedroom units require 1.5 parking spaces per unit. This requirement is a constraint to development of smaller unit multifamily uses. Program H-N commits the City to limiting parking requirements for these uses to one space per unit through the currently (2023) ongoing Comprehensive Zoning Code Update scheduled for adoption in fall 2023.

Table 35 Parking Requirements, St. Helena, Napa, Yountville

Type	St. Helena	City of Napa	Town of Yountville
1-2 dwelling units	2 spaces per unit with 1 in garage/carport	*Single-family:* 2 spaces per unit with 1 in garage + 1 for each bedroom in excess of 2 and guest parking	2 space, 1 covered and 1 screened; 4 for duplex with 1 covered and 1 screened
3+ dwelling units (studios and 1 bedroom units)	1 covered space + ½ space per unit	1.5 per unit (1-3 units) 1.4 per unit (4-49 units) 1.25 per unit (50+ units)	3 dwelling units – 4 spaces, 2 covered, 2 screened 4 dwelling units – 6 spaces, 3 covered, 3 screened Additional units require 1 additional covered and 1 additional screened space per 2 units
3+ dwelling units (2 or more bedroom units)	2 space per unit with 1 covered	Varies, from 1.75-2 spaces per unit plus 0.4 space for each bedroom in excess of 3	
Rooming, boarding, or lodging house	1 space per room and 2 for owner-occupied unit	1 space per sleeping room with ability for planning commission to override under certain circumstances	1.14 spaces per room
Mobile home	2 spaces per unit with centralized guest parking	*Not specified, however, using single family requirements:* 2 spaces per unit with 1 in garage + 1 for each bedroom in excess of 2 and guest parking	*Not specified, however, using single family requirements:* 2 space, 1 covered and 1 screened; 4 for duplex with 1 covered and 1 screened

Source: Chapter 17.124, City of St. Helena Municipal Code, 2015; Town of Yountville Municipal Code 17.116.020; City of Napa Municipal Code 17.54.040.

Parking requirements are additionally not a constraint given the size of the parcels identified in the Sites Inventory. For example, one site with large capacity identified in the sites inventory is Site 8, a 1.5 acre vacant lot located at 882 and 886 College Avenue. This site is projected to have a capacity of 39 units with 15 lower income and 15 moderate income units. If the complex were to have 15 two-bedroom units, 15 one-bedroom units, and 9 studios, it would need a total of 66 parking spaces with 39 of them being covered. The St. Helena Standard Specifications for Public Improvements, Standard Number 321A and 321B call for parking spaces that are 19 feet long by 9.5 feet wide, which equates to 180.5 square feet per parking space. Thus, for Site 8, there would be an allocation of 11,913 square feet of surface space allocated for parking, which accounts to approximately 18.23 percent of the site. This allocation does not pose an undue constraint on the project and provides sufficient parking for the projected residents of the project. Further, developers can design garages, overhangs, and other architectural features which can allow for greater building footprint and thus less land allocated to uncovered parking.

The City's parking minimums are also in line with State data. According to the Department of Motor Vehicles, there were 147,603 registered vehicles in Napa County in 2021, equating to approximately 1.06 vehicles per

person in Napa County. St. Helena's parking minimums, particularly figures regarding multifamily one-bedroom units, matches the data provided by the DMV.

To help promote the development of emergency homeless shelters, Assembly Bill 671 (2019) was passed which included a variety of measures to incentivize the construction of such facilities, including the requirement that jurisdictions can only require the number of spaces necessary for staff working in the shelter and no more than other uses in the same zones. According to Municipal Code Section 17.124, emergency homeless shelters are considered an unlisted use, which leaves it up to the planning commission to determine the parking requirements. Emergency homeless shelters are permitted in the Industrial and Service Commercial zoning districts, which only conditionally permit housing. Commercial and industrial parking requirements require one parking space per 300 square-feet of office area, one parking space per 650 square-feet of industrial uses, and one parking space per 1,000 square feet of warehouse space., respectively. Based on these standards, the City does not currently comply with State law. The City is committed through Program H-F to amend the Zoning Code to require only be the number of spaces necessary for staff working in the shelter and no more than other uses in the same zones..

Further, the City is also evaluating and revising, as necessary, parking requirements for multifamily uses as a part of the currently ongoing (2023) Comprehensive Zoning Code Update to identify and remove potential constraints to housing development. The Update is scheduled for adoption in fall 2023.

The City does not impose any on-site and off-site improvement standards beyond those necessary to achieve health and safety requirements. The City's on-and-off site improvements standards, including roadway improvements, water and sewer requirements, and parking standards do not constrain residential development in St. Helena.

Fees and Exactions

The City's building department fee schedule is designed to directly offset the costs incurred by the City when processing and reviewing development applications, and to inspect new construction. Fees are charged when a building permit is issued and are based on building plans and estimated construction costs.

Development impact fees are charged to new projects in order to offset costs for the construction, expansion, and maintenance of off-site improvements that either were built for the purposes of the new project or were existing improvements from which the new developments will benefit. In the case of St. Helena, impact fees are charged for public safety, civic facilities, water and wastewater services, drainage, traffic mitigation, and schools. In 2013, the City conducted a comprehensive study and update of all of its development impact fees. As a result, total impact fees for single-family houses decreased from $19.78 per square foot to $16.32 per square foot, a 17.5 percent reduction. Fees for multiple-family development increased from $13.78 per square foot to $21.37 per square foot, a 55 percent increase.

The single-family fee calculations shown in Table 36 are based on an example 2,300 square foot single family residence with three-bedrooms and two-bathrooms with a total construction cost estimate of approximately

$920,000 ($400 per square foot). The multifamily fee calculations shown in Table 36 are based on an example eight unit, three story 6,780 square foot multi-family development project.

Table 36 Planning and Development Fees

Fee Description	Single-Family	Multiple-Family
Planning and Application Fees		
Variance	$4,500	$4,500
Conditional Use Permit (CUP)	$5,200	$5,200
General Plan Amendment	$13,000 deposit plus staff time	$13,000 deposit plus staff time
Zone Change	$8,200 deposit plus staff time	$8,200 deposit plus staff time
Site Plan Review	$2,578	$2,578
Specific Plan	$25,000 deposit plus staff time	$25,000 deposit plus staff time
Specific Plan Amendment	$4,100	$4,100
Development Agreement	$13,500	$13,500
Building Inspection / Permit	$1,838	$1,838
Home Occupation Permit	$200 standard, $250 expanded	$200 standard, $250 expanded
Lot Subdivision	$6,300 minor; $35,000 major	$6,300 minor; $35,000 major
Lot Line Adjustment	$3,000	$3,000
Tentative Tract Map	$4,500	$4,500
Final Parcel Map	$2,100	$2,100
Design Review	<1,000 square feet: $2,600 >1,000 square feet: $3,700	$3,700
Environmental Fees		
Negative Declaration	$5,600 plus staff time	$5,600 plus staff time
Mitigated Negative Declaration (In-House)	$11,600 plus staff time	$11,600 plus staff time
Mitigated Negative Declaration (Contract)	$3,200 plus staff time	$3,200 plus staff time
Environmental Impact Report	$9,000 deposit plus staff time	$9,000 deposit plus staff time
Permit Fee	$433	$5,503
City Impact Fees		
Public Safety Fee ($1.04/sq ft)	$2,392	$7,051
Civic Facilities Fee ($1.95/sq ft)	$4,485	$13,221
Parks Fee ($7.16/sq ft)	$16,468	$82,580

Water System Fee ($3.05/sq ft)	$7,015	$16,747
Wastewater System Fee ($0.45/sq ft)	$1,035	$4,475
Drainage System Fee ($0.73/sq ft)	$1,679	$4,678
Transportation Fee ($1.94/sq ft)	$4,462	$16,001
Housing Fee (2.5% of construction cost)	$18,400	$27,933
Other District Fees		
School District Fee ($3.20/sq ft)	$6,831	$21,696

Source: City of St. Helena Planning Department, Mintier Harnish, 2022.

City impact fees are included in Table 36 above. Among these, the costliest fee is the Parks fee of $7.16 per square foot. These funds are used to develop and maintain City parks, a critical resource in the community. The City's wastewater impact fee ($0.45 per square foot), drainage system fee ($0.73 per square foot) and public safety fee ($1.04 per square foot) are particularly low. Further, the City's civic facilities and transportation fees are both under $2 per square foot. Importantly, City impact fees for multifamily listed in Table 36 are based on an eight-unit development, as explained previously, and have a lower per unit cost than City impact fees shown for a typical single-family use. These impact fees are based on the City's actual costs and are reevaluated and revised each year. The City's impact fees do not impose undue impacts to housing cost, supply, and feasibility, and are not a constraint to the development of housing.

Continuing with the example single-family and multi-family projects used in Table 36,Table 37 provides a breakdown of the cost-per-unit and estimated proportion of fee cost for the example project. These fees would be $70,830 and $21,525 per unit, respectively. This represents 7.7 percent of the single-family home project's construction cost and 12.3 percent of the multi-family home project's construction cost.

Table 37 Construction Cost Summary, Cost Per Unit and Cost Per Square-Foot

	Single-Family	Multiple-Family
Building Size (square feet)	2,300	6,780
Construction Cost (per square-foot)	$400	$206.49
Valuation	$920,000	$1,400,000
Total Estimated Fees Per Unit	$70,840	$21,525
Fees as % of Construction Cost	7.7%	12.3%

Source: City of St. Helena Planning Department; Mintier Harnish, 2022

The multiple-family development impact fees have increased to reflect the costs of the improvements necessary to serve multifamily residential development. Without the funds collected through the fees, the City could not

afford to make the necessary improvements in infrastructure, and thus the fees do not represent an undue governmental constraint to housing development. In addition, fee reductions and adjustments for affordable and other housing projects are permitted on a case-by-case basis, as approved by City Council under Section 3, Chapter 3.32 of the St. Helena Municipal Code.

In comparison to nearby jurisdictions, St. Helena's planning fees are similar in range, as shown on Table 38. For rezoning, St. Helena has some of the most expensive fees in the region, however for tentative tract or parcel maps, St. Helena has some of the lowest fees in the region. Overall, St. Helena does not have fees that result in an extremely significant cost difference between development projects situated in the city and those situated outside of the city in nearby jurisdictions.

Table 38 Planning Application Fees – Surrounding Jurisdictions, Single-Family and Multiple-Family

Jurisdiction	General Plan Amendment	Zone Change	Tentative Tract Map	Variance
St. Helena	$13,000 deposit plus staff time	$8,200 deposit plus staff time	$4,500	$4,500
City of Sonoma	$16,581	$981	$3,735 plus $395 per lot plus engineering time	$2,279
Yountville	$7,500 deposit plus staff time	$7,500	$5,000 plus staff time	$2,500
American Canyon	$8,312	$3,714	$8,129	$1,896
County of Napa	Established by resolution of the Board of Supervisors	N/A	$622.90 plus staff time	$6,100.90 plus staff time

Source: City of St. Helena Planning Department; Mintier Harnish, 2022

Given similar fee structures to nearby jurisdictions and the development impact fee study in 2013, St. Helena's fee structure does not pose an undue constraint on the production of housing.

Processing and Permit Procedures

St. Helena, as with other jurisdictions, has two primary types of processing and permit procedures: ministerial and discretionary.

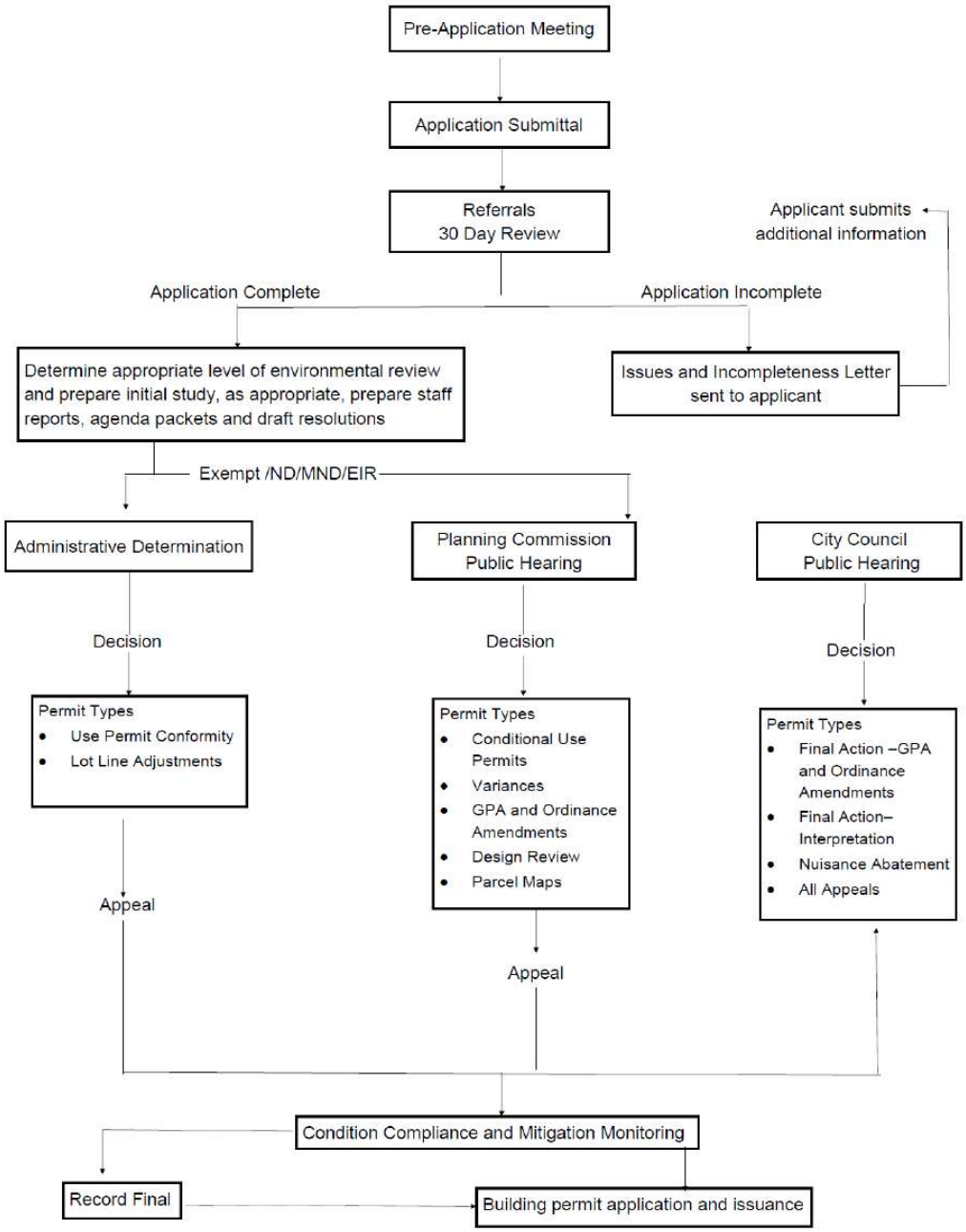
Ministerial Permit Procedures

Ministerial permits are any permits that do not require a decision-making body to provide additional input before its approval. Ministerial permits are handled internally within the planning department and are approved by the planning director. Ministerial permits cover all development that is permitted by right in zones without design review. An example of a common ministerial permit is one for the construction of an accessory dwelling unit on a lot with a preexisting single-family dwelling. Ministerial review typically takes 2-4 weeks. As shown in Table 41, there is very little delay among previous projects. Ministerial permit procedures do not pose a constraint to housing development.

Discretionary Permit Procedures

Discretionary permits are any permits requiring a decision-making body to exercise judgment prior to its approval. As shown in Figure 48, after successfully completing a use permit and passing State environmental review, discretionary permits can be handled administratively through the Planning Director, or through public review with the Planning Commission. If an appeal is made against the project, the project is sent to City Council for review.

Figure 48 Discretionary Permit Process Flowchart



Discretionary permits in St. Helena include general plan amendments, code amendments, specific plans, variances, development agreements, use permits, parcel and subdivision maps, design review, permit/map extensions, lot line adjustments, appeals, revocation of land use permits, and interpretations. As shown in Table 39 and Table 40, most discretionary permits take 3-6 months to process, with some permits taking less time (conditional use permit) or significantly more time (general plan amendment). For the purposes of residential development, conditional use permits (CUPs) and design review are the most pertinent to affecting the affordability, speed, and thus availability of affordable housing.

Table 39 Typical Processing Procedures by Project Type

	Single-Family Unit	Subdivision (20 units)	Multiple-Family (20 Units)
Required Permit Procedures	Ministerial Review - ADU	Tentative Map	Conditional Use Permit
	Design Review – new SFD	Final Map	
		Design Review	Design Review
		Initial Environmental Study	Initial Environmental Study
		Environmental Impact Report	Mitigated Negative Declaration
Estimated Total Processing Time	2 months	12 months	9 months

Source: City of St. Helena, Mintier Harnish, 2022.

Table 40 Timelines for Permit Procedures

Type of Approval or Permit	Typical Processing Time	Approval body
Ministerial Review	2 – 4 weeks	Planning Director
Conditional Use Permit	3 months	Planning Commission
Zone Change	6 months	Planning Commission & City Council
General Plan Amendment	6 months	Planning Commission & City Council
Design Review	3 months	Planning Commission
Subdivision Maps	6 months	Planning Commission & City Council
Parcel Maps	3 months	Planning Commission
Initial Environmental Study	6 months	Planning Commission & City Council, depending on project
Environmental Impact Report	10 months	Planning Commission & City Council

Source: City of St. Helena, Mintier Harnish, 2022.

Actual Project Times

Table 41 outlines a selection of seven projects with their entitlement approval dates and issuance of building permits. The time between entitlement and building permit issuance is negligible in St. Helena and is not a constraint to the city meeting its share of the regional housing need.

Table 41 Timelines for Permit Procedures

Description of Project	Entitlement Approval	Building Permit Issued	Time Elapsed
A single family dwelling with an accessory dwelling unit (601 Fulton)	3/19/2020	3/25/2020	4 days
An accessory dwelling unit (1856 Adams St, B)	3/12/2020	6/2/2020	3 months, 20 days
An accessory dwelling unit (1730 Stockton St, B)	1/6/2020	4/9/2020	3 months, 3 days
An accessory dwelling unit (940 Hunt Ave)	9/17/2020	9/17/2020	Same day
A single family dwelling (222 Pope St)	7/28/2020	7/28/2020	Same day
An accessory dwelling unit (1607 Kearney St, B)	6/1/2020	6/4/2020	3 days
An accessory dwelling unit (1135 Church St, B)	6/8/2020	6/23/2020	15 days

Source: City of St. Helena, Mintier Harnish, 2022.

Conditional Use Permit (CUP)

Conditional use permits (CUPs) are required when a land use is listed as a conditional use for a zoning district in the Zoning Code. Conditional Use Permits are subject to review by the Planning Commission, which considers compatibility with surrounding uses, public input, and staff feedback. Conditional use permits typically take three months to fully process, which is not considered a constraint to residential development. All projects that require a conditional use permit, except for the installation or modification of fences, require design review.

Design Review

Design Review is a process undertaken by the Planning Commission on certain projects to promote environmental quality, foster attractiveness, sustain functional utility, preserve neighborhood character, protect public investments, encourage a mix of uses, and raise the level of community expectations for the quality of the environment. [44] Chapter 17.164 of the St. Helena Municipal Code outlines the City's Design Review policies. The Municipal Code lists 14 specific design criteria considered by the Planning Commission:

1. Consistency and compatibility with applicable elements of the general plan;
2. Compatibility of design with the immediate environment of the site
3. Relationship of the design to the site;
4. Determination that the design is compatible in areas considered by the board as having a unified design or historical character;
5. Whether the design promotes harmonious transition in scale and character in areas between different designated land uses;
6. Compatibility with future construction both on and off the site;
7. Whether the architectural design of structures and their materials and colors are appropriate to the function of the project;

[44] *St. Helena Municipal Code. 17.165 Design Review.*

8. Whether the planning and siting of the various functions and buildings on the site create an internal sense of order and provide a desirable environment for occupants, visitors and the general community;
9. Whether the amount and arrangement of open space and landscaping are appropriate to the design and the function of the structures;
10. Whether access to the property and circulation systems are safe and convenient for pedestrians, cyclists and vehicles;
11. Whether natural features and vegetation are appropriately preserved and integrated with the project;
12. Whether the materials, textures, colors and details of construction are an appropriate expression of its design concept and function and whether they are compatible with the adjacent and neighboring structures and functions;
13. Whether the landscape design concept for the site, as shown by the relationship of plant masses, open space, scale, plant forms and foliage textures and colors, create a desirable and functional environment and whether the landscape concept depicts an appropriate unity with the various buildings on the site; and
14. Whether sustainability and climate protection are promoted through the use of green building practices such as appropriate site/architectural design, use of green building materials, energy efficient systems and water efficient landscape materials.[45]

The Planning Commission examines all proposed new structures and some exterior additions (e.g. additions on historical residential properties, addition of new residential floors) in relation to the above listed design criteria and arrives at one of three recommendations: approve, approve with minor modifications, or disapprove.

Projects that are subject to design review include:

- Any exterior modification to a commercial, multi-family, or designated historic building, including new construction
- The construction of a new single-family home
- Structures, buildings or site modifications requiring use permits in any district, excluding fences
- Additions to a single-family home which create a second or third floor, story or living space where one does not currently exist
- Any new structure prior to the issuance of any future building permits for structures on newly created parcels created on maps approved after January 1992
- Any new public facility, or modification thereof
- Demolition, except when required for emergency protection of public health, safety or welfare

[45] *St. Helena Municipal Code. 17.165 Design Review.*

The following projects are subject to administrative design review, which means that they are ministerially decided on by city planning staff as opposed to the Planning Commission:

- Any form of repair or maintenance where the work solely involves the replacement of materials in like kind and form or to any such work in areas not visible to the public from the public right-of-way or areas accessible to the public
- Accessory dwelling units, subject to requirements identified in SHMC 17.116.030
- Alteration, modification, or addition to an existing single-family home that is not eligible for design review
- Construction of an accessory structure in keeping with all development criteria of the zoning district in which the structure is proposed

Design review is required for practically all projects, including all primary residential structures. The City has not adopted a design review exemption for affordable housing development in the City. Therefore, design review is considered a significant constraint to affordable housing development in the City.

The complex and subjective nature of the design review process is a constraint housing production. Through the current comprehensive zoning code update, the City is working to codify objective design standards for single-family, small lot, and multifamily uses. Program H-F commits the City to amending the Municipal Code to provide objective design standards for residential development and a ministerial, by-right, process for approval of developments meeting all zoning and design standards.

Currently (2023) the MR zone does not allow for multifamily uses without a conditional use permit (CUP), with the exception of 5th Cycle Housing Element opportunity sites. Although the MR zone is primarily a single-family zone, the requirement for a CUP in this zone constrains the development of smaller multifamily uses. Program H-N commits the City to allowing duplexes and triplexes and a density range of 5.1 to 16 dwelling units per acre in the MR zone without a CUP.

Please note: the City implemented 5th Cycle Housing Element program HE1.D which committed the City to eliminating use permit requirement for multifamily projects on Housing Opportunity sites (Key Housing Sites) in the medium density residential zone. Section 17.40.020 was amended to permit the following:

> *N. Multiple-family dwellings, apartments, and dwelling groups at a density up to the maximum allowed by the medium density residential district shall be allowed as a permitted use on the following MR zoned parcels, which are identified as "Key Housing Sites" in Table 42 of the city's 2015-2023 housing element, and are identified as follows by street address and assessor's parcel number (APN): 567 Pope St. APN 009-070-002; 591 McCorkle Ave. APN 009-070-003; 1817 Spring St. APN 009-322-009; Sulphur Springs Ave. APN 009-362-015; Spring St. APN 009-441-023 and 009-552-002; 576 Pope St. APN 009-552-003; 1105 Pope St. APN 009-090-003. (Ord. 17-2 § 6 (part); Ord. 16-8 § 1; Ord. 15-2 § 7 (part): Ord. 12-2 § 6: Ord. 07-5 § 2 (part): Ord. 05-4 § 1 (part): Ord. 03-4 § 11: prior code § 27.51)*

Further, The City has received SB 2 and LEAP grants from the State of California to assist with encouraging and streamlining affordable housing development in the city. The City has applied these funds to the Comprehensive

Zoning Code Update currently underway. The Draft Update works to overcome constraints and encourage development by incorporating objective design standards for residential development and removing CUP requirements for duplexes and triplexes and densities of 5.1 to 16 du/ac in the MR zone, among other efforts.

Table 42 Housing Types Permitted by Base Zoning District

Zone Type	Agricultural			Residential				Commercial/Office			I	WW
Zoning District	A-20	W	AP	LR	LR-1A	MR	HR	CB	SC	BPO		
Design Review Required	No			Yes								
Single-family dwelling	P [1]	P [1,2]	P	P[4]	P	P[4]	P[4]	—	—	—	—	P
Residential units (in a mixed-use setting)	—	—	—	—	—	—	—	C[5]	C[5,7]	C[5]	C[8]	—
Residential Condominium or Townhouse	—	—	—	—	—	C	C	—	—	—	—	—
Duplex or triplex units	—	—	—	—	—	C	P	—	—	—	—	—
Multiple-family dwellings	—	—	—	—	—	P[6]	P	—	—	—	—	—
Mobile homes	—	—	—	P	P	P	P	—	—	—	—	—
Agricultural employee housing	—	—	P	P[3]	P[3]	P[3]	P[3]	—	—	—	—	P[3]
Supportive housing	—	—	P	P	P	P	P	C[5]	C[5,7]	C[5]	—	P
Transitional housing	—	—	P	P	P	P	P	C[5]	C[5,7]	C[5]	—	P
Single room occupancy housing	—	—	—	—	—	—	P	—	—	—	—	—
Intermediate care facility, 6 or fewer persons	—	—	—	P	P	P	P	—	—	—	—	—
Intermediate care facility, 7 or more persons	—	—	—	—	C	C	C	—	—	—	—	—
Residential facility, 6 or fewer persons	—	—	—	P	P	P	P	—	—	—	—	—
Residential facility, 7 or more persons	—	—	—	C	C	C	C	—	—	—	—	—
Emergency Shelter	—	—	—	—	—	—	—	—	P	—	P	—

P=Permitted C=Conditional —=Prohibited

[1]Permitted if the single-family dwelling(s) existed prior to October 1, 1993.

[2]Additional dwellings for occupancy by owners, caretakers and/or other employees, provided density does not exceed one dwelling unit per each five acres of the winery's contiguous property is a Conditional Use.

[3]Six or fewer persons only.

[4]New construction of single-family dwellings where the minimum density of 2 units or greater is a Conditional Use.

[5]Limited to upper floors only.

[6]Permitted only to parcels identified in the adopted Housing Element.

[7]Upper floors only in conjunction with a mixed-use project

[8]Subject to the restrictions outlined in SHMC 17.60.030, including a maximum 850 square feet floor area, one off-street parking space, and residency requirements.

Note: The Zoning Code text takes precedence over this table and there may be additional requirements or limits not noted on this table.

If the zone is not present in the table (PQP, PR, OS), it does not allow any residential uses by right or through any permitting processes.

Source: St. Helena Municipal Code, Title 17.

SB 330 Streamlining

On October 9, 2019, Governor Newsom signed into law SB 330, the Housing Crisis Act of 2019. The act amends existing state laws and creates new regulations around the production, preservation and planning of housing. The bill has been in effect since January 1, 2020 and sunsets on January 1, 2025. SB 330 will affect both project planning procedures and community planning outcomes.

The goal of SB 330 is to create certainty in the development of housing projects, speeding up the review of these projects, preserving affordable housing and preventing certain zoning actions that reduce the availability of housing. SB 330 does the following (not a comprehensive list):

- Creates a new vesting process for zoning and land use ordinances, policies, and standards in place at the time a preliminary application is submitted (with limitations);
- Requires that the historic status or designation of any site be determined at the time an application for a discretionary action is deemed complete;
- Prohibits imposing or enforcing non-objective design review standards established after January 1, 2020;
- Limits the number of public hearings to five for housing projects that meet all objective design standards; and
- Prohibits actions that reduce the total zoned capacity for housing (i.e., down-zoning).

A project that meets any of the following criteria per California Government Code Section 65589.5(h)(2)(B) is subject to the provisions of SB 330:

1. The project consists of residential units only;
2. The project is a mixed-use development consisting of residential and non-residential uses with at least two-thirds of the square footage of the project designated for residential use, including dwelling units and any uses accessory to the residential units; or
3. The project is transitional or supportive housing.

New Preliminary Application Form. SB 330 creates a new vesting process for discretionary housing projects during the five-year period of the bill. It achieves this through the creation of a new "preliminary application" process that establishes a new date for the purposes of locking projects into the ordinances, policies, and standards in effect when a preliminary application (including all required information) is submitted and deemed complete. This vesting does not apply to California Environmental Quality Act (CEQA) determinations, including historic resource determinations pursuant to CEQA.

Once a complete Preliminary Housing Development Application is submitted (along with other required applications if applicable), the zoning, design, subdivision, and fee requirements in effect as of that date will remain applicable to the project for the duration of the review and entitlement process, provided that all the following provisions are satisfied:

- Complete discretionary entitlement applications must be submitted and accepted by the Planning Department within 180 days of the Preliminary Housing Development Application being deemed complete;
- If the entitlement applications are deemed incomplete after filing, the application must submit all missing or incomplete items to the Planning Department within 90 days of being notified in writing by Planning Department staff;
- The project may not increase by more than 20 percent in the number of units or total square footage indicated in the Preliminary Housing Development Application, except as the project may be revised using the State Density Bonus; and
- The project must commence construction within 30 months of site permit issuance.

Note that the following modifications may be required even when a Preliminary Housing Development Application is on file:

- Development impact fees, application fees, capacity and connection fees, or other charges may be annually adjusted based on a published cost index;
- Requirements necessary to avoid an adverse impact to public health or safety, or to avoid or lessen an impact under CEQA may be applied; and
- Applicants may submit a new or amended Preliminary Housing Development Application at any time, in which case the requirements in effect at that time shall apply.

The City has created a preliminary SB 330 process and checklist to streamline the design and approval of by-right multi-family units within the community. Program H-F provides a by-right streamlined review process for affordable housing developments meeting state affordability thresholds, in compliance with SB 35 and SB 330.

Procedures for Selected Housing Types

The following section describes the processing and permit procedures for selected housing types that are typically used by lower income households. For more housing types, see the Zoning for a Variety of Housing Types section.

Multifamily Rental Housing

Multifamily rental housing is housing traditionally identified as any housing available for rent that has greater than one dwelling unit in a building. Some examples of multifamily rental housing include duplexes, triplexes, fourplexes, and apartment buildings. Multifamily rental housing is permitted entirely in the High Density Residential (HR) district only. Multifamily rental housing is permitted in the Medium Density Residential (MR) district only on parcels identified in the housing element. MR zoned parcels identified in the fifth cycle housing element are currently codified as being the MR zone parcels that allow multifamily housing. Currently, all multifamily rental housing projects, affordable and market rate, are subject to subjective design review.

Therefore, multifamily rental housing is constrained by the design requirements set forth in the Zoning Code. Program H-F is included to commit the City to adopting objective design standards to reduce barriers to multifamily rental housing and eliminate subjective design standards.

Mobile Homes

Mobile homes, or manufactured homes, are small, prefabricated homes which are often situated on rented portions of land in mobile home parks. Mobile homes can offer affordable pathways to home ownership and stable shelter for many low-income households. Mobile homes, as shown in Table 42 are permitted in all residential zoning districts in St. Helena. Mobile homes in St. Helena are subject to the following conditions in all residential zoning districts:

- To be occupied only as a single-family residential use,
- To be subject to all provisions of the zoning ordinance applicable to conventionally built dwellings,
- To be attached to a permanent foundation system in compliance with all applicable building regulations,
- To be covered with an exterior material customarily used on conventionally built dwellings extending to the top of the foundation,
- To have parapet walls or roofs which utilize shingles or other materials customarily used on conventionally built dwellings;

These requirements do not constitute a constraint to the development of mobile homes. However, mobile homes are subject to subjective design review, which poses a significant constraint to their development. Program H-F is included to commits the City to incorporate objective design standards for single-family, small lot, and multifamily developments, including mobile homes, that provide a ministerial design review process for projects that meet zoning and design standards.

Housing for Agricultural Employees

Housing for agricultural employees is permitted in the agricultural zone for up to 36 persons, thus complying with California Health and Safety Code Section 17026.1. Housing for agricultural employees is also permitted for up to six persons in all residential zones and in the WW zone. Housing for agricultural employees is subject to subjective design review, which poses a significant constraint to development. Program H-F commits the City to incorporate objective design standards for single-family, small lot, and multifamily developments, including farmworker housing, that provide a ministerial design review process for projects that meet zoning and design standards.

Supportive and Transitional Housing

Supportive and transitional housing is permitted in the AP zone, all residential zones, and the WW zone. Supportive and transitional housing is subject to subjective design review, which poses a significant constraint to development. Program H-F commits the City to incorporate objective design standards for single-family,

small lot, and multifamily developments, including transitional and support housing, that provide a ministerial design review process for projects that meet zoning and design standards.

Constraints to Housing for Persons with Disabilities

On January 1, 2002, SB 520 went into effect, requiring local jurisdictions to analyze potential governmental constraints to the development, improvement, and maintenance of housing for persons with disabilities as part of a jurisdictions housing element update. Under SB 520, housing elements must also include one of the following: 1) a program to remove constraints, or 2) provide reasonable accommodations for, "housing designed for occupancy by, or with supportive services for, persons with disabilities." A jurisdiction can fulfill this second clause in a variety of ways including establishing policies that facilitate the provision of housing that is physically accessible to people with mobility impairments, residential care facilities for individuals with Alzheimer's, housing for persons with AIDS/HIV, and transitional housing that serves homeless with disabilities.

Reasonable Accommodation

The City of St. Helena adopted a reasonable accommodation ordinance in 2015 that provides a procedure to request reasonable accommodation for persons with disabilities seeking equal access to housing under the federal Fair Housing Act and the California Fair Employment and Housing Act (the Acts) in the application of zoning laws and other land use regulations, policies, and procedures.

A request for reasonable accommodation may be made by any person with a disability, their representative or any entity, when the application of a zoning law or other land use regulation, policy or practice acts as a barrier to fair housing opportunities. A person with a disability is a person who has a physical or mental impairment that limits or substantially limits one or more major life activities, anyone who is regarded as having such impairment or anyone who has a record of such impairment. This chapter is intended to apply to those persons who are defined as disabled under the Acts.

A request for reasonable accommodation may include a modification or exception to the rules, standards and practices for the siting, development and use of housing or housing-related facilities that would eliminate regulatory barriers and provide a person with a disability equal opportunity to housing of their choice. Requests for reasonable accommodation shall be made in the manner prescribed in Section 17.200.030.

Requests for reasonable accommodation are submitted on an application form provided by the Planning Department, or in the form of a letter, to the Planning Director and should contain the following information:

1. The applicant's name, address, and telephone number.
2. Address of the property for which the request is being made.
3. The current actual use of the property.
4. The basis for the claim that the individual is considered disabled under the Acts.
5. The zoning code provision, regulation or policy that is the subject of the applicant's requested reasonable accommodation, and a narrative and graphic (where applicable) description of the specific accommodation requested.

6. Why the reasonable accommodation is necessary to make the specific property accessible to the individual.

Requests for reasonable accommodation shall be reviewed by the Planning Director if no discretionary permit approval is required other than the request for reasonable accommodation. Requests for reasonable accommodation submitted for concurrent review with another discretionary permit application shall be reviewed by the review authority reviewing the discretionary permit application. The Director shall make a written determination within forty-five (45) days and either grant, grant with modifications, or deny a request for reasonable accommodation in accordance with Section 17.200.060. The written decision to grant or deny a request for reasonable accommodation will be consistent with the Acts and shall be based on a consideration of the following factors:

1. Whether the housing which is the subject of the request will be used by an individual considered disabled under the Acts.
2. Whether the request for reasonable accommodation is necessary to make specific housing available to an individual with a disability under the Acts.
3. Whether the requested reasonable accommodation would impose an undue financial or administrative burden on the town.
4. Whether the requested reasonable accommodation would require a fundamental alteration in the nature of a town program or law, including but not limited to land use or zoning.
5. Whether the requested reasonable accommodation would adversely impact surrounding properties or uses.
6. Whether there are reasonable alternatives that would provide an equivalent level of benefit without requiring a modification or exception to the City's applicable rules, standards and practices.
7. Whether the accommodation would alter the significance of a historic structure.

In granting a request for reasonable accommodation, the Planning Director may impose any conditions of approval deemed reasonable and necessary to ensure that the reasonable accommodation would comply with the findings required by subsection A of this section, including but not limited to the following:

1. Inspection of the property periodically, as specified, to verify compliance with this chapter and any conditions of approval.
2. Removal of the improvements, where removal would not constitute an unreasonable financial burden, when the need for which the accommodation was granted no longer exists.
3. Time limits and/or expiration of the approval if the need for which the accommodation was granted no longer exists.
4. Recordation of a deed restriction requiring removal of the accommodating feature once the need for it no longer exists.
5. Measures to reduce the impact on surrounding uses.
6. Measures in consideration of the physical attributes of the property and structures.
7. Other conditions necessary to protect the public health, safety and welfare.

A determination by the Planning Director to grant or deny a request for reasonable accommodation may be appealed to the City Council in compliance with Section 17.08.180.

The City's required finding *"5. Whether the requested reasonable accommodation would adversely impact surrounding properties or uses"* poses a potential constraint to housing for residents with disabilities seeking equal access to housing under the federal Fair Housing Act and the California Fair Employment and Housing Act (the Acts). HCD indicates that, given its importance in addressing barriers to housing for persons with disabilities, reasonable accommodation should not impose discretionary findings similar to that of a Conditional Use Permit, such as impacts to surround uses. Program H-F commits the City to update the municipal code to remove this discretionary finding.

Zoning and Land Use

The City of St. Helena allows residential care facilities serving six or fewer persons as a permitted use in the LR-1A, LR, MR, and HR residential zones. For compliance with state law, the City must allow these uses in any zone allowing single-family uses, subject only to the conditions imposed upon residential uses in the same zone. The City currently allows single-family homes in the A-20, W, and WW zones. The City should revise the municipal code to allow residential care facilities of six or fewer in these zones.

Residential care facilities serving seven or more persons require the approval of a Conditional Use Permit. A use permit requirement in zones allowing multifamily uses is a constraint to the development of these uses. The City should revise the municipal code to allow residential care facilities of six or fewer in these zones.[46]

Program H-F commits the City to updating the municipal code to allow residential care facilities in all zones, subject only to the requirements imposed upon single-family uses; and facilities of seven or more in all zones, subject only to the same requirements as multifamily uses.[47]

The City's parking and loading requirements do not have specific provisions related to persons with disabilities, but there is a provision stating that "rest homes, convalescent hospitals, residential care and similar group care facilities" require only one space for each four beds, which is a reduced requirement compared to the two parking spaces required for typical "one-and two-family dwelling units."[48] Consequently, the reduced parking requirements for group care facilities decrease the parking requirements for some disabled persons, but parking requirements for residential development need to serve all disabled persons.

Permits and Processing

The City's permitting and processing procedures do not negatively affect the ability to design or retrofit homes that will be accessible for the disabled or constrain the siting of group homes. The City, however, applies the

[46] *City of St. Helena Municipal Code, Title 17.*
[47] *City of St. Helena Municipal Code, Title 17.*
[48] *City of St. Helena Municipal Code, Chapter 17.124: Parking and Loading Requirements*

same process required for other renovations to retrofitting homes for accessibility, and the City does not have a special process for such retrofits.

As discussed above, residential and intermediate care facilities with fewer than six persons are permitted in residential zones. Although care facilities with seven or more persons are permitted with a Conditional Use Permit in the residential zones, no additional permits are required. This is consistent with the City's requirements for other multifamily uses such as condominiums, townhomes, apartments, and dwelling groups containing more than four units, which also require a Conditional Use Permit. There are no additional requirements placed on residential or intermediate facilities.

Building Codes

In 2019, the City of St. Helena adopted the 2019 California Building Code with minor amendments. The changes made to this Code by the City, enumerated in the Governmental Constraints section of this document, do not unfairly treat residential and intermediate care homes differently than other residential uses. Nevertheless, no specific exemptions to the 2019 California Building Code exist for housing for disabled persons. The City of St. Helena does not have local universal design requirements but adopted a reasonable accommodate ordinance in 2015 which provides a reasonable accommodation procedure related to "a zoning law or other land use regulation, policy or practice acts as a barrier to fair housing opportunities", including building codes and the issuance of Building Permits.

Definition of Family

The Municipal Code currently (2022) defined "family" as:

"Family" means any of the following groups living together in the same dwelling unit as a single housekeeping unit:

1. Any number of persons related by blood, marriage or legal adoption;
2. A nuclear family identified by extended cohabitation;
3. A group not exceeding five persons whose interpersonal relationships relating to shared household expenses, duties and private lives are indistinguishable from groups listed in subsections 1 and 2 above.

The definition of family in a jurisdiction's municipal code can pose some challenges for persons with special needs who may have live-in caregivers, group home arrangements, or other arrangements not reflective of the typical nuclear family. Additionally, the definition used by a city can cause confusion or difficulty when applying to programs such as Community Development Block Grants, which use a more inclusive definition of a family unit.

In the previous element, Program 1.K was included to amend the zoning ordinance to define "family" as one or more persons living together as a single housekeeping unit in a dwelling unit, as required by State law. This change has not been made to the Zoning Code, however, all City actions are made in keeping with California

State law, as it has precedence over any in-consistent locally adopted land use definitions. The City is undergoing a comprehensive Zoning Code update, which will address the existing outdated adopted definition of "family." Further, Program H-Fis included in this Housing Element, committing the City to updating this definition specifically.

Spacing or Concentration Requirements

The City of St. Helena does not have any additional spacing or concentration requirements for housing for persons with disabilities. There are no spacing requirements for group homes, residential care facilities, transitional housing facilities, and supportive housing facilities.

In the Service Commercial (SC) and Central Business (CB) districts, supportive housing is permitted only on the upper floors, which is the same requirement imposed on all other residential developments in these zone.

Locally Adopted Ordinances

St. Helena has passed five development-related local ordinances to help ensure growth of quality housing and to create a balance between the need for affordable housing and the market demands of the tourism industry.

Bed and Breakfast Inns

Bed and breakfast inns, a common sight in many tourist-oriented towns like St. Helena, are regulated by a use permit process that requires certain findings to be made, including that:

A. The establishment of a bed and breakfast inn is consistent with the purpose of the general plan, including policies regarding the displacement of rental units in the housing stock.

B. The establishment of a bed and breakfast inn will not be detrimental to a building, structure or feature of significant aesthetic, cultural, architectural or engineering interest or value of a historical nature.

C. The establishment of a bed and breakfast inn is compatible with and will not be detrimental to the character of the neighborhood and surrounding land uses. [49]

Additionally, bed and breakfast inns are required to only use up to four bedrooms, a requirement that helps ensure that larger homes are still partially available for use as a permanent residential dwelling. Such affordances can be considered helpful to special needs groups, such as large households. Given these strict requirements, St. Helena's bed and breakfast inns ordinance does not pose additional constraints to housing and helps limit potential reduction of housing units in the case of a homeowner wishing to convert their residential property to a bed and breakfast.

Short-Term Rentals

Short term rentals are strictly regulated in the City of St. Helena to reduce the impact on the area's already scarce housing inventory. The City allows only twenty-five short-term rental permits at a time with a maximum

[49] *City of St. Helena. St. Helena Municipal Code, Title 17. http://www.codepublishing.com/CA/sthelena/. Accessed January 9, 2023.*

of four bedrooms in the household being used for short-term rentals. Additionally, the City restricts uses of the propety by guests and enforces additional regulations on sounds and general activities during the hours of 10 P.M. to 7 A.M. Given the strict measures in place, the short-term rentals ordinance doesn't pose additional constraints to housing. Instead, the ordinance incentivizes property owners to use their homes for other uses with less stringent requirements, which may include long-term rentals.

Time-Share Uses

Time-shares are strictly regulated in the City of St. Helena, are considered commercial uses, and are permitted only in commercial zoning districts. Any existing housing stock in the city is prohibited from being converted into a time-share. As such, the time-share ordinance is not a constraint to housing, but instead assists with ensuring residential land is being put to more productive, residential purposes that assist with alleviating the existing housing crisis.

Affordable Housing

The City's affordable housing ordinance is a codified ordinance that specifies how the City will provide density bonuses, concessions, and incentives for the construction of affordable housing projects that are designed for seniors, low-income, very low-income, and moderate-income (in the case of condonminiums) persons and families. The affordable housing ordinance also specifies how the City will grant priority for the provision of water and sewer services to affordable developments, a requirement stated in California Government Code Section 65589.7. The affordable housing ordinance also describes the process in which a person voluntarily donates land to the City for residential development use. The ordinance additionally allows for vehicular parking ratios to be beneath those required by the city, subject to Californai Government Code 65589.7 and a recorded covenant against the property.

The affordable housing ordinance does not pose any constraint to housing, but instead acts to formalize State mandated programs and laws designed to incentivize affordable housing.

Housing Trust Fund, Housing Impact Fee and Inclusionary/In-Lieu Fee Requirements

In September 2004, the City Council passed Ordinance 2004-7 adding Chapter 17.146 Housing Trust Fund, Housing Impact Fee, and Inclusionary/In-Lieu Fee Requirements to the St. Helena Municipal Code. The regulations are designed so that new non-residential developments and additions are required to pay a housing impact fee and new residential developments containing five units or more are required to include 20 percent of their units as affordable housing, and developments with less than five units pay an in-lieu fee. The fees collected from the nonresidential and residential development then go into a Housing Trust Fund. The use of Housing Trust Fund monies is directed exclusively to "increase and improve the supply of housing affordable to households of moderate, low and very low income" including costs such as land, construction, financing, and reimbursements to the City.[50] The monies are available for both ownership and rental projects and services.

[50] *St. Helena Municipal Code. 17.146.030*

These affordable housing requirements do add additional cost to market rate residential development in the process of creating additional affordable housing in St. Helena. To minimize the impact on the price of market rate housing, the Municipal Code allows developers to submit an "alternative equivalent proposal" and offers a series of concessions or incentives.[51] An "alternative equivalent proposal" enables developers to meet the affordable housing requirements through alternative means like dedicating vacant land as long as the proposed alternative aligns with the purpose of the Municipal Code and is approved by the City Council. Concessions and incentives that are automatically available to residential developers who construct inclusionary units include the opportunity to submit a preliminary development proposal, priority in the City application process, and fee deferment. In addition, the City Council can grant additional concessions and incentives including extra density bonuses, changes to City standards, and monetary assistance. The automatic and discretionary concessions and incentives help expedite the process of building affordable housing and therefore minimize the cost to developers.

[51] *St. Helena Municipal Code. 17.146.050*

9. Opportunities for Energy Conservation

Government Code Section 65583(a) (7) requires the "analysis of opportunities for energy conservation with respect to residential development." [55] This is important due to the key role played by energy efficiency in determining the relative affordability of housing. Lower rates of energy usage decrease utility costs for residents, making a housing unit more affordable. The discussion that follows outlines current State policies and development standards along with local City policies that promote energy conservation for new and existing development in the City of St. Helena.

Instituted by legislative action in 1978 to reduce overall energy consumption statewide, the California Building Energy Efficiency Standards set thresholds and guidelines for energy efficiency for both residential and nonresidential construction. The revised standards for 2022 went into effect August 11, 2021, under Title 24, Part 6, of the California Code of Regulations. Title 24 is otherwise known as the California Building Standards Code. The energy requirements of the new State code are significantly more stringent than the prior codes (heat pump requirements for single-family and multi-family homes and businesses; electricity-ready requirements for single-family homes; and new solar power requirements for high-rises, hotels/motels, tenant spaces, offices, stores, restaurants, schools, and civic spaces) and are intended to progress to 100 percent clean electricity and carbon neutrality by 2050 or earlier.

In addition to the Building Energy Efficiency Standards, Part 11 of Title 24 contains California's Green Building Standards Code (CALGreen). St. Helena adopted the revised standards in 2019, with amendments to require all new indoors plumbing fixtures to meet the 20 percent reduction in water use, a 20 percent reduction in cement use in foundations, and certified U.S. EPA Phase II certified wood-burning devices or pellet-fueled device. These amendments are not considered an impediment to housing development.

On a local level, the 2040 City of St. Helena General Plan Climate Change Element addresses energy conservation for residential development by including goals such as:

- reducing energy demand through improved building and design;
- reducing consumption and divert waste; and
- increasing community engagement and advocacy.

The City participates in an AB811 program that allows commercial and residential property owners to finance renewable energy, water efficiency, and energy efficiency improvements through a property tax assessment. Additionally, the City of St. Helena is currently implementing a program to reduce GHG emissions from City facilities and has an Active Transportation and Sustainability Committee and a Water Advisory Board that oversee its natural resources for energy conservation.

[55] *HCD Building Blocks for Effective Housing Elements, "Opportunities for Energy Conservation." Accessed September 24, 2008. http://www.hcd.ca.gov/hpd/housing_element/index.html.*

The City has included Programs H-RR through H-UU to educate, encourage, and fund pushes for energy conservation within the community. Through education provided by the City, residents, contractors, and property owners can learn about various ways to integrate energy conservation programs into St. Helena residential developments. The City also intends to stay up to date on State efficiency and building code standards to ensure new and rehabilitated housing developments provide future owners and tenants with long-term cost-savings and energy efficiency.[56] Additionally, to further encourage energy efficiency, the City also aims to explore the possibility of offering low-interest loans for energy conservation measures, in addition to continuing to participate in AB-811 programs to finance local efforts.

[56] *See St. Helena Municipal Code Chapter 15.18*

10. Zoning for a Variety of Housing Types

Key Findings

- St. Helena's Zoning Code allows for a variety of housing types in the City including multiple-family units, transitional and supportive housing, single-room occupancy units, manufactured and mobile homes, and accessory dwelling units. However, to comply with Section 65915 through 65918 of the California Government Code, St. Helena should amend the Zoning Code to reflect the new maximum density bonus provisions that were adopted by the State in 2020. Additionally, St. Helena must also amend the Zoning Code to allow for low barrier navigation centers, consistent with State law.

Multiple-Family Rental Housing

The St. Helena Zoning Code allows multiple-family dwellings subject to design review in the High Density Residential (HR) zoning district. In addition, the Medium Density Residential (MR) district permits the construction of attached duplex or triplex units with a Conditional Use Permit.[57] Multiple-family rental housing is subject to subjective design review, which poses a constraint to development. For more information regarding the design review process and development standards applied to multi-family housing, see the Governmental Constraints section.

Density Bonuses for Affordable Housing

Per California Government Code Sections 65915 through 65918, local governments are required to provide density bonus provisions to projects that comply with specific standards. Legislation approved in 2020 increased the maximum density bonus amounts for very-low-, low-, and moderate-income housing. The California Government Code describes how maximum densities shall be calculated for very low-, low-, and moderate-income housing in a tabular format. Additionally, local governments are also required to provide one or more incentives for qualifying projects and are required to accept an incentive proposed by a developer unless the incentive proposal is found to cause environmental harm, a health and safety issue, a cost reduction, a detriment to historical property, or otherwise contrary to law. Both density bonuses and incentives are granted based on the number of affordable units present in each project.

The City of St. Helena currently establishes density bonus provisions for affordable housing in Chapter 17.144 (Affordable Housing). The provisions in that Chapter do not reflect the new maximum density bonus tier framework that was adopted by the State in 2020. Because of this, the City is not currently in compliance and has included Program H-F to commit the City to amend the Zoning Code for compliance with California Government Code Sections 65915 through 65918. The City is currently (2023) undertaking a Comprehensive Zoning Code Update. Density bonus provisions in the Draft Zoning Code have been revised for compliance with State law. The Comprehensive Zoning Code Update is scheduled for adoption in fall 2023.

[57] *City of St. Helena. St. Helena Municipal Code, Title 17.*

Housing for Permanent and Seasonal Agricultural Employees

Sections 17021.5 and 17021.6 of the California Health and Safety Code establish specific requirements for the permitting of agricultural employee housing in a jurisdictions' zoning code. Specifically, Section 17021.5 mandates that "employee housing providing accommodations for six or fewer employees shall be deemed a single-family structure with a residential land use." [58] Furthermore, designated employee housing, as defined above, cannot be subject to Conditional Use Permit requirements, zoning variance, fees, taxes, or any other requirement other than those pertaining to a traditional single-family structure. Section 17021.6 pertains to larger employee housing facilities featuring a maximum of 36 beds in group quarters, or 12 single-family units. Under this legislation, such units are deemed an agricultural land use and cannot be subject to any restrictions, conditional use requirements, zoning variance, fees, taxes, or other requirements not imposed on other agricultural uses in the same zone.

The City is in compliance with Sections 17021.5 or 17021.6 of the California Health and Safety Code. The A-20, AP, and W zoning districts allow large employee housing facilities (12 units or 36 beds) by right. Whereas, the WW, LR-1A, LR, MR, and HR zoning districts allow agriculture employee housing for six or fewer persons subject to design review. Housing for permanent and seasonal agricultural employees is subject to subjective design review, which poses a significant constraint to development. Program H-F commits the City to amending the Zoning Code to replacing subjective design review with objective design standards and SB 330-compliant streamlined review. The City is currently (2023) undertaking a Comprehensive Zoning Code Update. The Draft Zoning Code incorporates objective development and design standards for residential development. These standards will apply to housing for permanent and seasonal agricultural employees. The Comprehensive Zoning Code Update is scheduled for adoption in fall 2023.

Zoning for Emergency Shelters, Transitional Housing, and Supportive Housing

AB-139 requires local government to identify a zone(s) where emergency shelters are allowed by-right without a conditional use or other discretionary permit. Local governments are authorized to impose only those development standards that apply to residential or commercial development within the same zone. However, a local government may impose specified objective standards, including standards for off-street parking based on demonstrated need, as specified. The intent of these regulations is to help streamline the development of varying housing types.

AB-139 requires the need for emergency shelter to be assessed based on the capacity necessary to accommodate the most recent homeless point-in-time count, the number of shelter beds available on a year-round and seasonal basis, the number of beds that go unused on an average monthly basis, and the percentage of those in emergency shelters that move to permanent housing. The bill also requires sufficient parking for employees and one space per two beds in the shelter. Under AB-139 and California Government Code Section 65651, local governments shall allow supportive and transitional housing as a by-right use in all districts where

[58] *California Government Health and Safety Code 17021.5 (b)*

single-family and multiple-family dwelling unit uses are allowed. Additionally, the State requires that these uses be subject only to those regulations that apply to other residential dwellings (i.e., single-family dwellings, multiple-family dwellings) of the same type in the same district.

The City is in compliance with State laws related to emergency shelters, supportive housing, and transitional housing. The Zoning Code allows both supportive and transitional housing by-right in all residential zoning districts, and allowed in non-residential and mixed use zones subject to the same requirements imposed upon residential uses. Emergency shelters are identified as a by-right use in the I and SC zoning districts. According to a Point in Time Count provided by the Chief of Police, there is one homeless person who resides in St. Helena. There are several parcels in these zones that can accommodate an emergency shelter, including APN 009-580-022-000 (I zoning district) and APN 009-194-005-000 (SC zoning district). These parcels are vacant, habitable, and in proximity to transportation and services. Combined, they total 1.48 acres and can provide capacity for 15 beds, by conservative assumption of 10 beds/acre. Emergency shelters, transitional housing, and supportive housing are subject to subjective design review, which poses a significant constraint to development. Program H-F commits the City to amending the Zoning Code to replacing subjective design review with objective design standards and SB 330-compliant streamlined review through the currently ongoing (2023) Comprehensive Zoning Code Update. The Draft Zoning Code (released October 2022) incorporated objective development and design standards for residential development. The Comprehensive Zoning Code Update is scheduled for adoption in fall 2023.

Residential Care Facilities

California Government Code Section 65583 requires that housing elements provide a program to "address and where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing for persons with disabilities. The program shall remove constraints to and provide reasonable accommodations for housing designed for, intended for occupancy by, or with supportive services for, persons with disabilities." In line with encouraging the development of housing for those with disabilities, the State requires that small, licensed residential care facilities (defined as facilities with six or fewer residents) be allowed "by right" in all residential zones. Additionally, the State, through HCD, requires that cities consider constraints to reasonable accommodation for large, licensed residential care facilities (defined as facilities with seven or more residents).[59]

The City of St. Helena allows residential care facilities serving six or fewer persons as by-right uses in the LR-1A, LR, MR, and HR residential zones. For compliance with state law, the City must allow these uses in any zone allowing single-family uses, subject only to the conditions imposed upon residential uses in the same zone. The City currently allows single-family homes in the A-20, W, and WW zones. The City should revise the municipal code to allow residential care facilities of six or fewer in these zones. Just like all other residential uses, residential care facilities are subject to design review, which poses a significant constraint to development. Program H-F is included to commit the City to amending the Zoning Code to replacing subjective design review

[59] *HCD Building Blocks for Effective Housing Elements, "Constraints for People with Disabilities." Accessed May 19, 2022. https://www.hcd.ca.gov/community-development/building-blocks/constraints/constraints-for-people-with-disabilities.shtml*

with objective design standards and SB330-compliant streamlined review through the currently ongoing (2023) Comprehensive Zoning Code Update. The Draft Zoning Code (released October 2022) incorporated objective development and design standards for residential development. The Comprehensive Zoning Code Update is scheduled for adoption in fall 2023.

Residential care facilities serving seven or more persons require the approval of a Conditional Use Permit. A use permit requirement in zones allowing multifamily uses is a constraint to the development of these uses. The City should revise the municipal code to allow residential care facilities of six or fewer in these zones.[60]

Program H-F commits the City to updating the municipal code to allow residential care facilities in all zones, subject only to the requirements imposed upon single-family uses and facilities of seven or more in all zones, subject only to the same requirements as multifamily uses.

Low Barrier Navigation Centers

California Government Code Section 65660 identifies low barrier navigation centers are facilities that focus on moving people into permanent housing and connecting temporary residents with opportunities for income, public benefits, health services, shelter, and housing. Similar to displaced persons shelters, these facilities are intended to accommodate people with disabilities, pets and their owners, partners (if not a gender-specific site), the storage of possessions, and survivors of domestic violence. Specifically, the State mandates that low barrier navigation centers have services "to meet the diverse needs of (the) population." As of 2018, low barrier navigation centers are allowed, subject to design review, wherever multiple-family dwellings and mixed-use development are allowed. In addition, local governments may not impose parking requirements onto low barrier navigation centers.

The City is not currently in compliance and has included Program H-F to commit the City to amend the Zoning Code for compliance with California Government Code Section 65660. In updating the Code the City shall list low barrier navigation facilities as allowed by-right wherever multiple-unit dwellings and mixed-use development are allowed.

Single Room Occupancy (SRO)

Single-room occupancy residential units are a traditional form of affordable housing for very low- and low-income individuals. These units consist of a single room, often between 80 and 250 square feet in size, with or without cooking and sanitary facilities, that is rented out, often on a daily, weekly, or monthly basis. The St. Helena Municipal Code currently permits single-room occupancy type units in the form of Lodging Houses serving up to two paying occupants in an owner-occupied dwelling, as an accessory use in the LR and MR zoning districts. The HR zoning district currently allows single room occupancy units, subject to design review. As defined under Chapter 17.04 of the Municipal Code, lodging houses are buildings other than hotels, motels or bed and breakfast inns, where individuals can pay a rent in exchange for accommodations, including room and board, or board alone. Lodging houses serving more than two and up to five occupants require a use

[60] *City of St. Helena Municipal Code, Title 17.*

permit. Accessory structures featuring cooking and sanitation facilities are required to meet design and building standards like those of standard single-family and second units. Units without such facilities are subject to significantly fewer requirements and are more likely to address very low- and low-income housing needs.[61]

Factory Built Housing and Mobile Homes

Government Code Section 65852.3(a) requires that manufactured and mobile homes, including the lots on which they are installed, meeting certain standards of construction and be subject to the same development standards that apply to conventional, stick built, single-family homes.[62] In accordance with this legislation, the St. Helena Municipal Code, Title 17, defines a single-family dwelling to include a "mobilehome constructed to meet 1976 HUD standards, when placed on a permanent foundation, which is designed or used exclusively as a residence, including only one dwelling unit." [63] Mobile units meeting the above definition are permitted under single-family site development standards in all zones that allow single-family housing units.

In addition, the Low Density Residential (LR), Low Density Residential One Acre Minimum (LR-1A), Medium Density Residential (MR) and High Density Residential (HR) districts specifically permit as an allowed use, permanent mobile homes constructed in accordance with the 1974 safety standards and installed on a permanent foundation. Chapter 17.100 of the Municipal Code sets forth requirements for the Mobilehome Park Overlay (MHP) zoning district that applies the State Mobilehome Parks Act to the establishment and operation of mobilehome parks within the boundaries of the City of St. Helena.[64] Under these provisions of the Municipal Code, St. Helena fully adheres to the State standards regarding manufactured and mobile homes, and mobile home parks. Factory built housing and mobile homes are subject to subjective design review, which poses a significant constraint to development. Program H-F is included to commit the City to amending the Zoning Code to replacing subjective design review with objective design standards and SB 330-compliant streamlined review through the currently ongoing (2023) Comprehensive Zoning Code Update, scheduled for adoption in fall 2023. The Draft Zoning Code (released October 2022) incorporated objective development and design standards for residential development in compliance with State law.

Accessory Dwelling Units

Accessory dwelling units (ADUs) are defined as attached or detached dwelling units that provide independent living facilities on the same parcel as a legal single-unit or multiple-family unit dwelling, and which include permanent provisions for living, sleeping, eating, cooking, and sanitation. Due to the lower cost of construction and reduced environmental impact, the State has enacted many laws aimed at incentivizing the development of ADUs to help combat the worsening housing crisis. The State requires local governments to treat all ADUs that comply with specific standards as ministerial approvals. Local governments reserve the exclusive right to impose

[61] *City of St. Helena. St. Helena Municipal Code, Title 17.*
[62] *GCS 65852.3(a) standards include the constructed or purchased after October 1976, certified under the National Manufactured Housing Construction and Safety Standards Act of 1974, and installed on a foundation system pursuant to Section 18551 of the Health and Safety Code.*
[63] *City of St. Helena. St. Helena Municipal Code, Title 17.*
[64] *City of St. Helena. St. Helena Municipal Code, Title 17.*

specific design and development standards, which include, but are not limited to setbacks, minimum and maximum parcel size, and maximum height. Second units are exempt from the GMS in Municipal Code Section 17.152.040.

On January 10, 2023, the City adopted a new ADU Ordinance for compliance with California Government Code Sections 65852.2 and 65852.22. The City now permits ADUs or JADUs on any lot that is zoned to allow single-family dwelling residential use or multifamily dwelling residential use (including all residential, mixed-use, and agriculturally zoned parcels). The updated Ordinance also addressed compliance issues related to the definition of a cooking facility, definition of an efficiency kitchen, allowing both an ADU and JADU for conversions on a lot with an existing or proposed single-family dwelling, separate conveyance of an ADU or JADU, and restricting bedroom count, to meet the requirements of State law.

The City is currently undertaking a Comprehensive Zoning Code Update that will address any remaining compliance issues that HCD may find in their review of the newly Adopted ADU Ordinance. Program H-F in this Housing Element commits the City to revising the code for additional compliance with State law by 2026, though the City expects to adopt the Zoning Code Update in summer/fall 2023.

11. Housing Resources

Future Housing Need

State Housing Element law requires that a local jurisdiction accommodate a share of the region's projected housing needs for the planning period, called the Regional Housing Needs Allocation (RHNA). Compliance with this requirement is measured by the City's ability to provide adequate land with adequate density and appropriate development standards to accommodate the RHNA. The Association of Bay Area Governments (ABAG), as the regional planning agency, is responsible for allocating the RHNA to individual jurisdictions within the region.

For the sixth Housing Element cycle, the City of St. Helena has been allocated a RHNA of 256 units, divided into four income levels as follows:

- Very Low Income: 104 units (41 percent)[65]
- Low Income: 59 units (23 percent)
- Moderate Income: 26 units (10 percent)
- Above Moderate Income: 67 units (26 percent)

The City must ensure the availability of residential sites at adequate densities and appropriate development standards to accommodate these units by income category.

Credits Towards RHNA

Projects with housing units approved or permitted that would not be occupied before the start of the planning period can be credited towards meeting the City's RHNA. These units can count towards the RHNA based on affordability and unit count provided it can be demonstrated that the units can be built within the planning period of February 2023 through February 2031. Affordability (income category) is based on the actual or projected sale prices, rent levels, or other mechanisms establishing affordability of the units within the project. In addition, the City can project the number of Accessory Dwelling Units (ADUs) that may be built between 2023 and 2031, based on trends of ADU permitting during the last three years.

Pending or Approved/Entitled Projects

Currently there is one single-family residence and four moderate-income units, not to exceed 120 percent of the AMI, that are approved and undergoing building permit processing. In addition, there are 87 units that are pending planning/entitlement approval under the Hunter Subdivision project. While the Hunter Subdivision

[65] *The City has a RHNA allocation of 104 very low income units (inclusive of extremely low income units). Pursuant to State law (AB 2634), the City must project the number of extremely low income housing needs based on Census income distribution or assume 50 percent of the very low income units as extremely low. Therefore, the City generally estimates 52 extremely low and 52 very low income units.*

project is proposing approximately 25 affordable units, because the affordable agreements are not in place at the time of Housing Element, all unit credits were assumed to be above moderate.

On February 7, 2023, the Planning Commission approved a resolution recommending that the City Council approve the Hunter Subdivision project. The Project was presented to and discussed by the City Council at a duly noticed public hearing on May 1, 2023. A second public hearing for the project is scheduled for June 2023 where City Council action on the proposed project is expected to occur. If approved by the City Council, the applicant will need to record the tentative tract map with Napa County Recorders Office which is expected in the fall of 2023 and then submit for final map approval by the City Council in late 2023 to early 2024. The project may then undergo Design Review which could be completed within 12 months of final map approval; with the issuance of building permits expected in 2025. As referenced in Chapter 8, *Non-Governmental and Governmental Constraints*, recent trends show building permits were issued within four months of entitlement approval for recent housing unit developments, with many projects receiving building permits within a week of entitlement approval. Program H-A further ensures the City is committed to supporting the Hunter Subdivision project through completion and finding alternative solutions if the project is not meeting timelines for the 6th Cycle. As an alternate strategy should there be delays with the Hunter Subdivision beyond control of the City, such as developer financing challenges, the City has also included surplus capacity of 116 units in the above moderate-income category to ensure capacity to meet the RHNA is sustained throughout the planning period. Table 43 details the pending and entitled projects with housing units.

Table 43 Pending and Entitled Projects

Project Number	Address	APN	Zoning	Project Description	Net Units
PL20-046	777 Pratt Ave.	009-030-060	Twenty-acre Agriculture District (A-20)	Construction of a single-family residence	1 above moderate-income
PL20-015	963 Pope St.	009-090-012/013	Medium Density Residential	Construction of four (4) new deed restricted affordable housing units on a site with one (1) existing deed restricted unit.	1 moderate and 4 lower-income
#2010-40	Terminus of Adams Street	009-030-057	Medium Density Residential	Hunter Subdivision Tentative Map to subdivide the 16.9-acre parcel into 51 single-family lots and a 3.4-acre multi-family parcel. The applicant intends to construct 51 single-family residences, 11 ADUs, and 25 multi-family units.	87 above moderate-income*

**The project is subject to Inclusionary Housing requirements with 20% affordable housing.*

Projected Accessory Dwelling Units

Pursuant to Government Code Section 65583.1, the City can satisfy its regional housing need using ADU and junior accessory dwelling unit (JADU) trends and existing resources and incentives that promote their development. Using 2018-2021 data on ADUs/JADUs, the City has issued permits for approximately 9 ADUs on average. Extending this trend over the next 8 years, the City can assume approximately 72 ADU units will be permitted over the next planning period. Feedback from public outreach and research on ADU rental prices indicated that ADUs are typically rented at market rate and should be considered above moderate.

Remaining RHNA

Accounting for the entitled, approved and pending projects, as well as projected ADUs, the City has a remaining RHNA of approximately 184 units, including 159 lower- and 25 moderate-income units. Existing pending and approved projects and ADU trends currently meet the City's above moderate RHNA requirement. Table 44 details the existing progress towards the 6th cycle RHNA and the remaining RHNA that the City must demonstrate the availability of sites with appropriate zoning and development standards.

Table 44 Progress Towards RHNA

Income/ Affordability Category	RHNA Allocation	Pending or Approved	Estimated ADUs	Remaining RHNA
Lower	163	4	0	159
Moderate	26	1	0	25
Above Moderate	67	88	72	0
Total	256	92	72	184

Residential Site Inventory

Following the analysis of RHNA credits, specific sites throughout the city were considered for potential for housing development. Site selection for the residential site inventory started with City owned sites where residential development is in line with short-term City goals, then vacant and nonvacant sites zoned for residential use, and lastly sites that could be rezoned to accommodate residential development or residential development at a higher density. Several constraints were considered for each site, including environmental concerns, utility or infrastructure access, feasibility of redevelopment during the next planning period, and realistic capacity assumptions. Sites identified for lower income housing must meet certain density and site requirements, including a minimum density of 20 units per acre, parcel size between 0.5 and 10 acres, and access to high performing schools, jobs, amenities, health care facilities, and grocery stores. Zoning designations with allowable density appropriate for lower income housing capacity include Mixed Use (12-20 du/ac) and High Density Residential (16-26 du/ac).

City-Owned Sites

A review of City-owned properties for sites that are feasible for housing and reflect City priorities was conducted by the City Council in 2021. There are three City-owned properties (1480 Main Street, 1572 Railroad Avenue, and Adams Street/Library Lane) where near-term affordable housing development is in line with community and City priorities for these sites. In 2015, Vernazza Wolfe Associates, Inc conducted a *Feasibility Analysis and Comparison of Sites for New Affordable Housing Development* which looked at site feasibility and capacity for each of the three City-owned sites. The study evaluated potential risks and time to develop each site and identified the number of units, cost per unit, and funding gaps associated with each site. The analysis determined the three City-owned sites included in the site inventory are suitable for development of housing with 100 percent of units dedicated to lower-income housing. The capacity analysis factored in the size of the site, buildable footprints, maximum allowable floor area ratio and height, a ground-floor commercial

assumption, and required open and support services spaces. The inventory incorporated the 2015 site feasibility and capacity analysis and revised certain assumptions as needed based on land use changes and new density bonus law. The City is interested in redeveloping these sites and intends to conduct studies to determine the most efficient use of these sites for housing and proceed with the findings for housing development by 2025, consistent with Program H-L. In 2022, the City hired an appraiser to get the most current real estate valuation of all city surplus sites. The City is engaging the services of a consultant in spring 2023 to help begin the surplus land act process.

Site 1: 1480 Main Street (APN 009-211-016)



Table 45 Site 1 Summary

Current Use	Fire Stations and Vacant City Hall Structures
Parcel Size	1.66 acres (0.9 acres available for redevelopment)
Existing General Plan Land Use	Central Business and Public/Quasi-Public
Existing Zoning	Public/Quasi-Public
Proposed Land Use and Zoning	Mixed-Use
Allowed Density	12 to 20 units/acre
Site Capacity	22 units
Assumed Capacity and Income Category	6 Lower Income units

Site 1 is a 1.66-acre property owned by the City of St. Helena located at 1480 Main Street. City goals for the site include redevelopment of the portion of the site fronting Main Street with a visitor-serving commercial uses as a primary use and housing as a secondary use. The site is currently developed with the St. Helena Fire Department on the northern portion of the site and a vacant one-story building on the southwestern portion of the site. Only the vacant components of the site are proposed for redevelopment. A General Plan Amendment and Rezone change is proposed to change the land use and zoning designation from Central Business & Public/Quasi-Public to Mixed-Use. While the Mixed-Use Zone could potentially support 100 percent commercial development, the City has identified this site as suitable for mixed use housing development with intentions to develop.

The 2015 site feasibility and capacity analysis evaluated housing capacity of the site by analyzing current and adjacent land uses and zoning, site topography, environmental sensitivities, service connection feasibility, as well as setback, height, lot coverage, FAR, density, parking, and landscape requirements. The analysis identified two development scenarios for the site, resulting in a maximum capacity of approximately 44 units in scenario one or 46 units in scenario two. The assessment also accounted for the required number of-site parking spaces, 82 spaces in scenario one and 88 in scenario two. No environmental constraints or service connection obstacles were identified on the site. According to the analysis, development of 44 housing units would result in a building lot coverage of approximately 39 percent in both development scenarios. In the Draft Zoning Code there is currently no standard for building coverage in the proposed Mixed-Use zone, therefore the resulting lot coverage would not conflict with the City's Zoning Ordinance. Due to the existing Fire Department, the site developable area is assumed to be approximately 0.9 acres (the location of the vacant building on the southwestern portion of the site), which is approximately half the area assumed in the 2015 analysis. The inventory conservatively assumes a maximum of 6 housing units, as the site area could approximately 22 units based on half the units assumed in the 2015 study.

Site 2: 1572 Railroad Avenue (APN 009-193-002)



Table 46 Site 2 Summary

Current Use	Temporary City Hall
Parcel Size	0.93 acres
Existing General Plan Land Use	Business and Professional Office
Existing Zoning	Business and Professional Office
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	24 units
Assumed Capacity and Income Category	20 Lower Income units

Site 2 is a 0.93-acre property owned by the City of St. Helena located at 1572 Railroad Avenue. City goals are in line with affordable housing development on the site. This site is currently used as a temporary location for City Hall. A General Plan Amendment and Rezone is proposed to change the land use and zoning designation to High Density Residential.

The entire 0.93-acre site is able to be redeveloped with the removal of the existing buildings. Based on allowed density under High Density Residential, 24 units would be permitted as a baseline. Density bonus provisions allowed with affordable housing projects would increase the number of units permitted on-site. However, 20 lower-income units were assumed in order to ensure adequate off-street parking capacity. According to the 2015 site feasibility and capacity analysis, which evaluated housing capacity of the site by analyzing current and adjacent land uses and zoning, site topography, environmental sensitivities, service connection feasibility, as well as setback, height, lot coverage, FAR, density, parking, and landscape requirements, the site can accommodate a total of 20 housing units with adequate area for the required 38 parking spaces. According to

the 2015 assessment, development of 20 housing units on the site would result in a building lot coverage of approximately 31 percent and would be consistent with the maximum lot coverage allowed in High Density Residential zone, 45 percent. The 2015 feasibility analysis and site assessment did not identify any environmental constraints or service connection obstacles that would affect redevelopment of the site. Twenty housing units is slightly higher than 80 percent of the maximum allowable density, at 83 percent. However, given that the City owns and intends to redevelop the site for housing and that this is consistent with the findings 2015 site feasibility and capacity analysis, the development of 20 housing units on-site is considered feasible.

Site 3: Adams Street (APN 009-150-006)



Table 47 Site 3 Summary

Current Use	Vacant
Parcel Size	5.6
Existing General Plan Land Use	Central Business
Existing Zoning	Central Business
Proposed Land Use and Zoning	Central Business
Allowed Density	n/a
Site Capacity	n/a
Assumed Capacity and Income Category	31 Lower Income units

Site 3 is a 5.6-acre property owned by the City of St. Helena located at the terminus of Adams Street and the crossroads of Adams Street/Library Lane. City priorities of the site include a mix of public, commercial, and residential uses. The site is currently vacant but being leased for a small vineyard operation. No land use changes are proposed as residential uses are permitted on upper stories within the Central Business district.

The site inventory assumes a portion of the site, approximately 1.3 acres, would be dedicated for affordable housing, while the remainder of the site would be used for other public and commercial uses such as a potential location for City Hall and Police station. Based on the 2015 site feasibility and capacity analysis, which evaluated housing capacity of the site by analyzing current and adjacent land uses and zoning, site topography, environmental sensitivities, service connection feasibility, as well as setback, height, lot coverage, FAR, density,

parking, and landscape requirements, approximately 31 units could be accommodated on the portion of the site adjacent to the Public Library. The site would also accommodate 58 parking spaces where only 53 are required. According to the 2015 site feasibility and capacity analysis, development of 31 housing units on the 1.3 acre portion of the site would result in a building lot coverage of 28 percent. There is no standard for building coverage in the Central Business zone, therefore the resulting lot coverage would not conflict with the City's Zoning Ordinance. No environmental sensitivities or service connection constraints were identified for the site. This site was identified as a housing opportunity site in the 5th housing element cycle.

Privately Owned Vacant and Nonvacant Properties

After reviewing the pending and approved projects, existing ADU/JADU trends, and City-owned properties, additional capacity is needed to fully accommodate the City's RHNA and to allow for a buffer. A desktop and City tour of parcels that could accommodate more housing and meet the City's regional housing needs was conducted. Pursuant to Government Code section 65583.2(a), these included:

- Vacant sites zoned for residential use
- Vacant sites zoned for nonresidential use that allow residential development
- Residentially zoned sites that are capable of being developed at a higher density than existing conditions
- Commercially zoned sites that are capable of being developed at a higher residential density than existing conditions
- Sites suitable for rezoning to allow for residential uses or allow residential uses at a high density
- Sites zoned for residential use or suitable for rezoning to allow residential uses with expressed property owner interest for residential development

Suitability of Nonvacant Sites

The City has recently seen redevelopment of nonvacant, residentially zoned parcels for housing development. Recently redeveloped parcels included those with existing single-family residences. In addition, the City has recently seen the development of housing on sites with existing vineyards. Examples of recent development trends in residential zones and on properties with existing vineyards include the following:

- 632 McCorkle Avenue: The completed project demolished an existing single family residence to construct 8 new housing units
- 684 McCorkle Avenue: The completed project demolished an existing single family residence to construct 8 new, affordable housing units
- 963 Pope Street: The approved project merged two existing parcels with an existing single family home and constructed 4 new multi-family housing units; all 5 units will be affordable
- 500 Mills Lane: The completed project constructed a single-family residence, ADU, and barn on a property with an existing vineyard

- 601 Fulton lane: The completed project constructed a single-family residence, ADU, and barn on a property with an existing vineyard

The site inventory identified nonvacant residentially zoned sites with similar conditions to trends detailed above (nonvacant sites with existing, single-family residences). The projects listed above were infill sites that redeveloped parcels with existing single family residences with multi-family developments and affordable housing. These projects were located on parcels zoned Medium and High Density Residential. The conditions and characteristics of these projects are similar to Sites 6, 7, and 9 which each have one existing single-family residence and are zoned Median and High Density Residential.

The 632 McCorkle Avenue project had a density of 14.9 units per acre which is 57 percent of the maximum allowed density of the site, the 684 McCorkle Avenue project had a density of 14.7 units per acre which is 56 percent of the maximum allowed density, and the 601 Fulton Lane project had a density of 17.1 units per acre which is 107 percent of the maximum allowed density. The recent redevelopment projects have an average density of 15.5 units per acre, which equates to an average of 73 percent of the maximum allowed density on each site. The site inventory assumes a capacity of approximately 80 percent of the maximum allowed density on each site. This is slightly higher than the average density of recently constructed and approved projects. However, the sites identified in the inventory are larger than the recent redevelopment projects listed above which allows for more efficient layout and greater capacity for development. In addition, two of the three recently redeveloped sites were narrow parcels where the parcel size and shape limited the configuration and available area for housing development on-site.

Other jurisdictions in the region have also seen redevelopment of nonvacant, residentially zoned parcels for housing development as well. Additional redevelopment projects on nonvacant, residentially zoned parcels in the region include the following:

- City of Calistoga – 2008 Grant Street: The approved project includes demolition of an existing residential structure, a three-sided wooden garage, and a large, fire-damaged shed on a 5.84-acre parcel and construction of 15 single-family homes
- City of Calistoga – Yellow Rose Ranch: The proposed project consists of the demolition of an existing single-family residence, barn, and four accessory buildings and construction of 46 single-family homes, 33 attached ADUs, and 12 detached ADUs
- City of Napa - Browns Valley Subdivision: The proposed project includes the demolition of a single-family residence, barn, and several outbuildings and construction of 11 single-family homes
- City of Napa – Old Sonoma Road Mixed Use: The proposed project includes the demolition of nine existing non-historic buildings and rehabilitation of three existing historic buildings into two townhome clusters, six new condominium structures, eight single-family homes, and commercial space. The project proposes a total of between 155 and 162 housing units.

- City of Napa – Redwood Grove Housing: The proposed project includes the removal of an existing single-family residence and construction of a two-story, 34-unit, multi-family, 100 percent affordable housing development.

Site 4: 905 Main Street (APN 009-180-008)



Table 48 Site 4 Summary

Current Use	Vacant
Parcel Size	0.27 acres
Existing General Plan Land Use	Mixed-Use
Existing Zoning	Service Commercial
Proposed Land Use and Zoning	Mixed-Use
Allowed Density	12 to 20 units/acre
Site Capacity	5 units
Assumed Capacity and Income Category	4 Above Moderate Income units

Site 4 is a 0.27-acre property located at 905 Main Street. The property is a vacant site in a location prime for development along Main Street. The property owner has expressed interest in development of the site with housing and community members have expressed support for this use. A zoning change is proposed to change the zoning designation from Service Commercial to Mixed-Use, which would bring the property into conformance with the existing General Plan land use designation and incentivize owner redevelopment of the site due to the new allowed on-site uses. In addition, mixed-use development incentives anticipated under Program H-P, such as streamlined design review and fee waivers, would further encourage development of housing on the site. The Mixed-Use land use designation is a new designation introduced in the City's recent 2040 General Plan Update. The City is currently in the process of updating the Zoning Ordinance to include a Mixed-Use zone consistent with the General Plan and anticipates to adopt these changes in Fall of 2023. Because the Mixed-Use zone has not yet been adopted in the Zoning Ordinance, there are no recent development trends in the city for sites zoned Mixed-Use. According to the City of Napa's Housing Element Update, two recent mixed-use projects in the city had an average of 92 percent of the maximum allowed

density of the sites. Napa's sites inventory assumed a realistic density of 80 percent of the maximum allowed density of each site based on the density of recent mixed-use developments, which averaged 83 percent of the maximum allowed density.[66] There is potential that Site 4 could be developed with 100 percent commercial uses. However, the inventory only includes one site with a Mixed Use land use and only a total of four above-moderate housing units. In addition, the property owner has expressed to the City that they are interested in developing housing on the site. The site is vacant, and the entire 0.27-acre site is able to be developed. Based on 80 percent of the maximum allowed density under Mixed-Use, four above-moderate income units are feasible.

[66] City of Napa. 2022. Housing Element Update. file:///C:/Users/lsegal/Downloads/Napa%20Housing%20Element%20Rev%2002%2020230216.pdf

Site 5: Main Street between Mills Lane and Dowdell Lane (APN 009-660-005)



Table 49 Site 5 Summary

Current Use	Vacant
Parcel Size	1.8 acres
Existing General Plan Land Use	Service Commercial
Existing Zoning	Service Commercial
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	45 units
Assumed Capacity and Income Category	45 Lower Income units

Site 5 is a 1.8-acre property located on Main Street between Mills Lane and Dowdell Lane. The property is a vacant site in a location prime for development along Main Street. The site is privately owned currently but a local affordable housing non-profit has secured an exclusive option to purchase the property to develop affordable housing, consistent with an approved development agreement for the Farmstead Hotel. A General Plan Amendment and Rezone is proposed to change the land use and zoning designation from Service Commercial to High Density Residential to allow for affordable housing development. The affordable housing project is in the preliminary site design phase which is pending pursuant to adoption of the Housing Element Update and subsequent rezoning of the property to accommodate multi-family housing.

The entire 1.8-acre site is vacant and able to be developed. Based on allowed density under High Density Residential, a total of 45 housing units would be permitted. The affordable housing non-profit organization that owns the site intends to develop a housing project affordable to households earning between 30 percent and 60 percent of the AMI (very low- and low-income). A conceptual site plan was analyzed which determined

four-story development along Fountain Court and three-stories along Main Street with structured parking could yield approximately 45 units and all required parking spaces. The inventory assumes 45 units. While this is greater than 80 percent of the maximum allowable density of the site, it is consistent with the non-profit's project plans and less than the maximum density of the project site (46 units).

Site 6: 709 McCorkle Avenue (APN 009-100-031)



Table 50 Site 6 Summary

Current Use	Single Family Residences
Parcel Size	0.9 acres
Existing General Plan Land Use	Medium Density Residential
Existing Zoning	Medium Density Residential
Proposed Land Use and Zoning	Medium Density Residential
Allowed Density	14 units/acre
Site Capacity	5 units
Assumed Capacity and Income Category	4 Above Moderate Income units

Site 6 is composed of a 0.9-acre property located at 709 McCorkle Avenue. The property is underutilized with one existing single family residence and a large undeveloped space. The site is considered underutilized based on the additional density, FAR, height, and lot coverage available. The property owner along with community members and local nonprofit groups expressed interest in developing more housing on the site. The property owner inquired with the City regarding the possibility of subdividing the property pursuant to SB9, which would allow the lot to be split into two lots with development of up to two units on each lot. The current land use and zoning designation is Medium Density Residential and no changes to land use or zoning are proposed.

The site is composed of a single family lot which could accommodate 14 units under current land use regulations. Due to the existing residence on the site, the inventory conservatively assumed additional units would be added pursuant to SB 9. Each lot can be split into two lots with development of up to 2 units on each

lot, for a total of 4 above moderate units (a net increase of 3 units). In addition, each lot could develop ADUs for a total net capacity of 5 units. However, a total of 4 above moderate income units were assumed, given the property owner's development interests.

Site 7: 821 Pope Street (APN 009-503-001)



Table 51 Site 7 Summary

Current Use	Single Family Residence
Parcel Size	1.0 acres
Existing General Plan Land Use	High Density Residential
Existing Zoning	High Density Residential
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	26 units
Assumed Capacity and Income Category	10 Lower Income and 10 Moderate Income units

Site 7 is a 1.0-acre property located at 821 Pope Street. The site is underutilized with one existing single-family residence and large undeveloped areas on-site. The site is considered underutilized based on the additional density, FAR, height, and lot coverage available. Land use designations and existing development surrounding the site consist of multi-family housing. The current land use and zoning designation is High Density Residential and no changes to zoning are proposed. This site mirrors the condition of properties that were recently redeveloped with multi-family housing in the city. Similar to the 632 McCorkle Avenue, 684 McCorkle Avenue, and 963 Pope Street projects, this site contains existing single family residences on a large parcel but is underutilized as it is located on a High Density Residential zone

The entire 1.0-acre site is able to be redeveloped. Based on allowed density under High Density Residential, development of 26 units would be permitted. However, a total of 20 units, 10 lower income units and 10 moderate income units, is assumed in order to accommodate off-street parking capacity.

This site was included in the 5th Cycle Housing Element and is considered non-vacant, therefore requiring by-right approval for projects with at least 20% affordable units.

Site 8: 882 and 886 College Avenue (APN 009-070-043, -044, -045)



Table 52 Site 8 Summary

Current Use	Vacant
Parcel Size	1.5 acres
Existing General Plan Land Use	Public/Quasi-Public
Existing Zoning	A-20 (Agriculture)
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	39 units
Assumed Capacity and Income Category	15 Lower Income and 15 Moderate Income units

Site 8 is composed of three adjacent properties that total 1.5 acres located at 882 and 886 College Avenue. All three properties are vacant and are owned by a single property owner who has expressed interest in residential development on these properties. The site is adjacent to areas with existing multi-family development. A General Plan Amendment and zoning change is proposed to change the land use and zoning designation from Public/Quasi-Public and Agriculture to High Density Residential.

The entire 1.5-acre site is able to be redeveloped. Based on allowed density under High Density Residential, 39 units would be permitted. However, a total of 30 units, 15 lower-income units and 15 moderate income units, is assumed in order to accommodate off-street parking capacity. Future development of the site would not be dependent upon lot consolidation as all three parcels are under the same ownership. Furthermore, Program H-ZZ would incentivize lot consolidation at the time the property is developed.

Site 9: 1447 and 1515 Spring Street (APN 009-590-003, -010)



Table 53 Site 9 Summary

Current Use	Single Family Residences
Parcel Size	2.4 acres
Existing General Plan Land Use	High Density Residential
Existing Zoning	High Density Residential
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	62 units
Income Category	24 Lower Income and 24 Above Moderate Income units

Site 9 is composed of two adjacent properties that total 2.4 acres located at 1447 and 151 Spring Street. Both properties are underutilized with one existing single-family residence and large undeveloped areas on each parcel. The overall site is considered underutilized based on the additional density, FAR, height, and lot coverage available. This site mirrors the condition of properties that were recently redevelopment with multi-family housing in the city. Similar to the 632 McCorkle Avenue, 684 McCorkle Avenue, and 963 Pope Street projects, this site contains existing single family residences on large parcels but is underutilized as it is located on a High Density Residential zone. The site is surrounded by single- and multi-family development and sites zoned High Density Residential, similar to the 632 McCorkle Avenue and 684 McCorkle Avenue projects. The current land use and zoning designation is High Density Residential and no changes to zoning are proposed.

The entire 2.4-acre site is able to be redeveloped. Based on allowed density under High Density Residential, 62 units would be permitted. However, a total of 48 units, 24 lower income units and 24 above moderate income units, is assumed in order to accommodate site circulation improvements and adequate off-street parking

capacity. The site is currently underutilized and does not meet the minimum density of the High Density Residential Zone (16.1 units/acre) with a current density of 0.83 units/acre. The site has two existing housing units, which equals approximately three percent of the total allowed capacity of the site (62 units). The existing building lot coverage is approximately eight percent and the maximum allowed lot coverage is 45 percent. Future development of the site would not be dependent upon lot consolidation as all three parcels are under the same ownership. Furthermore, Program H-ZZ would incentivize lot consolidation at the time the property is developed.

This site was included in the 5th Cycle Housing Element, therefore requiring by-right approval for projects with at least 20% affordable units.

Site 10: Spring Street between Hudson Avenue & Valley View Street (APN 009-441-023)



Table 54 Site 10 Summary

Current Use	Vineyard
Parcel Size	4.4 acres
Existing General Plan Land Use	Medium Density Residential
Existing Zoning	Medium Density Residential
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	114 units
Assumed Capacity and Income Category	44 Lower Income and 44 Moderate Income units

Site 10 is a 4.4-acre parcel located on Spring Street between Hudson Avenue and Valley View Street. Recent property owner interest in residential development of the site indicates opportunity for housing. Additionally, Focus Group meetings showed interest in High Density Residential uses on this residentially zoned parcel in the form of town homes, which is compatible with the surrounding residential neighborhoods. The site is considered underutilized as it has a residential land use designation but is currently used as vineyards. As previously discussed, the City has seen recent development of housing on properties with existing vineyards. Site 10 has greater development potential than the recently developed vineyard parcels since it is is located on a residentially zoned parcel, while the 500 Mills Lane and 601 Fulton Lane projects were located on parcels with a land use and zoning designation of Agriculture and therefore are only allowed to develop one housing unit and one ADU per parcel. A General Plan Amendment and zoning change is proposed to change the zoning from Medium Density Residential to High Density Residential.

The entire 4.4-acre site is able to be redeveloped. Based on allowed density under High Density Residential, 114 units would be permitted. However, a total of 88 units, 44 lower income units and 44 moderate income units, is assumed in order to accommodate adequate off-street parking capacity.

This site was included in the 5th Cycle Housing Element and is considered non-vacant, therefore requiring by-right approval for projects with at least 20% affordable units.

Site 11: 1637 Spring Street (APN 009-600-018)



Table 55 Site 11 Summary

Current Use	8 Detached Residential Housing Units
Parcel Size	1.1 acres
Existing General Plan Land Use	Medium Density Residential
Existing Zoning	High Density Residential
Proposed Land Use and Zoning	High Density Residential
Allowed Density	16.1 to 26 units/acre
Site Capacity	28 units
Assumed Capacity and Income Category	8 Additional Lower Income units

Site 11 is a 1.1-acre parcel located at 1637 Spring Street. Recent property owner interest in adding housing units on-site indicates there is opportunity to develop additional housing. The property owner emailed City Staff on March 7, 2022, interested in the development of additional housing units on the property . The property owner stated a desire to double the number of housing units on the site and expressed support for changing the land use designation from Medium Density Residential to High Density Residential, to match the current zoning. Further, correspondence with the property owner confirmed they are interested in including the site in the site inventory. The land use designation of the site is currently Medium Density Residential, changed from High Density Residential during the latest General Plan Update in 2019. However, the site is still zoned High Density Residential and is adjacent to other parcels zoned High Density Residential. A General Plan Amendment is proposed to change the land use designation from Medium Density Residential to High Density Residential, in conformance with the current zoning designation.

Based on allowed density under High Density Residential, a total of 28 units would be permitted. With the existing 8 units and current on-site structures, the site is underutilized based on density, FAR, and lot coverage. Based on discussions with the property-owner and existing site layout, approximately 8 additional units could

be accommodated on-site. Therefore, the inventory assumed 8 lower income units, resulting in 16 units total on-site, based on the property owner's development interests. The site is underutilized and currently does not meet the minimum density of the High Density Residential Zone (16.1 units/acre) with a current density of 7.3 units/acre. The site has 8 existing housing units, which equals approximately 29 percent of the total allowed capacity of the site (28 units). The existing building lot coverage is approximately 30 percent and the maximum allowed lot coverage is 45 percent.

Site 12: 620 McCorkle Avenue (APN 009-502-003)



Table 56 Site 12 Summary

Current Use	Single Family Residence
Parcel Size	0.76 acres
Existing General Plan Land Use	Medium Density Residential
Existing Zoning	Medium Density Residential
Proposed Land Use and Zoning	Medium Density Residential
Allowed Density	5.1 to 16 units/acre
Site Capacity	12 units
Assumed Capacity and Income Category	3 Additional Above Moderate Income units

Site 12 is a 0.76-acre parcel located at 620 McCorkle Avenue. The site is considered underutilized as it is zoned medium density residential but is currently developed with a single family residence. The site is considered underutilized based on the additional density, FAR, height, and lot coverage available. The site is surrounded by single- and multi-family development and properties zoned Medium and High Density Residential. In addition, community feedback from public meetings and public comment letters have shown the site is a strategic location for housing and the community is interested in including this site in the site inventory. The current land use and zoning designation is Medium Density Residential and no changes to zoning are proposed. This site also is adjacent to recent redeveloped sites at 632 McCorkle Avenue and 684 McCorkle Avenue, which removed an existing single-family residence with multi-family units.

The entire site could accommodate approximately 12 units based on allowed density alone. However, three additional above-moderate income units are assumed in order to accommodate adequate off-street parking capacity and existing residential uses. Therefore, the inventory assumed three additional above moderate income units, resulting in four units total onsite.

Summary of Site Inventory

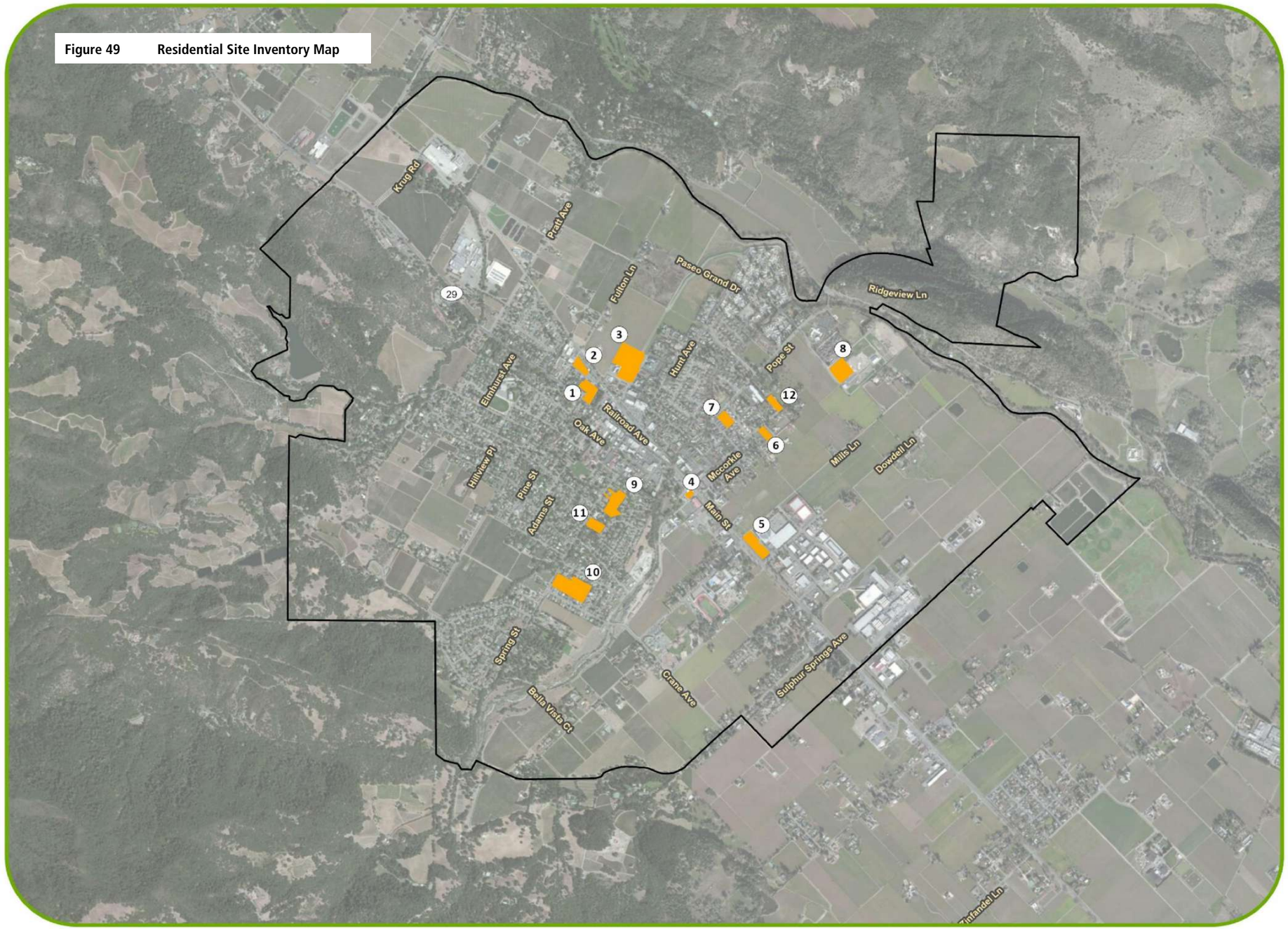
In combination with the City's pending projects and ADU development trends, the site inventory provides adequate sites to meet the City's RHNA allocation and buffer requirements. Between these three methods, the city can accommodate a total of 472 housing units, including 207 lower-income, 70 moderate-income, and 195 above moderate-income units. Table 57 shows a summary of the number of housing units accommodated by pending projects, ADU trends, and the site inventory.

Table 57 Summary of Housing Units

	Lower Income	Moderate Income	Above Moderate Income	Total
Pending Projects	4	1	88	93
ADU Trends	0	0	72	72
Site Inventory				
Site 1 (1480 Main St.)	6	0	0	6
Site 2 (1572 Railroad Ave.)	20	0	0	20
Site 3 (Adams St.)	31	0	0	31
Site 4 (905 Main St.)	0	0	4	4
Site 5 (Main St. btw Mills Ln. and Dowdell Ln.)	45	0	0	45
Site 6 (709 McCorkle Ave.)	0	0	4	4
Site 7 (821 Pope St.)	10	10	0	20
Site 8 (882 and 886 College Ave.)	15	15	0	30
Site 9 (1447 and 1515 Spring St.)	24	0	24	48
Site 10 (Spring St. btw Hudson Ave. And Valley View St.)	44	44	0	88
Site 11 (1637 Spring St.)	8	0	0	8
Site 12 (620 McCorkle Ave.)	0	0	3	3
Total	**207**	**70**	**195**	**472**
St. Helena RHNA plus 20% Buffer	192	31	79	302
Surplus	15	39	116	170

.

Figure 49 Residential Site Inventory Map



- City Boundary
- Selected Sites

1 - 1480 Main Street
2 - 1572 Railroad Avenue
3 - Adams Street
4 - 905 Main Street
5 - Main Street (between Mills & Dowdell)
6 - 709 McCorkle Avenue
7 - 821 Pope Street
8 - 882 and 886 College Avenue
9 - 1447 and 1515 Spring Street
10 - Spring Street (between Hudson & Valley View)
11 - 1637 Spring Street
12 - 620 McCorkle Avenue

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

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Additional data provided by County of Napa, 2022.

Table 58 Vacant and Nonvacant Sites

Site Address	APN	Developable Acres	Existing Zoning	Rezone Proposed	Proposed Zoning	Minimum Density	Maximum Density	Used in Previous HE?	Nonvacant	City-Owned	Lower Income	Moderate Income	Above Moderate Income	Total
Site 1 (1480 Main St.)	009-211-016	0.90	Public/Quasi-Public	Yes	Mixed-Use	12	20	No	Nonvacant	Yes	6	0	0	**6**
Site 2 (1572 Railroad Ave.)	009-193-002	0.93	Business and Professional Office	Yes	High Density Residential	16.1	26	No	Nonvacant	Yes	20	0	0	**20**
Site 3 (Adams St.)	009-150-006	5.6	Central Business	Yes	High Density Residential	16.1	26	Yes (Moderate Income and Above)	Vacant	Yes	31	0	0	**31**
Site 4 (905 Main St.)	009-180-008	0.27	Service Commercial	Yes	Mixed-Use	12	20	Yes (Moderate Income and Above)	Vacant	No	0	0	4	**4**
Site 5 (Main St. btw Mills Ln. and Dowdell Ln.)	009-660-005	1.8	Service Commercial	Yes	High Density Residential	16.1	26	No	Vacant	No	45	0	0	**45**
Site 6 (709 McCorkle Ave.)	009-100-032	0.9	Medium Density Residential	No	Medium Density Residential	5.1	16	No	Nonvacant	No	0	0	4	**4**
Site 7 (821 Pope St.)	009-503-001	1.0	High Density Residential	No	High Density Residential	16.1	26	Yes (Lower Income)	Nonvacant	No	10	10	0	**20**
Site 8 (882 and 886 College Ave.)	009-070-043, 009-070-044, 009-070-045	1.5	Agriculture	Yes	High Density Residential	16.1	26	No	Vacant	No	15	15	0	**30**
Site 9 (1447 and 1515 Spring St.)	009-590-010, 009-590-003	2.4	High Density Residential	No	High Density Residential	16.1	26	Yes (Lower Income)	Nonvacant	No	24	0	24	**48**
Site 10 (Spring St. btw Hudson Ave. And Valley View St.)	009-441-023	4.4	Medium Density Residential	Yes	High Density Residential	16.1	26	Yes (Moderate Income and Above)	Vacant	No	44	44	0	**88**
Site 11 (1637 Spring St.)	009-600-018	1.1	High Density Residential	No	High Density Residential	16.1	26	No	Nonvacant	No	8	0	0	**8**
Site 12: 620 McCorkle	009-502-003	0.76	Medium Density Residential	No	Medium Density Residential	5.1	16	No	Nonvacant	No	0	0	3	**3**
		Total									**203**	**69**	**36**	**308**

	Lower Income Capacity
Lower Income RHNA with 20 percent buffer:	**192**
Pending and Approved Projects (lower income)	**4**
Existing HDR capacity: Site 7	**10**
Existing HDR capacity: Site 9	**24**
Existing HDR capacity: Site 11	**8**
Remaining lower income shortfall	**146**
Sites with proposed rezone to HDR (Sites 2, 3, 5, 8, 10)	**156**

Availability of Infrastructure and Services

The City of St. Helena is dedicated to improving existing and new infrastructure and facilities to support existing and future development. The City's annual budget devotes funds towards the Public Works Department which provides design, construction, maintenance, and operation of public facilities and infrastructure within the city. Public Works is responsible for infrastructure including streets, storm drains, parks, water treatment, water distribution, wastewater collection, and wastewater treatment. Environmental compliance services provided by Public Works also includes storm water pollution prevention, sustainability, protection of public trees and floodplain administration, response to infrastructure and weather emergencies. The city's existing infrastructure system may require minor upgrades to address age and condition-related issues. New construction would be located in areas served by existing infrastructure.

The Integrated Urban Master Plan analyzed future infrastructure and water supply capacity accounting for planned development within the city, including the Hunter Subdivision project, and estimated buildout proposed under the 2040 General Plan, which would be about 7,400 residents by the year 2040. The City's RHNA plans for the addition of a total of 256 housing units within the planning period. Currently the city has a population of approximately 6,073. Therefore, the additional 256 units would not exceed buildout assumed in the Master Plan.

Wastewater System

The City's Integrated Utility Master Plan was adopted in 2021 and serves as the guiding document for planning and implementing sewer system improvements through the year 2040. The plan is consistent with the population, land use, employment, and housing projections presented in the 2040 General Plan. The City also has a Sewer System Management Plan that was developed in 2006 and last updated in April 2016. The City's sewer system service area consists of the City limits and includes approximately 24 miles of active gravity sewer pipelines, 0.4 miles of force mains, and two lift stations that convey flow to the Wastewater Treatment Plant. Improvements to the Wastewater Treatment Plant began in 2022 to adhere to stricter environmental requirements and are expected to be completed in 2023.

A capacity analysis of the existing wastewater collection system showed a storm event would result in multiple pipeline capacity deficiencies and sanitary sewer overflows at several locations with the existing system. Wastewater collection systems improvement projects proposed by the Utility Master Plan included gravity main improvements with pipeline replacement and lift station improvements. These improvements would be constructed based on prioritization within the Master Plan and developed as a Capital Improvement Project. The improvements would be financed through City budgeting and collection of project impact fees. As discussed under the Government Constraints section, impact fees in the city do not represent a constraint to housing.

Potable Water System

The City's Integrated Utility Master Plan serves as the guiding document for planning and implementing water system improvements through the year 2040, consistent with growth under the 2040 General Plan. Previously, the City utilized the Water Master Plan, developed in 2006, to identify infrastructure need to the year 2020. The City's water system service area extends beyond the City limits to unincorporated areas in the Meadowood Napa Valley Resort/Neighborhood area and area between Chaix Lane and Zinfandel Lane along Main Street. There are three main water supply sources: Bell Canyon Reservoir, Stonebridge wells, and an interconnection with the City of Napa. The City's water system consists of approximately 47 miles of water distribution pipelines.

A capacity analysis of the existing water distribution system showed there is one pump station, the Holmes pup station, that does not have sufficient firm pumping capacity to meet maximum day demand. Evaluation of the existing treated water storage system capacity found one area that does not have adequate capacity to meet peak hour demand, fire flow storage, and emergency storage. Improvement projects proposed by the Utility Master Plan to prevent system failures caused by leaks, fails, and main breaks include rehabilitation and replacement of water main and transmission lines, which would enable the City to meet potable water demands. The potable water improvements would be constructed based on prioritization within the Master Plan and developed as a Capital Improvement Project. The improvements would be financed through City budgeting and collection of project impact fees. As discussed under the Government Constraints section, impact fees in the city do not represent a constraint to housing.

Storm Water System and Drainage System

The City's Integrated Utility Master Plan guides planning and implementing the storm drainage system improvements through the year 2040 with growth projections consistent with the 2040 General Plan. Previously, the Storm Drainage Master Plan, developed in 2000, served as the City's guide to analyze the existing storm drain system and plan for implementation of improvements. The City's storm drainage collection system service area consists of the city limits and includes street drainage, inlets, gravity pipelines, open channels, one storm water detention basin, and 33 outfalls that discharge in Sulphur Springs Creek, York Creek, or Napa River.

Evaluation of existing storm drainage capacity showed there would be multiple areas of flooding throughout the system in the event of a 10-year, 50-year, and 100-year storm. Improvement projects proposed by the Utility Master Plan to mitigate storm water system capacity issues include implementing an annual storm drain rehabilitation and replacement program with the assumption that approximately 1.25 percent of the system would be replaced per year until 2040. Storm water infrastructure upgrades would be constructed based on prioritization within the Master Plan and developed as a Capital Improvement Project. The improvements would be financed through City budgeting and collection of project impact fees. As discussed under the Government Constraints section, impact fees in the city do not represent a constraint to housing.

Dry Utilities

PG&E is responsible for supplying electricity and natural gas to the City and surrounding areas. Other dry utilities such as telephone and data services and cable television are serviced by contracted providers within the city, including Xfinity and AT&T.

Circulation System

The City's Circulation Element, updated in 2019 along with the General Plan, identifies the principal components of the City's circulation system and issues related to parking, public transit, and pedestrian and bicycle infrastructure. The Circulation Element also includes standards and guiding principles for implementing transportation improvements.

The City's street network is largely grid based with some streets east of State Route 29 that are not fully connected to the network. State Route 29 (Main Street) is the main street used for traveling north-south throughout the city and is the main route for vehicles traveling between Lake County, northern Sonoma County, and the City of Napa and other destinations further south. It runs northwest to southeast through the city and divides the city in two. Congestion along State Route 29 is a major issue within the city and pushes traffic onto local city streets. Much of the traffic congestion seen in the city is caused by tourists traveling throughout the region. The primary transit option in the city is the Vine bus service, however ridership is low with only 0.9 percent of St. Helena residents commuting via transit. Future improvements to the City's transportation network include improvements aimed at reducing congestion along State Route 29 and enhancing alternative modes of travel, including the addition of pedestrian and bicycle infrastructure.

Environmental Constraints

In 2019, the City certified a FEIR with the 2040 General Plan Update that analyzed all potential environmental impacts associated with the population and development growth proposed under the plan. City Council also adopted CEQA Findings and a Statement of Overriding Considerations identifying public benefits that override the significant and unavoidable impacts of the General Plan, including agricultural preservation, a balanced mix of land uses and sustainable land use pattern, creation of construction jobs, managing effects of regional traffic, and a shift to a multi-modal circulation system. Environmental clearance for future development projects may tier from the General Plan FEIR, thereby expediting the approval process. Mitigation measures set forth in the FEIR include measures to minimize impacts associated with potential flooding, and other environmental constraints.

There are no known conditions that would preclude any of the selected sites from being developed within the planning period. Sites 4 and 7 are located in the Federal Emergency Management Agency (FEMA) flood hazard zone, Zone X, an area of moderate- to low-risk. Development within Zone X would not preclude the properties from development, as future development would be subject to development standards contained within the Saint Helena Municipal Code, which incorporates FEMA standards for construction in flood hazard zones, as well as relevant policies within the City's General Plan which regulate development in flood risk areas. In

addition, future development would comply with applicable mitigation measures within the 2040 General Plan EIR, including HYDRO-1 which ensures that no development will impede waters in the floodway, raises base flood levels, or expose housing to undue risk from flooding. The remaining sites are not located within a FEMA flood zone. None of the sites are located within a state of local fire hazard severity zone.

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Appendix A:
Affirmatively Furthering Fair Housing

Adopted

May 9, 2023

ST. HELENA
CALIFORNIA
HOUSING ELEMENT
2023 - 2031



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1. Introduction

In 2018, the California State Legislature passed Assembly Bill (AB) 686 to expand upon fair housing requirements and protections outlined in the Fair Employment and Housing Act. The law requires all State and local public agencies to facilitate deliberate action to explicitly address, combat, and relieve disparities resulting from past patterns of segregation to foster more inclusive communities. AB 686 created new requirements that apply to all housing elements due for revision on or after January 1, 2021. The passage of AB 686 protects the requirement to affirmatively further fair housing within State law.

AB 686 defined "affirmatively further fair housing (AFFH)" to mean "taking meaningful actions, in addition to combat discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity." AB 686 added an assessment of fair housing to the Housing Element which includes the following components:

- A summary of fair housing issues and assessment of the City's fair housing enforcement and outreach capacity
- An analysis of segregation patterns and disparities in access to opportunities
- An assessment of contributing factors
- An identification of fair housing goals and actions.[67]

1.1 Approach to Analysis

This AFFH analysis is consistent with the 2021 California Department of Housing and Community Development's Affirmatively Furthering Fair Housing Guidance for All Public Entities and for Housing Elements (AFFH Guidance Memo) which provides guidance on the preparation of housing elements and ensures statutory requirements are satisfied, pursuant to Government Code Section 65583(c)(10).

This AFFH analysis evaluates fair housing issues on the following topics:

1. Fair Housing Enforcement and Outreach Capacity
2. Integration and Segregation Patterns and Trends
3. Racially and Ethnically Concentrated Areas of Poverty
4. Disparities in Access to Opportunity
5. Disproportionate Housing Needs

[67] *Housing and Community Development (HCD). 2021. https://www.hcd.ca.gov/community-development/affh/index.shtml*

6. Other Relevant Factors, including historical disinvestment, lack of infrastructure improvements, and presence of older affordable housing units that may be at risk of conversion to market-rate housing.

Fair housing priorities goals and actions are also provided specific to St. Helena to address as implementation actions for the Housing Element. The goals and actions address the major contributing factors for the topics above.

1.2 Fair Housing Methodology

The California Government Code Section 65583 (10)(A)(ii) requires cities and counties to analyze areas of segregation, racially or ethnically concentrated areas of poverty, disparities in access to opportunity, and disproportionate housing needs, including displacement risk.

To conduct this analysis, the City utilized data from a variety of sources, including:

- The Housing and Community Development (HCD) AFFH Data Viewer
- AFFH Segregation Report by ABAG
- Napa Sonoma Collaborative
- Urban Displacement Project (UDP)
- U.S Housing and Urban Development (HUD)
- CalEnviroscreen
- California Tax Credit Allocation Committee (TCAC)
- The Comprehensive Housing Affordability Strategy (CHAS)
- US Census American Community Survey (ACS)
- AllTransit
- Walk Score

Additionally, the analysis includes input from sources of local knowledge, including special needs groups, housing advocacy organizations, housing and services providers, and residents.

1.2.1 Housing and Community Development's AFFH Viewer

The AFFH Data Viewer is a tool developed by HCD that features census block group and tract level data from an expansive collection of sources including ACS, HUD, TCAC, UDP, and CHAS. The Data Viewer tool serves as a resource for local and regional governments and provides the ability to explore spatial data patterns concerning fair housing enforcement, segregation and integration, racially and ethnically concentrated areas of poverty, and disparities in access to opportunities and housing. The Data Viewer is

intended to assist in the creation of policies that alleviate disparities, combat discrimination, and increase access to safe and affordable homes.

1.2.2 AFFH Segregation Report

The University of California, Merced and STIR Labs, on behalf of ABAG, prepared reports for jurisdictions in California studying segregation patterns and current land use policies that correlate with patterns of racial segregation. The report for St. Helena addresses racial and income segregation using the racial isolation index, racial dissimilarity index, and Thiel's H-Index at the neighborhood level within and regional level.

1.2.3 Napa Sonoma Collaborative

The Napa Sonoma Collaborative (NSC) is a collaboration between Napa and Sonoma Counties that aims to address housing challenges within the region. NSC is made up of housing staff from jurisdictions within Napa and Sonoma Counties and is working to raise awareness and increase participation in the Housing Element update process. The collaborative conducted outreach to gather information on fair housing issues within local communities and discuss constraints to affordable housing.

1.2.4 Urban Displacement Project (UDP)

The UDP was developed to track neighborhood change and identify areas that are vulnerable to gentrification and displacement in California. Indicators of gentrification and displacement are measured at the census tract level based on data from the 2015 ACS. UDP indicators examine census tracts to identify areas that qualify as disadvantaged neighborhoods. Additionally, census tracts identified as disadvantaged neighborhoods by UDP's criteria are further analyzed to explore changes in the percentage of college educated residents, non-Hispanic White population, median household income, and median gross rents over time to determine levels of gentrification and displacement risk.

1.2.5 CalEnviroscreen

The California Office of Environmental Health Hazard Assessment developed a screening methodology to identify communities disproportionately burdened by multiple sources of pollution. This tool, called the California Communities Environmental Health Screening Tool (CalEnviroScreen), utilizes existing environmental, health, and socioeconomic data to rank census tracts based on 20 distinct indicators. In general, if a community has a high score for that indicator, it is more impacted by pollution burdens and population vulnerabilities compared to other communities. Designated disadvantaged communities are those with CalEnviroScreen percentile scores of 75 or higher, meaning that they scored within the highest 25 percent of census tracts across California. There are no disadvantaged communities in St. Helena.

1.2.6 California Tax Credit Allocation Committee (TCAC)

HCD and the TCAC created the California Fair Housing Task Force to provide research, evidence based policy recommendations, and other strategic recommendations to HCD and other related state

agencies/departments to further the fair housing goals.[68] The Task Force created the AFFH Data Viewer, an interactive mapping tool to assess population and housing characteristics related to fair housing and access to opportunity to aid in the development of policy for the promotion of equitable and inclusive communities. The data viewer includes Opportunity Maps made from composite scores of three different domains made up from a set of indicators data shown in Table 1. The Opportunity Maps include a measure or "filter" to identify areas with poverty and racial segregation. To identify these areas, census tracts were first filtered by poverty and then by a measure of racial segregation. The criteria for these filters were:

- **Poverty Status.** Census tracts with at least 30 percent of population that earned an income that was below the federal poverty level.
- **Racial Segregation.** Census tracts with a location quotient that is higher than 1.25 for Black, Hispanic, Asians, or all non-White populations in comparison to the county.

Table 1 Domains and List of Indicators for Opportunity Maps

Domain	Indicator
Economic	Poverty, Adult Education, employment, Job proximity, median home value
Environmental	CalEnviroScreen 3.0 pollution indicators and values
Education	Math proficiency, reading proficiency, high school graduation rates, student poverty rates

Source: California Fair Housing Task Force, Methodology for the 2020 TCAC/HCD Opportunity Maps, December 2020

1.2.7 AllTransit

AllTransit is an online database that details transit opportunity for communities. The website explores metrics that reveal the social and economic impact of transit, specifically looking at connectivity, access to jobs, and frequency of service. The AllTransit performance score explores metrics that reveal the social and economic impact of transit, such as connectivity, access to jobs, and frequency of service.

1.2.8 Walk Score

Walk Score provides walkability services and apartment search tools to addresses across the United States, with the mission "to promote walkable neighborhoods." Walk Score measures walkability by assigning a numerical walkability score based on distance to amenities within a 30-minute walk and evaluates pedestrian friendliness by analyzing population density and road metrics, including block length and intersection density.

[68] *Office of The State Treasurer (STO). 2021. https://www.treasurer.ca.gov/ctcac/opportunity/2020-tcac-hcd-methodology.pdf*

1.2.9 Community Engagement and Outreach

As part of the Housing Element Update, the City implemented a community engagement program, soliciting input from the general public, housing stakeholders, and City decision makers. Results and feedback obtained during the community engagement program have been incorporated into the Housing Element, including this section on affirmatively furthering fair housing practices. Please see Chapter 1 for more details on the City's outreach efforts.

2. Summary of Fair Housing Issues

This summary guides the prioritization of contributing factors to fair housing issues and the creation of goals and actions to address these issues. Fair housing issues are conditions that restrict fair housing choice or access to opportunity in the geographic area of interest. Fair housing choice means realistic housing opportunities exist, can be accessed without discrimination towards protected characteristics such as race, color, religion, sex, disability, etc., and are informed with adequate information regarding options.

2.1 Regional Trends

Impediments to fair housing within Napa County, and the Bay Area as a whole, include the following:

- Residential segregation between White residents and non-White residents has increased in the last decade.
- Areas with higher percentages of non-White residents generally have less access to proficient schools, jobs, and cleaner air and water.
- Median rental prices rose an approximately $483 (unadjusted for inflation) since 2009, from $1,087 to $1,570, an increase of 44.4 percent in a 10-year period.
- The average home value increased from approximately $319,926 to $768,414 in less than 20 years, from 2001 to 2020 (unadjusted for inflation).
- Housing Choice Voucher holders and those with disabilities often find it difficult to find an appropriate housing unit based on located a unit of appropriate size and/or cost.
- Disability, race, and familial status are the most common bases of housing discrimination complaints forwarded to the California Department of Fair Employment and Housing and the Office of Fair Housing and Equal Opportunity.

2.2 Local Trends

Contributing factors identified as impediments to fair housing in St. Helena are discussed in detail below and include descriptions of how each impediment is addressed in this Housing Element.

2.2.1 Concentrations of Lower- and Moderate-Income Earning Populations

HUD defines a Lower and Moderate Income (LMI) area as a census tract or block group where over 51 percent of the population earn an income that is considered lower or moderate relative to the area median income. In St. Helena, residents with low and moderate household incomes are concentrated in the eastern portion of the city. The Housing Element ensures available land to accommodate all income levels on sites located across the city. Efforts to combat this impediment are outlined in Programs H-A, H-B, H-N, H-O, H-R, H-U, H-V, H-W and H-OO, which focus on maintaining an inventory of sites suitable for residential development and prioritize and incentivize housing development for lower- and moderate-income residents in the western portion of the city.

2.2.2 Insufficient Housing Stock for Farmworkers

Farmworker housing is a critical need in Napa County and St. Helena due to the presence of year-round agricultural production. The migratory and sometimes seasonal nature of farm workers pose housing challenges for a community and are seen as an impediment for St. Helena as the City tries to house its entire population. Efforts to combat this impediment are outlined in Programs H-E, H-H, H-I, and H-KK, which work to support regional and City farmworker housing efforts, including creating incentives and fast-tracking development for workforce/farmworker housing.

2.2.3 Lack of Affordable Housing Types

There is a lack of diversity in housing types that restricts development of affordable housing in St. Helena. Local land use and zoning regulations perpetuate this deficiency by limiting the form of housing that can be developed on a particular site. Much of the residentially zoned parcels within the city are zoned low and moderate density residential and are not compatible with the construction of duplexes, triplexes, quadplexes and multifamily housing developments. The City is upzoning a number of parcels as a part of the Housing Element Update to allow higher density residential development. Efforts to combat this impediment are outlined in Programs H-A, H-B, H-E, H-H, H-I, H-J, H-M, H-N, H-P, H-Q, H-V, H-X, H-AA, H-DD, H-EE, H-FF, H-GG, H-LL, H-NN, and H-OO, which focus on maintaining an inventory of sites suitable for residential development, updating municipal code for developing workforce/farmworker housing, ADUs, housing for disabled and homeless persons, and non-traditional housing types, increasing development density, and fast-tracking housing development.

2.3 Enforcement and Outreach Capacity

Fair housing enforcement and outreach capacity is the ability of a local jurisdiction and fair housing agencies to distribute fair housing and tenants' rights information to their community. Enforcement and outreach capacity also includes the ability to address compliance with fair housing laws, such as investigating complaints, resolving issues, and conducting fair housing testing.

2.3.1 Regional Resources

Several organizations in Napa County provide aid for fair housing issues and outreach. Table 2 shows organizations and agencies that collaborate with local governments, including St. Helena to address housing and community needs and provide the following services:

- Housing Need Assessment
- Homelessness Needs
- Market Analysis
- Fair housing testing and complaints
- Fair housing counseling and education
- Tenant/landlord counseling and mediation
- Homeless prevention program
- Rental assistance program
- Rent/deposit grant program
- Home seeking services
- Shared housing counseling placement
- Homebuyers' education learning program

Table 2 Fair Housing Organizations Active in Napa County

Organization	URL	Phone Number
Abode Services	https://www.abodeservices.org/napa-county	(510) 657-7409
Bay Area Legal Aid (BALA)	https://baylegal.org/	(800) 551-554
CA Department of Fair Employment and Housing	https://www.dfeh.ca.gov/	(800) 884-1684
EAH Housing	https://www.eahhousing.org/	
Fair Housing Advocates of Northern California (FHANC)	https://www.fairhousingnorcal.org/	(415) 457-5025
Fair Housing Napa Valley (FHNV)	https://napafairhousing.org/	(707) 224-9720
Napa Continuum of Care	https://homelessnapa.com/	
Napa County Housing and Homeless Services Division	https://www.countyofnapa.org/272/Homeless-Services	(707) 271-7818
Napa Valley Community Housing	https://nvch.org/	(707) 253-6140
North Bay Housing Coalition	https://www.northbayhousingcoalition.org/	(707) 289-7000

Source: City of Napa AI, 2020; Napa Sonoma Collaborative Fair Housing Enforcement, Outreach Capacity and Resources, 2022

2.3.2 Local Resources

The City of St. Helena contracts with the non-profit organization Fair Housing Napa Valley (FHNV), a regional non-profit fair housing agency, to assist residents with fair housing counseling services, connections to rental assistance and homelessness prevention programs, and to conduct fair housing testing. FHNV assists residents and landlords throughout the city, providing mediation, investigation, and referral services. In addition to the fair housing services provided by active organizations, the Napa County Housing Authority administers the Housing Choice Voucher program for St. Helena and other jurisdictions in the county.

The City complies with existing fair housing laws and regulations. The City does not place more scrutiny or deny projects or individuals of their right to tenancy, residence, or entitlement based on memberships of protected class, in compliance with Government Code section 65008. Implementation of the 6th Cycle Housing Element would bring the City's adopted regulations and policies into compliance with other fair housing regulations such as Program H-F which would bring density bonus provisions into compliance and allow for greater incentives for affordable housing. The City is also proposing updates to their existing Inclusionary Ordinance to promote more housing choices for residents.

2.3.2.1 Ability to Address Complaints

The Department of Justice's Civil Rights Division initiated fair housing testing in 1991. This is a technique used to uncover evidence of discrimination in rental housing. Fair housing testing involves one or more individuals who pose as prospective renters for the purpose of determining whether a landlord is complying with local, State, and federal fair housing laws. Enforcement actions may be taken when investigations yield evidence of a pattern or practice of illegal housing discrimination. Testing may be initiated following the filing of a specific housing discrimination complaint or, as is the case when testing for disability discrimination, as part of an overall effort to determine whether the design or architectural features of a specific rental facility comply with state and federal accessibility requirements. In Napa County, fair housing testing is used to identify unlawful housing discrimination practices based on the real or perceived race, ethnicity, color, religion, gender identity or expression, national origin, disability, familial status, marital status, age, ancestry, sexual orientation, and source of income of prospective renters. Fair Housing Napa Valley conducts fair housing testing of rental properties to assess how well rental properties are conforming to fair housing laws, assists residents in filing fair housing complaints, provides education and technical assistance to housing providers, and provide conciliation services for tenants and landlords.

The Department of Fair Employment and Housing (DFEH) maintains a record of housing discrimination complaints filed in local jurisdictions. From 2015 - 2019, 256 fair housing complaints originating in Napa County were filed with DFEH. Overall, disability-related discrimination comprised the largest proportion of cases (56 percent). The next highest basis for discrimination were race and familiar status, comprising nearly 8 percent each. According to the HCD AFFH Data Viewer, no fair housing inquiries for the City of St. Helena were received between 2013 and 2021. Fair housing inquiries are comments or questions related to fair housing received by HUD's Office of Fair Housing and Equal Opportunity (FHEO), not formal

discrimination complaints. The lack of inquiries is low for the region, as seen when compared to the cities of Santa Rosa (received 61), Sonoma (received 8), and Napa (received 33).

2.3.3 Findings, Lawsuits, and Enforcement Actions

There are currently no active fair housing lawsuits or enforcement actions in the city. However, historically, low-income and minority populations have struggled to procure affordable housing opportunities in the city. In addition, residents have challenged the City for not doing enough to combat housing segregation issues between the western and eastern portions of the city.

In 2013, the City of St. Helena signed a settlement agreement with Esvin Calderon as well as other residents and fair housing providers who had filed a lawsuit against the City on the basis that the City "promoted or maintained policies, practices, or actions that had the purpose of effect of displacing or excluding Latino residents and low-income residents from the City". According to the settlement the City would comply with a list of requirements that would promote the development of affordable housing units in the city, including depositing $500,000 to the City's Affordable Housing Trust Fund and amending the St. Helena Municipal Code to support and prioritize affordable housing development, and to host fair housing workshops in collaboration with Napa Valley Fair Housing.

In 2016, St. Helena Residents For An Equitable General Plan, the McCorkle East Side Neighborhood Group, and the Protect the St. Helena Vineyard Riverwalk Community Group filed a claim with the City citing that the city is "a segregated city, with an affluent White west and diverse east side where most Hispanics, seniors, and members of other protected groups live largely in a concentrated area near the Napa River."

The City is in the process of adopting a new Zoning Ordinance to be consistent with the 2040 General Plan, which would permit duplexes and triplexes within the MR District (see Program H-N). This would create additional housing choices and affordability levels in the MR Districts on the western side of the city. In addition, several programs, including H-BB, H-EE, and H-XX would implement placemaking strategies to outreach and work with the more diverse and older populations living in the east due to the historic development patterns.

3. Segregation and Integration Patterns and Trends

To inform priorities, policies, and actions, the housing element must include an analysis of integration and segregation, including patterns and trends. Integration generally means a condition in which there is not a high concentration of persons of a particular race, color, religion, sex, familial status, national origin, or having a disability or a particular type of disability in a specific geographic area. Segregation generally means the opposite condition, in which there is a high concentration of the characteristics described above in a specific geographic area. To adequately assess the patterns of integration and segregation, this section identifies trends at the regional scale (Napa County) and at the local scale (St. Helena).

3.1 Race and Ethnicity

The ethnic and racial composition of a community relates to other housing characteristics including household size, locational preference, and economic opportunity. Additionally, race/ethnicity is a known contributor to unfair housing practices. Historical patterns of racial/ethnic segregation were results of governmental policies from the federal to local level that promoted exclusionary actions and disparate treatment of people of color such as redlining, racially restrictive covenants, and mortgage lending practices. The existence of concentrations of minorities living in one location may be an indicator that some minority groups do not have as many housing choices as non-minority residents.

3.1.1 Regional Trends

Regionally, the urbanized areas of Napa County are more diverse, with a minimum of 40 percent of the population consisting of non-White residents, as demonstrated in the geographic depiction of 2014-2018 ACS data shown in Figure 1. Comparatively, populations in the less urbanized and less densely populated areas of Napa County are generally more predominantly White with populations consisting of about 60 percent or greater of White residents.

HUD utilizes the racial/ethnic dissimilarity index as a measure of segregation. The racial/ethnic dissimilarity index represents the extent of which any two racial/ethnic groups differ across a defined geographical area. The index ranges from 0-100, where 0 represents perfect integration between the two racial/ethnic groups and 100 representing perfect segregation. An index value below 40 is generally considered low segregation, a value between 40 and 54 is considered a moderate level of segregation, and a value above 55 is a high level of segregation.[69] Racial/ethnic segregation in Napa County slightly increased between 2010 and 2019. Table 3 shows racial/ethnic segregation in Napa County using the dissimilarity index using data from HUD's AFFH mapping tool. Black and Asian/Pacific Islander residents are the most segregated compared to other racial and ethnic groups. Segregation between Black and White residents and between Asian/Pacific Islander and White residents is high, since their racial dissimilarity index scores are above 55 for 2019. Segregation between Non-White and White residents and between Hispanic and White residents

[69] *HUD, 2020. https://www.hud.gov/sites/dfiles/FHEO/documents/AFFH-T-Data-Documentation-AFFHT0006-July-2020.pdf*

is considered low, since their racial dissimilarity index scores are below 40 for 2019. In Napa County, there has been an increase in segregation across all measured racial/ethnic groups between 2010 and 2019.

Table 3 Racial/Ethnic Dissimilarity Trends (Napa County)

Racial/Ethnic Dissimilarity Index	1990	2000	2010	2019
Non-White/White	19.58	26.18	31.24	36.84
Black/White	56.22	52.61	58.76	67.86
Hispanic/White	21.86	28.94	30.13	35.61
Asian or Pacific Islander/White	37.11	38.97	57.35	64.47

Source: Affirmatively Furthering Fair Housing Mapping Tool – Table 3, Version AFFHT0006, 2022

3.1.2 Local Trends

St. Helena is more diverse compared to rural areas of Napa County, which are predominantly White, and less diverse than the cities of Napa and American Canyon. According to 2015-2019 ACS estimates, White residents comprise the largest racial/ethnic group in St. Helena, followed by Hispanic/Latino residents. The predominant population throughout the entire city is White, as shown in Figure 3. The northwest area of the city has the highest predominance of White residents, although the southeast area of the city is predominantly White as well. The eastern areas of the city have the largest non-White populations, as shown in Figure 3.

3.2 Persons with Disabilities

Persons with disabilities include those with a physical or mental impairment including hearing, vision, mobility, cognitive function. For persons with disabilities, fair housing choice and access to opportunity include access to accessible housing and housing in the most integrated setting appropriate to an individual's needs as required under federal civil rights law, including equitably provided disability-related services that an individual needs to live in such housing. For example, persons with disabilities who are unable to use stairs or need a zero-step shower may not have actual housing choice without the presence of housing units with these accessibility features.[70]

High spatial segregation of persons with disabilities may indicate fair housing issues related to both physical needs and economic disparities. According to the *2020 Annual Report on People with Disabilities in America*, more than 25 percent of persons with disabilities (including physical, intellectual, and developmental; sensory; and other disability categories) live below the Census Bureau-designated poverty line, which is 14.5 percentage points higher than people without a disability.[71] Persons with disabilities may be more reliant than persons without disabilities on fixed incomes or access to public transit.

[70] *HCD 2021. https://www.hcd.ca.gov/community-development/affh/docs/affh_document_final_4-27-2021.pdf*
[71] *The Rehabilitation Research and Training Center on Disability Statistics and Demographics. 2020. https://disabilitycompendium.org/annualreport*

3.2.1.1 Regional Trends

According to 2015-2019 ACS estimates, a total of 16,244 Napa County residents had one or more disabilities, which represents approximately 11.8 percent of the county's total population. Figure 4 shows the percentage of the population living with one or more disabilities throughout Napa County. The western areas of the county, which includes the urban areas of the cities, have higher concentrations of persons living with one or more disabilities compared to the eastern areas of the county. The southeastern area of the City of Napa has the highest concentration of persons living with one or more disabilities in the county.

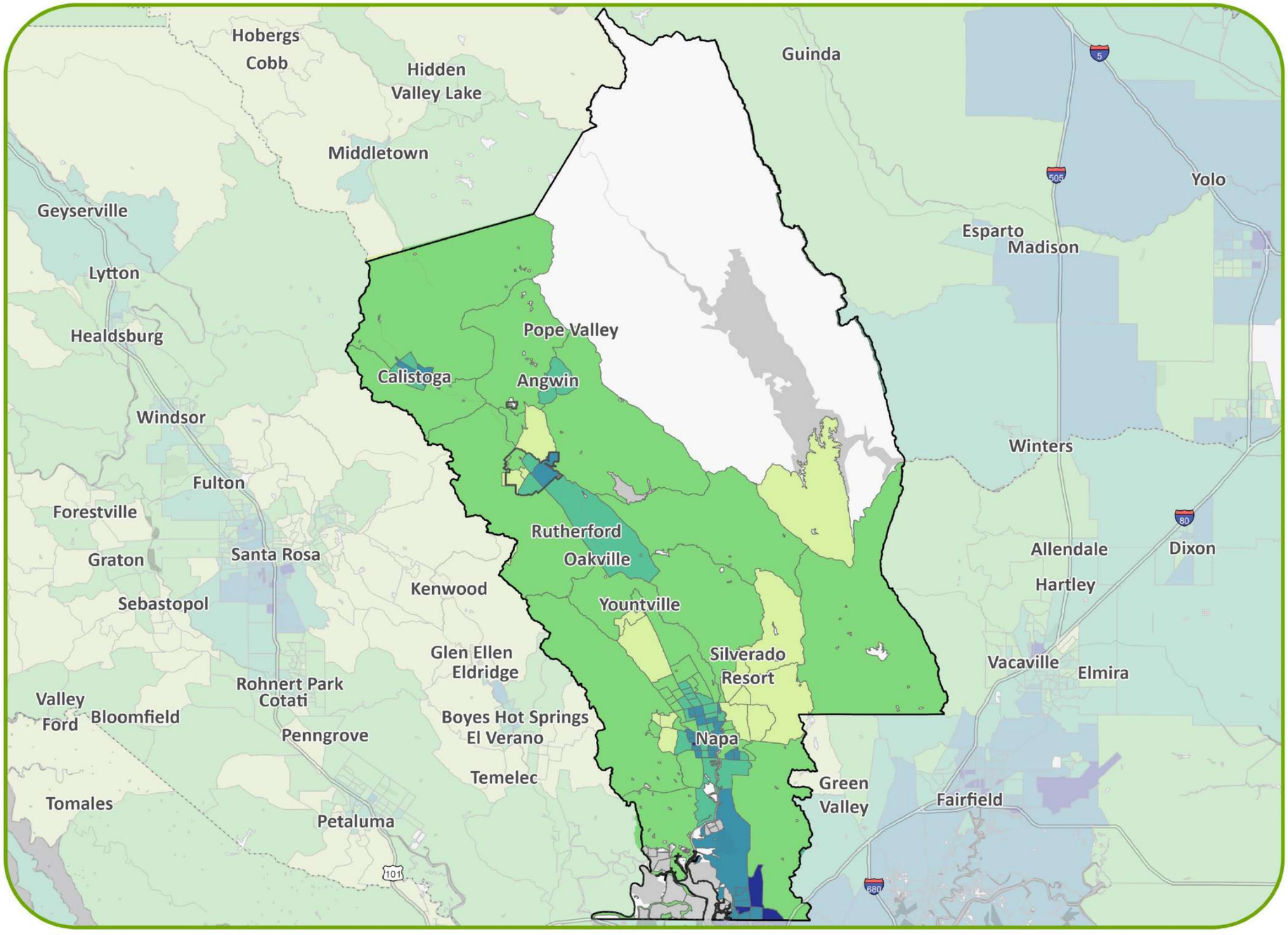


Figure 1:
Percent of Total Non-White Population (Napa County)

City Boundary
County Boundary
(R) Racial Demographics (2018) - Block Group
Percent of Total Non-White Population
≤ 20%
21 - 40%
41 - 60%
61 - 80%
> 81%

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

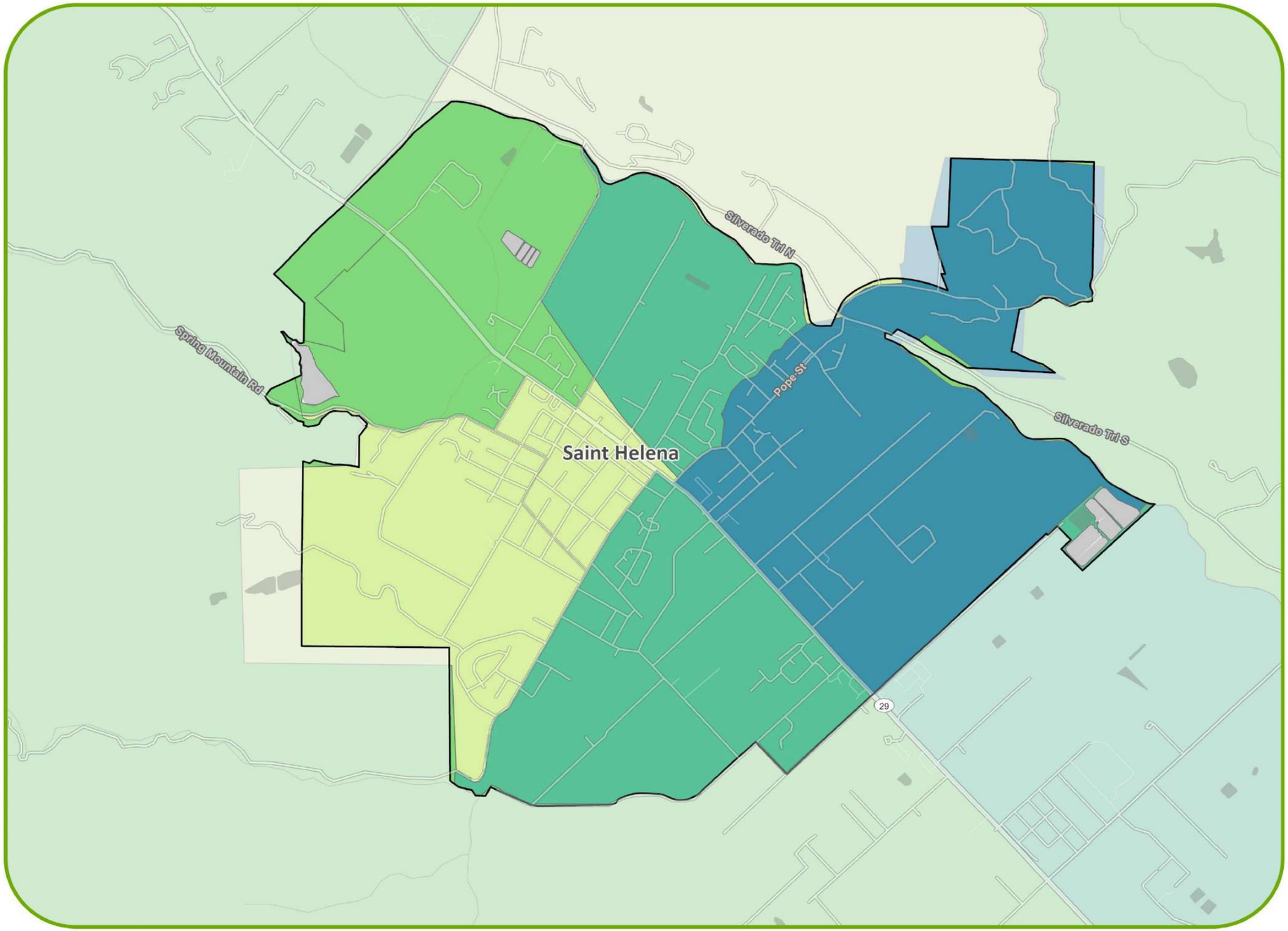


Figure 2:
Percent of Total Non-White Population (St. Helena)

City Boundary
(R) Racial Demographics (2018) - Block Group
Percent of Total Non-White Population
≤ 20%
21 - 40%
41 - 60%
61 - 80%
> 81%

ST. HELENA
CALIFORNIA

0 0.2 0.4 N
Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

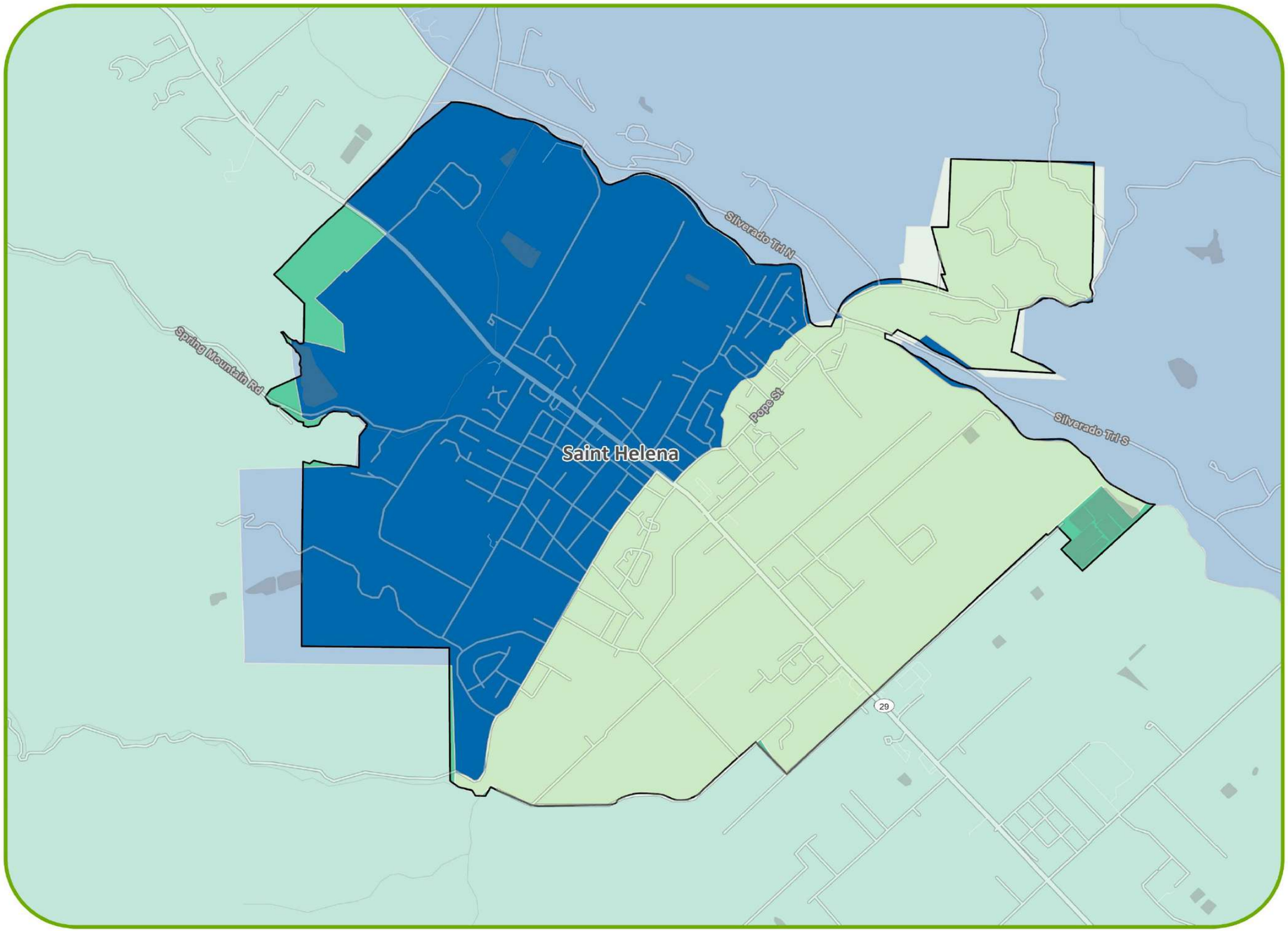


Figure 3:
Predominant Populations (St. Helena)

City Boundary

(R) Predominant Population - White Majority Tracts

Dominance Value

- Slim (gap < 10%)
- Sizeable (gap 10% – 50%)
- Predominant (gap > 50%)

(R) Predominant Population - Hispanic Majority Tracts

Dominance Value

- Slim (gap < 10%)
- Sizeable (gap 10% – 50%)
- Predominant (gap > 50%)

(R) Predominant Population - Asian Majority Tracts

Dominance Value

- Slim (gap < 10%)
- Sizeable (gap 10% – 50%)
- Predominant (gap > 50%)

(R) Predominant Population - African American Majority Tracts

Dominance Value

- Slim (gap < 10%)
- Sizeable (gap 10% – 50%)
- Predominant (gap > 50%)

(R) Predominant Population - Native American Majority Tracts

Dominance Value

- Slim (gap < 10%)
- Sizeable (gap 10% – 50%)
- Predominant (gap > 50%)

0 0.2 0.4 N
Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

Figure 4 Percent of Population with a Disability (Napa County)

Source: AFFH Viewer, 2022

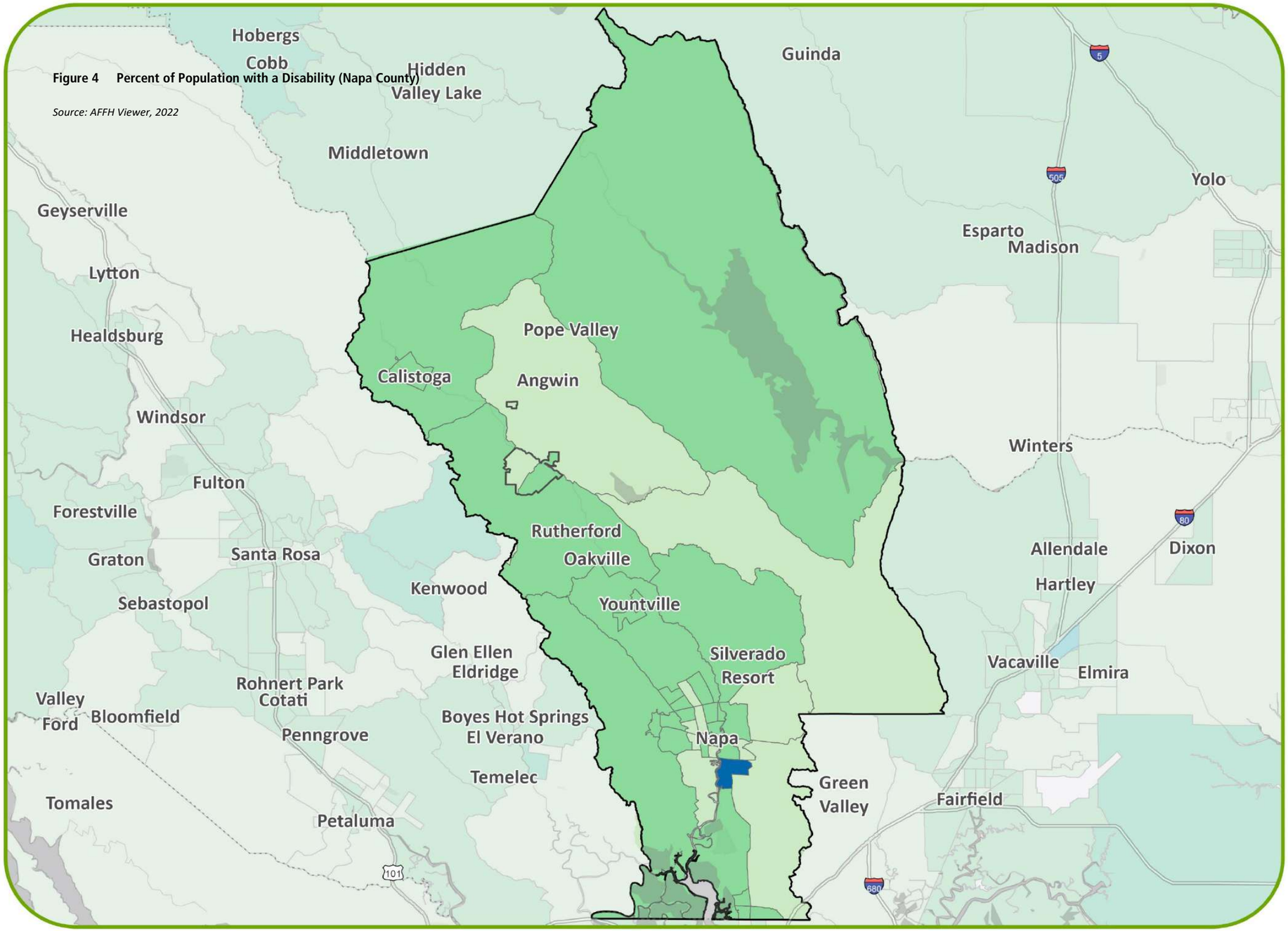


Figure 4: Percent of Population with a Disability (Napa County)

City Boundary
County Boundary
(R) Population with a Disability (ACS, 2015 - 2019) - Tract
Percent of Population with a Disability
< 10%
10% - 20%
20% - 30%
30% - 40%
> 40%

ST. HELENA CALIFORNIA

0 3 6 Miles

N

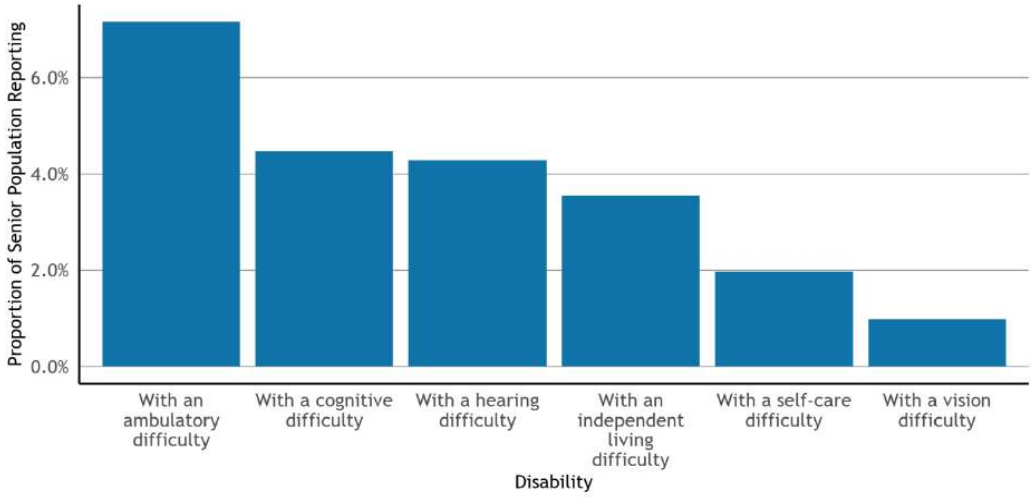
County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

3.2.2 Local Trends

The 2015-2019 ACS estimated a total of 726 residents in St. Helena were living with one or more disabilities, which is approximately 11.9 percent of the total population. Of the 726 individuals living with a one or more disabilities, 466 (64.2 percent) are age 65 or older. The most common type of disability in St. Helena is ambulatory difficulty, defined as those who have serious difficulty walking or climbing stairs, as shown in

Figure 5. Persons with ambulatory disability have specific housing needs and may require housing that is wheelchair accessible or lacks stairs or steps.

Figure 5 Disability by Type (St. Helena)



Source: U.S. Census Bureau, American Community Survey 5-Year Data (2015-2019), Table B18102, Table B18103, Table B18104, Table B18105, Table B18106, Table B18107.

Figure 6 highlights the percentage of the population living with one or more disabilities in the city by census tract. The southeastern parts of the city, east of Spring Street and Pope Street, have higher concentrations of residents with one or more disabilities (between 10 and 20 percent living with at least one disability).

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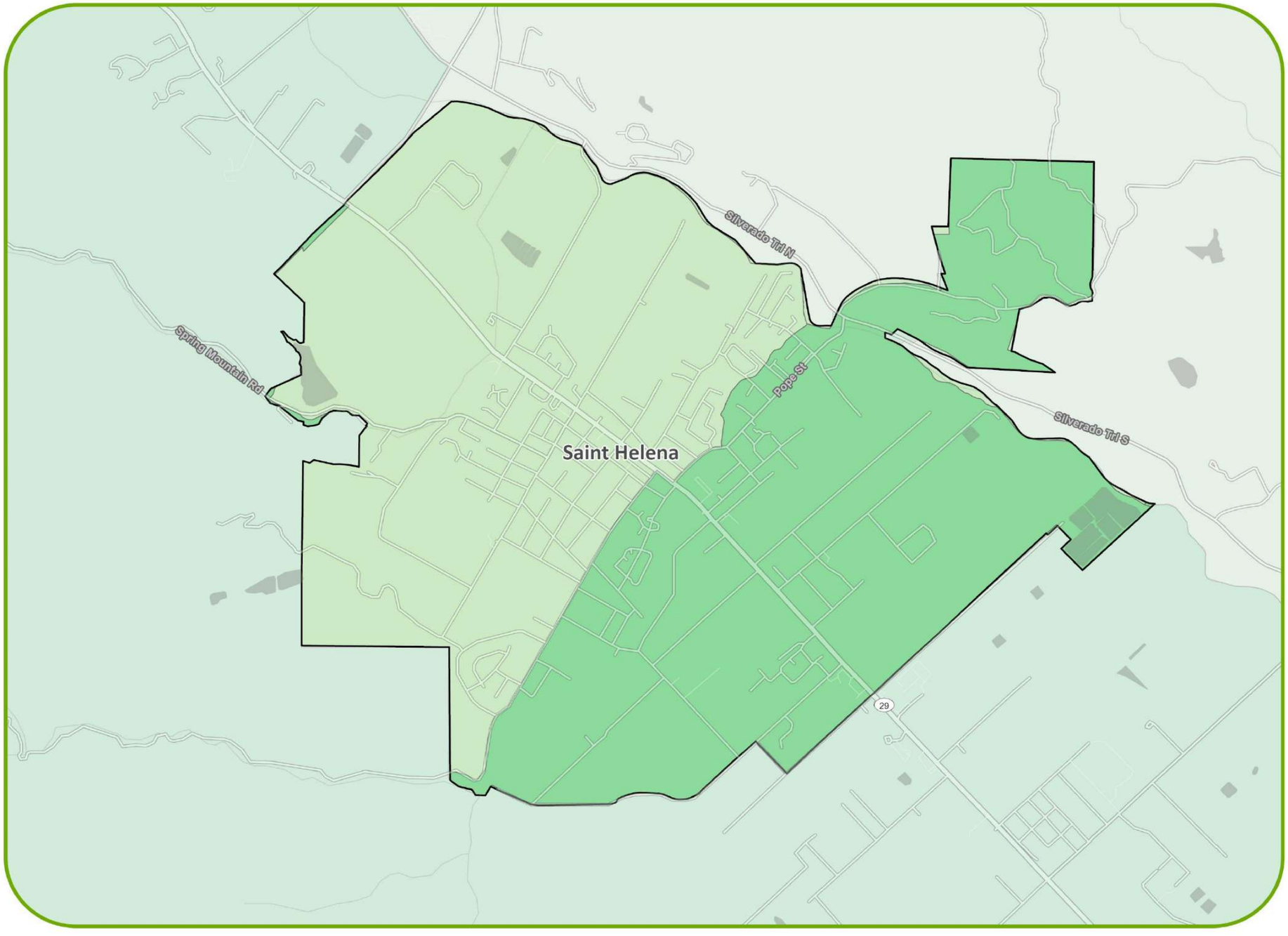

Figure 6: Percentage of Population with One or More Disabilities (St. Helena)

City Boundary
(R) Population with a Disability (ACS, 2015 - 2019) - Tract
Percent of Population with a Disability
< 10%
10% - 20%
20% - 30%
30% - 40%
> 40%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

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3.3 Familial Status

Familial status refers to families with children under the age of 18, including those with legal custody of a child, pregnant persons, and those in the process of adopting or gaining legal custody. Families with children may face housing discrimination by landlords, including being denied housing due to the presence of children or being subject to special restrictions or fees. Differential treatments such as limiting the number of children in a complex or confining children to a specific location or unit are also fair housing concerns. In a 2016 housing discrimination study, researchers found that compared to households without children, households with children were shown slightly fewer units and were commonly told about units that were slightly larger, and as a result, slightly more expensive to rent.[72] Additionally, female-headed households with children require special consideration and assistance because of generally greater needs for affordable housing and accessible day care, health care, and other supportive services.

3.3.1 Regional Trends

Most households in Napa County are family households, comprising approximately 68 percent of the total 48,705 households in the county. Households with children present comprise 28.1 percent (13,699 households) of the total households or 41.4 percent of all family households in the county. Married couples without children represent 46.9 percent of family households. The majority of family households with children are married couple households with fewer numbers of female and male single parent households. Single-parent households are more often at risk for housing issues because they rely on a single income and may require access to affordable childcare. Table 4 shows a breakdown of household type by tenure (owned versus rented) and presence of children in Napa County. Single-parent households are more likely to rent than own, especially female, single-parent households. There are 1,008 single-parent households that own and 2,323 single-parent households that rent in Napa County.

Table 4 Household Type and Tenure (Napa County)

Household Type	Owner-Occupied	Percent of Total Owner-Occupied	Renter-Occupied	Percent of Total Renter-Occupied
Married Couple Family, with Children Present	6,257	20.0%	4,036	23.2%
Single-Parent, Male Householder, no Spouse Present	383	1.2%	577	3.3%
Single Parent, Female Householder, No Spouse Present	700	2.2%	1,746	10.0%
Total Households with Children Present	7,340	23.5%	6,359	36.5%
Total Households	31,276	100%	17,429	100%

Source: U.S. Bureau of the Census, American Community Survey (ACS), Table B25115 Tenure by Household Type (Including Living Alone) and Age of Householder, 2015-2019 Estimates.

[72] *HUD. 2016. https://www.huduser.gov/portal/sites/default/files/pdf/HDSFamiliesFinalReport.pdf.*

Figure 7 shows the percentage of children in married couple households in Napa County. The less urban areas of the county have higher concentrations of children residing in married couple households while the urban areas have a lower percentage of children residing in married couple households. In most areas of the county the majority of children live in married couple households, however the northern half of the county generally has a higher percentage of children living in married couple households compared to the southern half.

Figure 8 shows the estimated percentage of children in households with a female head of household with no spouse or partner. Urban areas of the county, especially areas of the City of Napa and Town of Yountville, have higher concentrations of children in female single-parent households with between 20 and 40 percent of family households headed by a single parent female. The southern area of the City of Napa has the highest concentration of children in households with a female head of household with no spouse or partner, with between 40 and 60 percent of families headed by a single parent female. Less urban areas of the county, outside of incorporated cities, have less than 20 percent of families headed by a single female.

Figure 9 shows the percentage of adults living with a spouse or partner in Napa County. In most areas of the county 40 to 60 percent of adults are living with a spouse/partner. In areas in the southeast portion of the county, and on the west side of the City of Napa, there is a higher concentration of adults living with a spouse/partner, consisting of approximately 60 to 80 percent of adults.

Figure 10 shows the percentage of adults living alone, with less than 20 percent adults living alone in most areas in Napa County. In several of the more urban areas, specifically portions of the City of Napa, Yountville, and St. Helena, there is a higher concentration of adults living alone (greater than 20 percent).

3.3.2 Local Trends

Approximately 58 percent of the total 2,702 households in St. Helena are family households, as shown in Table 5. The majority of families are married couple families with more renters than homeowners. However, more single-parent households own their home than rent. Table 6 shows the breakdown of families with children by tenure and household type.

Non-family households are the second most common household type; a total of 42 percent of households fall into this category. These are primarily individuals living alone. Female single parent families make up about 10 percent of both owner-occupied units and rented units. Compared to the entire county, St. Helena has a greater percentage of non-family households, especially those living alone.

Table 5 Household Type and Tenure (St. Helena)

Household Type	Owner-Occupied	Percent of Total Owner-Occupied	Renter-Occupied	Percent of Total Renter-Occupied
Family Households	920	58	586	53
Married couple family	735	46	408	37
Male householder, no spouse present	29	2	63	6
Female householder, no spouse present	156	10	115	10
Non-family households	670	42	526	47
Living Alone	644	41	395	36
Not Living Alone	26	2	131	12
Total Households	1,590		1,112	

Source: U.S. Bureau of the Census, American Community Survey (ACS), Table S2501 Occupancy Characteristics, 2015-2019 Estimates.

Table 6 Tenure by Household Type and Presence of Children (St. Helena)

Household Type	Owner-Occupied	Percent of Total Owner-Occupied	Renter-Occupied	Percent of Total Renter-Occupied
Married Couple Family, with Children Present	164	10.3%	230	20.7%
Single-Parent, Male Householder, no Spouse Present	17	1.1%	11	0.1%
Single Parent, Female Householder, No Spouse Present	114	7.2%	50	4.5%
Total Households with Children Present	295	18.6%	291	26.2%
Total Households	1,590	100%	1,112	100%

Source: U.S. Bureau of the Census, American Community Survey (ACS), Table B25115 Tenure by Household Type (Including Living Alone) and Age of Householder, 2015-2019 Estimates.

The majority of children in St. Helena live in married couple households; however this percentage is less than in rural areas of Napa County. Figure 11 shows the percentage of children in married couple households in St. Helena is between 60 and 80 percent, while more than 80 percent of children in the surrounding rural areas live in married couple households.

Figure 12 shows the percentage of children in female single-parent households in St. Helena. In the northwest areas of St. Helena, 20 to 40 percent of children live in female single-parent households. In the southeast areas of the city less than 20 percent of children live in female single-parent households.

Figure 13 provides estimates regarding the percent of the adult population living with a spouse in St. Helena. Throughout the city, 40 to 60 percent of adults are living with a spouse. Figure 14 shows the

percentage of the adult population living alone in St. Helena. In the western half of the city, 20 to 40 percent of adults live alone while in the eastern half of the city less than 20 percent of adults live alone.

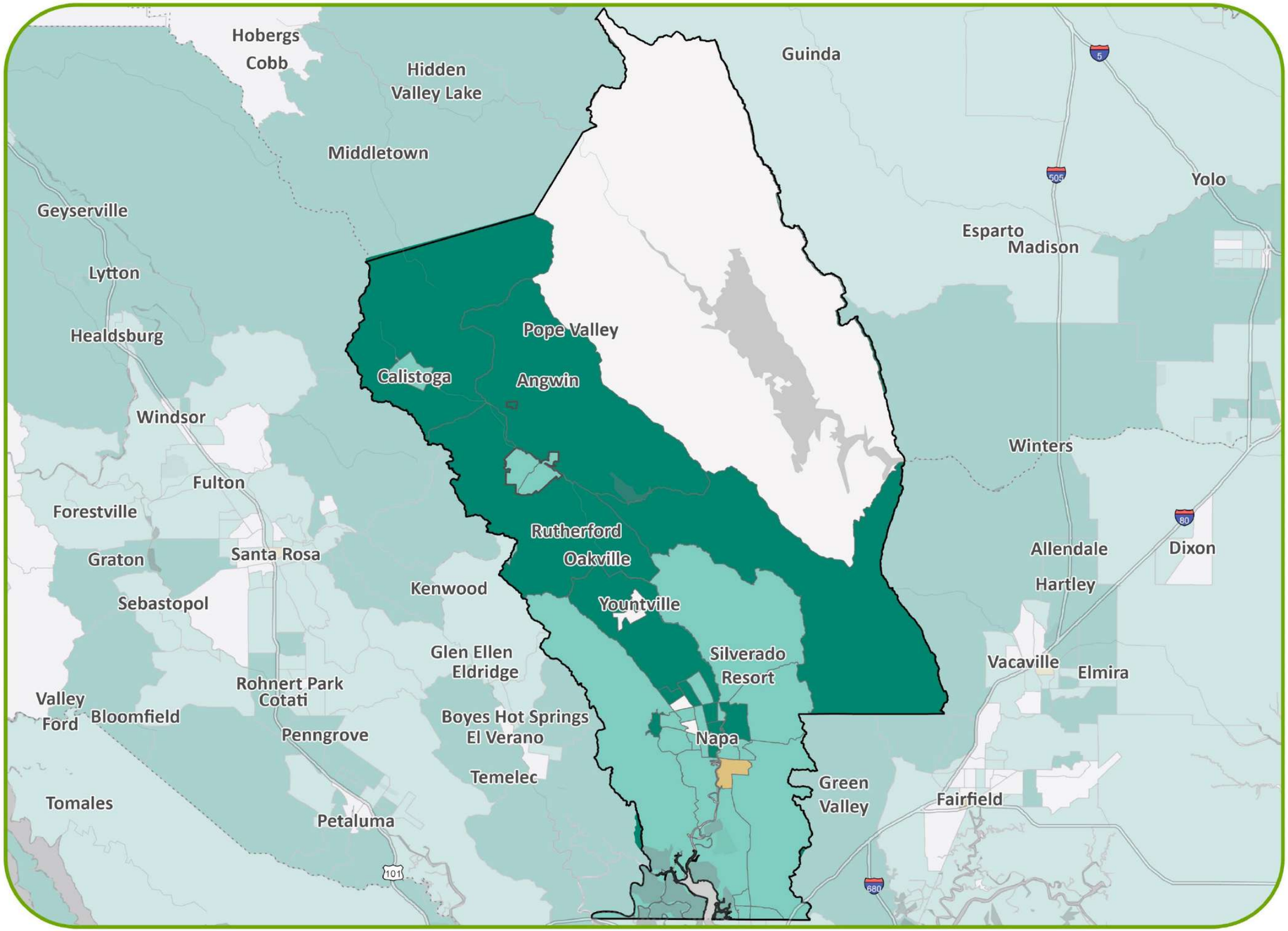


Figure 7: Children in Married-Couple Households (Napa County)

City Boundary
County Boundary
(R) Percent of Children in Married - Couple Households (ACS, 2015-2019) - Tract
Percent of Children in Married-Couple Households
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA CALIFORNIA

0 3 6 Miles N

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

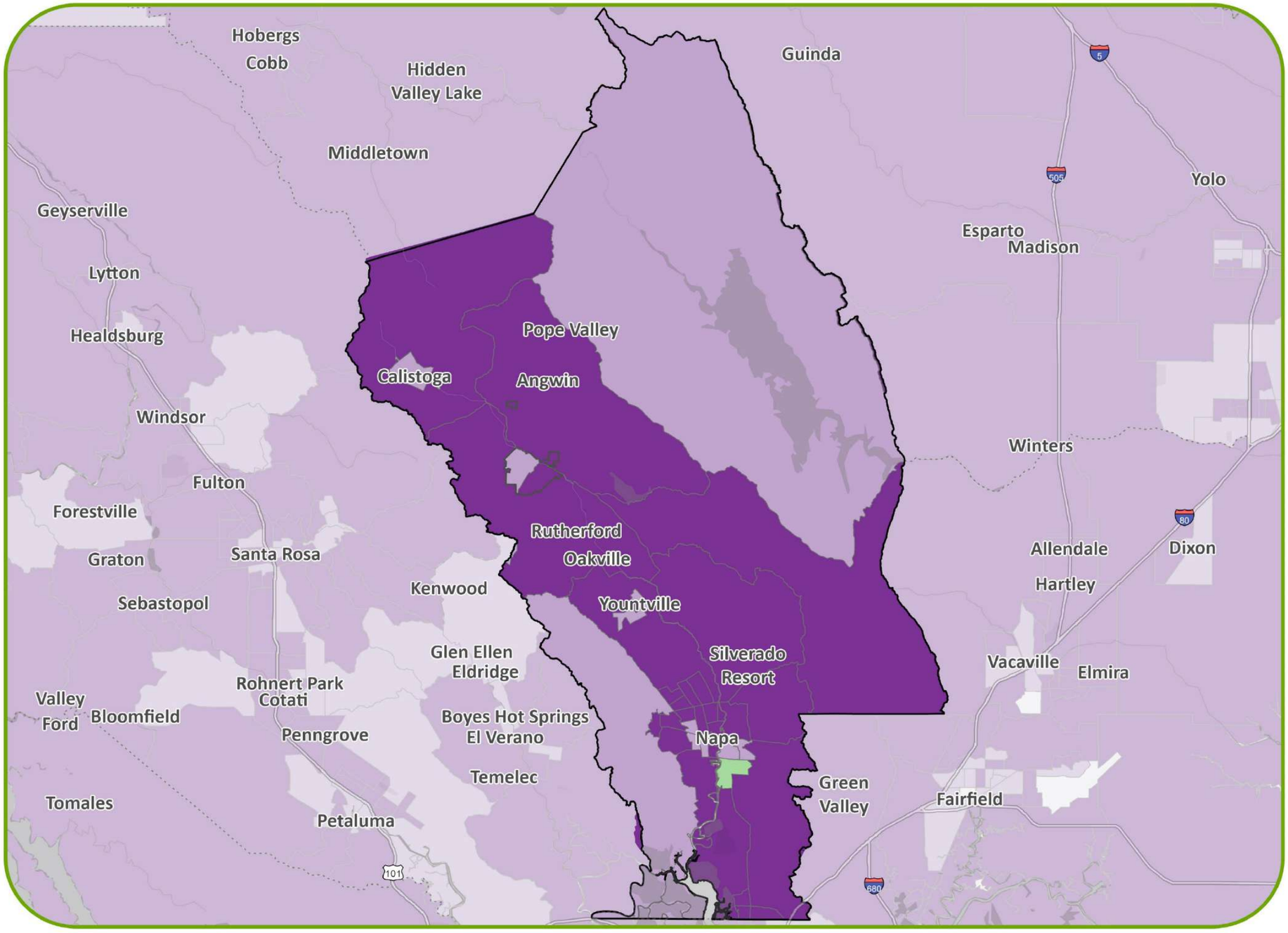


Figure 8: Female Headed Households with Children, No Spouse/Partner Present

City Boundary
County Boundary
(R) Percent of Children in Female Householder, No Spouse/Partner Present Households (ACS, 2015-2019) - Tract
Percent of Children in Female Householder, No Spouse/ Partner Present Households
≤ 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA CALIFORNIA

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

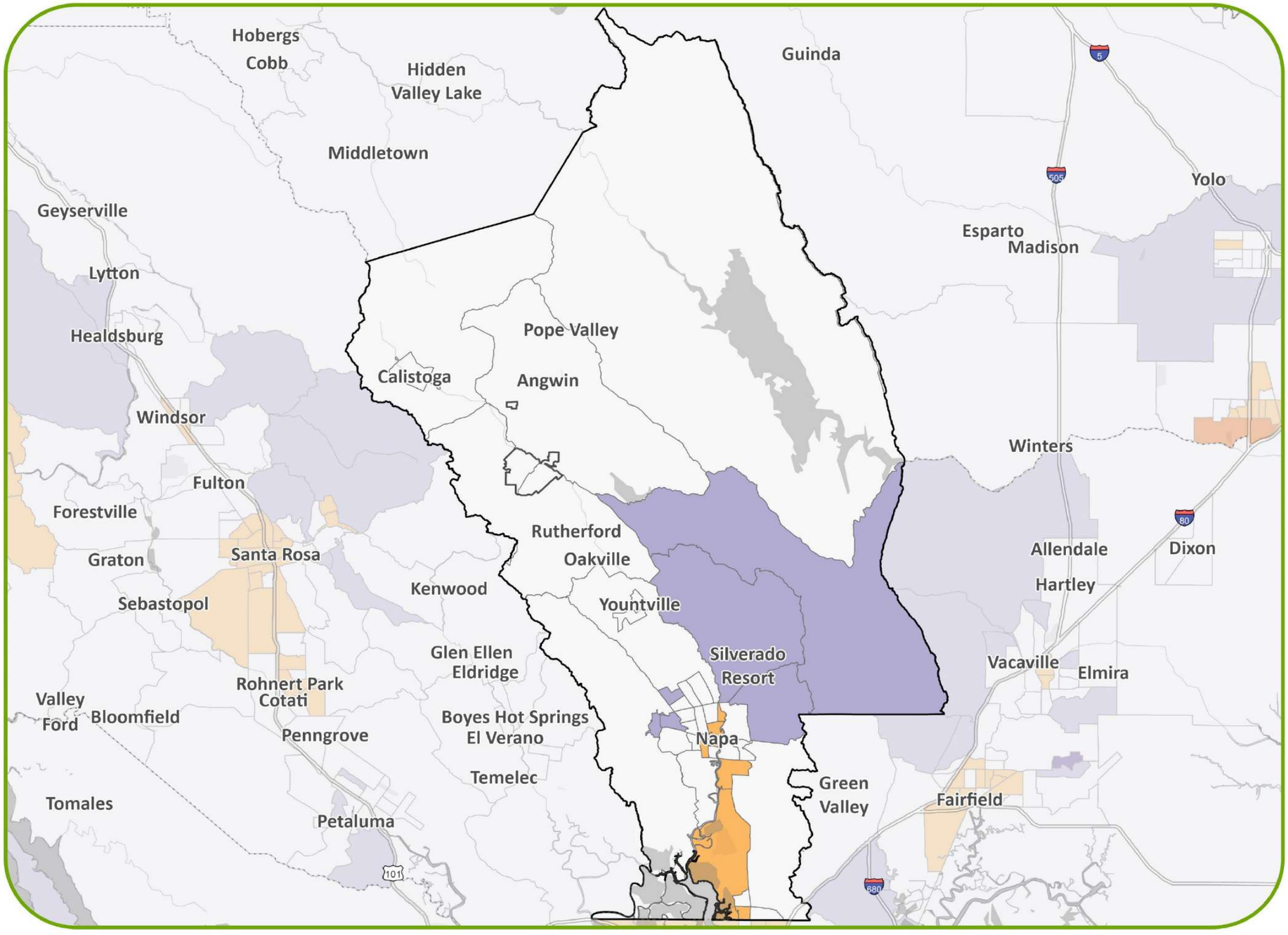


Figure 9: Population of Adults Living with Spouse/ Partner (Napa County)

City Boundary
County Boundary
(R) Percent of Population 18 Years and Over in Households Living with Spouse (ACS, 2015-2019) - Tract
Percent of Population 18 Years and Over in Households Living with Spouse
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA CALIFORNIA

0 3 6 Miles N

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

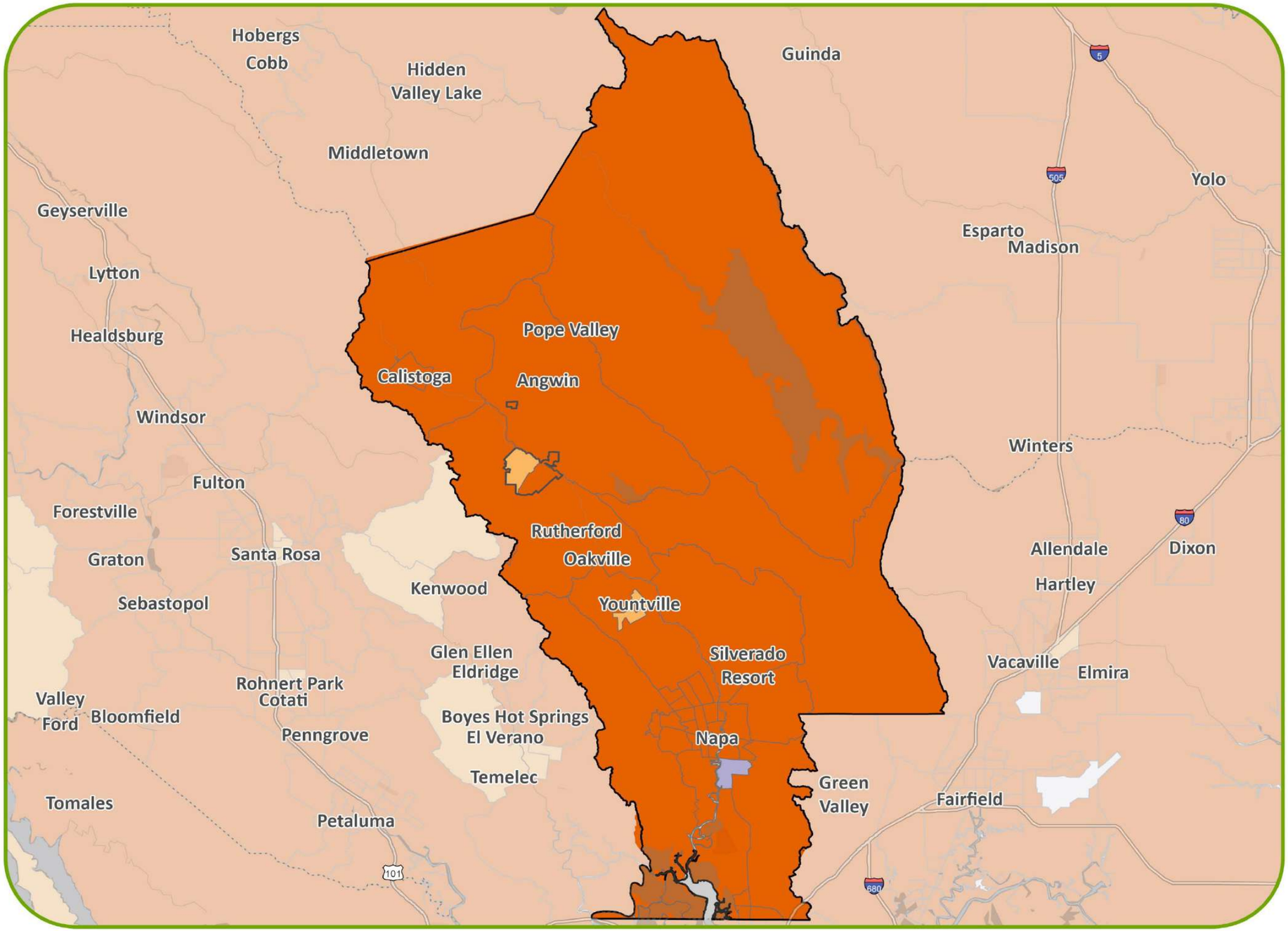


Figure 10: Population of Adults Living Alone (Napa County)

City Boundary
County Boundary
(R) Percent of Population 18 Years and Over in Households Living Alone (ACS, 2015-2019) - Tract
Percent of Population 18 Years and Over in Households Living Alone
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA
CALIFORNIA

0 3 6
Miles
N

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

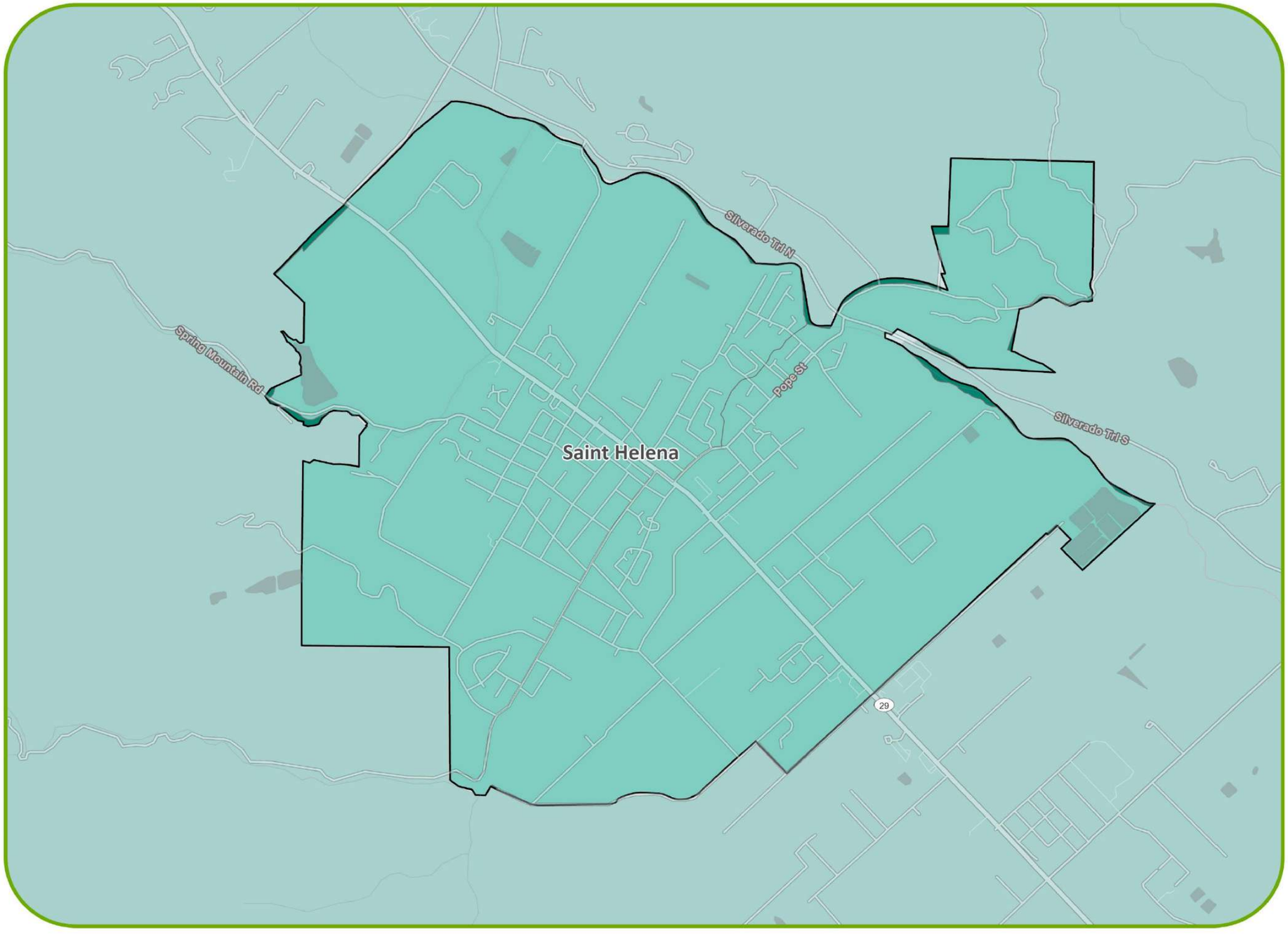


Figure 11: Children in Married-Couple Households (St. Helena)

City Boundary
(R) Percent of Children in Married - Couple Households (ACS, 2015-2019) - Tract
Percent of Children in Married-Couple Households
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA
CALIFORNIA

0 0.2 0.4 N
Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

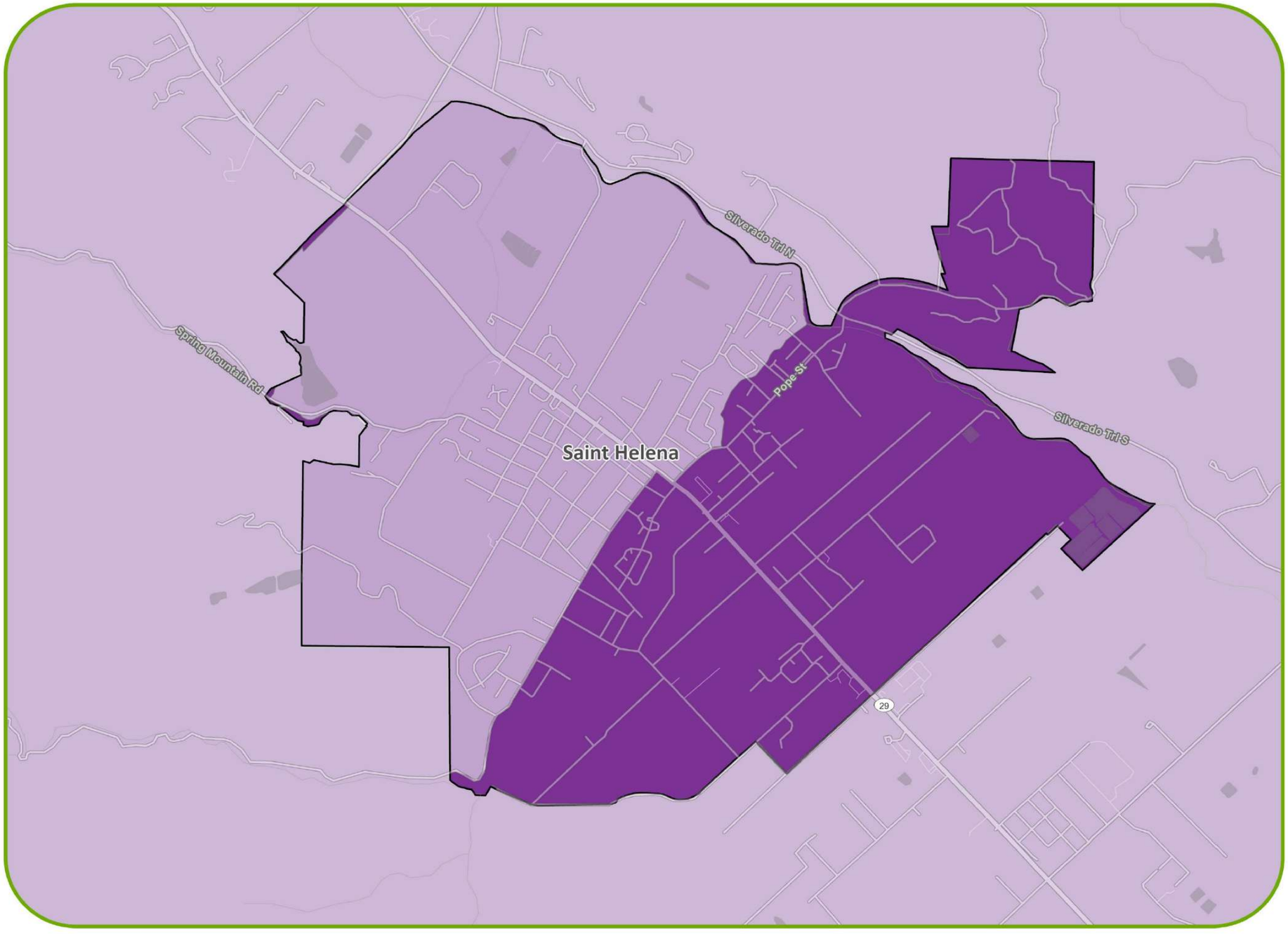


Figure 12: Female Headed Households with Children, No Spouse/ Partner Present (St. Helena)



Figure 13: Population of Adults Living with Spouse/Partner (St. Helena)

City Boundary

(R) Percent of Population 18 Years and Over in Households Living with Spouse (ACS, 2015-2019) - Tract

Percent of Population 18 Years and Over in Households Living with Spouse

- < 20%
- 20% - 40%
- 40% - 60%
- 60% - 80%
- > 80%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

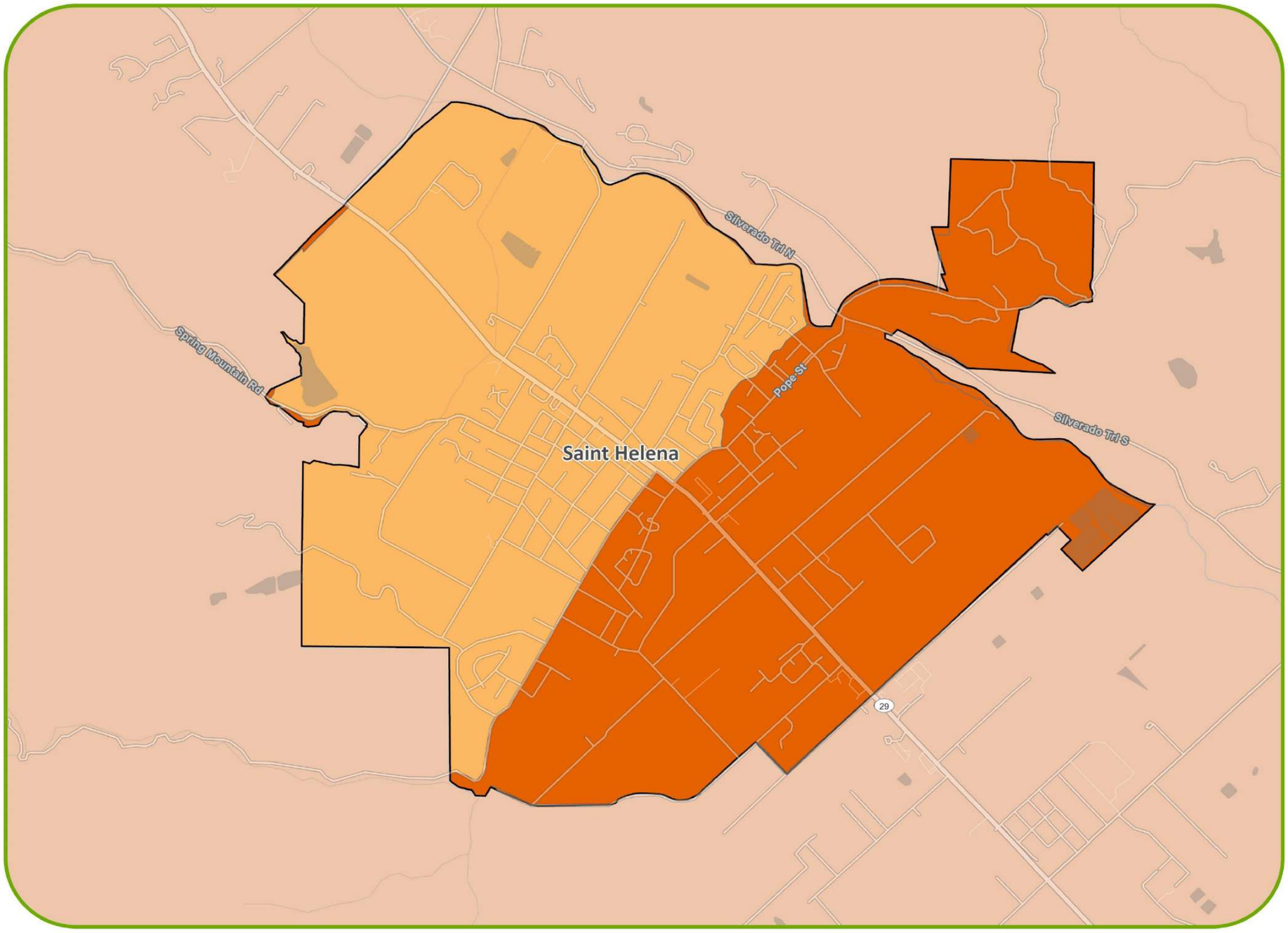


Figure 14: Population of Adults Living Alone (St. Helena)

City Boundary

(R) Percent of Population 18 Years and Over in Households Living Alone (ACS, 2015-2019) - Tract

Percent of Population 18 Years and Over in Households Living Alone

- < 20%
- 20% - 40%
- 40% - 60%
- 60% - 80%
- > 80%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

Overall, the northwest portion of the city has a higher proportion of children living in female single-parent households and a higher proportion of adults living alone compared to the southeast portion of the city. The percentages of children living in married couple households and adults living in with a spouse/partner are high throughout the city.

3.4 Household Income

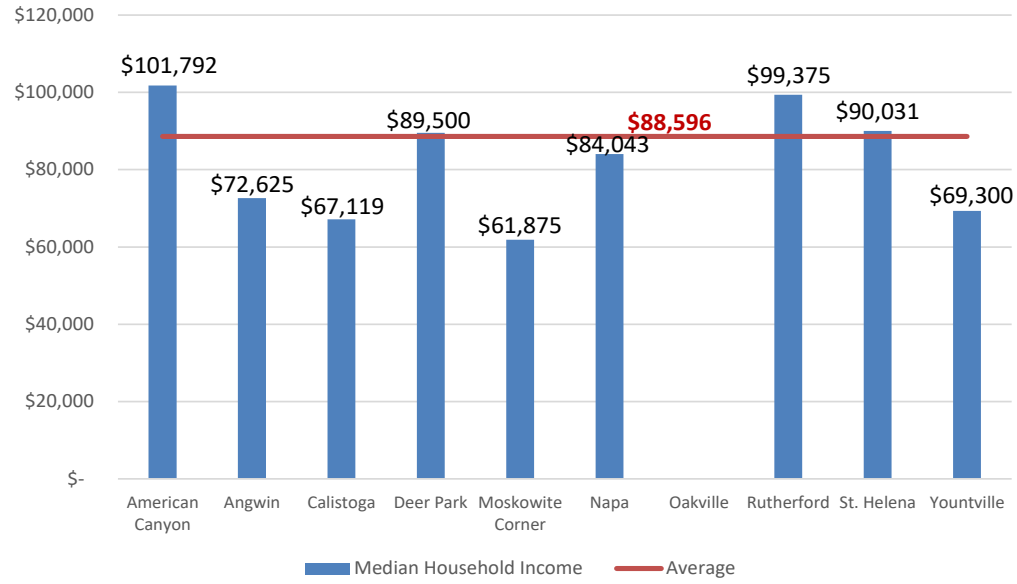
Household income is directly related to the ability to afford housing. Higher income households are more likely to own rather than rent housing. However, as household income decreases, households tend to pay a disproportionate amount of their income for housing and the number of persons occupying unsound and overcrowded housing increases. To achieve fair housing objectives, people in low-income households must have actual choice in housing opportunities – that is, they are able to locate units that are affordable and well maintained in all parts of a jurisdiction and region.

Identifying low or moderate income (LMI) geographies and individuals is important to overcome patterns of segregation. HUD defines a LMI area as a Census tract or block group where over 51 percent of the population is LMI (based on HUD income definition of up to 80 percent of the area median income).

3.4.1 Regional Trends

The median household income of Napa County is $88,596. LMI areas are concentrated in the more urbanized areas of the county, including the City of Napa, St. Helena, and Calistoga. Rural areas of the county tend to have higher income households. Figure 15 shows the median household income for cities within Napa County.

Figure 15 Median Household Income (2015-2019)



Source: Bureau of the Census, American Community Survey American Community Survey, 2015-2019.

Figure 16 shows median household income by block group using 2015-2019 ACS estimates. Block groups with the lowest median income are the eastern area of St. Helena, the area south of Yountville, and areas within the City of Napa.

LMI populations by census tract for Napa County are displayed in Figure 17. Census tracts within Cities of Napa, St. Helena, and Calistoga have the highest percentages of populations with low to moderate income. These areas are the same areas with the highest percentages of non-White population.

3.4.2 Local Trends

Household incomes in St. Helena tend to be higher than the region as a whole, with a median income of $90,031 compared to the median household income of Napa County ($88,596). St. Helena has a higher median income than many of the surrounding cities, including the cities of Napa, Yountville, and Calistoga, as shown in Figure 15.

Figure 18 provides an overview of median household income by block group in the city. The census blocks with the lowest median income are located on the northeast and east side of St. Helena with median incomes of $47,083 and $51,544, which is less than the state median income of $87,100. Community input identified that many of the property owners in this area are not lower income and are in fact very wealthy. The low-medium income trends in this area of the city may partially be attributed to the three affordable housing developments (Stonebridge Apartments, Woodbridge Village Apartments, and Hunt's Grove

Apartments), Vineyard Valley Mobile Home Park, and a senior living community (Silverado Orchards Retirement Community) all located within these two census blocks. The census block with the highest median income is located in the downtown area in the center of the city with a median income of $158,500. The AFFH Data Viewer has no information on median income of the northwest area of St. Helena.

The LMI populations in St. Helena are concentrated on the east side of the city, as shown in Figure 19. According to HUD estimates, in the eastern area of the city 68 percent of the population are LMI populations. In contrast, on western side of city less than 20 percent of the population is LMI. This pattern closely corresponds with areas of the city that have a greater non-White population concentration, which is also greater on the eastern side of the city.

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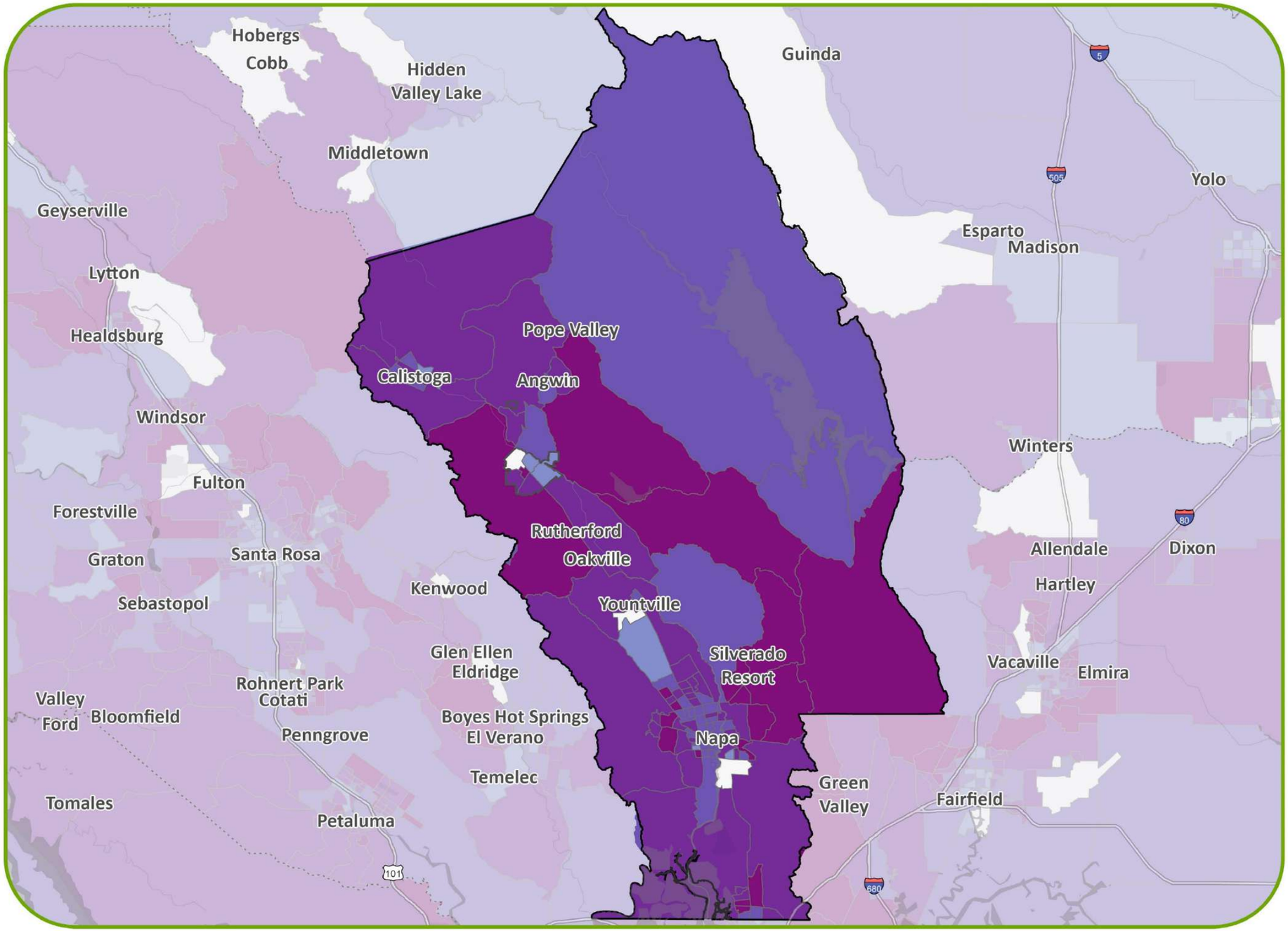

Figure 16: Median Household Income (Napa County)

City Boundary
County Boundary
(R) Median Income (ACS, 2015-2019) - Block Group
Median Income
< $30,000
< $55,000
< $87,100 (HCD 2020 State Median Income)
< $125,000
Greater than $125,000

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

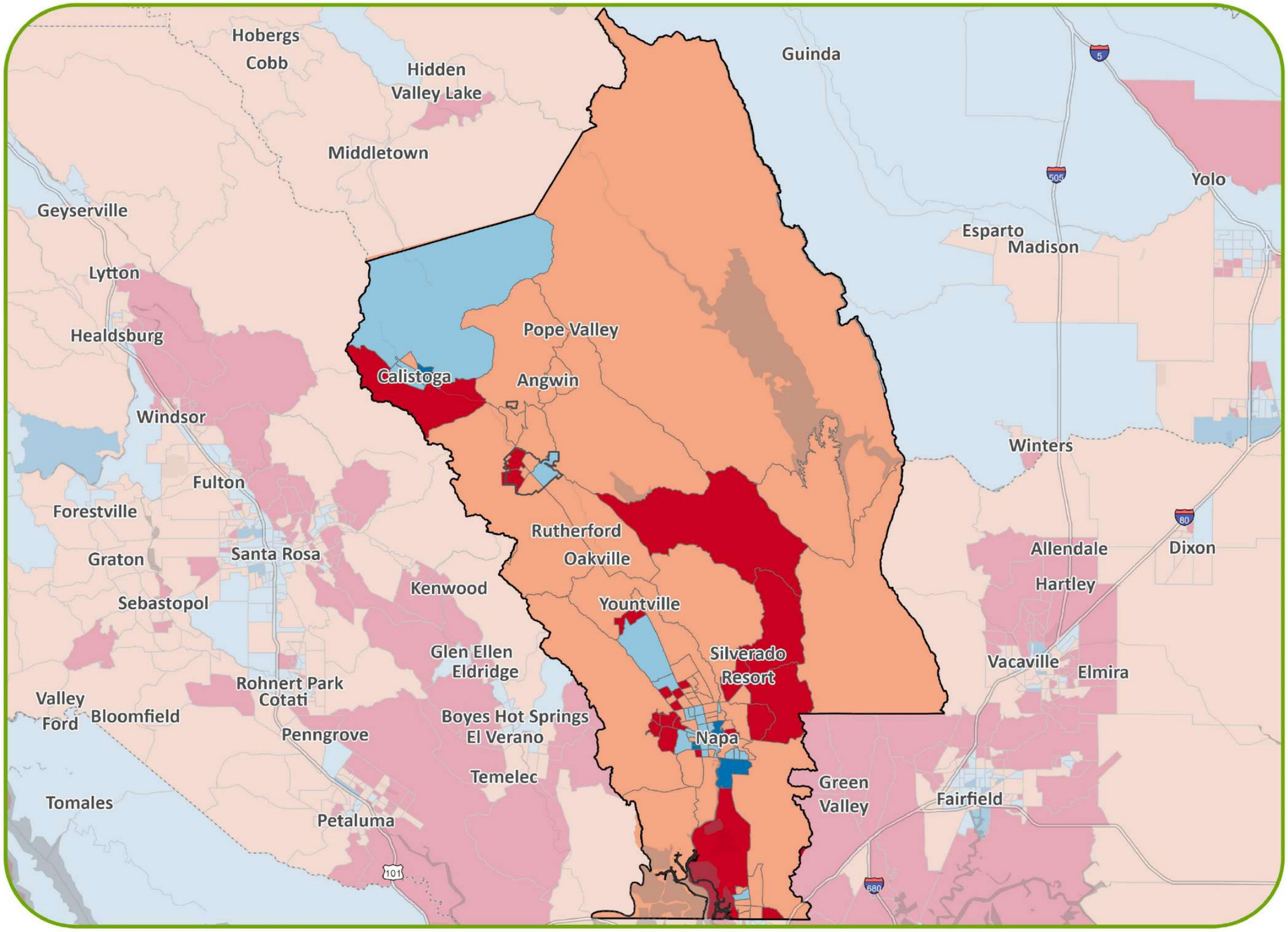

Figure 17: Low and Moderate Income Population (Napa County)

City Boundary
County Boundary
(A) Low to Moderate Income Population (HUD) - Block Group
Percent of Low-Moderate Income Population
< 25%
25% - 50%
50% - 75%
75% - 100%

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

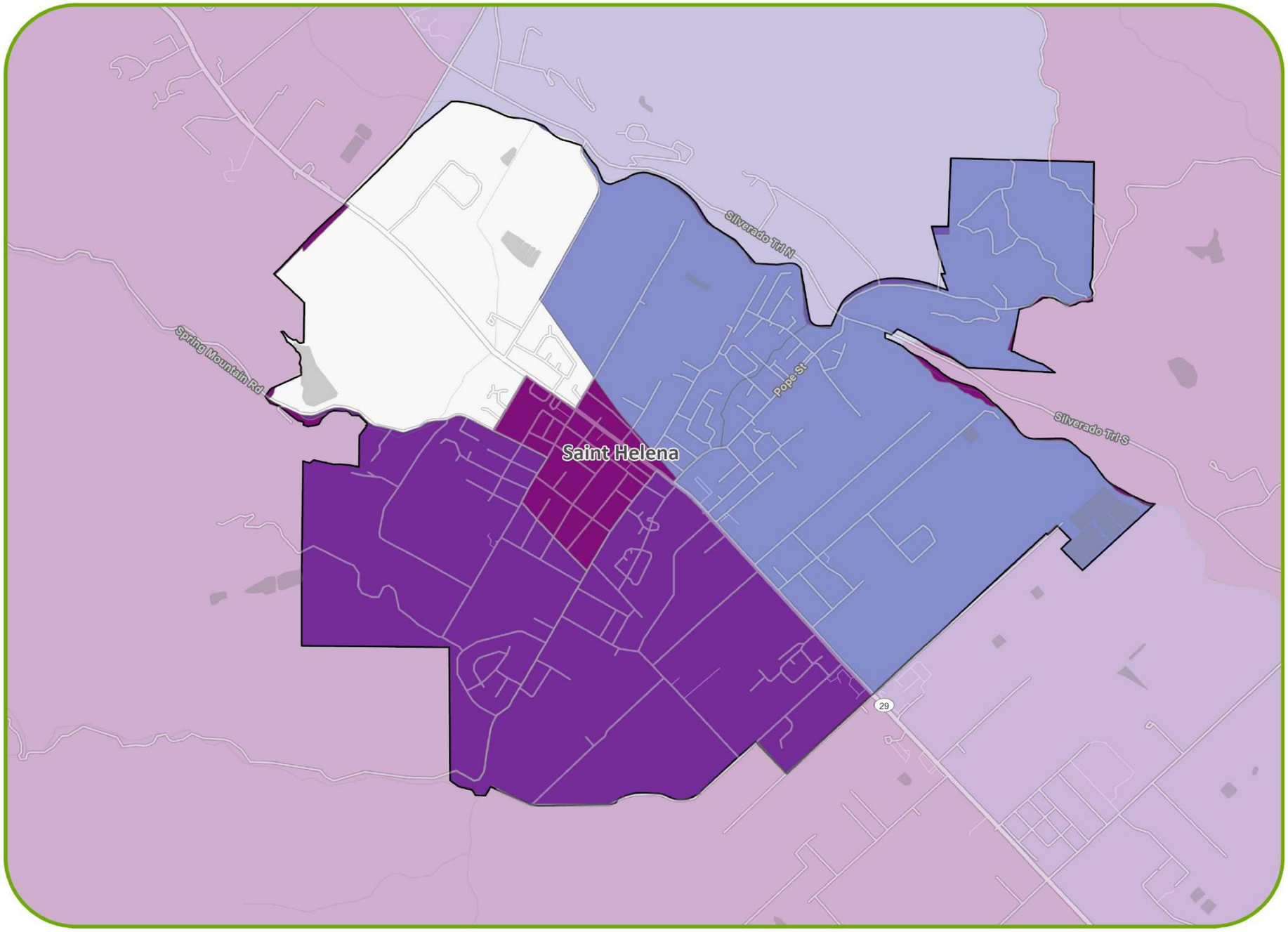

Figure 18: Median Household Income (St. Helena)

City Boundary
(R) Median Income (ACS, 2015-2019) - Block Group
Median Income
< $30,000
< $55,000
< $87,100 (HCD 2020 State Median Income)
< $125,000
Greater than $125,000

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County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

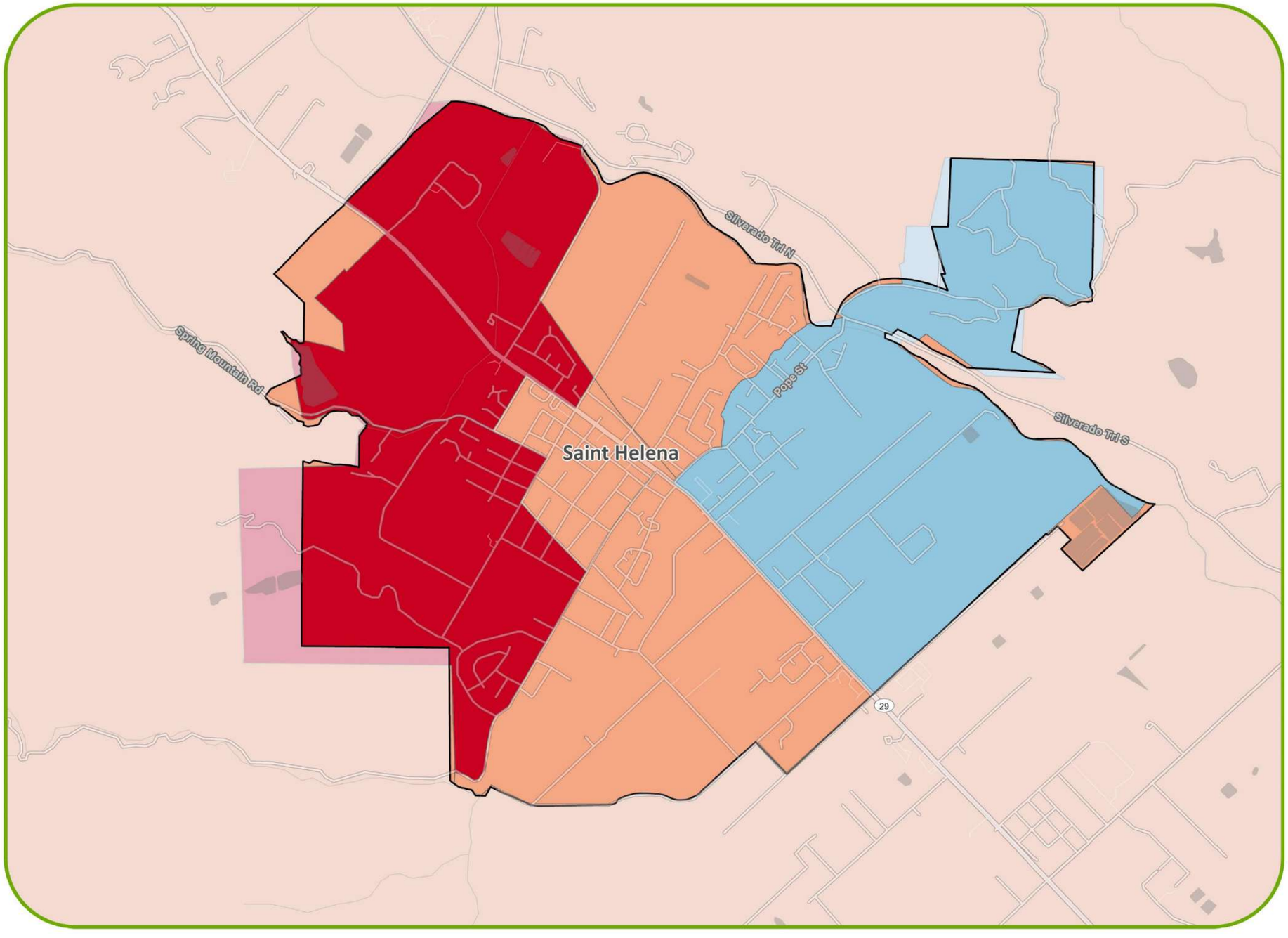

Figure 19: Low to Moderate Income Population (St. Helena)

City Boundary
(A) Low to Moderate Income Population (HUD) - Block Group
Percent of Low-Moderate Income Population
< 25%
25% - 50%
50% - 75%
75% - 100%

ST. HELENA CALIFORNIA

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County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

3.5 Racially and Ethnically Concentrated Areas of Poverty

To identify racially and ethnically concentrated areas of poverty (known as R/ECAPs), HUD developed thresholds based on racial and ethnic concentration and income level. The threshold for racial and ethnic concentration is a non-White population of 50 percent or more within metropolitan or micropolitan areas (in rural areas it is 20 percent). Areas of "extreme poverty" are defined using the poverty test as those with more than 40 percent of the population at or below the poverty line or a poverty rate or three times the average of the metropolitan area, whichever is less. Areas that meet both the racial/ethnic concentration threshold and the "extreme poverty" threshold are considered R/ECAPs.

3.5.1 Poverty and Segregation

3.5.1.1 Regional Trends

There are no R/ECAPs within Napa County, however there is a small area of in the southern portion of the City of Napa that would be considered an area of extreme poverty with more than 40 percent of the population below the poverty line. According to 2015-2019 ACS estimates, approximately 8 percent of the population of Napa County are below the poverty level. Several areas within county have 10 and 20 percent of the population below the poverty line, including areas in the southern region of the county, in and around the Cities of Napa, American Canyon, and St. Helena. Figure 20 shows the poverty status within Napa County.

3.5.1.2 Local Trends

St. Helena does not have any R/ECAPs. According to 2015-2019 ACS estimates, approximately 8 percent of the population of St. Helena are living below the poverty level, consistent with poverty rates of Napa County. The western half of the city has a greater percentage of the population below the poverty line, between 10 and 20 percent. This area also had a higher percentage of children in a female single parent household.

Figure 21 displays the percentage of the population whose income is below the poverty line in St. Helena. The poverty rates in St. Helena have shifted over time. The 2010-2014 ACS estimated the eastern half of the city had a greater percentage of the population below the poverty line, opposite of the trend shown by the 2015-2019 ACS estimates.

Figure 22 shows neighborhood segregation in St. Helena using to data from UC Berkeley's Urban Displacement Project (UDP). According to the UDP the predominant racial/ethnic composition in St. Helena is Latinx-White. ABAG's Segregation Report also analyzed neighborhood segregation in St. Helena between 2010 and 2020 using the racial isolation index, racial dissimilarity index, and Thiel's H-Index. The isolation index showed White residents are the most segregated racial group in the city, followed by Latinx residents. The dissimilarity index showed segregation is greatest between Asian/Pacific Islander and White residents, followed by Latinx and White residents. However, the dissimilarity index is an unreliable measure for Asian/Pacific Islander and Black/African populations in St. Helena because their populations are too

small for accurate calculation. Thiel's H-index for neighborhood level segregation indicated racial segregation between all racial groups within the city is less than in the average Bay Area jurisdiction. Compared to all Bay Area jurisdictions, St. Helena is less diverse, with a smaller percentage of the population consisting of people of color.

ABAG's Segregation Report also analyzed neighborhood level income segregation between 2010 and 2015 in St. Helena using the income group isolation index, income group dissimilarity index, and Thiel's H-index. The isolation index showed above moderate income residents are the most segregated income group in the city followed by very low income residents. Among all income groups, segregation of the moderate income population has changed the most between 2010 and 2015, becoming less segregated. The dissimilarity index showed income segregation is greater in St. Helena than in the average Bay Area jurisdiction between lower income residents and non-lower income residents and between very low income residents and above moderate income residents. Overall, segregation between lower income residents and residents who are not lower income increased between 2010 and 2015. According to Thiel's H-index for neighborhood level income segregation, income segregation in the city is less than the average Bay Area city and remained about the same between 2010 and 2015. Compared to all Bay Area jurisdictions, St. Helena has a similar share of very low income residents, lower share of low and moderate income residents, and a higher share of above moderate income residents.

In summary, ABAG's segregation report found White residents and above moderate income residents are the largest and most segregated racial and income groups in St. Helena.

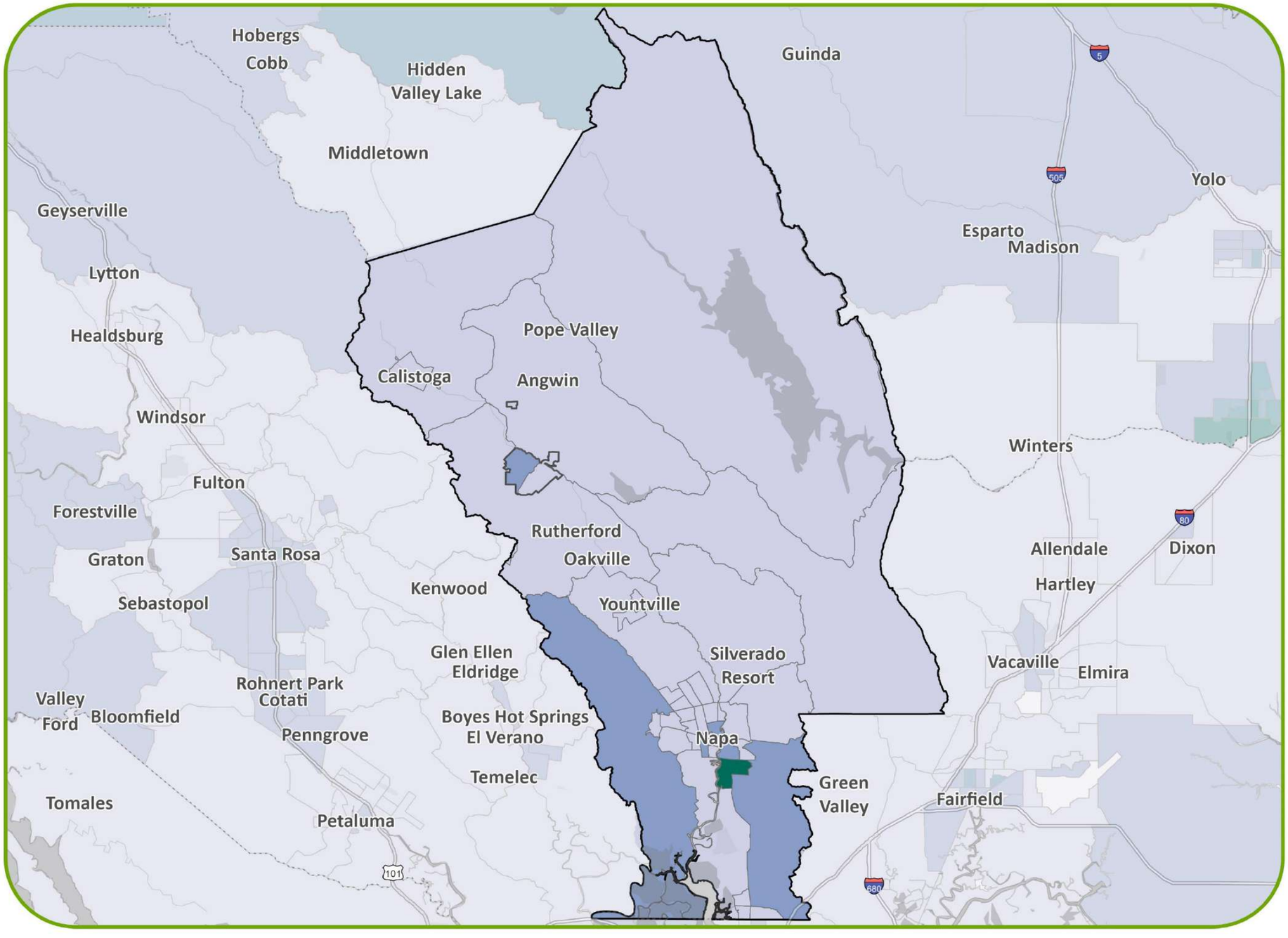

Figure 20:
Areas of High Poverty (Napa County)

City Boundary
County Boundary
(R) Poverty Status (ACS, 2015 - 2019) - Tract
Percent of Population whose income in the past 12 months is below poverty level
< 10%
10% - 20%
20% - 30%
30% - 40%
> 40%

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County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

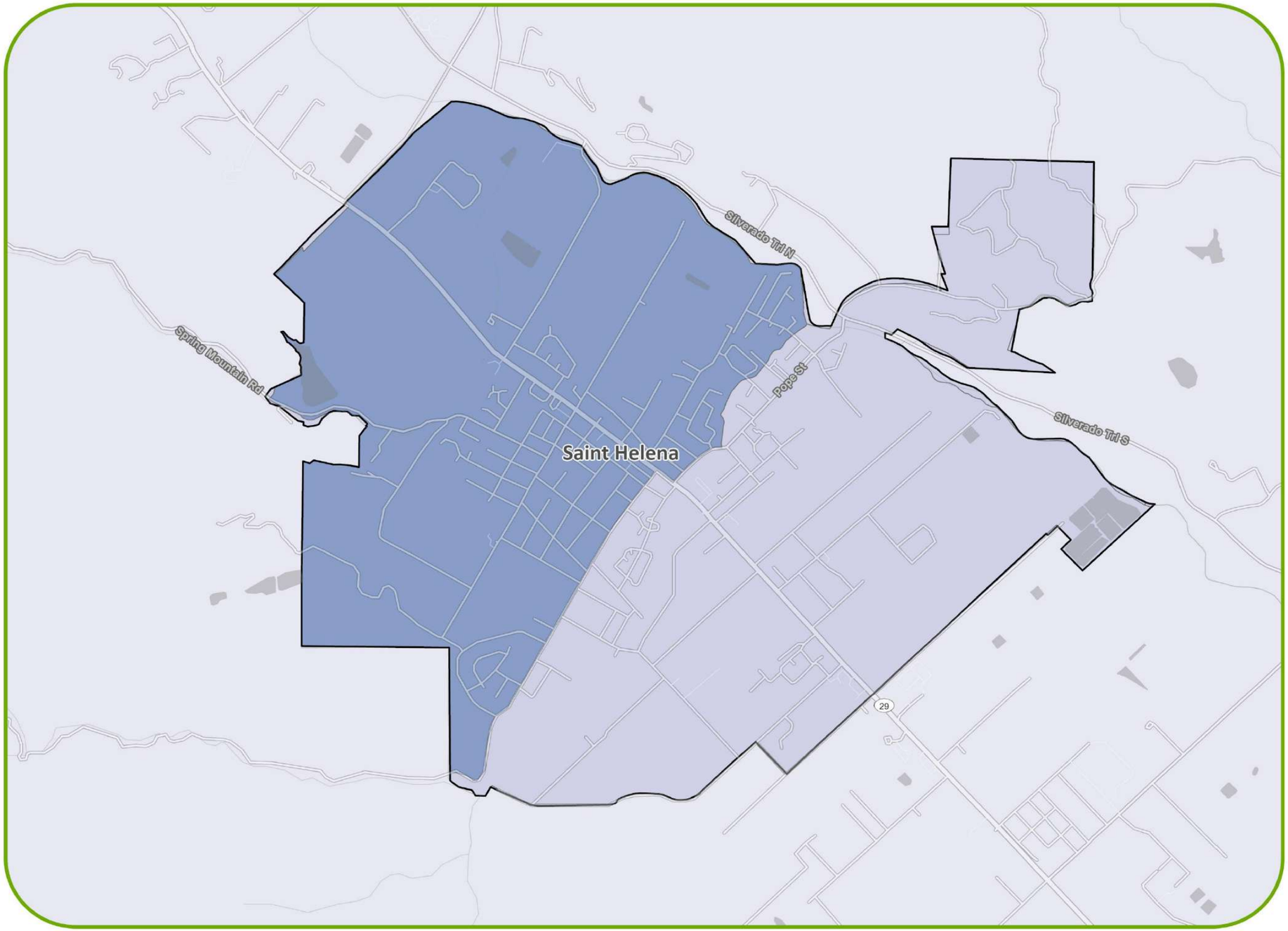

Figure 21:
Poverty Status
(St. Helena)

City Boundary
(R) Poverty Status (ACS, 2015 - 2019) - Tract
Percent of Population whose income in the past 12 months is below poverty level
< 10%
10% - 20%
20% - 30%
30% - 40%
> 40%

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County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

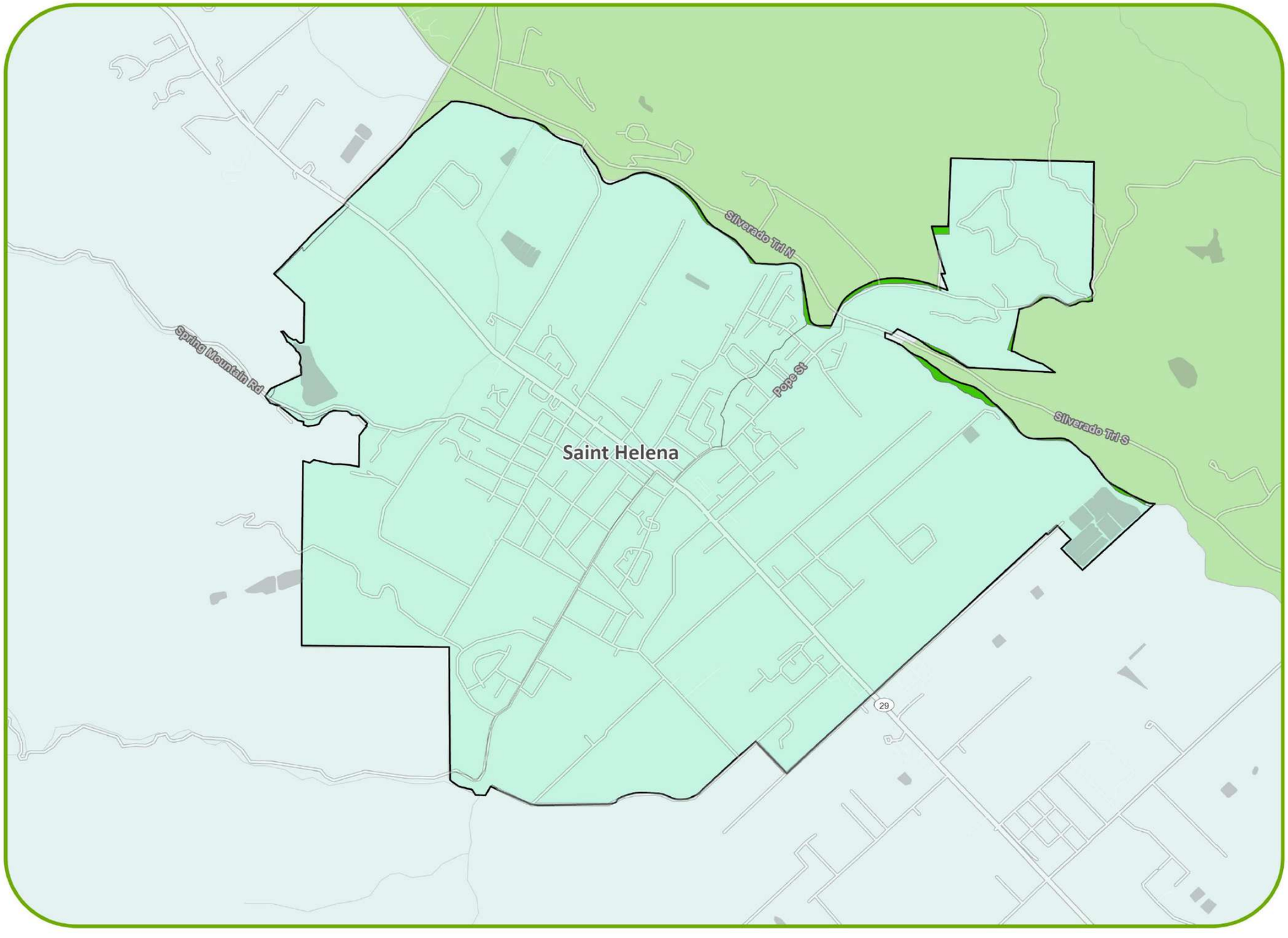

Figure 22: Neighborhood Segregation (St. Helena)

City Boundary
(A) Neighborhood Segregation (UC Berkeley, 2019) - Tract
Latinx-White
3 Group Mix

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Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

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3.5.2 Concentrated Areas of Affluence

While racially R/ECAPs have long been the focus of fair housing policies, racially concentrated areas of affluence (RCAAs) must also be analyzed. Racially concentrated areas of affluence (RCAAs) are affluent communities that are predominantly White.[73] According to a policy paper published by HUD, White residents are the most racially segregated group in the United States and are typically more affluent than majority non-White communities. In addition to having a higher median income, areas of affluence experience less overcrowding, less housing cost burden on renters, and are generally less susceptible to displacement compared to LMI areas.

RCAAs have not been studied extensively, nor has a standard definition been published by HCD or HUD. HCD has created a metric to identify RCAAs by analyzing the total White population for each census tract and comparing it to the average percentage of total White populations for all census tracts within a given Council of Government (COG) region. This compared value is referred to as the Location Quotient (LQ). For example, a census tract with an LQ of 1.5 has a percentage of total White population that is 1.5 times higher than the average percentage of total White population within the COG region. HCD identifies RCAAs as census tracts with an LQ of more than 1.25 and a median income 1.5 times higher than the COG AMI (or 1.5x the State AMI, whichever is lower).

3.5.3 Regional Trends

There are several RCAAs in Napa County, which are primarily located in more rural areas of the county. Most of the RCAAs are concentrated along the western portion of the county with several RCAAs located within the northwest part of the City of Napa as well as in the rural areas northeast of the City of Napa. shows RCAAs in Napa County.

The population of Napa County is predominantly White, with the highest concentration of White residents residing in rural areas of the county. Figure 23 highlights the predominantly White census tracts in Napa County. Areas with a lower concentration of White residents are generally located within the valley where population density is higher. The more rural areas along the eastern boarder of Napa County have high concentrations of White populations, which corresponds with areas that have the highest median incomes in the county.

3.5.4 Local Trends

There are no RCAAs identified within St. Helena. However, similar to patterns of affluence throughout Napa County, areas of St. Helena with higher median incomes correspond to areas with higher proportions of White residents. The northwestern area of the city has a larger proportion of White residents and a higher median income, while the southeastern area has greater racial/ethnic diversity and a lower median income. The northwestern area of the city has a predominant White population (over 50 percent) and the

[73] *Goatz, Damanio and Williams, "Racially Concentrated Areas of Affluence: A Preliminary Investigation" https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/ch4.pdf, (2019).*

southeastern area of the city has a large White population and large Hispanic population (approximately 48 percent each). Figure 26 shows the overlap of high median income and predominant White population in St. Helena.

In addition to having a higher median income, areas of affluence in St. Helena experience lower percentages of overpayment by homeowners, more positive economic outcomes, and more positive environmental outcomes compared to LMI areas.

3.6 Disparities in Access to Opportunities

According to HCD guidance, land use policies and planning often translate into the ability of residents to access neighborhoods of opportunity, with high-performing schools, greater availability of jobs that afford entry to the middle class, and convenient access to transit and services. The limits on housing choice and access experienced by people within protected classes, such as race, sexual orientation, or disability, have far-reaching impacts on access to job opportunity, quality education, and mental and physical health.[74] Access to opportunity often means both improving the quality of life for residents of low-income communities, as well as supporting mobility and access to 'high resource' neighborhoods. This encompasses education, employment, economic development, safe and decent housing, low rates of violent crime, transportation, and other opportunities, including recreation, food, and healthy environment (air, water, safe neighborhood, safety from environmental hazards, social services, and cultural institutions).

The analysis of place-based characteristics linked to opportunity indicators, quality education, employment, transportation, and healthy environment, seeks to understand the disparity between communities in terms of access to real and potential economic benefits and quality of life.

3.6.1 Transit Access

Reliable access to public transit is crucial, especially for low-income residents and/or persons with disabilities, to provide connections to employment opportunities. Access to employment via public transit can reduce income burden and increase housing mobility, which enables residents to locate housing in more areas.[75] The lack of a relationship between public transit, employment opportunities, and affordable housing may impede fair housing choice. Persons who depend on public transit may have limited choices regarding places to live.

3.6.2 Regional Trends

As Napa County is largely rural, residents mainly depend on their personal vehicles for commuting and traveling. Public transit options do exist in Napa County, primarily Vine Transit, a fixed route bus service

[74] *HCD. 2021. https://www.hcd.ca.gov/community-development/affh/docs/affh_document_final_4-27-2021.pdf*
[75] *Ong, Paul and Evelyn Blumenberg, "Job Accessibility and Welfare Usage: Evidence from Los Angeles." UCLA Department of Policy Studies, (1998).*

operated by the Napa Valley Transportation Authority. Vine Transit operates fixed bus route service throughout the county from American Canyon to Calistoga and provides connections to the Vallejo Ferry Terminal, and El Cerrito Del Norte BART station, SolTrans stations in Vallejo and Fairfield, and the Suisun/Fairfield Train Station. Lake Transit Authority connects southern areas of Lake County to northern Napa County, with bus stops in Calistoga, St. Helena, and Deer Park. Additionally, several low cost, on demand shuttle services are available to the public providing fixed route and door-to-door transit within the city limits of their operating city, including the Yountville Trolley, St. Helena Shuttle, Calistoga Shuttle, and American Canyon Transit. Residents and visitors with physical and/or cognitive disabilities may be eligible to participate in VineGo Paratransit Service, a shared ride service providing curb-to-curb transportation. VineGo offers rides within and between cities throughout the county as well as to Kaiser Vallejo Medical Center.

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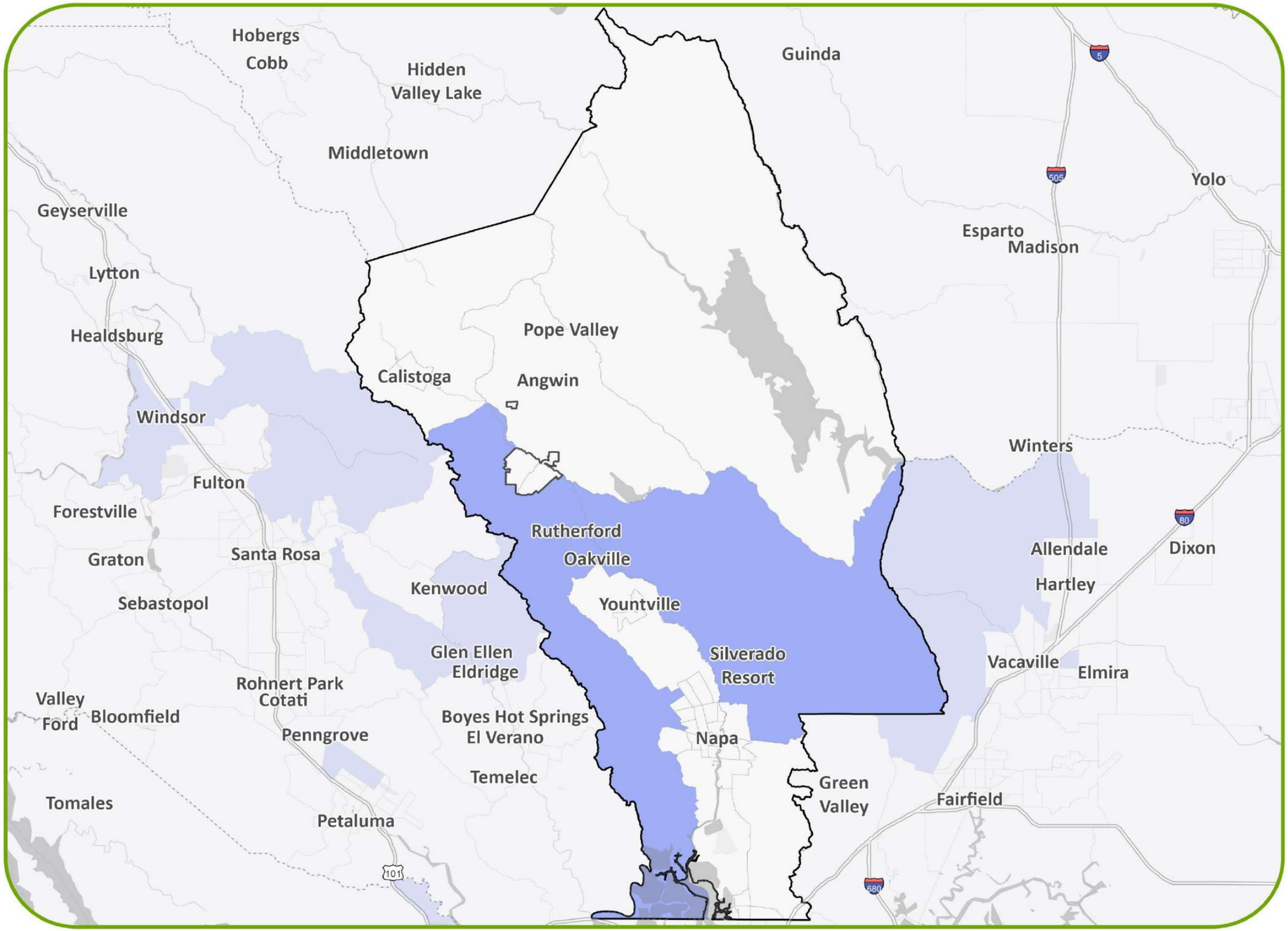

Figure 23:
Racially Concentrated Areas of Affluence (Napa County)

City Boundary
County Boundary
(R) Racially Concentrated Areas of Affluence RCAA (ACS, 2015 - 2019) - Tract
0 - Not a RCAA
1 - RCAA

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

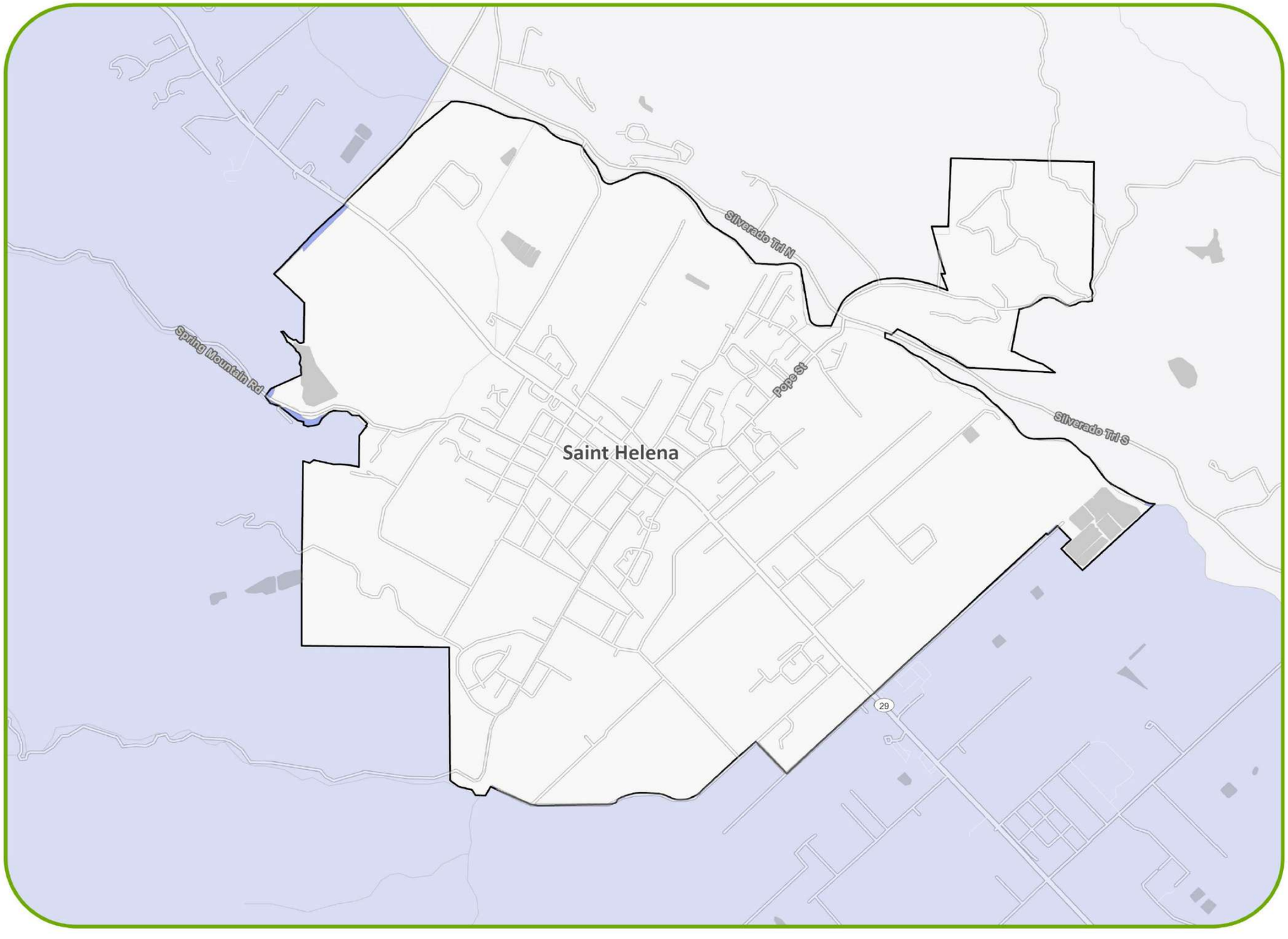

Figure 24:
Racially Concentrated Areas of Affluence (St. Helena)

City Boundary
(R) Racially Concentrated Areas of Affluence RCAA (ACS, 2015 - 2019) - Tract
0 - Not a RCAA
1 - RCAA

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County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

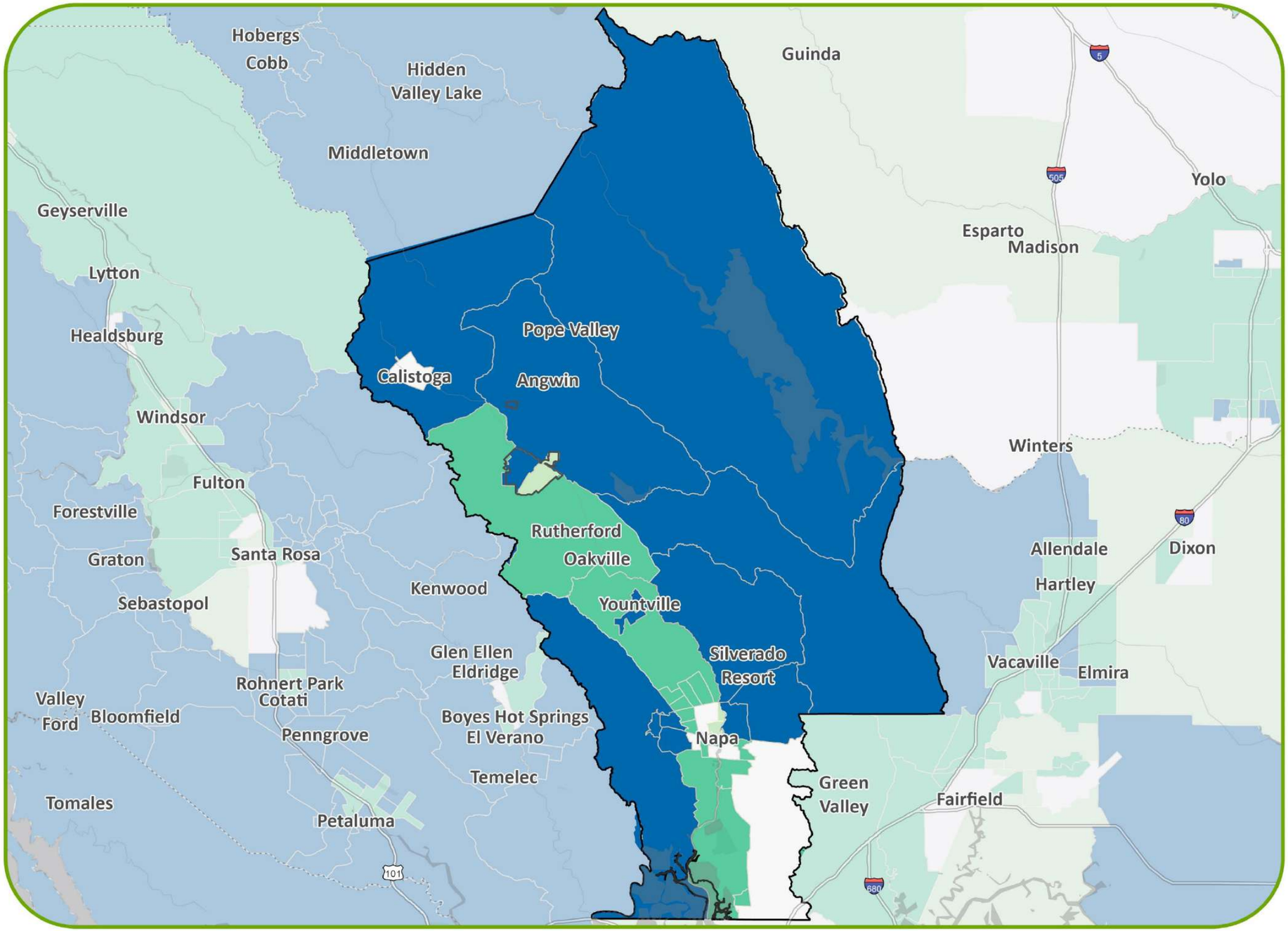

Figure 25: Predominant White Population (Napa County)

City Boundary
County Boundary
(R) Predominant Population - White Majority Tracts
Dominance Value
Slim (gap < 10%)
Sizeable (gap 10% – 50%)
Predominant (gap > 50%)

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County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

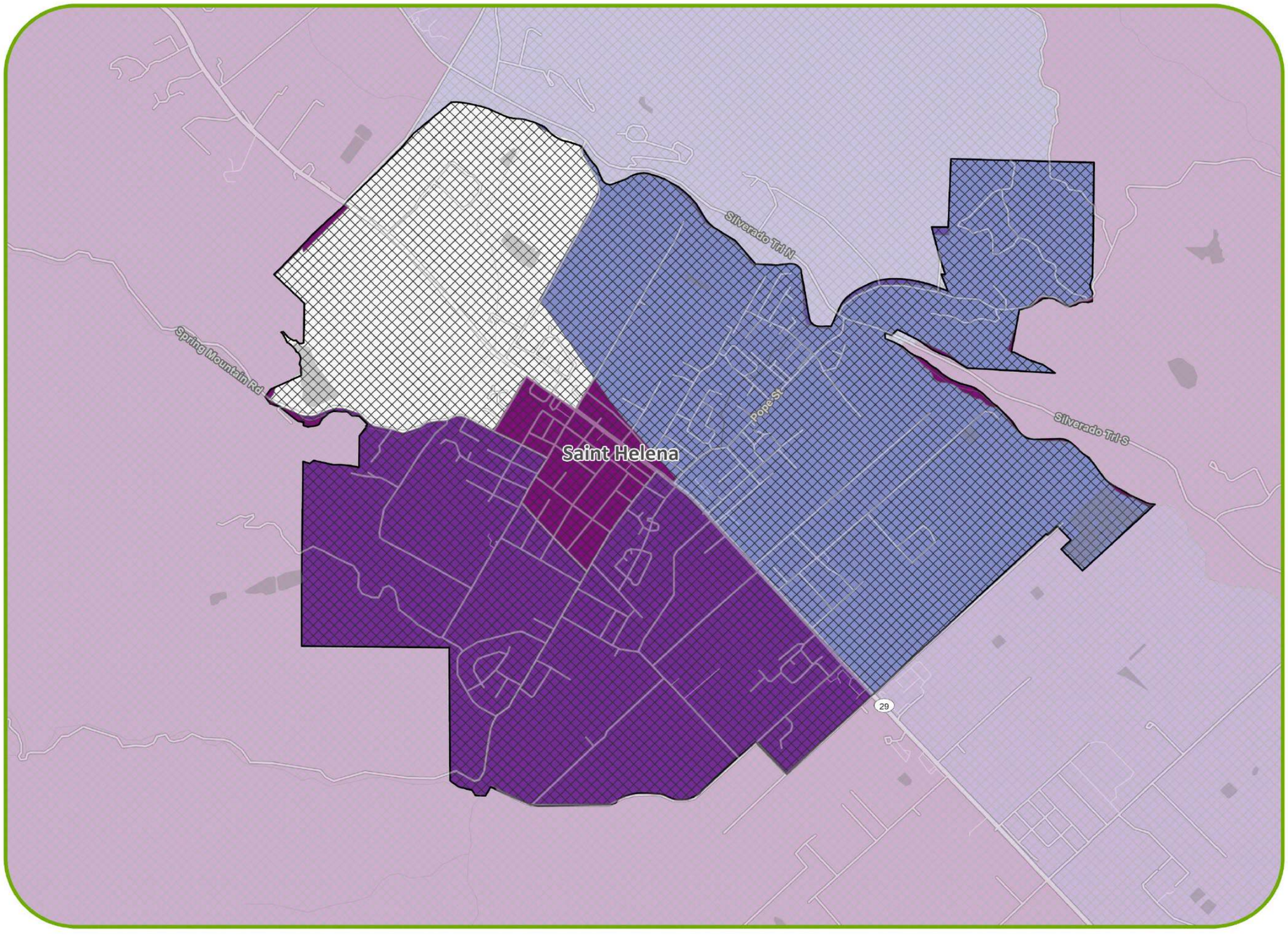

Figure 26: Predominant Populations and Median Household Income (St. Helena)

City Boundary
(R) Predominant Population - White Majority Tracts
White Majority Tract
(R) Predominant Population - Hispanic Majority Tracts
Hispanic Majority Tract
(R) Predominant Population - Asian Majority Tracts
Asian Majority Tract
(R) Median Income (ACS, 2015-2019) - Block Group
Median Income
< $30,000
< $55,000
< $87,100 (HCD 2020 State Median Income)
< $125,000
Greater than $125,000

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0 0.2 0.4 N
Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

The Commuter Bike Path (Vine Trail) runs parallel to the Napa Valley Railroad and provides an off-street route walking/biking path for recreation and commuting. Ultimately the Vine Trail will cover 47 miles from Vallejo to Calistoga. Currently 12.5 miles of the path has been completed from Kennedy Park in the City of Napa to Yountville. Sections of the Vine trail have also been completed in American Canyon and Calistoga.

AllTransit is an online database that provides details on transit opportunity throughout the United States, specifically looking at connectivity, access to jobs, and frequency of service. Napa County received an AllTransit performance score of 3.3 which equates to a low combination of trips per week and number of jobs accessible by transit.[76] Approximately 1.5 percent of commuters use public transit in Napa County. The cities of Napa (4.6), Yountville (4.6), and Calistoga (4.0) have the highest scores with a slighter greater combination of number of trips per week, accessible jobs, and available transit routes.

3.6.3 Local Trends

The City of St. Helena has an AllTransit performance score of 2.4 with approximately 1.0 percent of workers who commute using public transit. This score is lower than the County score of 3.3. One Vine Transit bus route passes through St. Helena, providing connections to the City of Calistoga to the north and City of Napa to the south. Additionally, the St. Helena Shuttle Service provides both a fixed route and an on-demand, door-to-door transit service option within the city limits.

Walk Score is a tool that produces a walkability index by assigning a numerical walkability score to cities and neighborhoods. Walkability is measured by analyzing population density, distance to amenities, and road metrics such as block length and intersection density. St. Helena has a walk score of 83, which is considered very walkable, and most errands can be accomplished by foot[77]. St. Helena's walkability score is most negatively affected by the limited number of parks within walking distance from different areas of the city.

The Environmental Protection Agency (EPA) also has a walkability index, which ranks block groups according to their relative walkability. The EPA walkability map, shown in Figure 27, shows that walkability varies across the city. The highest walkability scores are in downtown and along Main Street where most of the commercial areas are concentrated. Further from downtown and in the western and eastern parts of the city, walkability scores are below average.

[76] *https://alltransit.cnt.org/*
[77] *https://www.walkscore.com/*

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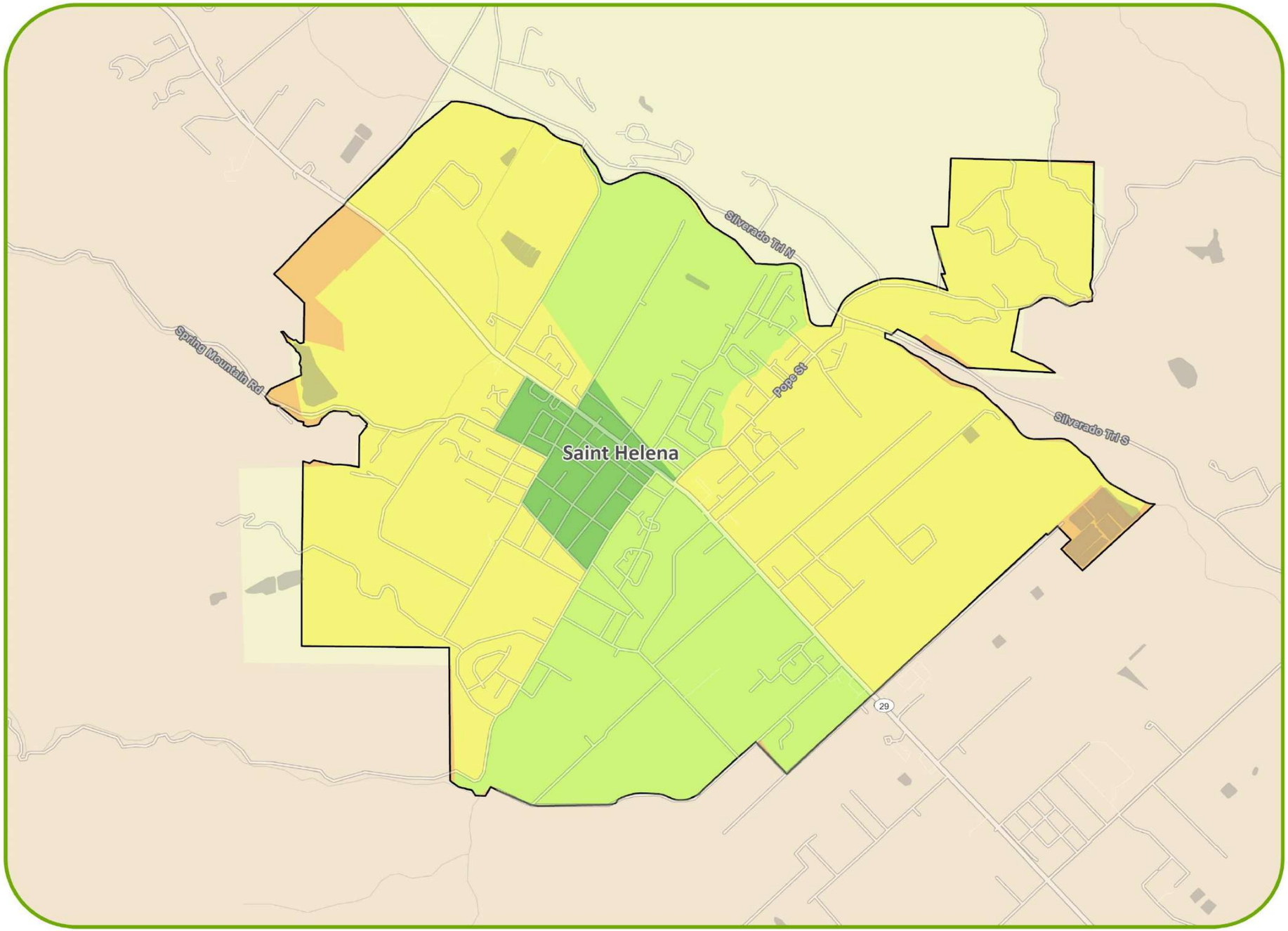

Figure 27:
Walkability Index
(St. Helena)

City Boundary

National Walkability Index

- 1 - 5.75 (Least Walkable)
- 5.76 - 10.50 (Below Average Walkable)
- 10.51 - 15.25 (Above Average Walkable)
- 15.26 - 20 (Most Walkable)

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Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

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3.6.4 Access to Quality Education

Economics literature has consistently found about a 10 percent increase in wages/salary with each additional year of education.[78] Educational attainment is directly linked to housing opportunities. TCAC education domain scores, which are used to identify areas of higher or lower education opportunities, incorporate a variety of indicators including math and reading proficiency scores, high school graduation rates and student poverty rates to assess educational outcomes at the census tract level.

3.6.5 Regional Trends

Napa County is served by five school districts: Napa Valley Unified School District, St. Helena Unified School District, Calistoga Joint Unified School District, Howell Mountain School District, and Pope Valley School District. An overview of education outcomes across the Napa County is illustrated in Figure 28 which shows the TCAC Opportunity Areas map. Education outcomes vary throughout the county. Areas in the western portion of the county and portions of the more urban areas have more positive education outcomes compared to eastern portions of the county and southern parts of the City of Napa.

3.6.6 Local Trends

The City of St. Helena is served by the St. Helena Unified School District which is comprised of four schools: a primary school, elementary school, middle school, and high school. Altogether, approximately 1,243 students were enrolled in 2020 from the City St. Helena and the surrounding areas. Approximately 45 percent of students were White and 52 percent were Hispanic/Latino. St. Helena Unified School District reported a high school graduation rate of 92.9 percent in 2020, 90.1 percent in 2019, and 94.1 percent in 2018. The district reported all students who did not receive high school diplomas in 2019 were Long Term English Learners and socio-economically disadvantaged students.[79]

Figure 29Figure 28 shows TCAC scores for education outcomes for St. Helena at the census tract level. St. Helena has better education outcomes than other areas of Napa County. At the city level, the southern and eastern areas of the city have better education outcomes than the western areas.

3.6.7 Economic Outcomes

Housing opportunities are directly related to economic opportunities. Access to high quality employment close to desired and affordable housing results in more housing opportunities and shorter commute times. The analysis for economic opportunities uses TCAC economic indicators, employment participation data

[78] *The Rehabilitation Research and Training Center on Disability Statistics and Demographics. 2020.* *https://disabilitycompendium.org/annualreport*

[79] *St. Helena Unified School District 2021-22 Local Control and Accountability Plan* *https://www.sthelenaunified.org/cms/lib/CA50000465/Centricity/Domain/36/LCAP%20Control%20Accountability%20Plan%202021%202022.pdf*

from the ACS, Metropolitan Transportation Commission (MTC) Equity Priority Communities (EPC), and the HUD Jobs Proximity Index.

TCAC economic opportunities are measured by census tract. They consider poverty, adult education, employment, job proximity, and median home values. A higher economic index score reflects more positive economic outcomes. The MTC EPC identifies concentrations of underserved populations in order to direct funding for housing and transportation equity. The HUD Jobs Proximity Index assesses the accessibility to job opportunities at the census block group level.

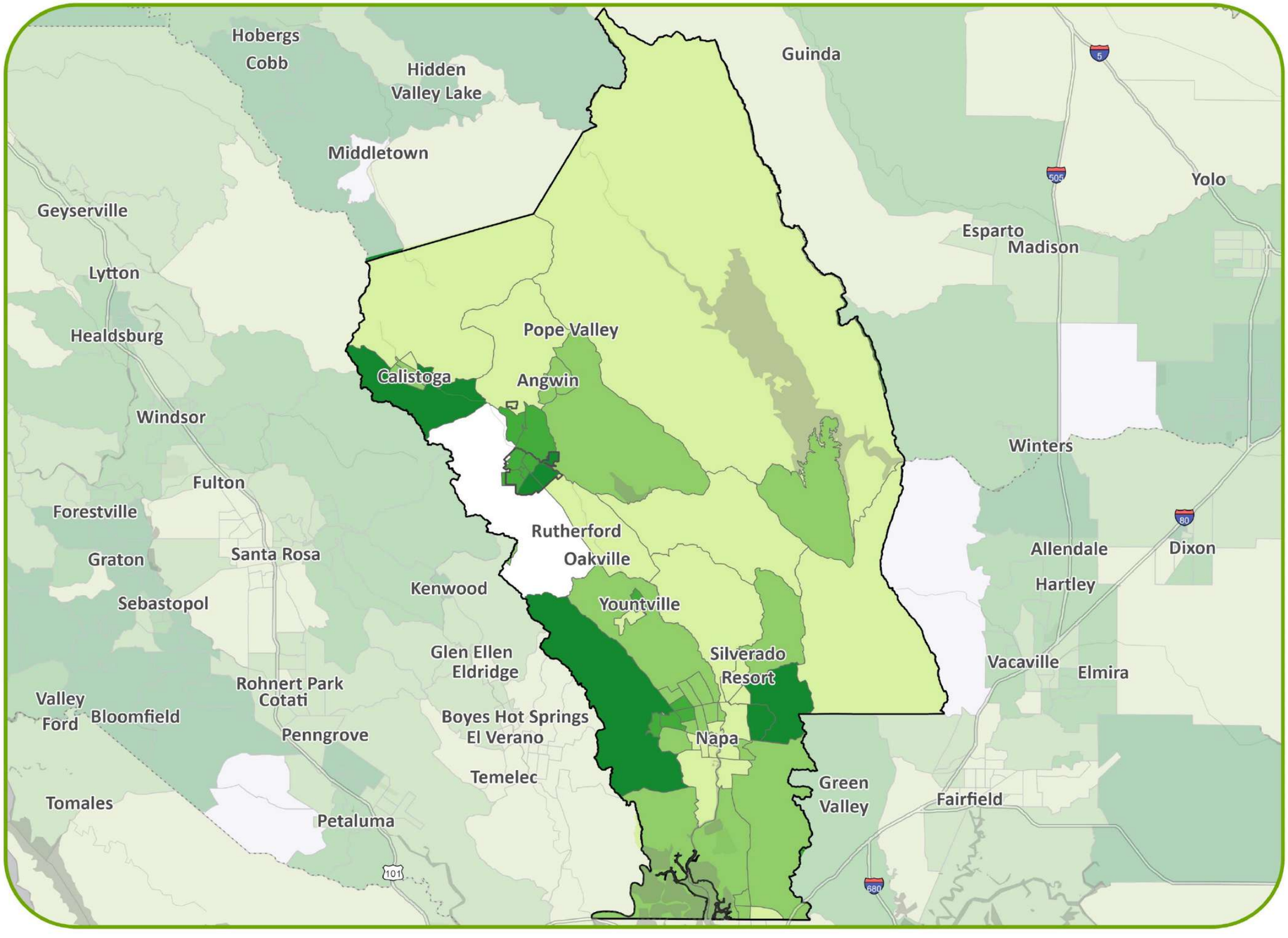

Figure 28:
TCAC Opportunity Areas – Education Outcomes (Napa County)

City Boundary
County Boundary
(R) TCAC Opportunity Areas (2021) - Education Score -Tract
Education Domain Score (by region)
- < 0.25 (Less Positive Education Outcomes)
- 0.25 - 0.50
- 0.50 - 0.75
- > 0.75 (More Positive Education Outcomes)
- No Data

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

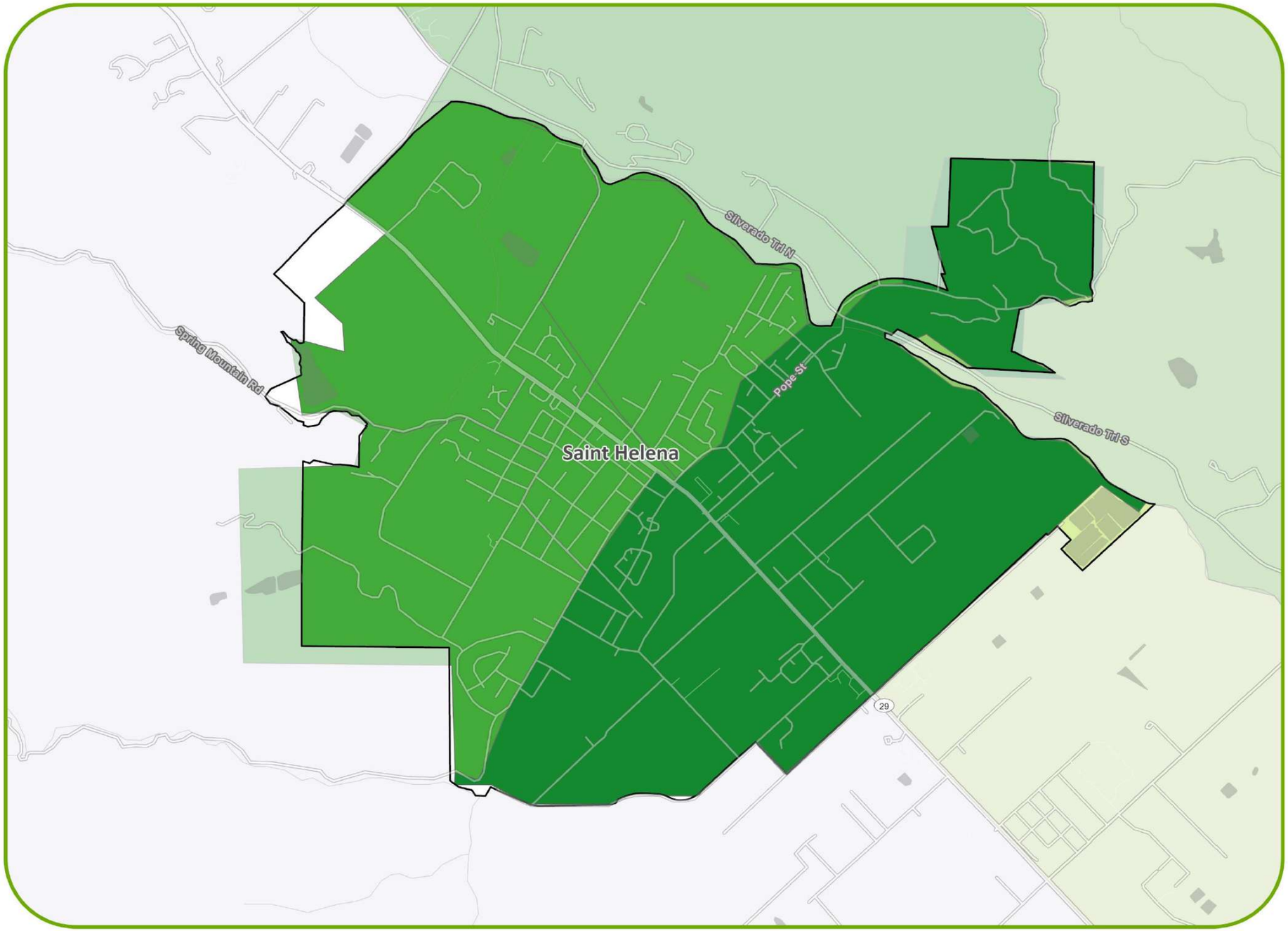

Figure 29:
TCAC Opportunity Areas – Education Outcomes (St. Helena)

3.6.8 Regional Trends

According to the California Employment Development Department, the unemployment rate of Napa County was 3.9 percent in February 2022 (not seasonally adjusted). Top employers in the county include manufacturing (including large- and small-scale wine manufacturing), healthcare, and accommodation and food service. The 2015-2019 ACS estimates reported 74,549 workers in the County of Napa with a labor force participation rate of 65 percent of persons 16 years and older. Approximately 33.7 percent of workers commute 30 or more minutes to work with a countywide mean commute time of 25.6 minutes.

Figure 30 shows the TCAC Opportunity Areas map for economic outcomes across the county. Economic outcomes are varied with more positive outcomes generally located in the western areas of the county and less positive outcomes in the eastern areas of the county. This trend may be attributed to the high concentration of vineyards and wineries in the western and central areas of the county and low population density in eastern areas of the county.

3.6.9 Local Trends

According to the 2015-2019 American Community Survey (ACS), there are 3,159 persons in the labor force in St. Helena with a labor force participation rate of 61 percent. The California Employment Development Department reported the unemployment rate was 3.1 percent in December 2021 (not seasonally adjusted), slightly less than the county. Top industries in the city reflect county trends, with the highest number of workers in manufacturing, healthcare, and accommodation and food service.

Figure 31 shows the TCAC Opportunity Areas map for economic outcomes in St. Helena. Much like the county, economic outcomes are varied across the city. Western areas of the city have more positive economic outcomes and eastern areas have less positive economic outcomes. This pattern of lower economic outcomes in the eastern areas of the city reflects the lower median incomes and greater ethnic diversity that is also experienced in these areas. The eastern areas of the city contain affordable housing developments, a mobile home park, and senior living community which may be contributing to lower median incomes and lower median home values.

ACS 2015-2019 estimates show approximately 22.4 percent of workers commute 30 or more minutes to work and the mean commute time is 19.6 minutes. Figure 32 shows the job proximity index in St. Helena which assesses the accessibility of employment opportunities based on distance, a higher index score corresponds to closer job proximity. Job proximity throughout St. Helena is consistently high (closest proximity), especially when compared to the southern and eastern areas of the county.

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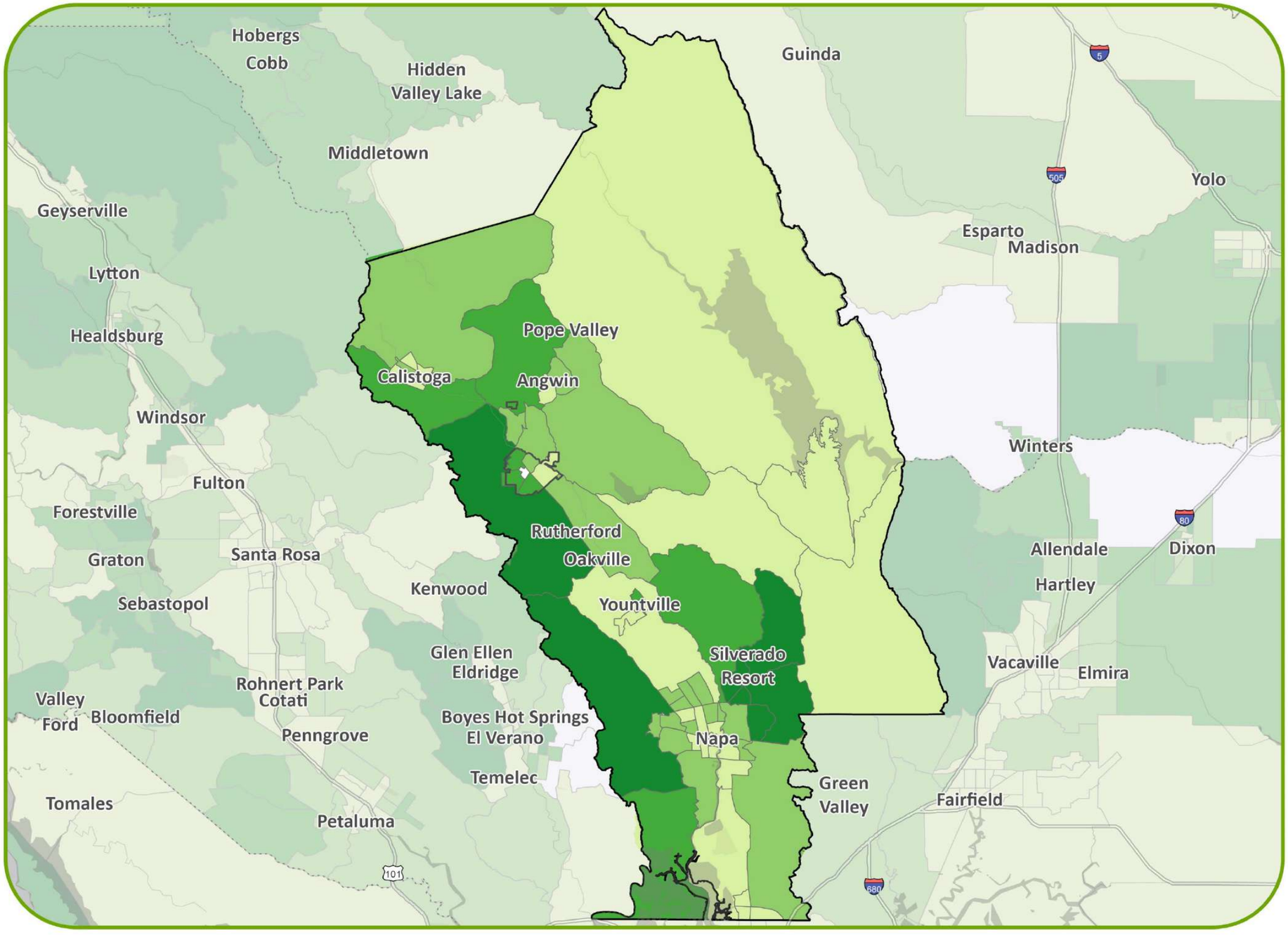

Figure 30: TCAC Opportunity Areas – Economic (Napa County)

- City Boundary
- County Boundary
- (R) TCAC Opportunity Areas (2021) - Economic Score - Tract
- Economic Domain Score (by region)
  - < 0.25 (Less Positive Economic Outcome)
  - 0.25 - 0.50
  - 0.50 - 0.75
  - > 0.75 (More Positive Economic Outcome)
  - No Data

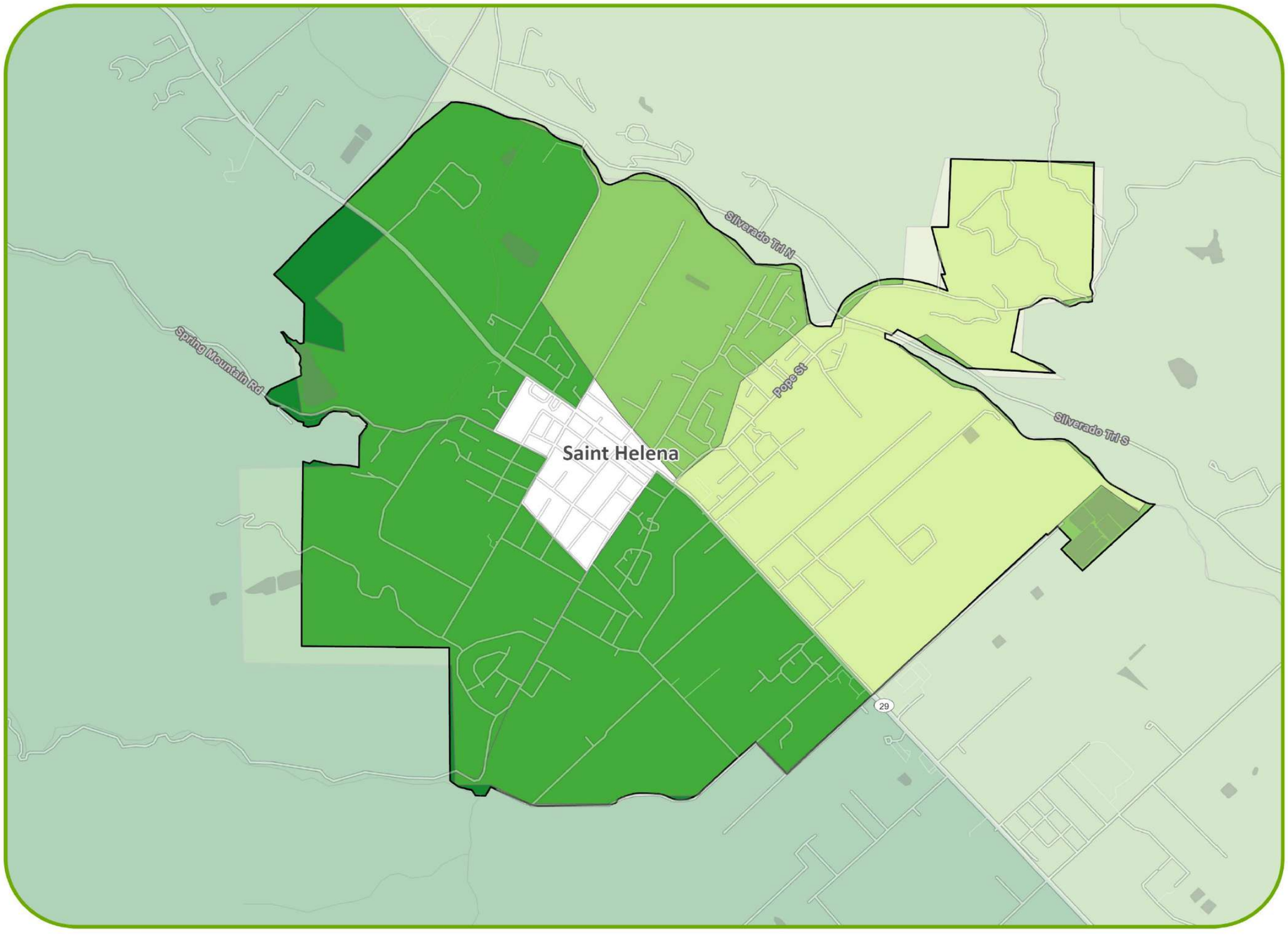

Figure 31:
TCAC Opportunity Areas – Economic (St. Helena)

City Boundary
(R) TCAC Opportunity Areas (2021) - Economic Score - Tract
Economic Domain Score (by region)
< 0.25 (Less Positive Economic Outcome)
0.25 - 0.50
0.50 - 0.75
> 0.75 (More Positive Economic Outcome)
No Data

ST. HELENA
CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

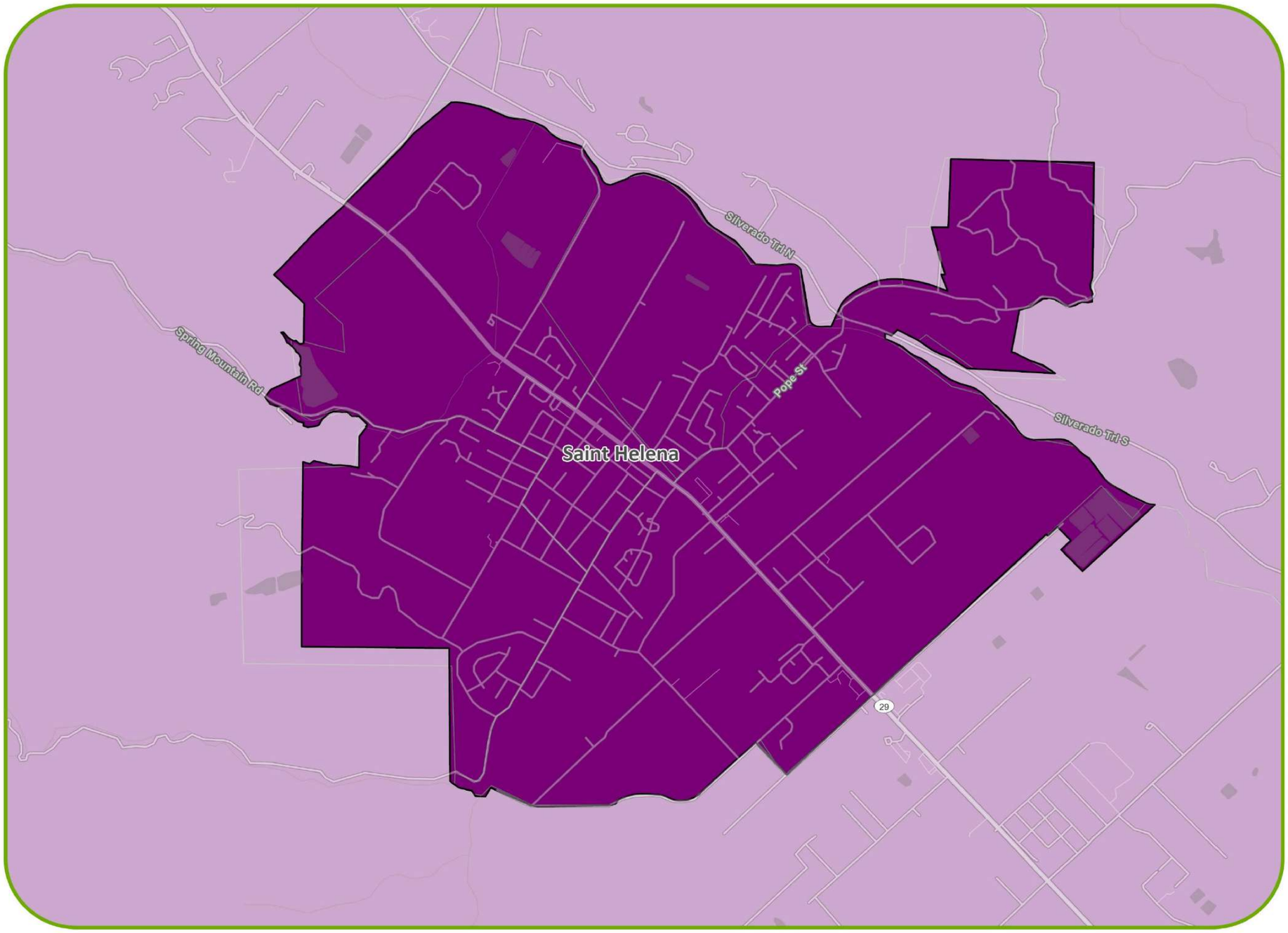

Figure 32:
Job Proximity Index (St. Helena)

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3.6.10 Healthy Environment

Access to a healthy environment is necessary for communities within a city to thrive. Healthy environment analysis considers patterns in the disparities found within individual neighborhoods and protected area groups. These disparities can vary in a number of categories, including air quality, water quality, safe neighborhood, environmental hazards, social services, and cultural institutions. Recent California laws, AB 1550, Senate Bill (SB) 535 and SB 1000 emphasize the importance of environmental justice as a fair housing issue. Environmental Justice, as defined by HUD, means ensuring the environment and human health are protected fairly for all people regardless of race, color, national origin, or income, and consideration the means by which federally assisted projects may have disproportionately adversely affect human health or the environmental on minority and low income populations.[80] The California Office of Environmental Health Hazard Assessment developed the California Communities Environmental Health Screening Tool (CalEnviroScreen) a screening methodology to help identify California communities disproportionately burdened by multiple sources of pollution called. High scoring census tracts tend to be more burdened by pollution from multiple sources and are most vulnerable to its effects, taking into account their socioeconomic characteristics and underlying health status.

3.6.11 Regional Trends

The CalEnviroScreen map for Napa County identifies the degree to which communities are considered burdened by pollution. Figure 33 below shows the pollution burden for Napa County, representing the potential exposure to pollutants and resulting adverse environmental conditions. The more urban areas on the western side of the county have a higher pollution burden, especially within and to the south of the City of Napa. Figure 34 shows TCAC Opportunity Map for environmental outcomes in the county. Similar to the CalEnviroScreen map, the TCAC Opportunity Map shows that the western areas of the county have less positive environmental outcomes compared to the eastern areas of the county. This may be caused by the mountains flank the valley which block wind flow and trap pollution. Additionally, the western and central areas of the county have a higher concentration of people, traffic, and agriculture which produces greater levels of pollution and pesticides. Eastern areas of the county tend to be forested and are less populated

3.6.12 Local Trends

Pollution Burden in St. Helena is lower than many other areas in the county, as shown in Figure 35. However, the eastern areas of the city have a slightly higher pollution burden (overall score of 40) compared to the rest of the city, with high burdens of pesticides, cleanups, and groundwater threats. The western areas have a slightly lower burden (overall score of 33) with high burdens of pesticides, cleanups, groundwater threats, and solid waste. Pesticide use is considered high throughout the city likely due to pesticide applications on nearby vineyards. There are two cleanup sites located within the city including one site with an active dry-cleaning business and one site with a manufactured gas plant that was dismantled in 1930. These two cleanup sites are also sources that pose groundwater threats to the city. A

[80] *HUD, 2021. https://www.hudexchange.info/programs/environmental-review/environmental-justice/*

third cleanup site is located outside the city limits, southeast of the city, with a food market that has detected high pesticides in the soil beneath the building. A solid waste facility is located in the eastern area of the city which may potentially expose neighboring communities to environmental burdens such as odor, pests, and truck traffic. The southern and eastern areas of the city have a higher pollution burden, which corresponds with areas with higher ethnic diversity, higher populations with a disability, and lower median incomes discussed in the previous sections.

Figure 36 shows the TCAC Opportunity map for environmental outcomes in the City of St. Helena. The southern and eastern areas of the city have less positive environmental outcomes compared to the western areas.

3.7 Disproportionate Housing Needs

Disproportionate housing needs generally refers to a condition in which there are significant disparities in the proportion of members of a protected class experiencing a category of housing need when compared to the proportion of members of any other relevant groups, or the total population experiencing that category of housing need in the applicable geographic area. For purposes of this definition, categories of housing need are based on such factors as cost burden and severe cost burden, overcrowding, homelessness, and substandard housing conditions

3.7.1 Housing Cost Burden

Housing cost burden is defined as the proportion of a household's total gross income spent on housing costs. Households that spend at least 30 percent of their total gross income on housing costs (rent, mortgage, utilities, and other housing-related costs) are considered cost burdened, and households spending over 50 percent on housing costs are considered severely cost burdened. The higher the housing cost burden, the more likely residents are to live in overcrowded and substandard conditions and are less likely to afford to relocate. Low-income households and persons in protected classes disproportionately experience severe housing problems. Housing problems are households that has one or more of the following problems: lacks a complete kitchen facility, lacks complete plumbing facility, a household that is overcrowded, or a household that is cost burdened.

3.7.2 Regional Trends

Figure 37 shows areas of Napa County where renter households overpay for housing (spend more than 30 percent of household income on housing costs). Overpayment by renters is a widespread issue across the county, especially in the more urban areas of the county as well as the northeast and southeast areas of the county. Similar to overpayment by renters, overpayment by homeowners is common throughout the county, highlighting that the costs of housing are too high for both renters and homeowners. Figure 38 shows areas of the county where homeowners overpay for housing, which is most prevalent in the urban areas of the county as well as the northwest and southeast areas of the county.

3.7.3 Local Trends

Housing cost burden among renters is widespread in St. Helena. Figure 39 shows that 40 to 60 percent of renters overpay for housing in all areas of the city. Additionally, data from HUD's Comprehensive Housing Affordability Strategy (CHAS) indicates lower income households are disproportionately overpaying for housing.

Lower-income households experience higher cost burden than moderate income and above households in St. Helena. Approximately 41 percent of extremely low-income households (those earning 30 percent or less of the local area median income (AMI)) are considered severely cost burdened (spend 50 percent or more of their income on housing). Both renters and owners experience cost burden in St. Helena, with higher proportions of lower income households spending greater than 30 percent or 50 percent on housing. Table 7 shows housing cost burden of lower income households in St. Helena. Generally, a higher percentage of renters than owners experience cost burden, however, more owners than renters experience severe cost burden.

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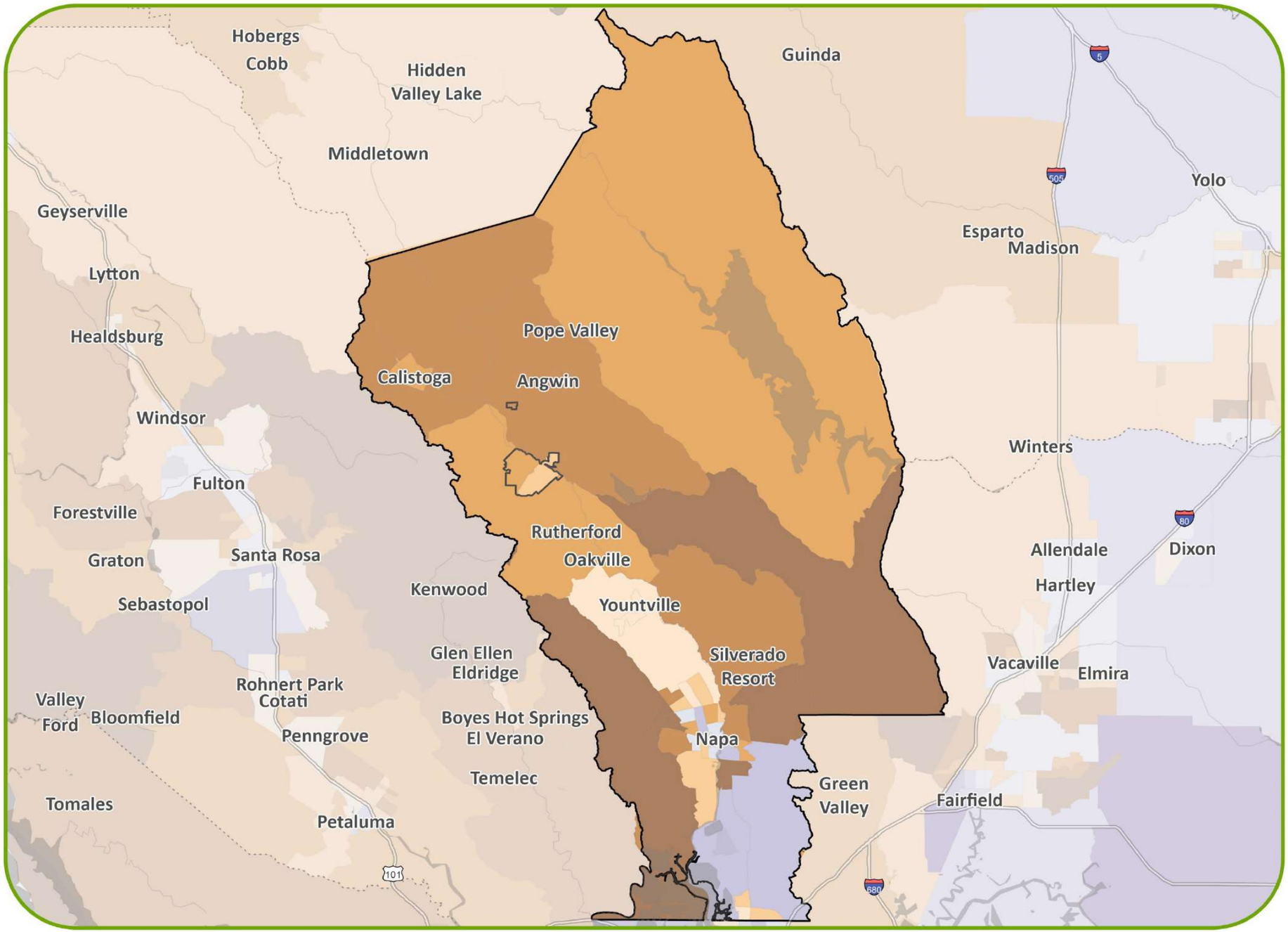

Figure 33: CalEnviroScreen 4.0 Percentile Scores (Napa County)

City Boundary
County Boundary
(A) CalEnviroScreen 4.0, 2021 - Tract
CalEnviroScreen 4.0 Percentile
1 - 10% (Lowest Scores)
11 - 20%
21 - 30%
31 - 40%
41 - 50%
51 - 60%
61 - 70%
71 - 80%
81 - 90%
91 - 100% (Highest Scores)

ST. HELENA CALIFORNIA

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Miles

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

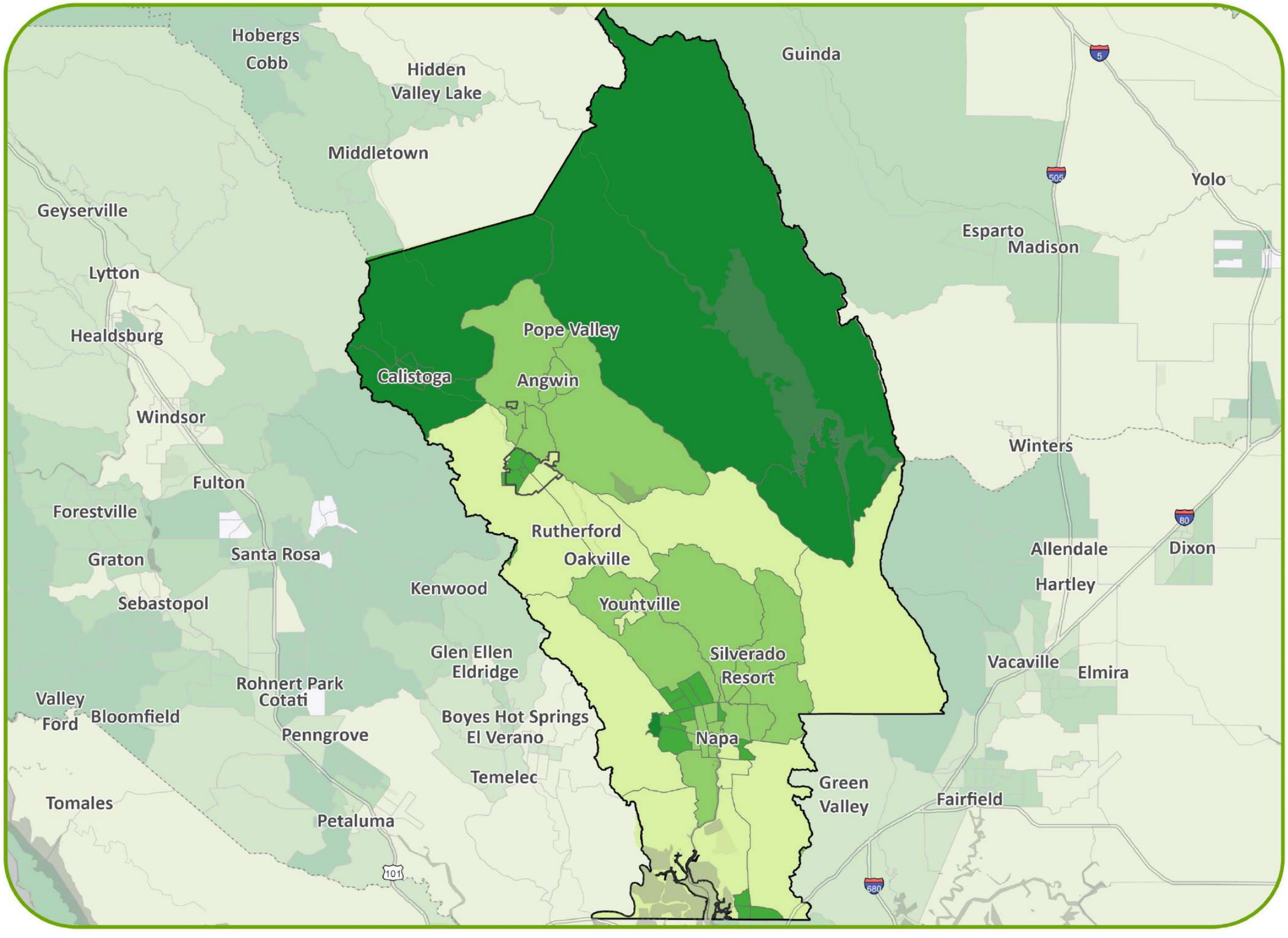

Figure 34:
TCAC Opportunity Areas – Environment (Napa County)

City Boundary
County Boundary
(R) TCAC Opportunity Areas (2021) - Environmental Score -Tract
Environmental Domain Score
< .25 (Less Positive Environmental Outcomes)
.25 - .50
.50 - .75
.75 - 1 (More Positive Environmental Outcomes)
No Data

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

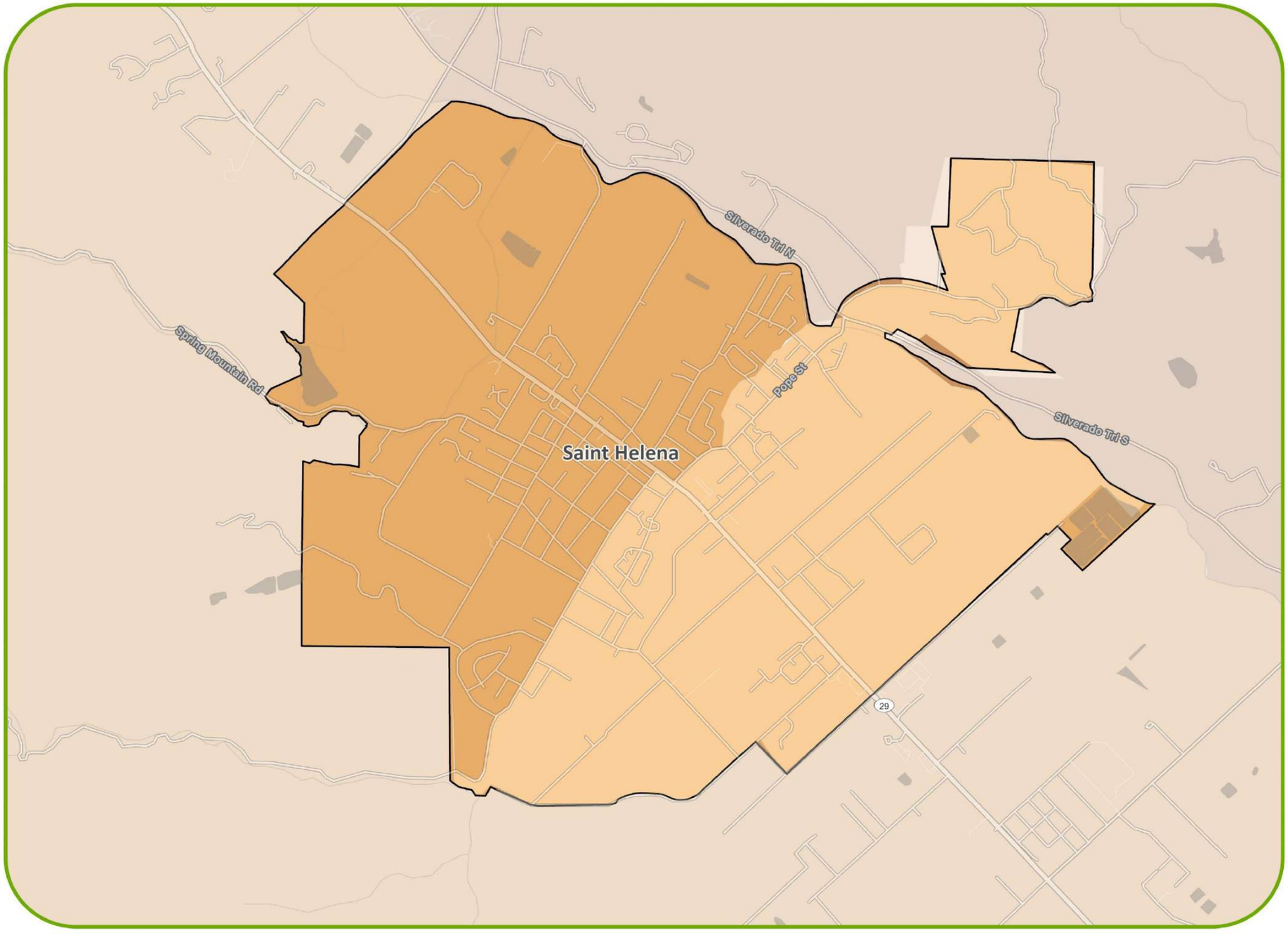

Figure 35: CalEnviroScreen 4.0 Percentile Scores (St. Helena)

City Boundary
(A) CalEnviroScreen 4.0, 2021 - Tract
CalEnviroScreen 4.0 Percentile
- 1 - 10% (Lowest Scores)
- 11 - 20%
- 21 - 30%
- 31 - 40%
- 41 - 50%
- 51 - 60%
- 61 - 70%
- 71 - 80%
- 81 - 90%
- 91 - 100% (Highest Scores)

ST. HELENA CALIFORNIA

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County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

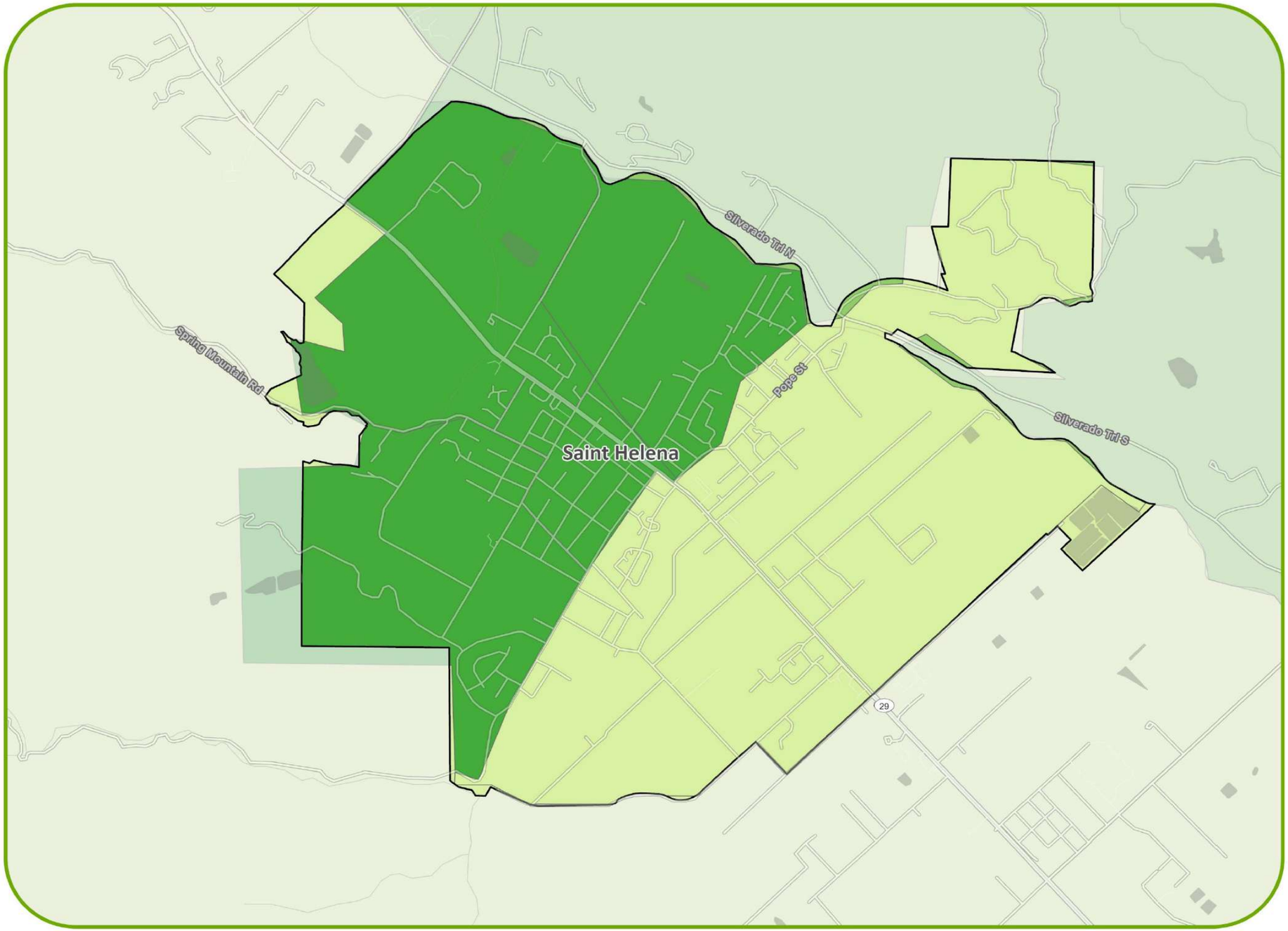

Figure 36:
TCAC Opportunity Areas – Environment (St. Helena)

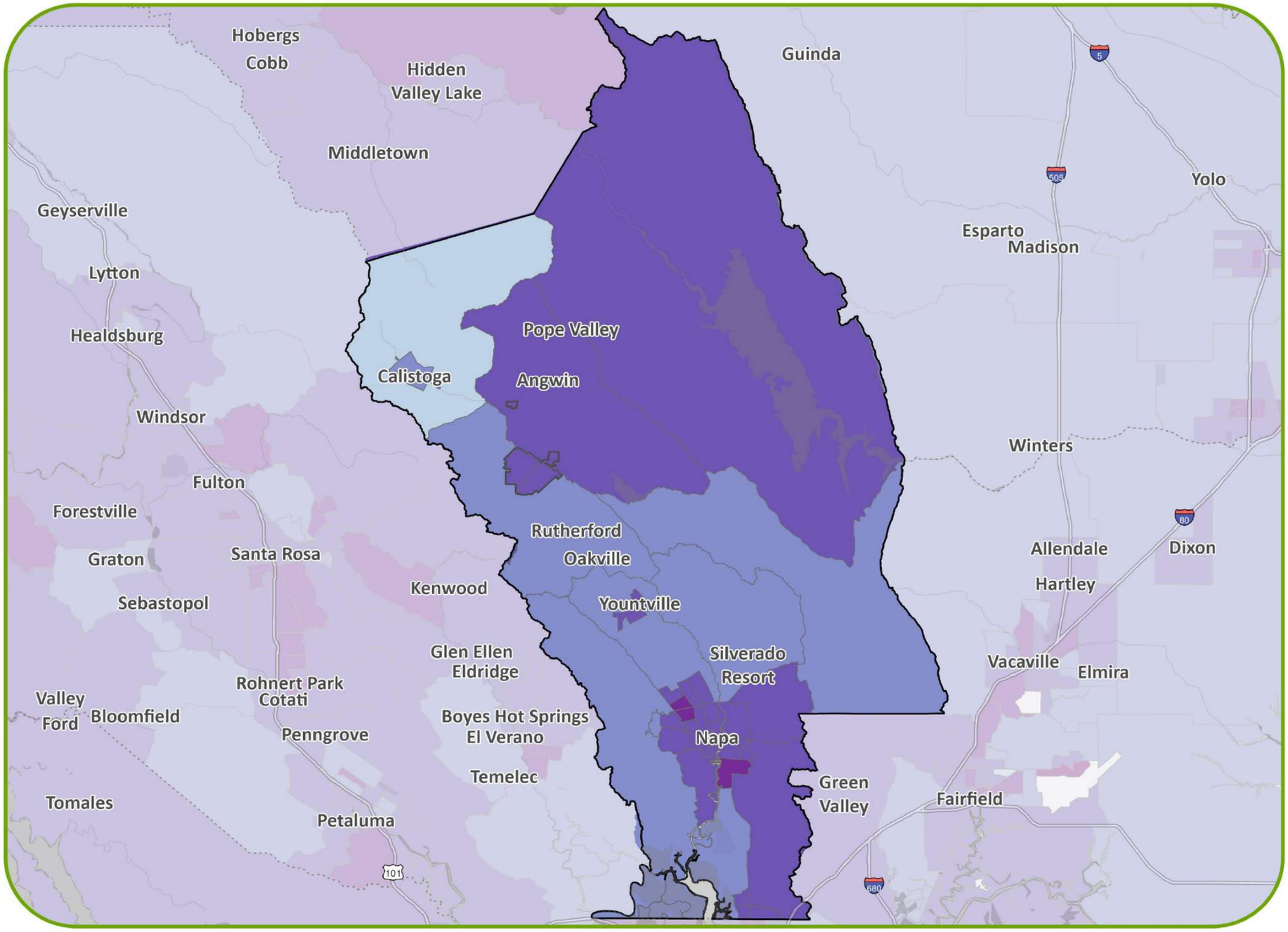

Figure 37: Overpayment By Renters (Napa County)

City Boundary
County Boundary
(R) Overpayment by Renters (ACS, 2015 - 2019) - Tract
Percent of Renter Households for whom Gross Rent (Contract Rent Plus Tenant-Paid Utilities) is 30.0 Percent or More of Household Income
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

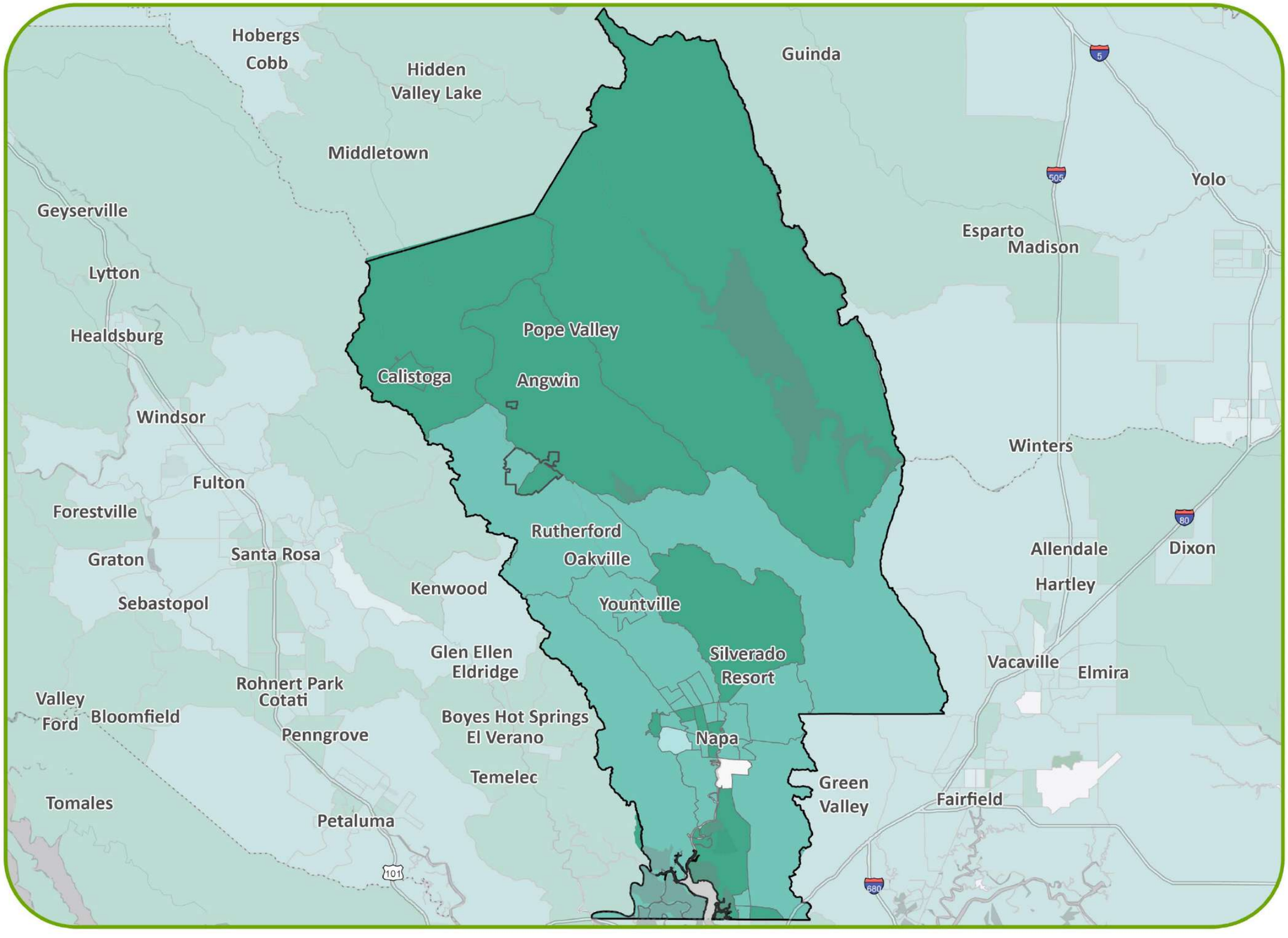

Figure 38: Overpayment By Homeowners (Napa County)

City Boundary
County Boundary
(R) Overpayment by Home Owners (ACS, 2015 - 2019) - Tract
Percent of Owner Households with Mortgages whose Monthly Owner Costs are 30.0 Percent or More of Household Income
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

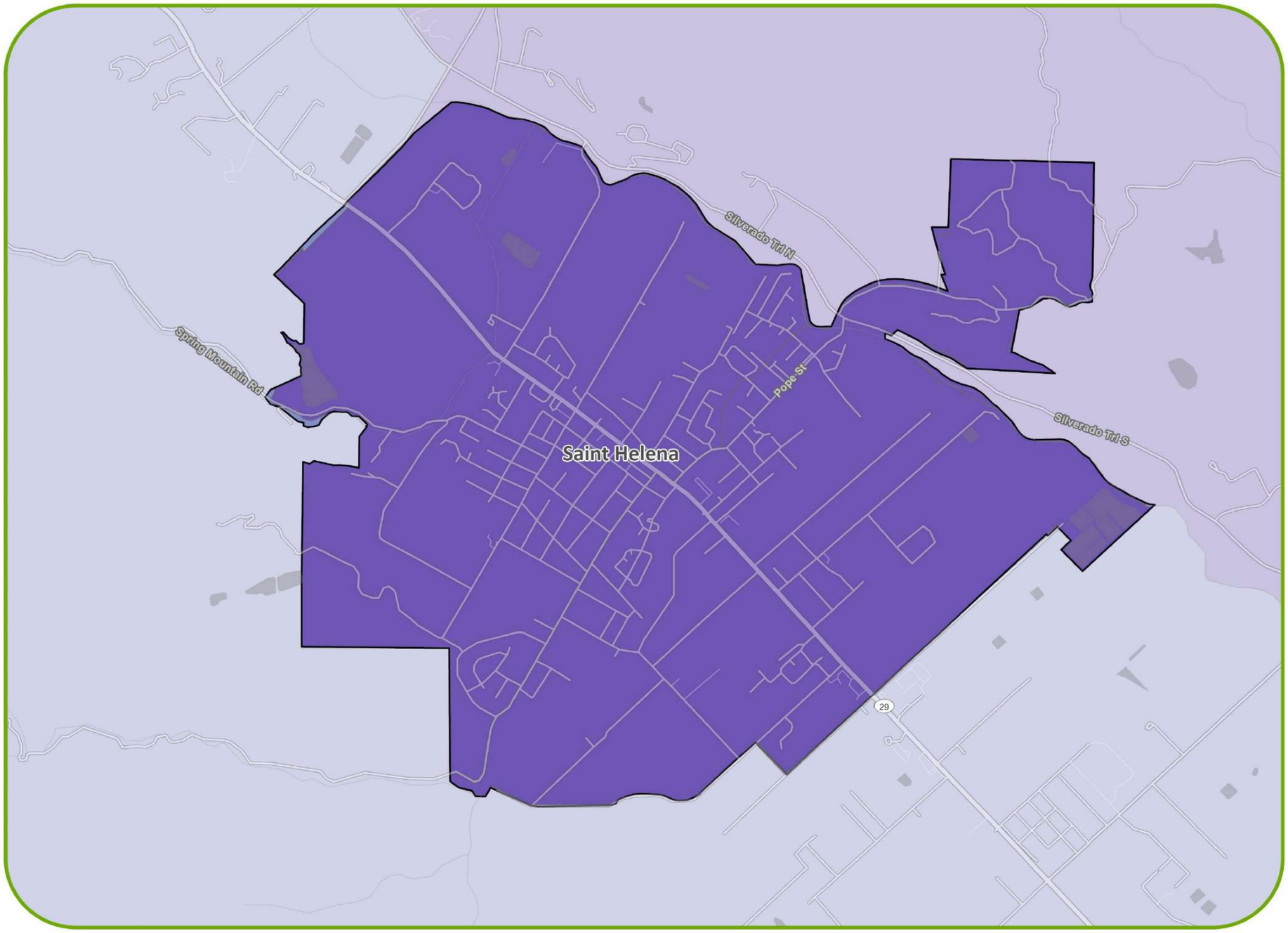

Figure 39: Overpayment By Renters (St. Helena)

City Boundary
(R) Overpayment by Renters (ACS, 2015 - 2019) - Tract
Percent of Renter Households for whom Gross Rent (Contract Rent Plus Tenant-Paid Utilities) is 30.0 Percent or More of Household Income
< 20%
20% - 40%
40% - 60%
60% - 80%
> 80%

ST. HELENA CALIFORNIA

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Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

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Table 7 Housing Cost Burden of Lower-Income Households (2014-2018)

Household by Type, Income, and Housing Problem	Renters	Percent	Owners	Percent	Total Households	
Extremely Low-Income (0-30 % AMI)	185		160		345	
With Cost Burden >30%	100	54.1%	105	65.6%	205	59.4%
With Cost Burden >50%	50	27.0%	90	56.3%	140	40.6%
Very Low-Income (0-30 % AMI)	240		105		345	%
With Cost Burden >30%	195	81.3%	70	66.7%	265	76.8%
With Cost Burden >50%	35	14.6%	40	38.1%	75	21.7%
Low-Income (51-80 % AMI)	145		160		305	%
With Cost Burden >30%	100	69.0%	85	53.1%	185	60.7%
With Cost Burden >50%	40	27.6%	60	37.5%	100	32.8%
Moderate & Above Income (>80% AMI)	500		1,105		1,605	%
With Cost Burden >30%	133	26.6%	205	18.6%	338	21.1%
With Cost Burden >50%	8	1.6%	60	5.4%	68	4.2%
Total	1,070	41.2%	1,530	58.8%	2,600	%

Source: HUD Comprehensive Housing Affordability Strategy (CHAS), 2014-2018

3.7.4 Substandard Housing

HUD considers housing units to be "standard units" if they are in compliance with local building codes. Substandard housing is housing that poses a risk to the health, safety, or wellbeing of its occupants or neighbors, includes housing that does not have operable indoor plumbing, electricity, or heat. Housing age can be an important indicator of housing condition in a community. Like any other tangible asset, housing is subject to gradual physical or technological deterioration over time. If not properly and regularly maintained, housing can deteriorate and discourage reinvestment, depress neighboring property values, and eventually impact the quality of life in a neighborhood. Typically, housing over 30 years old is more likely to have rehabilitation needs that may include new plumbing, roof repairs, foundation work, and other repairs. Some older housing units may have health risks such as lead paint and asbestos. Housing issues such as mold may elevate health conditions such as asthma.

3.7.5 Regional Trends

In Napa County approximately 73 percent of all housing units were built before 1990. These older units potentially require minor repairs and modernization improvements. Figure 41 shows the approximate break down by age of housing units.

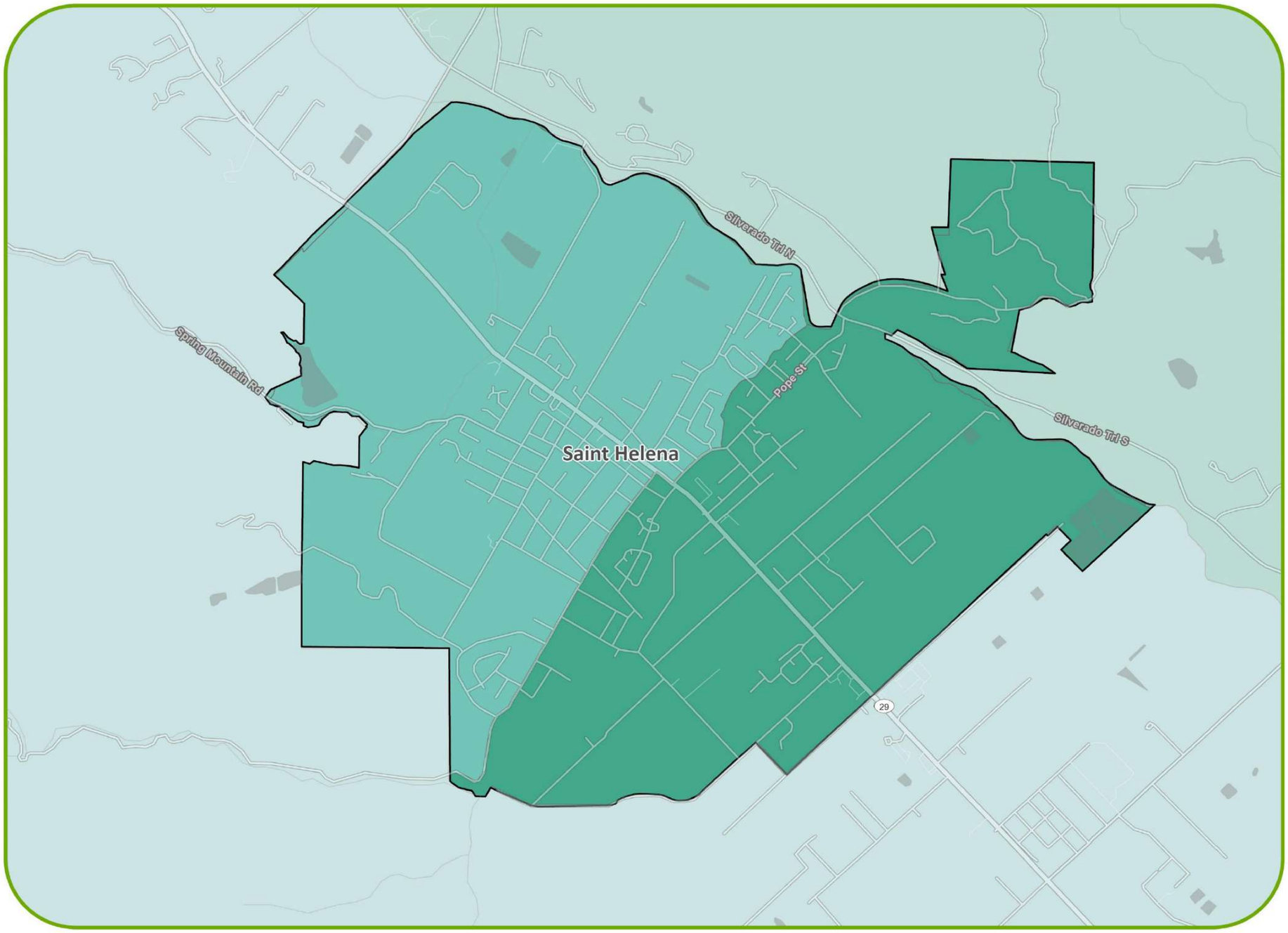

Figure 40: Overpayment By Homeowners (St. Helena)

City Boundary

(R) Overpayment by Home Owners (ACS, 2015 - 2019) - Tract

Percent of Owner Households with Mortgages whose Monthly Owner Costs are 30.0 Percent or More of Household Income

- < 20%
- 20% - 40%
- 40% - 60%
- 60% - 80%
- > 80%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

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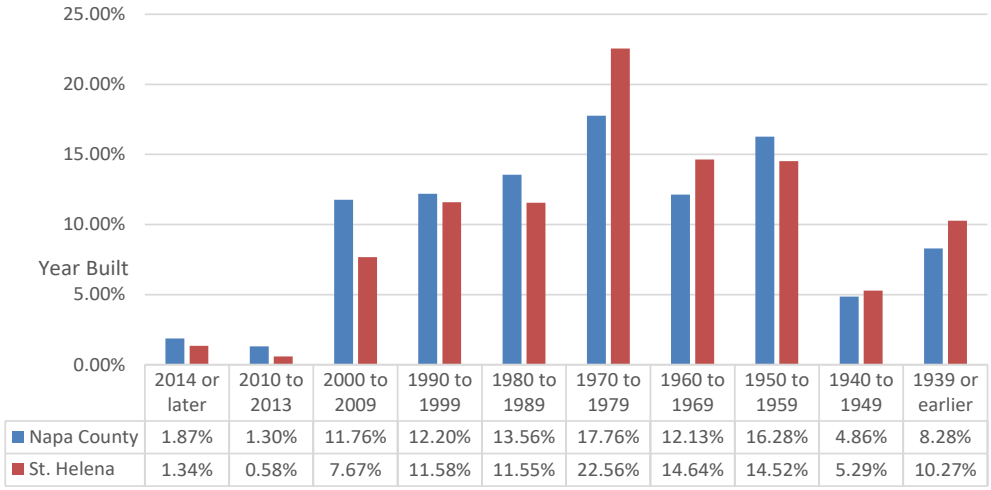
Figure 41 Housing Stock Age (2015-2019)



	2014 or later	2010 to 2013	2000 to 2009	1990 to 1999	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or earlier
Napa County	1.87%	1.30%	11.76%	12.20%	13.56%	17.76%	12.13%	16.28%	4.86%	8.28%
St. Helena	1.34%	0.58%	7.67%	11.58%	11.55%	22.56%	14.64%	14.52%	5.29%	10.27%

Source: Bureau of the Census, American Community Survey, 2015-2019

The County of Napa has a total of 881 substandard housing units, approximately 2 percent of the total occupied units in the county. A housing unit is considered substandard if it lacks complete plumbing or kitchen facilities. Of the 881 substandard units, approximately 15 percent lacked complete plumbing facilities and 85 percent lacked complete kitchen facilities. Table 8 shows a breakdown of the number of substandard housing units in Napa County and St. Helena. In the past, lack of telephone service was also an indicator of housing conditions. Today, with the widespread availability of cell and internet phone services, many households have chosen not to install land line telephone services, and availability of telephone service is no longer considered an indicator of substandard housing conditions.

Table 8 Substandard Housing Units (2019)

Condition	Napa County		St. Helena	
Lacking complete plumbing facilities	128	0.26%	0	0.00%
Lacking complete kitchen facilities	753	1.55%	83	3.07%
Total	48705		2702	

Source: Bureau of the Census, American Community Survey, 2015-2019.

3.7.6 Local Trends

As shown above in Figure 41, approximately 79 percent of the city's housing stock was built prior to 1990, potentially requiring minor repairs and modernization improvements.

Table 8 shows 83 units, about 3 percent of the St. Helena's housing stock, are considered substandard. All identified substandard units lacked complete kitchen facilities.

3.7.7 Homelessness

"Homelessness," as defined by HUD, describes an individual, who is not imprisoned or otherwise detained, who:

- Lacks a fixed, regular, and adequate nighttime residence; and
- Has a primary nighttime residence that is:
  - A supervised publicly or privately operated shelter designed to provide temporary living accommodations (including welfare hotels, congregate shelters, and transitional housing for the mentally ill);
  - An institution that provides a temporary residence for individuals intended to be institutionalized; or
  - A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings.

Throughout Napa Country, homelessness has become an increasingly important issue. Factors that contribute to the rise in homelessness include a lack of housing affordable available for low- and moderate-income households, increases in the number of persons whose incomes fall below the poverty level, reductions in public subsidies, and lack of support for persons with extreme developmental, physical, and mental disabilities.

3.7.8 Regional Trends

Napa County's 2020 Point-In-Time Count indicated there were 464 persons experiencing homelessness in the county on any given night; mostly in the City of Napa. This is an increase from 322 persons in the 2018 Point-In-Time Count.

3.7.9 Local Trends

The number of homeless persons in St. Helena is unknown as the 2020 Point-In-Time Count does not include a breakdown of the homeless population by jurisdiction. Based on St. Helena's share of the countywide population, 3.9 percent, it is estimated the City's homeless population is approximately 18 persons.

3.7.10 Overcrowding

Overcrowding is defined as housing units with more than one person per room (including dining and living rooms but excluding bathrooms and kitchen) and severe overcrowding refers to more than 1.5 persons per room. Large families generally have special housing needs due to lower per capita income, the need for affordable housing, or the need for larger units with three or more bedrooms, resulting in overcrowding. Some households may not be able to accommodate high-cost burdens for housing and accept smaller housing or reside with other individuals or families in the same home. Potential fair housing issues emerge if non-traditional households are discouraged or denied housing due to a perception of overcrowding.

Household overcrowding is reflective of various living situations such as a housing unit that is inadequately sized to meet a household's needs, the necessity or desire to have extended family members reside in an existing household, or unrelated individuals or families share a single housing unit.

Not only is overcrowding a potential fair housing concern, but it can also potentially strain physical facilities and the delivery of public services, reduce the quality of the physical environment, contribute to a shortage of parking, and accelerate the deterioration of homes. As a result, some landlords or apartment managers may be more hesitant to rent to larger households, thus making access to adequate housing even more difficult. According to local fair housing service providers and property managers, addressing the issue of large households is complex as there are no set of guidelines for determining the maximum capacity for a unit. Fair housing issues may arise from policies aimed to limit overcrowding that have a disparate impact on specific racial or ethnic groups with higher proportion of overcrowding.

3.7.11 Regional Trends

In Napa County, approximately 6 percent of occupied housing units are overcrowded. As shown in Figure 42, overcrowded housing is most prevalent in the cities of Napa and Calistoga. The City of Napa has the highest percentage of overcrowded units. Certain areas within the city have between 14 and 36 percent of households that are overcrowded. Rural areas experience less overcrowding, and some rural areas have no overcrowded or severely overcrowded units.

Table 9 shows the percentage of housing units that are overcrowded. Renter-occupied households had a larger proportion of overcrowded households in the county.

Table 9 Overcrowding by Tenure

Jurisdiction	Overcrowded (1+ occupants per room)			Severely Overcrowded (1.5+ occupants per room)		
	Renter	Owner	Total	Renter	Owner	Total
St. Helena	9.26%	1.57%	4.74%	1.44%	1.01%	1.18%
Napa County	11.92%	2.99%	6.18%	3.50%	0.64%	1.66%

Source: Table B25014 Tenure by Occupants Per Room 2015-2019 ACS. Bureau of the Census, American Community Survey, 2015-2019.

3.7.12 Local Trends

Based on 2015-2019 ACS estimates, approximately five percent of households in St. Helena are overcrowded, compared to 6 percent for the county as a whole. As shown in Table 9,a higher proportion of renter households are overcrowded than owned households in St. Helena. Figure 43 shows the percent of overcrowded households throughout the city, no concentrated areas overcrowding of households are shown. ACS estimates indicate overcrowding is a more common housing issue for Hispanic/Latino households than White households where approximately 20 percent Hispanic/Latino households in St. Helena are overcrowded compared to three percent of White households.

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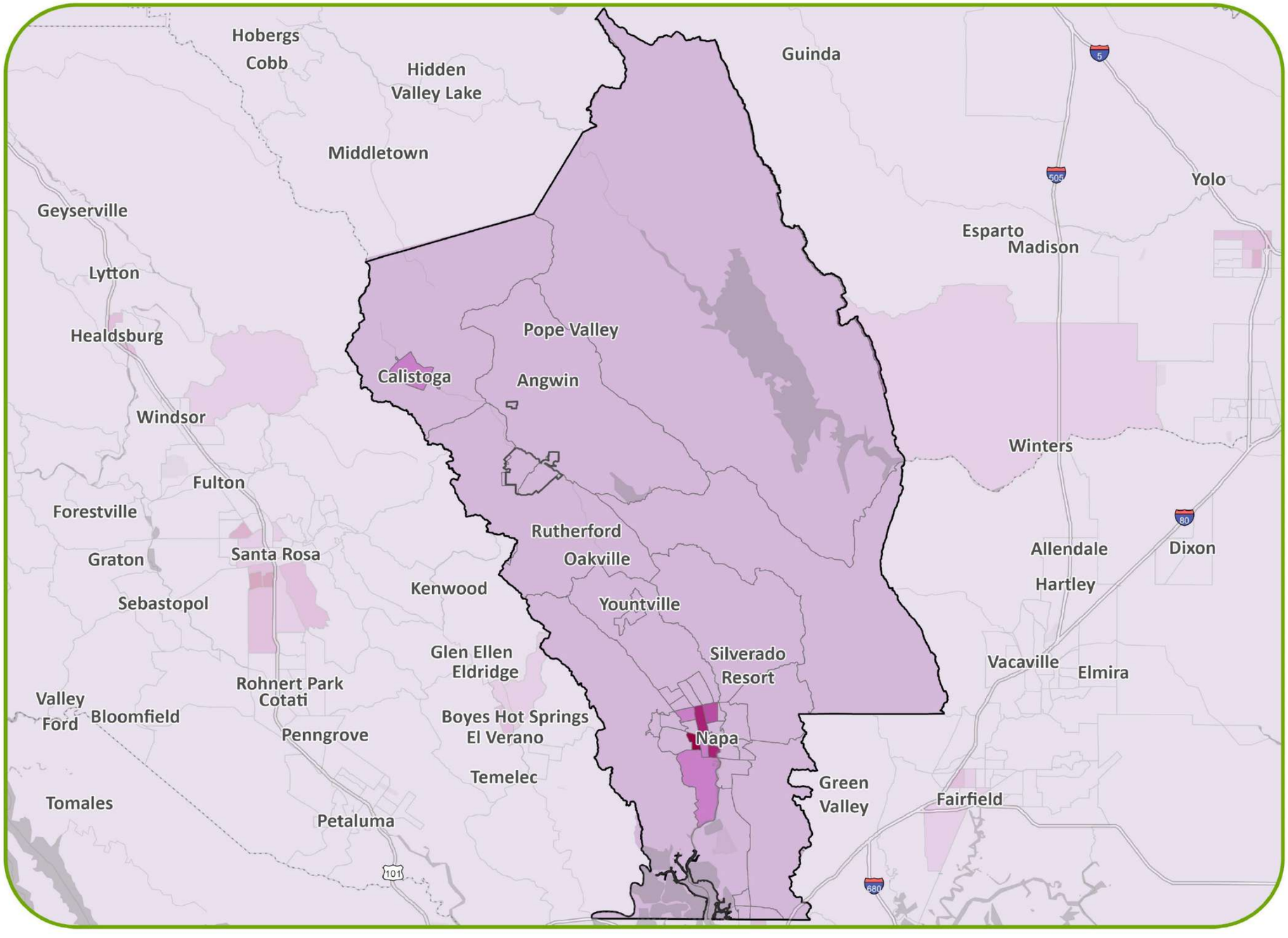

Figure 42: Overcrowded Households (Napa County)

City Boundary
County Boundary
(R) Overcrowded Households (CHHS) - Tract
Percent of Overcrowded Households
≤ 8.2% (Statewide Average)
8.3% - 12%
12.01% - 15%
15.01% - 20%
> 20%

County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, California Department of Housing and Community Development.

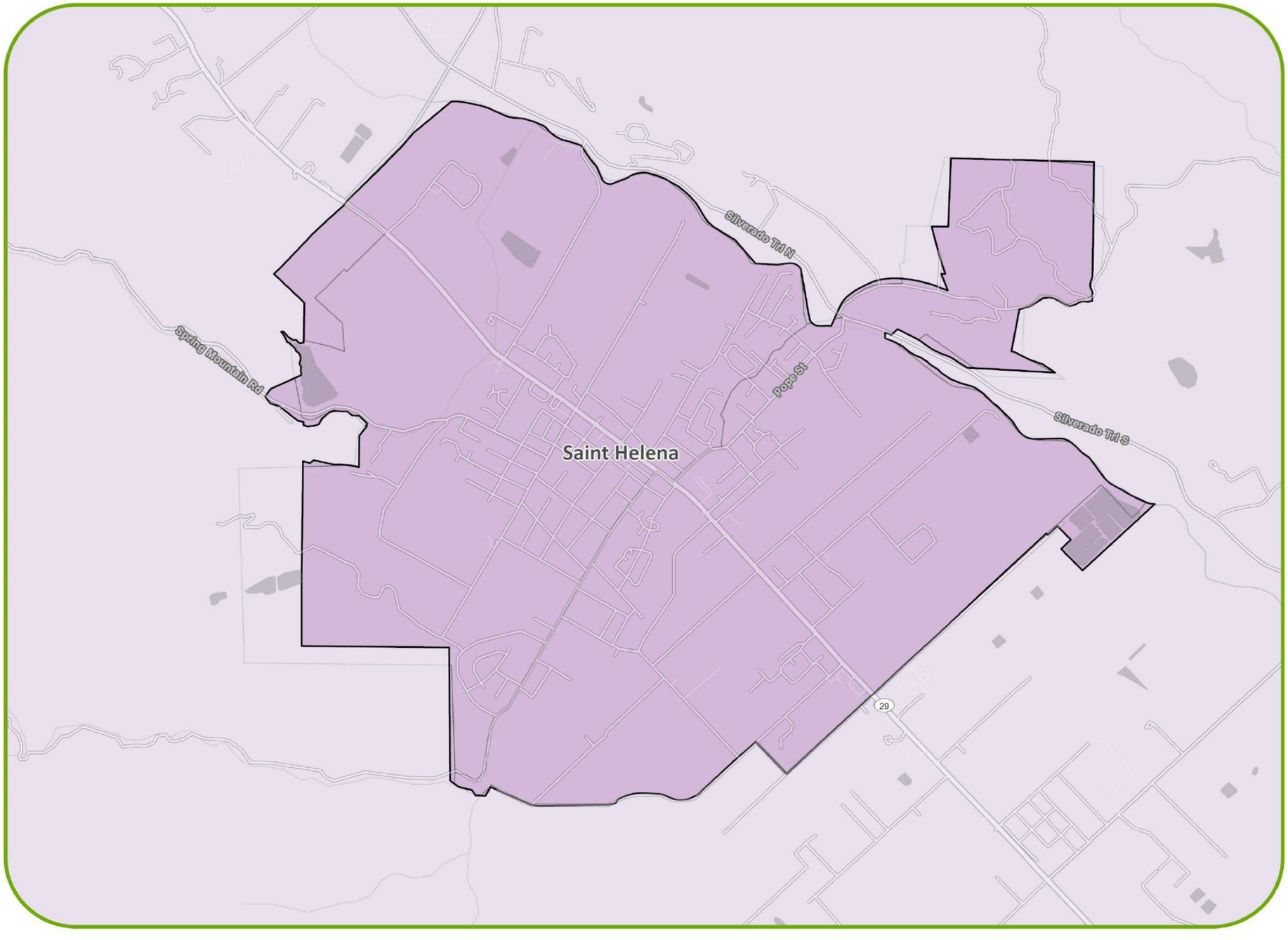

Figure 43: Overcrowded Households (St. Helena)

City Boundary
(R) Overcrowded Households (CHHS) - Tract
Percent of Overcrowded Households
- ≤ 8.2% (Statewide Average)
- 8.3% - 12%
- 12.01% - 15%
- 15.01% - 20%
- > 20%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

3.7.13 Displacement

Displacement, as defined by HCD, is used to describe any involuntary household move caused by landlord action or market changes. Shifts in neighborhood composition are often framed and perpetuated by established patterns of racial inequity and segregation. Movement of people, public policies, and investments, such as capital improvements and planned transit stops, and flows of private capital can lead to displacement. Displacement is fueled by a combination of rising housing costs, rising income inequality, stagnant wages, and insufficient market-rate housing production. Decades of disinvestment in low-income communities, coupled with investor speculation, can result in a rent gap or a disparity between current rental income of the land, and potentially achievable rental income if the property is converted to its most profitable use. These processes can disproportionally impact people of color, as well as lower income households, persons with disabilities, large households, and persons at-risk or experiencing homelessness.[81]

3.7.14 Regional Trends

The Urban Displacement Project (UDP) is an initiative out of the University of California, Berkeley that conducts data-driven research to better understand gentrification and displacement in order to generate more equitable and inclusive cities. UDP provides data to identify "sensitive communities," communities that are vulnerable to displacement caused by housing costs or with market-based displacement pressures within or near the community. As shown in Figure 44 below, portions of the cities of Napa and Calistoga are identified as sensitive communities by UDP. These communities are also more racially/ethnically diverse and have lower household median income compared to other areas of the county.

3.7.15 Local Trends

UDP did not identify any areas within St. Helena that are considered vulnerable to displacement, as shown in Figure 45. However, research from the University of California Berkeley indicates that 42.0 percent of households in St. Helena live in neighborhoods susceptible to or experiencing displacement.

[81] *HCD. 2021. https://www.hcd.ca.gov/community-development/affh/docs/affh_document_final_4-27-2021.pdf*

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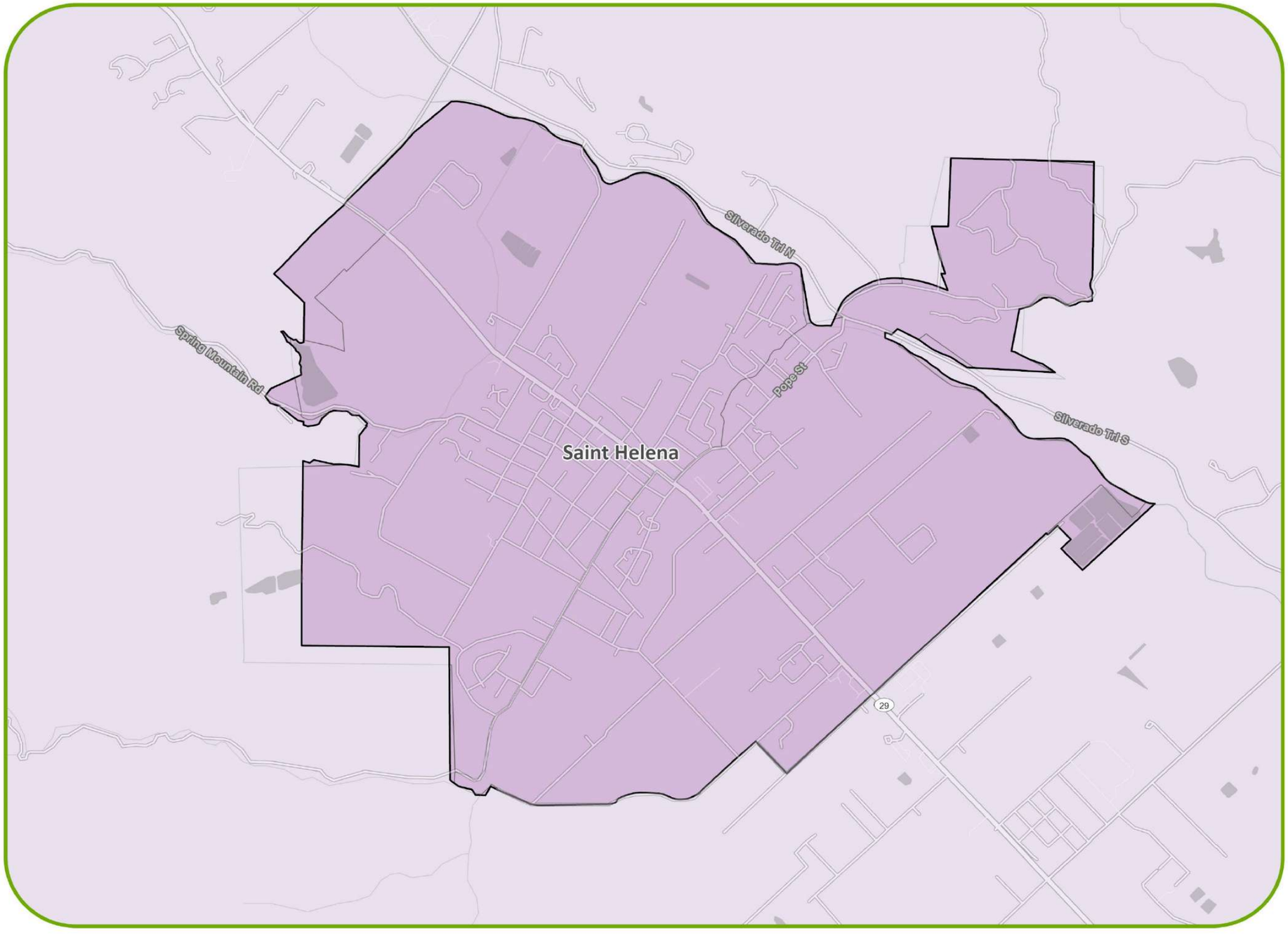


Figure 44:
Sensitive Communities (Napa County)

City Boundary
(R) Overcrowded Households (CHHS) - Tract
Percent of Overcrowded Households
- ≤ 8.2% (Statewide Average)
- 8.3% - 12%
- 12.01% - 15%
- 15.01% - 20%
- > 20%

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

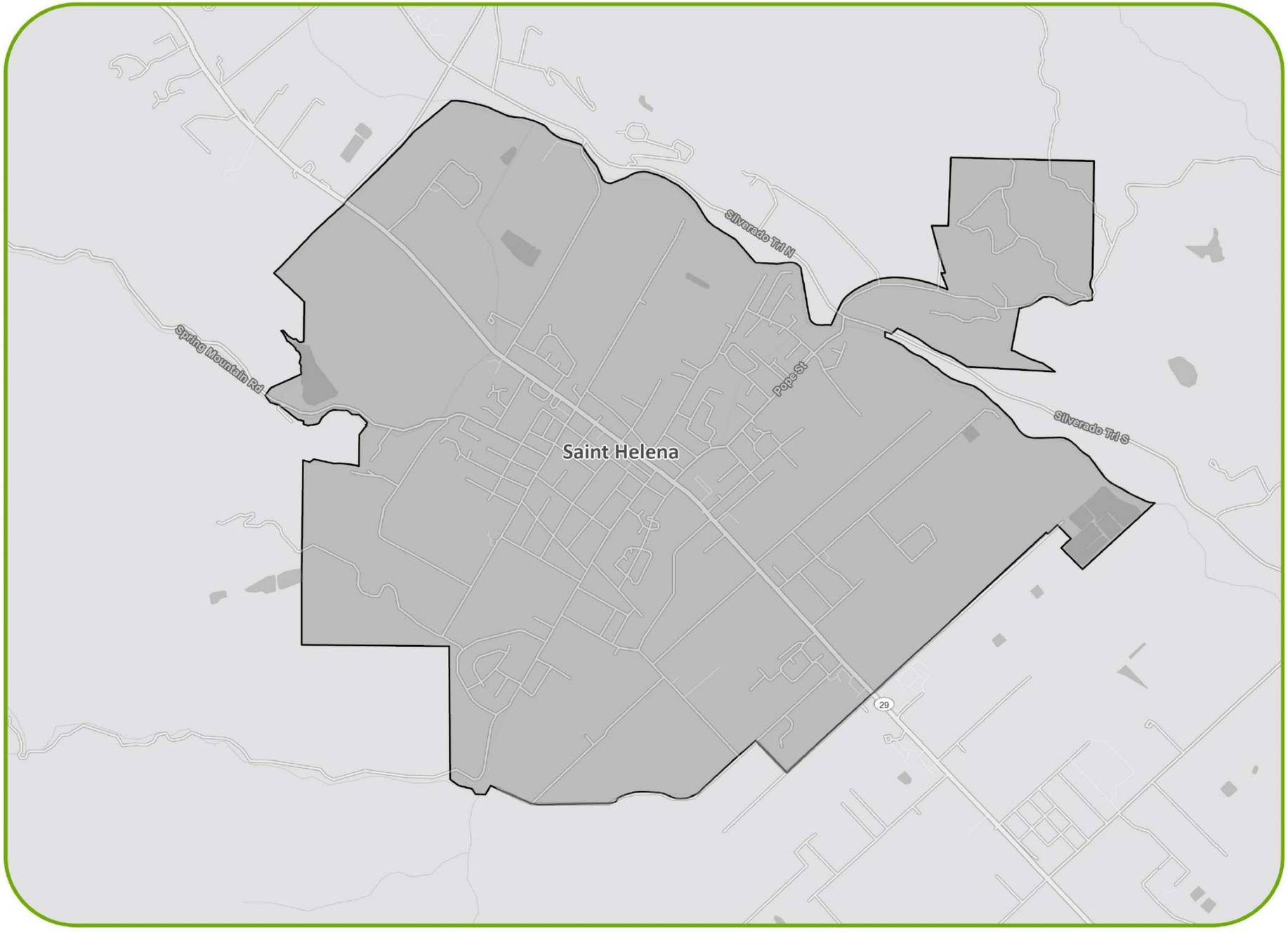


Figure 45:
Sensitive Communities (St. Helena)

City Boundary
(A) Sensitive Communities (UCB, Urban Displacement Project)
Vulnerable
Other

ST. HELENA
CALIFORNIA

0 0.2 0.4 N
Miles

County of Napa, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, California Department of Housing and Community Development.

4. Local Area of Knowledge

The AFFH analysis identified the eastern portion of St. Helena as generally experiencing more fair housing issues than other areas of the city. Fair housing issues in this area include higher levels of minority populations, low and moderate median income, overpayment of housing, higher median rent, and lower economic and environmental outcomes. The predominant population in this area of the city is White, however it has the highest non-White population of all areas within the city. Additionally, this area has a higher proportion of persons living with a disability compared to other areas. Overall, the eastern portion of the city is a moderate resource area, the same as the rest of the city. Some factors that could play into the trends seen in the data could be the location of existing retirement and older adult living facilities. The population living within these communities are, many time, fixed income and more often single-headed households. In addition, most of the city's high density land use and housing is located in this eastern portion of the city, which tends to be the housing type most affordable to lower income residents and single-parent households. As part of the Housing Element, the City is committing to improving the number of affordable units city-wide. In addition, with the recently adopted General Plan, the city envisions the redevelopment of Main Street within the eastern portion of the city with new, mixed-use development to increase economic opportunities and investments in this area.

4.1 Local Actions and Policy Efforts

In 2018, the City funded the 2018 St. Helena Housing Update Report, a housing analysis study that identified contributing factors to housing challenges in St. Helena. The report identified that residents believe new housing development primarily occurs east of Highway 29, however according to the report the majority of new construction was located west of Highway 29. In addition, the report also identified community opposition as a challenge to housing development in the city, leading to delays and increased project costs. Community members often desire to maintain the rural character of the city and are very concerned with how new development will impact surrounding neighborhoods.[82]

In October of 2020, the City Council adopted the Resolution 2020-105: Affirming that Discrimination and Systemic Racism Constitute A Public Health Crisis Causing Disparities in Mental Wellbeing, Language Access, Housing, Economic Development, Health, and Criminal Justice Experience, and Reaffirming Its Commitment to Advancing Justice, Equity, Diversity, and Inclusion in the City. This resolution commits the City to erasing barriers to opportunities to minority populations, including housing. The Staff Report to City Council for Resolution 2020-105 recommends actions to address racial equity and social justice in the community, including providing Spanish translation for City Council and Planning Commission meetings, provide all City communication in Spanish and reviewing adopted by other cities that promote inclusivity and access to affordable housing.

[82] 2018. St. Helena Housing and Community Report. https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3395/staff_report-white_paper.pdf

The City also prepared a Diversity, Equity, and Inclusion Strategy to outline the City's efforts towards diversity, equity and inclusion, and social justice. The strategy includes actions such as creating a Diversity, Equity and Inclusion Committee to discuss topics, including housing and racial justice, and offering live Spanish interpretation for regular and special City Council and Planning Commission meetings. The City continues to provide Spanish interpretation for City Council and Planning Commission meetings.

4.2 Stakeholder Input

The City held three housing workshops to receive feedback from the community on housing issues and the Housing Element Update (on September 16, 2021, January 20, 2022, and March 16, 2022). During these workshops, participants frequently brought up concerns regarding the lack of affordable housing for lower income households and the "missing middle" as well as the need to support affordable home ownership. AFFH related concerns included the high cost of housing, transportation accessibility, ADU trends (specifically that ADUs tend to be utilized as vacation rentals and not housing).

4.2.1 Other Relevant Factors

Other factors to fair housing issues in St. Helena that have not been previously discussed in this analysis include lack of sufficient housing for farmworkers, availability of affordable units in a range of sizes, access to transportation, access to home ownership. These contributing factors limit the accumulation of wealth and access to housing resources in historically marginalized communities.

4.2.2 Farmworker Housing

An estimated between 6,000 and 9,000 farmworkers are employed Napa County. Sufficient affordable housing options are lacking for farmworkers who are often lower income and have special housing needs, such as seasonal housing. The number of farmworkers employed in St. Helena is unknown, however the city's central location with regard to vineyards and wineries throughout the county would imply a number of farmworkers are employed in proximity to the city.

4.2.3 Access to Transportation

St. Helena's public transportation system is operated by Vine Transit which operates one bus route (Route 10) in the city. Route 10 has four stops in the city, however all four stops are along the main road, State Route 29. Areas of the city located further north or south are more than 0.25 miles from a bus stop. This bus route connects the City of Napa and the City of Calistoga where connections to destinations further north or south can be made. Residents who live or work in St. Helena have limited options for traveling via public transit, potentially limiting their housing options.

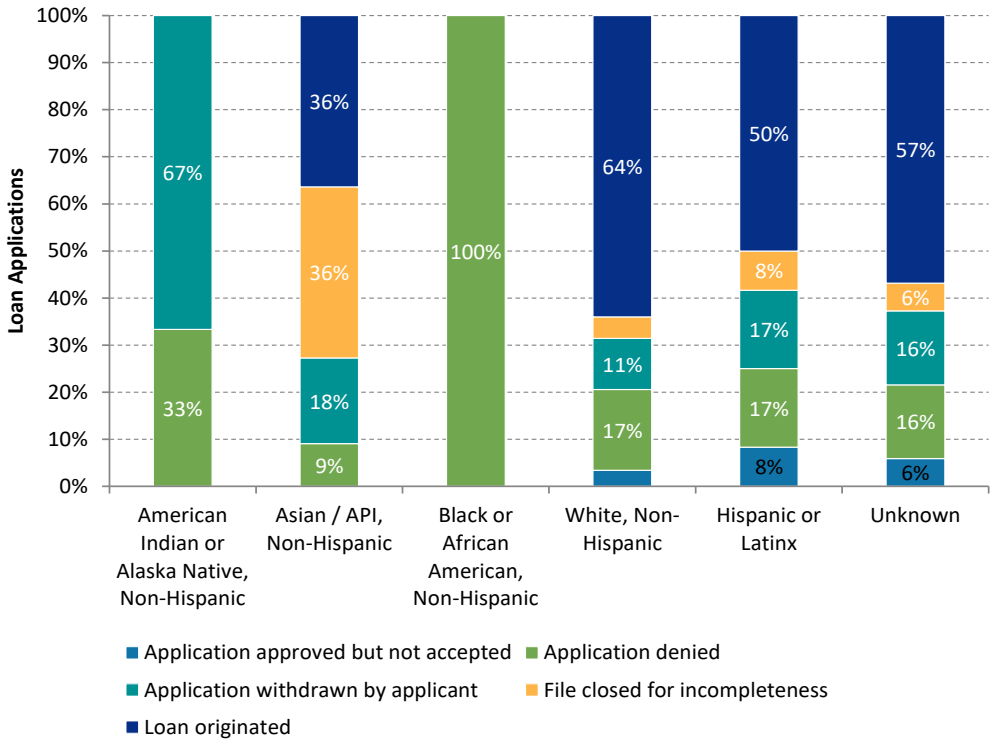
4.2.4 Access to Home Ownership

Increasing housing costs has produced a barrier to home ownership for St. Helena residents. As of December 2020, Zillow reported typical home values in St. Helena were estimated at $1,665,790, much

higher than the typical home value in Napa County, which is estimated at $768,410. Typical home values reflect the value of homes in the 35th to 65th percentile range. Home values have been consistently on the rise since 2000 (with the exception of the recession). This trend has made it more difficult for residents, especially lower income residents, to afford homes. Affordable housing projects in the city generally consist of rental units, which does not provide opportunities for lower income residents to own homes.

Mortgage application filing and acceptance data from 2018-2019 indicates there are racial/ethnic disparities among homeownership opportunities for residents in Napa County. As shown in Figure 46, 64 percent of White, Non-Hispanic applicants and 50 percent of Hispanic/Latinx had their loan originated, compared to 36 percent of Asian/ API applicants, 0 percent of Black/African American, and 0 percent of American Indian/Alaska Native applicants.

Figure 46 Mortgage Applications and Acceptance by Race



Source: Federal Financial Institutions Examination Council's (FFIEC) Home Mortgage Disclosure Act loan/application register (LAR) files

4.2.5 Opposition to New Development

According to the 2018 St. Helena Housing Update Report, city residents are "deeply concerned with maintaining the rural character of town" and therefore residents generally oppose housing projects that are perceived to changing neighborhood character. Many previous and ongoing multi-family housing projects

have been met with comments and concern from community members regarding environmental impacts, such as increases in water demand and increases in traffic as well as impacts to existing neighborhoods and community character.

4.2.6 Location of New Housing

Some residents of the city feel the city is segregated between east and west of Main Street, where the west side of the city consists of a greater percentage of White, affluent residents while the east side of the city has a greater percentage of non-White and low-income residents. In addition, residents have stated that the multi-family housing in the city is located in the eastern area. According to the 2018 St. Helena Housing Update Report, the majority of new construction over the last 10 years has been west of Highway 29.[83] The Magnolia Oaks housing development consists of 44 multi-family housing units, 10 of which are affordable to low-income residents. While this project is located just west of Highway 29, other recently multi-family projects have been constructed on the east along McCorkle Avenue. The City is in the process of adopting a new Zoning Ordinance to be consistent with the 2040 General Plan, which would permit duplexes and triplexes within the MR District (see Program H-N). This would create additional housing choices and affordability levels in the MR Districts on the western side of the city. In addition, Programs H-BB, H-EE, and H-XXwould implement placemaking strategies to outreach and work with the more diverse and older populations living in the east due to the historic development patterns.

5. Sites Inventory Analysis

5.1 Opportunity Areas

HCD and TCAC opportunity maps identify areas throughout the state whose characteristics support positive economic (low poverty, high employment, high median household income), educational (reading and math proficiency, high school graduation rates, low student poverty rates), and environmental outcomes (low exposure to pollution). A census tract with a designation of high resource would indicate there are strong educational and economic opportunities, meaning opportunity for current and future residents.

According to the 2022 TCAC Opportunity Map, the entire city is considered an area of moderate resource. However, the eastern portion of the city is has a higher percentage of non-White residents, lower household median income., higher percentage of cost burden among renters and owners, and less positive economic and environmental outcomes compared to the rest of the city. These demographic And socio-economic patterns influenced the locations of potential lower income sites in the city.

[83] Erica Skylar. 2018. St. Helena Housing Update Report. https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3395/staff_report-white_paper.pdf

5.2 Improved Conditions

According to the 2022 TCAC Opportunity Map, the entire city is considered an area of moderate resource. Demographic and socio-economic spatial patterns show that census blocks with low- and moderate-income households, greater Hispanic/Latino populations, and higher rates of housing problems are located throughout the eastern half of the city. Sites that accommodate housing unit densities appropriate for lower-income units are scattered around the city. Sites that can accommodate most of the lower income units are located in the western and southern part of the city, which has a higher household median income and more positive economic and environmental outcomes. Approximately 38 percent of the total proposed units and 36 percent of the proposed lower-income units planned for in the sites inventory (Appendix B) are located in the eastern part of the city, which has a higher percentage of low- and moderate-income populations and non-White residents. .

Figure 47 shows the site inventory in relation to the TCAC Opportunity Map. Sites proposed within the eastern area of the city, are diverse with a mix of lower income and non-lower income sites. Lower income sites spread across the city. Site 7 (821 Pope Street) and Site 8 (882 and 886 College Avenue) have 50% lower income units and 50% moderate income units. The rest of the proposed lower income sites are 100% lower income units.

5.2.1 Exacerbated Conditions

The northern and eastern parts of the city contain block groups considered moderate resource with a higher concentration of Hispanic/Latino population, higher percent of renter occupied units, higher percentage of overpayment by residents, less positive economic outcomes, and higher pollution burden compared to the moderate and high resource areas of the city. According to California Housing Partnership data, all federal and State subsidized housing within St. Helena is in moderate resource areas in the northern and eastern portions of the city. The Sites Inventory does not exacerbate conditions in vulnerable areas of the city by identifying sites that can accommodate lower income units throughout the city. Additionally, one underutilized site was identified that could accommodate above moderate units in the eastern part of the city, which has a higher percentage of non-White residents and cost burden and lower economic and environmental outcomes.

5.2.2 Racially/Ethnically Concentrated Areas of Poverty and Affluence

There are no racially/ethnically concentrated areas of poverty or affluence identified in St. Helena. However, eastern areas of the city have a larger population of Hispanic/Latino residents as well as LMI populations compared to other areas of the city. In contrast, western areas of the city have higher concentrations of White residents, higher median incomes, and lower concentration of LMI populations. Sites feasible for lower income housing were identified in these affluent areas.

5.2.3 Access to Opportunity

The city is categorized into 2 census tracts, both of which are considered moderate resource. Housing units in the sites inventory are not disproportionately concentrated in different resource areas, and the sites identified in the eastern areas are scattered on vacant and underutilized parcels to facilitate the development of lower- and above moderate-income units.

5.2.4 Disproportionate Housing Needs

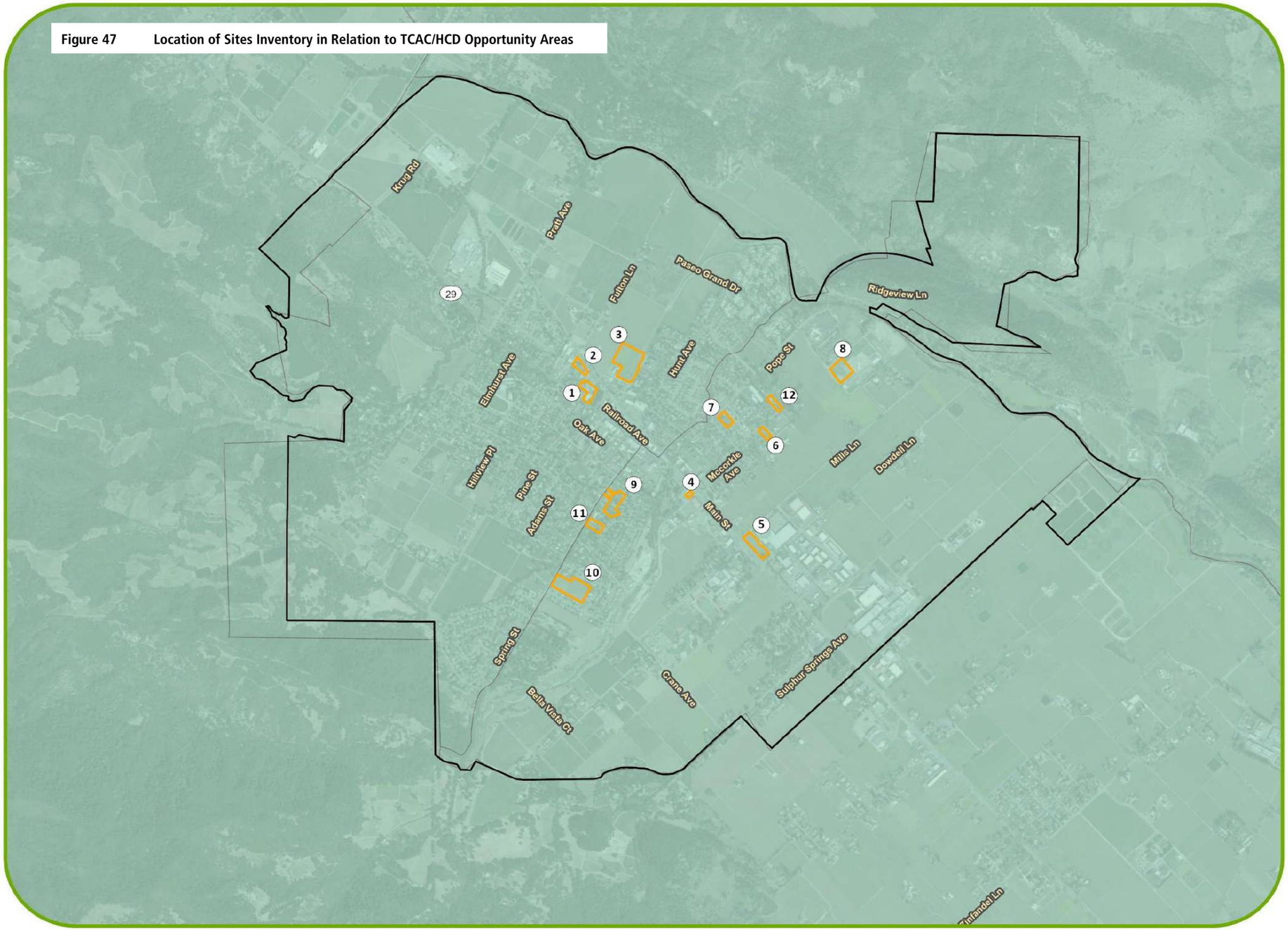
The fair housing assessment found a need for affordable housing for people with disabilities and adequate low-income households. The City incentivizes the development of extremely low-, very low-, low-, and moderate-income housing by reducing development fees and relaxing development standards to incentivize housing development. The City may also assist in acquiring and assembling property, subsidizing on-site and off-site improvements, and assisting in relocation activities as well as clearing and demolition.

5.2.5 Subsidized Housing

In 2019, approximately 1,105 households received Housing Choice Vouchers in the County of Napa, with 10 households receiving rental assistance and 6 households on the wait list in St. Helena.[84] The AFFH Data Viewer does not have data on Housing Choice Vouchers for St. Helena.

[84] *City of Napa Housing Authority's Annual Report Housing Services Agreement, 2019, https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3395/2018-2019_housing_services_annual_report.pdf*

Figure 47 Location of Sites Inventory in Relation to TCAC/HCD Opportunity Areas



City Boundary
Selected Sites

TCAC Opportunity Areas (2022)
- Highest Resource
- High Resource
- Moderate Resource
- Low Resource
- High Segregation & Poverty
- Missing/Insufficient Data

1 - 1480 Main Street
2 - 1572 Railroad Avenue
3 - Adams Street
4 - 905 Main Street
5 - Main Street (between Mills & Dowdell)
6 - 709 McCorkle Avenue
7 - 821 Pope Street
8 - 882 and 886 College Avenue
9 - 1447 and 1515 Spring Street
10 - Spring Street (between Hudson & Valley View)
11 - 1637 Spring Street
12 - 620 McCorkle Avenue

ST. HELENA CALIFORNIA

0 0.2 0.4 Miles N

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Agenda Item #6.1.

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6. Contributing Factors

This assessment of fair housing issues identifies factors that contribute to fair housing issues in the City of St. Helena, as shown in Table 10.

Table 10 Factors that Contribute to Fair Housing Issues

Identified Fair Housing Issue	Contributing Factor	Meaningful Action
Fair housing enforcement and outreach	· Lack of fair housing requirements and information provided to residents · Outreach and communication of services are limited to English · Limited fair housing testing and enforcement	· Participate in FHNV meetings, at least once annually, to coordinate regional responses to housing discrimination issues (Program H-XX)
Lack of affordable housing and displacement of residents	· Increasing rent and house/property costs · Dominance of single family housing · Land use and zoning laws · Availability of affordable units in a range of housing types	· Diversify and expand the housing stock to accommodate the varied housing needs of different groups (Programs H-E, H-H, H-I, H-J, H-W, H-LL) · Pursue down payment and mortgage assistance resources through the Housing Trust Fund or other resources (such as CalHome) for local funding to assist lower and moderate-income residents (Program H-GG) · Development of affordable housing on City-owned sites (Program H-V) · Provide by right approvals for multi-family housing projects that meet objective design and development standards (Program H-V) · At least once annually, provide an information on accessory dwelling units (ADUs) in the city, and target outreach to residents in the high resource

		southwest of Main Street and northeast of Pratt Street (Program H-Q)
Concentration of lower income and minority households in the southeastern areas of the city	· Land use and zoning laws · Location of existing affordable housing	· Prioritize affordable housing in high resource areas southwest of Main Street and northeast of Pratt Street (Program H-V) · Encourage construction and renting of ADUs in high resource areas to increase supply of variety of housing types in the city (Programs H-I, H-R) · Prioritize CIP in the eastern part of the city (Program H-WW) · Revise inclusionary housing ordinance for more lower income units, realistic in-lieu fees, workforce housing, and more on-site housing requirements (Program H-F) · Invest in public infrastructure projects in low and moderate resource areas that improve the quality of life for residents (Program H-WW)
Limited resources for persons with disabilities	· High cost of transportation for persons with disabilities · Lack of ADA compliant sidewalks	· Reduce ridership costs for VineGo paratransit system (Program H-WW) · Work with the County of Napa to carry out the ADA self-Evaluation and transition Plan to remove barriers for persons with disabilities to facilities and programs in Napa County (Program H-WW)

Appendix B: Comments on the Public Review Draft 2023-2031 Housing Element Update

The City received multiple comment letters on the Public Review Draft 2023-2031 Housing Element Update. Comments on the Public Review Draft were received between June 29, 2022, and July 30, 2022. Key changes in response to public input include revisions to various programs and the addition of a new site in the sites inventory.

Response to Comments

In response to these comments, the City has made a number of revisions to the Public Review Draft Housing Element, including:

- 1: Policy Document – Program H-Y: Corrected spelling error and added Voorhees Circle (now program H-Z).
- 1: Policy Document – Policy HE 2.5: Revised language for clarity.
- 1: Policy Document – Program H-C: Urban Limit Line: Deleted program.
- 1: Policy Document – Program H-J: Updated funding sources to include State and Federal programs and grants (now program H-I).
- 1: Policy Document – Program H-M: Zoning to Facilitate Higher Density Housing: Revised for clarity (now program H-N).
- 1: Policy Document – Program H-R: Affordability Requirements for ADU Incentives: Updated text to specify that a regulatory agreement is required (now program H-S).
- 5. Housing Conditions – Key Findings: Added source information for the data presented in the key finding related to Cost Burden
- 5. Housing Conditions – Physical Housing Conditions: Estimated the number of homes in need of rehabilitation.
- 6. Housing Market Conditions – Affordable Home Purchase Prices: Corrected broken references to Table 15.
- 6. Housing Market Conditions – For-Sale Housing: Revised note on Table 15 to clarify that 2021 data was used.

- 11. Housing Resources – Pending and Approved Projects: Revised Table 36 to identify the existing unit at 963 Pope Street as deed restricted.
- 11. Housing Resources – Remaining RHNA: Revised Table 37 to fix incorrect income categorization for 963 Pope Street.
- 11: Housing Resources – Residential Sites Inventory: Added 620 McCorkle (APN 009-502-003) to the available sites inventory.
- 11. Housing Resources – Pending and Approved Projects: Revised Table 36 to identify the existing unit at 963 Pope Street as deed restricted.
- 11. Housing Resources – Remaining RHNA: Revised Table 37 to fix incorrect income categorization for 963 Pope Street.
- 11: Housing Resources – Residential Sites Inventory: Added 620 McCorkle (APN 009-502-003) to the available sites inventory.

July 26, 2022

TO: Members of the City Council and Planning Commission, City of St. Helena

FROM: Jennifer La Liberte, Executive Director

SUBJECT: Housing Element Update, 2023-2031, Public Review Draft

The Board of Directors of Our Town St Helena and I appreciate the opportunity to comment on the draft Housing Element Update (HEU).

General Comments

Pg 1-4 Potential Funding Sources – There does not appear to be consistency among the potential funding sources for the objectives. Some programs list specific potential sources (though the lists should be expanded) and some list only staff time. It appears this could be related to how current programs are funded. Federal, state, county, local, and private funding sources would seem appropriate for each objective that requires development and construction funding. Also, if detailed funding sources are to be included, then US Department of Agriculture Rural Development should be added.

Pg. 1-6 Throughout the document (beginning on page 1-6), much of the cited data is outdated and does not accurately reflect today's market conditions. For example, the HEU states "typical contract rent for an apartment in St. Helena was $1,470 in 2019," and to avoid being cost burdened, a renter would need to earn $59,160. According to the Napa County 2021 Affordable Housing Needs Report (May 2021) produced by the California Housing Partnership, the average asking monthly rent in Napa County is $1,948 and renters need to earn $77,916 to avoid being cost burdened. Since St. Helena tends to be at the top of the market for Napa County, it's safe to assume (and observe) that those figures are even higher. Marcus & Millchap publishes a quarterly Bay Area multi-family market report that identifies mean rents by county by unit type which would be more accurate even if not specific to St Helena. We know that a typical two-bedroom market rate unit in good condition is renting for $2,100-$2,650 plus utilities, and three-bedrooms in very good condition are at approximately $3,000 per month.

Pg.1-11 How were the specific quantified objectives derived under each of the programs and how do they relate to each other? There appears to be significant overlap in

these objectives. Example: farmworker housing and very low-income housing could be the same housing; senior housing could be incorporated into a low-income project. The Quantified Objectives Summary Table on 1-40 page provides the totals but not the logic in how the quantities were broken out.

Pg. 1-17 "The City will explore possible incentives for building attached market rate housing units for rent and for sale" which is great, but it ought not take five years to explore incentives. And what action comes after exploration? Similarly, why will it take four years to study potential modifications to the Zoning Code to facilitate higher density housing, etc., when the City is already updating the Zoning Code and the HE and should be fairly versed in what changes are needed? Is it possible to make incremental changes? For example, an immediate step the City could take is to remove the conditional use permit requirement in multi-family zones to streamline the process for developers.

Page 1-25 Change Murietta to Marietta. Note: Some Voorhees Circle homes that have not changed hands are also at-risk for conversion.

Pp. 2-23 Beginning on page 2-23, Joe is Joe McGrath, Jordan is Jordan Bentley, Mary Stevenson is Mary Stephenson, John is John Sales, Jennifer Le Liberte is Jennifer La Liberte, and Steve is Steve Goldfarb.

Page 2-57 Employment – what did the unemployment rate increase to? Table 3, under 2010 for Napa County, the comma is in the wrong place.

Page 2-82 Vacant units -- It would be useful to state how many people could be housed in these units which comprise 17.4 percent of the housing stock. If the rental vacancy rate is 3.1 percent and ownership vacancy rate is 5.3 percent, what constitutes the delta (17.4 minus 3.1 minus 5.3)?

Page 2-83 Cost burden – for the last paragraph, what is the time period this data represents?

Page 2-84 How does the fact that an overwhelming portion of our existing housing stock is 40 to 80 years old correlate with the City's preservation goals?

Page 2-88 Table 14 – how many of the permitted units from 2015-2019 have been built?

Page 2-96 Home values – how is "typical home value" defined? Zillow is the cited source, which is providing listing prices, not value. Based on current listings in St. Helena, $1.6 million is at the lower end of the range. Local realtors could provide updated

MLS data which would be timelier and more accurate than Zillow. Also, within this section it is not clear whether existing deed-restricted units are included in totals of rent/homeownership units and monthly cost. It could be that these income-qualified units are affecting the total values. Could this be made more explicit?

Page 2-98 Affordable home purchases – some zeroes are at the beginning of the first sentence and middle of the second sentence that don't make sense.

Page 2-99 Table 15 -- The Area Median Income figures are for 2021. HUD has published new figures for 2022, so the footnote to the table should be adjusted accordingly.

Page 2-103 Table 16 – Christine Apartments, 723 Hunt Ave., four units, should be included as a very low and low income; OTSH purchased in June 2021 and recorded 55-year deed restrictions. Also, Grayson Apartments were funded privately through the inclusionary requirements met by 632 McCorkle and references to tax credits, AHP, etc. should be removed. This is an important point because the housing crisis here will not be solved exclusively through non-profits.

Page 2-154 Table 36 – 963 Pope Street, under "Project Description", the existing house is deed restricted and should be noted.

Page 2-155 Table 37 – if the 4 pending or approved units is referring to 963 Pope St, those should be moved to "lower" income.

<u>Policies</u>

HE 2.5 "Allow duplexes in all low-density residential zones" – please clarify whether this allowance is by right and not with a conditional use permit.

HE 4.8 "Give preference to projects providing workforce housing affordable to up to 140 percent of the AMI" – there doesn't appear to be an implementation program associated with this policy. What preference would be given, and would it be at the expense of another affordability level?

<u>Implementation Programs</u>

H-A, H-NN "Concentration of sites for affordable housing" – OTSH supports the City's efforts to ensure affordable housing sites are identified geographically throughout the city. But we caution that land is scarce, and large sites rarely become available that are suitable for multi-unit housing, and, most that do, tend to be located east of Main Street. We support incentivizing affordable housing wherever it can get

built, and don't support the City prioritizing Affordable Housing Trust Fund dollars for affordable projects in the western portion of the city at the expense of projects in the eastern portion.

H-C OTSH believes we should be planning for a more sustainable and less car-dependent future. We should be exploring opportunities to increase infill density and expand height limits and reduce parking requirements. Up and in should be the focus. The block of land from south of White Sulphur Spring Creek to Grayson and west of Highway 29 and east of Crane vineyard is one of the most poorly utilized sections of the City, and we believe a housing task force could explore how to unlock the potential here. Expanding the Urban Limit Line should be the last option as it runs a great risk of negatively impacting what makes this such a great and desirable place to live with vibrant wine and tourism industries.

H-D Water and sewer access should be prioritized for both affordable and missing middle housing. Also, please define "missing middle" in terms of Area Median Income. The water neutrality requirement should be eliminated for any attached affordable and missing middle housing. The City could consider requiring other trade-offs such as no-irrigation landscaping or rain capture systems.

H-J "ADU Workforce Housing Incentive Program" -- broaden the potential funding sources to include grants, state and federal programs. Also, consider working with the County Assessor to allow a property tax reduction on the larger property in exchange for 30-year a deed restriction on an ADU, with proper monitoring to ensure compliance.

H-M OTSH believe the City should immediately remove the Conditional Use Permit requirement on MDR Zoning. At a minimum, it should be removed for any parcel identified in the HE as a Housing Opportunity Site. Discretionary review is the toehold for opposition to these projects and makes developers wary of taking the significant financial risk that is required for this type of development. Also, consider allowing deed restrictions for missing middle projects (as defined by the City) and in exchange grant fee waivers and eliminate the housing impact fee requirement.

H-P We should not incentivize ADUs beyond existing state mandates unless they have a deed restriction and rental occupancy requirements in exchange. While this may be implied it isn't clearly stated.

H-R, H-DD	"Affordability requirements for ADU incentives; reduced fees for affordable housing" – these should include a reference to the mechanism that will restrict affordability (i.e., affordable housing regulatory agreement).
H-S	"Illegal housing units" – these types of policies or programs can be double edged as they often end up displacing households that cannot afford to live in legal units. Consider a companion program that sees to support households displaced by this program.
H-U	Under Objectives – "Support the development of 3 multi-unit housing projects….support the development of five infill projects…." What does "support" mean? As written it implies a maximum the City will "support" during the planning period.
H-??	Under Goal 3, Conservation of Existing Housing – consider adding an implementation program: "The City will work to obtain CDBG or other available funds to create an 'Affordable Housing Conservation Fund' so units can be acquired quickly when they hit the market and preserved at affordable levels."
H-Z	"Vacation Rentals" – the City should consider prohibiting vacation rentals in certain zoning districts if it hasn't already.
H-FF	"Affordable Homeownership" – the City should work with the County's Proximity Housing Program to provide down payment assistance to St. Helena first-time home buyers. If the County is amenable to working with the City to create a funding set-aside for St. Helena, the City could then market the program or work with others to do so.
H-II	"Housing Coordinator" – this is an immediate need, and a specified time frame is encouraged rather than "ongoing". It would be preferable to do this as a City of St Helena position, but a shared position is better than none. OTSH would prefer the City consider a Housing / Economic Development FTE rather than a lower level, part-time Housing Coordinator. Also, meeting with partner jurisdictions twice during the 13-year planning cycle does not appear to be sufficient.

Proposed Sites

Site maps	It would be helpful to add a north arrow to the aerials.

Page 2-162 The last sentence should read, "However, the future property owner intends to develop 36 to 50 units."

Page 2-170 Table 50, Site 5 – change 50 to 36-50 (if possible).

Housing Opportunity Sites

Adams Street What is the rationale for the size and placement of the Opportunity Site on the Adams Street property?

709 McCorkle This site was recently purchased and is intended to function as an estate compound. It has a low to zero probability of being developed for affordable housing.

741 McCorkle This house was recently renovated with significant capital improvements and is unlikely to be further developed in the next HE cycle.

1637 Spring This site has recently been purchased for the intent of turning it into employee housing.

Proposed site We encourage the City to add 620 McCorkle Avenue (APN 009-502-003-000) as a "key housing site". This 0.76-acre site is zoned MDR and is currently on the market. Including it as a key housing site would eliminate the requirement for a conditional use permit and be consistent with the goal to remove barriers to development of multi-unit housing.

Conclusion

OTSH commends the City for its work on this document. Realizing that the HEU is a mandated document that needs to follow strict guidelines, we hope the City will also create an implementation plan that identifies measures, cost analysis, staff and funding resources, and time frames for meeting the goals contained herein.

Aaron Hecock

From: LAURA KEIR <lkeir@me.com>
Sent: Tuesday, July 19, 2022 11:09 AM
To: Aaron Hecock
Subject: [External] Land designation

Hi
It appears numerous parcels sent to the state to meet our quota fir homes are not currently available for sale? Are they going to be for sale? And we are not aware? Or, emanate domain enforcement would be necessary?
I firmly disagree with the high to med density development of Valley View Hudson vineyard property being developed as traffic on the road is already more than a residential area should have to handle between cut threw traffic to avoid Hwy 29 to the school traffic it's impossible to safely get out of your driveway or even ride a bike!
Spring Street is narrow and I notice in addition three sites are designated as possible development.
The government/ Bay Area need to either agree to continue our exempt status. Recognize us as a primary agricultural area or the Napa Vally will be destroyed!

Laura
Sent from my iPhone

City of St Helena, City Hall
Received

JUL 15 2022

1480 Main St.
St Helena, CA 94574

Housing Element for Public Comment
Aaron Hecock, Senior Planner, City of St. Helena
ahecock@cityofsthelena.org

July 10, 2022

Dear Mr. Hecock,

As concerned St. Helena residents, we have read the Housing Element Update and plan to attend the public forum.

We support the city's efforts to identify appropriate sites for potential development to provide additional housing that is badly needed. Yet after reading about proposed rezoning and adding more density, we remain vigilant in pointing out situations where multi-unit projects would negatively impact neighborhoods.

We have shared with several City officials the situation we face after the recent purchase of the parcels at 1521 and 1541 Elmhurst. The owner, Jennifer Mozzetti, and her friend John Bowman, a self-described developer from Napa, have disrupted this peaceful neighborhood with their alleged plans to develop the parcel at 1541 Elmhurst into a multi-unit site with the "cooperation of the City." They initially claimed, as a result of their purchase of the two parcels, they "owned" the Elmhurst Alley from the property at 1521 extending to the end of the alley.

The city, through correspondence from Eric Janzen on 5/17/22 and several other emails, assured us that the Elmhurst Alley was listed by the County Assessors as a public right of way and is not owned by Ms. Mozzetti.

Elmhurst Alley is a single lane, dead-end alley that extends off busy Spring Mountain Road. It provides access to the vehicles of 5 single family homes in addition to the mail truck, delivery trucks and home health care vehicles that service those homes. The tightness of this alley already poses safety questions for Emergency and Fire Department vehicles.

Any development of the property at 1541 Elmhurst from its current single-family residence to a multi-unit would be unwise and unsafe expanding the number of alley users. (Garbage day finds the street with as many as 15 garbage cans as it is!) Certainly, the goal of adding multi-unit housing in St Helena is a laudable one, but to drop a new multi-unit project in an already dense neighborhood with limited access from a single-lane, blind alley, would be ill-conceived.

Our specific questions are these we hope you can answer:

1.The Housing Element mentions an inventory of possible sites, not yet public, that might be used to develop more housing.
Is the parcel at 1541 Elmhurst currently on this site list or being considered?

2. Can individuals, seeking to develop multi-unit housing on their own properties apply to be included on this site list?

If the answer is "yes" to either question, we kindly request a site visit, in person, by a member of the Planning Commission, so that the impact of adding more housing and residents on Elmhurst Alley will be obvious.

Sincerely yours,

Dayna Van Kleeck
1800 Spring Mountain Court

Henry Kistler, M.D.
1781 Spring Mountain Road

Susan Taylor Kistler
1781 Spring Mountain Road

Brenda Hill
1777 Spring Mountain Road

Jim Lampkin
1777 Spring Mountain Road

Terence Ford
1806 Spring Mountain Court

Kathryn Ford
1806 Spring Mountain Court

Polina De-Levi
1809 Spring Mountain Court

Vladymer De-Levi
1809 Spring Mountain Court

Brenda Hill
1777 Spring Mountain Road

Jim Lampkin
1777 Spring Mountain Road

Terence Ford
1806 Spring Mountain Court

Kathryn Ford
1806 Spring Mountain Court

Polina De-Levi
1809 Spring Mountain Court

Vladymer De-Levi
1809 Spring Mountain Court

Aaron Hecock

From: Nancy Dervin <nancydervin@hotmail.com>
Sent: Friday, July 1, 2022 3:13 PM
To: housingelements@hcd.ca.gov
Cc: office@mintierharnish.com; CityCouncil; Aaron Hecock
Subject: Re: [External] Public Review Draft Housing Element Available Now!

Dear HCD,

I am concerned about the City of St. Helena putting forth a Housing Element Draft that contains at least one property that the City has repeatedly been told is absolutely not available which is 601 Pope Street. There are other properties on the Draft that are also potentially not available but this one site is positively not available.

We have a huge housing shortage problem, like most communities. Knowingly including unavailable sites is unethical as well as contrary to the purpose of identifying housing opportunity sites.

What should be or can be done about this?

Sincerely,
Nancy Dervin
St. Helena, CA

From: St. Helena Housing Element <jim@mintierharnish.ccsend.com> on behalf of St. Helena Housing Element <office@mintierharnish.com>
Sent: Thursday, June 30, 2022 10:31 AM
To: nancydervin@hotmail.com <nancydervin@hotmail.com>
Subject: Public Review Draft Housing Element Available Now!



CITY OF ST. HELENA

Aaron Hecock

From: Mary Wilson <boecoup@gmail.com>
Sent: Wednesday, July 13, 2022 12:54 PM
To: Aaron Hecock
Subject: [External] Housing sites

I wanted to comment on the list of potential sites for housing that was in the St Helena Star. I've taken the time to look at each of the addresses mentioned. With the exception of one, I found all of them viable locations. My one exception is the vineyard location on Spring St.
One of the things that makes St Helena unique are the vineyards still scattered within the city. They are a part of our heritage, displaying the agriculture that has made this valley the world class jewel that it is. Please allow this one to remain as it is.

Respectfully, Mary Wilson

Sent from my iPad

Mary Wilson
1426 Kearney St.
St. Helena, Ca. 94574

707-529-4406

Aaron Hecock

From: Joe McGrath <joe.mcgrath65@gmail.com>
Sent: Thursday, July 14, 2022 12:12 PM
To: Aaron Hecock
Cc: Mary Stephenson; Maya DeRosa; Eric Hall; Lester Hardy; Jennifer La Liberte; Jordan Bentley; Joe Mcgrath
Subject: [External] Re: [External] A Potential New Opportunity Site

Aaron:

Thanks.
Speaking as a private citizen and neighboring property owner (and concurring with Mary as an OTSH Board member), I would also advocate that this lot [620 McCorkle - APN 009-502-003-000] be added to **this** HE cycle as a "Housing Opportunity Site".

In light of the recent multi-family developments on that street I would recommend however that it remain MDR, otherwise it may cause too much opposition with residents on the south side of McCorkle.
The goal would be to eliminate conditional use requirements which become, as you know, major entanglements in entitlement.

However, as MDR it should be explicitly listed under **17.40.020 Permitted Uses (N):**

N. Multiple-family dwellings, apartments, and dwelling groups at a density up to the maximum allowed by the medium density residential district shall be allowed as a permitted use on the following MR zoned parcels, which are identified as "Key Housing Sites" in Table 42 of the city's 2015-2023 housing element, and are identified as follows by street address and assessor's parcel number (APN): 567 Pope St. APN 009-070-002; 591 McCorkle Ave. APN 009-070-003; 1817 Spring St. APN 009-322-009; Sulphur Springs Ave. APN 009-362-015; Spring St. APN 009-441-023 and 009-552-002; 576 Pope St. APN 009-552-003; 1105 Pope St. APN 009-090-003. (Ord. 17-2 § 6 (part); Ord. 16-8 § 1; Ord. 15-2 § 7 (part): Ord. 12-2 § 6: Ord. 07-5 § 2 (part): Ord. 05-4 § 1 (part): Ord. 03-4 § 11: prior code § 27.51)

Please confirm that the above constitutes "public comment".

Thx,

Joe

Aaron Hecock

From: Joe McGrath <joe.mcgrath65@gmail.com>
Sent: Monday, July 18, 2022 4:41 PM
To: Aaron Hecock; Maya DeRosa
Subject: [External] HE Draft Input

Aaron/Maya:

Here are some additional comments/inputs re: Housing Element. Please do not take them as criticism of your hard work. The Housing Element can be a valuable tool to accomplish our municipal housing objectives if we shape it correctly.

Thanks,

Joe

General Comments:

* Current planning meetings should be held in person with a zoom option. It should no longer be acceptable that public meetings are held entirely by Zoom. It also should not be acceptable that participants to Zoom meetings have no idea how many other participants are present, and, if participants "opt-in" to identify themselves, are identified.

* The document and the process are too long, too bureaucratic, and not specific enough with respect to immediate and effective actions and policy changes that will alter the climate in any meaningful way to have a real near-term impact on affordable or missing middle housing.

* The document itself is outdated with may reference to data as far back as 2019 representing "current" data. We lived in a far different world than in 2019.

* A major flaw in the Housing Element process for Above Moderate or Market Rate units. Our State Legislators did not comprehend second home or vacation communities.
So meeting the HE RHNA objective for Above Moderate by enabling, say, the Hunter Project is nonsensical if say 50% of the SFHs ultimately become vacation homes.
Having these types of development consume constrained water, sewer and other valuable resources can impinge on more critical housing needs.

Specific Section / Page Comments:

Page 1-11:

H-C We should be planning for a more sustainable and less car-dependent future. We should be exploring opportunities to increase infill density and explore expanding height limits, and reduce parking requirements. Up and In should be the focus. The block of land from south of White Sulphur Spring Creek to Grayson and West of Highway 29 and east of Crane vineyard is one of the most poorly utilized sections of the City. We should unleash a task force to see if we can unlock

potential here. Expanding the Urban Limit Line should be our last option, and runs great risk of negatively impacting what makes this such a great and desirable place to live with a vibrant wine industry and tourism economy.

Page 1-12:

H-D. Water and sewer access should be prioritized for both affordable and missing middle. Also please define "missing middle" in terms of AMI %. 200%? Water Neutrality Requirement should also be eliminated for any attached affordable and missing middle. Mandate no-irrigation landscaping instead. All new buildings in CA are highly water efficient by California Building Code. It is better that we have new stock than old stock re: environmental sustainability (similar to newer car fleet vs. older regarding emissions).

Page 1-17:

H-M. It should not take 4 more years following 3 years working on the Housing Element to understand what Zoning Ordinances need to be changed to enable housing.

1) Start with removing the Conditional Use Permit requirement in some manner on MDR Zoning. At minimum, it should be reduced for any parcel identified in Housing Element as Housing Opportunity Site (not just Key Housing Opportunity Site") . It is imperative to reduce or eliminate "discretionary" review. Discretionary review is the toehold for opposition on these projects. It is also a toehold for CEQA opposition.
2) Define "Missing Middle" in terms of AMI. 200%?
3) Tradeoff off 2:1 (or some such ratio) of affordability requirements on private developers for below moderate units for moderate to missing middle (200%) cutoff units. Ie a developer can meet "affordable" designation if he/she builds (2) deed-restricted moderate to missing middle (80-200%AMI?) units for every (1) required < moderate unit (<80% AMI unit).
4) Eliminate Water Neutrality requirements for above. This is just one more hurdle.
5) Eliminate Housing Impact Fees for above. By very nature these projects are having a POSITIVE housing impact.
6) Reduce overall permit fee structure for above. (on page 2-142 it calculates 12.3% of multi-family costs on Permits & Fees. This is right after it the HE states that governmental constraints are not a factor?)

Pg 1-15:
H-J. What can we do to entice existing ADUs into a deed-restricted affordable? How about a tradeoff on property tax relief on that unit for 30-yr deed-restriction and rental occupancy rate compliance??

Pg 1-19:
H-P. We should not further incent ADUS beyond existing state mandates unless they have deed-restriction and rental occupancy requirements in exchange.

Pg 1-29:
H-II. What are the accountabilities of the Housing Coordinator? Why would we not do this under existing Departments?

Pg 1-34:
H-UU. We should be considering "no-irrigation" landscaping (at least after plants take hold).
We should eliminate the Water Neutrality Requirement on any deed-restricted affordable < 200% AMI. This is a cumbersome and complex and expensive requirement to comply with. New attached buildings under CBC are highly water efficient and perform well below 65 GPD per capita. Nix the irrigated landscaping as a tradeoff.

Pg 2-38:

HE1.B. This document indicates that because units have been built in last cycle that Growth management System was not an obstacle. This is untrue. 632 McCorkle was "lucky" in that we straddled two years and literally consumed (8) of the (9) available allocation. Had this been a 10 unit project, it is not clear what the City would have done. Had there

been another similar project, it is unclear what the city would have done. Uncertainty is the enemy of Investment and the friend of Risk.

Pg 2-103

Table 16 - Grayson Apartment 2 units funding source were **not** Tax Credits, nor AHP, nor RHCP, nor City funded. These two units were **funded privately** through inclusionary requirements on 632 McCorkle. This is an important point, because we will not solve the housing crisis here exclusively through non-profits.

Pg 2-125:

Saying that Building Codes and Zoning Ordinances are not a "governmental constraint" to development is an entirely untrue statement and somewhat offensive coming from a government agency. While I would not argue that enhancements in the California Building Code are in most cases warranted, they have most definitely affected housing costs and housing production and have contributed to the shortage of affordable housing stock. Enhancements to CBC in ADA, Seismic, Fire, and Environmental requirements have played a significant role in the increase in housing costs. This must be acknowledged. As for Fire Code, nearly all of the costs in the building code are for suppression systems to extinguish a fire that starts inside the building. Most homes in CA are destroyed by fire from outside the building.. The CBC however is very clear and the requirements do not have broad interpretation, so while costly to comply with, is not a great impediment.

Zoning Ordinances however and discretionary reviews are something entirely different. Developers do not like uncertainty. If a Zoning Ordinance can be interpreted differently by different people - that is problematic. And if the outcome of a Design Review Meeting may be different based on the makeup of a Commission that is problematic. Developers do not like uncertainty. This is why discretionary reviews are highly problematic. To bring a complete application to Design Review Submission - let's say 8-12 units - could easily require an investment of $250K. Surveys, Civil Plans, Arch Plans, Elec Plans, Plumbing Plans, Mechanical Plans, etc. This all with the possibility of project Denial.

Lastly. CEQA is a major governmental constraint and should be acknowledged as such. CEQA should have no role in infill projects within ULL unless special circumstances warrant.

2-132:

We should articulate what Design Review is "not". For projects that are entitled, Design Review has no function in determining whether a project can be built or not to its entitlement. It would be much preferable to establish objective design guidelines that should be followed for multi-family rather than subject applications to a highly subjective process.

2-138:
Parking requirements for 2 Bedrooms within the ULL should be reduced to 1.5 spaces for <200% AMI.

Housing Opportunity Sites Input

For the sites listed, the probability that any given site gets developed in the next HE cycle range between 0% and 95% (Phelps Site). Most sites identified have a low probability (< 10%?) chance of being developed.

709 McCorkle: This site has recently been purchased and is intended to function as an estate compound.

741 McCorkle: This house has been recently renovated with significant capital improvements, and is unlikely to be further developed in this HE cycle.

1637 Spring Street: This site has recently been purchased for the intent of turning it into employee housing. My understanding is that the current plan is to convert 1 BRs into 2 BRs through garage conversion.

620 McCorkle: Per prior inputs, this site should be added to the Housing Opportunity Site and Key Housing Opportunity Site list.

Saint Helena Housing Coalition, Inc.

PO Box 988
Saint Helena, CA 94574

July 13, 2022

Mr. Aaron Hecock, AICP Senior Planner
City of Saint Helena
1572 Railroad Avenue
Saint Helena, Ca 94574

RE: 2023-2031 Housing Element Draft
VIA: Email

Dear Mr. Hecock:

First of all ,we would like to thank you for the this very through and professional work product. It is obvious that much research and attention to detail has been taken.

A question. Under the Water Section it is stated that "although the maximum amount of (Bell Canyon) water that is available to the City is 992 acre-feet". Why?

In Section 11. Housing Resources -Future Housing Needs we note the following:

> The City must ensure the availability of residential sites at adequate densities and appropriate development standards to accommodate these units by income category.(Emphasis added).

Based upon our work in attempting to find suitable land for new "affordable" Essential worker housing our experience, in part, differs from the report's conclusions:

Regarding the City owned Adams Street parcel considerable thought should be given to identifying the Eastern most portion of the parcel, not the Western end for "affordable" housing. SHHC submitted as preliminary site plan so indicating. Thus, leaving the West end for a potential city hall location or other civic functions. To us, it does not make sense to place any type of affordable" housing at the West end.

Site 4: 905 Main Street. When SHHC made inquiries, we were informed that the owner expressed that this for-sale price of this parcel would exceed $1,000,000. Given the suggested density of five units that would make the land cost per unit $200,000. For most "affordable" housing the land cost should be nearer to $50,000 per unit to qualify for the necessary grants and/or financing thus making this parcel financially unfeasible.

Site 7: 81 Pope Street. Zillow estimates that the current price for this property is approximately $2,000,000. Again, that would work out to a land cost of $100,000 per unit of the projected 20 "affordable Units (to say nothing of the cost of demolishing the existing structure). . For most "affordable" housing the land cost should be near to $50,000 per unit to qualify for the necessary grants and/or financing thus making this parcel financially unfeasible.

Site 9: 1447 and 1515 Spring Street. The Zillow estimated sales price for each of the existing residences at $1.6mm to $1.75mm, totally $3.35mm in value. For the estimated 24 units that works out to a land cost of $139,583.00 per unit. For most "affordable" housing the land cost should be near to $50,000 per unit to qualify for the necessary grants and/or financing thus making this parcel financially unfeasible.

Site 10: Spring Street between Hudson Avenue & Valley View. From my notes during the public comment portion, I believe it was Joe McGrath who said that this property had recently been sold and lease-back on a long-term basis. Based upon that it would appear this parcel is not currently available.

Site 11: 601 Pope Street. This property owner declined SHHC's to acquire this parcel under a long-term lease. We offered $200,000 per year for a sixty-five-year lease and their response was "oh, we just like the way it looks".

Site 12: 1637 Spring Street. As recently as this spring this property owner expressed No interest, and the direct quote was "let them try and develop it."

Therefore, Mr. Hecock, unless that City is prepared to use Eminent Domain as in Kelo v. New London, it appears that the identified sites does not fulfill the "must" requirement of available sites to satisfy Saint Helena's 2023-2031 RHNA requirements.

Respectfully submitted:

Rick Crebs

Rick Crebs, CEO
rick@sthelenahc.org
707-580-0418

Saint Helena Housing Coalition, Inc.

PO Box 988
Saint Helena, CA 94574

July 25, 2022
Mr. Aaron Hecock, AICP Senior Planner
City of Saint Helena
1572 Railroad Avenue
Saint Helena, Ca 94574

RE: 2023-2031 Housing Element Draft
VIA: Email

Dear Mr. Hecock:

Again, we would like to thank you for leading this sixth Housing Element 2023-2031 document incredibly rich document full of quite important and relevant data.

However, we have some considerable concerns over facts stated and conclusions reach:

Issue #1:
In this report you state "The Housing Element ***must*** also identify ***adequate*** residential sites ***available*** for a variety of housing types for all income levels; provide assistance in developing ***adequate*** housing to meet the needs of low- and moderate-income households; address governmental constraints on the maintenance, improvement, and development of housing; conserve and improve the condition of the existing stock of affordable housing; and promote housing opportunities for all persons". (Aaron Hecock-Report to the City Council & Planning Commission Meeting -21 July 2022, page 4) (Emphasis added).

Response #1A:
Not being lawyers we referred to recognized authorities on the words contained in the above Issue #1.

Merriam-Webster Dictionary:
Ensure – "We define **ensure** as "to make sure, certain, or safe" and one sense of insure, "to make ***certain*** especially by taking necessary measures and precautions," is quite similar. But insure has the additional meaning "to provide or obtain insurance on or for," which is not shared by **ensure."**

> **Certain** – Ascertained; precise; identified; definitive; clearly known; unambiguous; or in law, capable of being identified or made known, without liability or to mistake or ambiguity, from data already given."

Realistic- means "based upon what is real rather than on what is wanted or hoped for"

> **Real –** means "having objective independent existence; not artificial, fraudulent, or illusory; being precisely what the name means; occurring or existing in actuality"

Black's Legal Dictionary:
Adequate means "Sufficient; proportionate; equally sufficient; equal to what is required; suitable to the case or occasion; satisfactory"
Availability Means "This phrase, among mercantile men, is a term well understood to be anything which can readily be converted into money; but it is not necessarily or primarily money."

Ready means **"**Prepared for what one is about to do or experience; equipped or supplied with what is needed for some act or event; *prepared for immediate movement or action"*(Emphasis added)

Demonstrate means "to prove indubitably"

Indubitable Proof "Evidence of which is not only found creditable but is of such weight and directness as to make out the facts alleged beyond a doubt."

Must "This word, like the word 'shall' is primarily of mandatory effect."

Based upon the above definitions SHHC is perplexed as to how the Housing Element can, in good conscience, or on any legal basis include 601 Pope Street or 1837 Spring Street as both owners have stated that they are not interested.

I just spoke to the owner who has been a dear friend of our families for 37 years and she stated ,"No one contacted me and further had no interest in allowing their back acreage to be developed into 'affordable' housing."?

Response #1B:
During the public comment section of the July 21m, 2022 2023-31 Zoom Housing Element, Rick Crebs, from SHHC, raised the issue of financial feasibility of Sites #4, 905 Main Street is stating "When SHHC made inquiries, we were informed that the owner expressed that this for-sale price of this parcel would exceed $1,000,000. Given the suggested density of five units that would make the land cost per unit $200,000. For most "affordable" housing the land cost should be nearer to $50,000 per unit to qualify for the necessary grants and/or financing thus making this parcel financially unfeasible".

Similar financial analysis was also offered on Site #7 821 Pope Street, (land costs of $100,000 per unit); Site #9 1447 & 1515 Spring Street, (land costs of $139,583 per unit).

Based upon that information provided during the Housing element Zoom meeting of Thursday, July 21, 2022, a question was directed by a city council member to the city's staff relative to the property valuations statements raised by Rick Crebs of SHHC on valuations attributed to Zillow. The response was questioned of the authenticity of the Zillow valuations. This seems odd in that the Housing Element report refers to Zillow eight (8) times as the authority on real estate valuations.

It was further stated that grants or low interest loans would off set the high land costs.

Please allow SHHC to provide a current financial analysis as present in SHHC's Offer to Develop 88 Units (using 2.3 acres at the East end of the Adams Street city owned parcel).

Use of Grants: Adams Street as an example:

Total Construction Costs $43,116,112 or average of $489,956 per unit (Leased, not sold land)

Funding necessary to complete this project: (Projected)

City/County	$2,000,000	(4.4%)
Other Grants	$32,337,084	(75.0%)*
Mortgage or Bond	$ 7,054,364	(16.40%)
Total	**$43,116,112**	**100% (rounded)**

*The largest grants that SHHC has been able to discover are from the California Department of Housing Affordable Housing Sustainable Communities (AHSC) grants which currently has a maximum grant amount of

$35mm, so the Adams Street project comes close to it. This information is supplied to illustrate the extreme difficulty present in realistically financing the Saint Helena community to provide the "Must" in the RHNA requirement.

Issue #2:

In this report you state "The issue of owner consent to being included on the housing opportunity sites list has come up on several occasions. Being listed as a housing opportunity site in no way terminates or otherwise affects existing uses on-site. Furthermore, there are currently no legislative or other means to compel a private property owner in this process, meaning we cannot force or otherwise require that they build housing. That said, owner consent is not a requirement for inclusion in the housing opportunity sites inventory (Government Code 65583.2). The inventory is to show that there are suitable sites to meet the City's RHNA and the programs are there to help housing developers to make that happen. Designating sites as suitable for housing falls within the City's authority to regulate land uses. If the Housing Element were to designate an already developed site."

Response to #2:
Mr. Hecock, it is true that California government Code does not include language requiring "owners Consent". but, by the same logic, it does not exclude requiring the "owners' consent." This, it would seem that your comment is non-responsive. Further, Code 65583.2 refers to Government code 65583 which, in part, states "(3) An inventory of land suitable and available for residential development, including vacant sites and sites having ***realistic*** and ***demonstrated*** potential for development during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites, and an analysis of the relationship of the sites identified in the land inventory to the jurisdiction's duty to affirmatively further fair housing. (Emphasis added).

Further, in referring to the word definitions provided above, that the proposed Saint Helena Housing 2023-2031 Document on a factually basis fails to meet with any degree of accuracy of the meanings of the authenticated meaning of the words; **Adequate**, **Available**, **Demonstratable**, **Ensure**, and **Must.**

In closing, such vagueness in the prior Housing Element Reports may have been tolerated in the past. However, our town is critically deficient in sufficient "affordable" housing for all AMI's. The fact that so many are required to commute to work in the Upper Valley each day clearly contributes to unnecessary Green Housing Gas (GHG) emissions to say nothing of the cost to commute which further contributes multiple well vetted studies that conclude that the majority of those renting are cost burdened. Many in the 50-60% of household income!

Lastly, the lack of a strategy to affirmatively address Saint Helena's housing crisis is to deny, or turn its back, on its pledge to work towards a policy of Diversity, Equity, and Inclusion.

Our town can no longer rely upon the old "Three Card Monty Trick" in addressing the statutory issues the Housing Element requires.

SHHC's First Suggestion:
The city should consider removing Sites 4 (905 Mains Street, Ste 7 (821 Pope Street, Ste 9 1447 & b1515 Springs Street as being financially unrealistic due to associated land costs and instead revise the Adams Street parcel from 30 unit of Lower Income to the recommendations in the following graph:

Table 50 Summary of Housing Units (Extracted)

	Lower Income	Moderate Income	Above Moderate Income	Total

Pending Projects	0	**4**	**88**	**92**
ADU Trends	0	0	72	72
Recommended Changes		**Site Inventory**		
Site 3 (Adams Street)	**-22**	**9**	**76**	**63**
Site 4 (905 Mains Street)	**0**	**0**	**-5**	**-5**
Site 7 (821 Pope Street	**-10**	**-10**	0	**-20**
Site 9 (1447 & 1515 Spring Street)	**-24**	0	**-24**	**-48**
Totals	**-56**	**-1**	**47**	**-10**
Remaining Sites (Consolidated)		**Site Inventory**		
Sites 1, 2, 5, 6, 8, 10, 11,12	152	87	244	483
Color Code -Purple-Doubtful				
Red - Subtractions				
Green -Additions				

The results reached is close to a net neutral on units for each category of AMI housing. And the inclusion of 88 units plus 50 for the OTSG/Phelps's project equates to a realistic 54% of Saint Helena's 2023-31 RHNA required allocation.

SHHC's Second Suggestion:

While draconian, the only true solution SHHC sees to the significant challenges in achieving the forthcoming coming 2023-31 RHNA Site locations allocations is for the city to firmly state that it will undertake, if necessary, Eminent Domain proceeding as in the Kelvo v. New London U.S. Supreme Court Decision.

In closing, it is time to discard the Housing Element word games from the past and boldly put forth only those Opportunity Sites that are ***certain*** and ***available***.

Respectfully submitted:

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DRAFT
ENVIRONMENTAL IMPACT REPORT
for the
Hunter Subdivision Project

SCH no. 2018032014

Prepared for

City of St. Helena
Planning & Community Improvement Department
1572 Railroad Avenue
St. Helena, California 94574

Contact: Maya DeRosa,
Planning & Building Director
mderosa@cityofsthelena.org



Prepared by

DUDEK 1102 R Street
Sacramento, California 95811

SEPTEMBER 2021

DRAFT

Environmental Impact Report
for the
Hunter Subdivision Project
SCH No. 2018032014

Volume I

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SEPTEMBER 2021

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AAQS	ambient air quality standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADU	accessory dwelling unit
AFY	acre-feet per year
amsl	above mean seal level
AP Act	Alquist–Priolo Earthquake Fault Zoning Act
APE	area of potential effects
ASTM	American Society of Testing and Materials
BAAQMD	Bay Area Air Quality Management District
BASMAA	Bay Area Stormwater Management Agencies Association
bgs	below ground surface
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	methane
CHHSL	California Human Health Screening Level
CHRIS	California Historical Resources Information System
City	City of St. Helena
cm	centimeter
cmbs	centimeters below the surface
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent

Acronym/Abbreviation	Definition
County	County of Napa
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Authority
GHG	greenhouse gas
GPR	ground-penetrating radar
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWP	global warming potential
HAP	hazardous air pollutant
HCFC	hydrochlorofluorocarbon
HDR	High-Density Residential
HFC	hydrofluorocarbon
HVAC	heating, ventilation, and air conditioning
ISTEA	Intermodal Surface Transportation Efficiency Act
kWh	kilowatt-hour
LE	Land Evaluation
LESA	Land Evaluation and Site Assessment
LOMR	Letter of Map Revision
m	meter
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MDR	Medium-Density Residential
MGD	million gallons per day
MMT	million metric tons

Acronym/Abbreviation	Definition
MS4	Municipal Separate Storm Sewer System
MT	metric ton
MWELO	Model Water Efficient Landscape Ordinance
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCFCWCD	Napa County Flood Control and Water Conservation District
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O_3	ozone
OCP	organochlorine pesticide
PFC	perfluorocarbon
PG&E	Pacific Gas & Electric Company
PGA	peak ground acceleration
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Proposed Project	Hunter Subdivision Project
PSHA	probabilistic seismic hazard assessment
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RMS	root mean square
ROG	reactive organic gas
RPS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SA	Site Assessment
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDC	Seismic Design Category
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFHA	Special Flood Hazard Area
SGMA	Sustainable Groundwater Management Act

Acronym/Abbreviation	Definition
SHFD	St. Helena Fire Department
SHPD	St. Helena Police Department
SHPO	State Historic Preservation Office
SHUSD	St. Helena Unified School District
SO_2	sulfur dioxide
SOx	sulfur oxides
SSMP	Sewer System Management Plan
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	tribal cultural resource
TMDL	Total Maximum Daily Load
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UVD	Upper Valley Disposal & Recycling
VdB	vibration decibel
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WQO	Water Quality Order
WRA	Wetland Research Associates
WTP	water treatment plant
WWTP	wastewater treatment plant
ZEV	zero emissions vehicle

EXECUTIVE SUMMARY

This chapter provides a summary of the Draft Environmental Impact Report (EIR) for the proposed Hunter Subdivision Project (Proposed Project). Included in this chapter are areas of known controversy and issues to be resolved, a summary of Proposed Project alternatives, a summary of all Proposed Project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

ES.1 DOCUMENT PURPOSE

This EIR was prepared by the City of St. Helena (City), as lead agency, to inform decision makers and the public of the potential significant environmental effects associated with the Proposed Project. This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Section 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines; 14 CCR 15000 et seq.) published by the Public Resources Agency of the State of California.

This Draft EIR is a “project” EIR, pursuant to CEQA Guidelines Section 15161. A project EIR examines the environmental impacts of a specific project. Feasible mitigation measures are recommended, when applicable, that could reduce significant environmental impacts to a level of insignificance or avoid significant environmental impacts.

ES.2 PROJECT LOCATION

The 16.9-acre Project site (Assessor’s Parcel Number is 009-030-057) is located in the northeast portion of the City, at the eastern terminus of Adams Street, three blocks east of downtown and State Route 29, and west of the Napa River (see Figure 2-1 in Chapter 2, Project Description). The Project site is generally rectangular with a “panhandle” extension that connects the site to Adams Street west of the panhandle (see Figure 2-2 in Chapter 2, Project Description).

ES.3 PROJECT DESCRIPTION

Project Background

The majority of the Project site was acquired by Dennis Hunter in 1997. Planning efforts were first initiated for development of the Project site in 2005 and an application was submitted to the City in September 2010 that included a request for a Tentative Map to subdivide the property for residential development. A completeness letter for the proposed subdivision was issued by the City on March 28, 2011. Since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this

EIR also evaluates consistency with the City's current "General Plan Update 2040"[1] for informational and consistency purposes.

The Proposed Project would consist of subdividing the 16.9-acre Project site to include 51 lots to accommodate single-family residences, a 3.4-acre parcel that would accommodate 25 attached residential units, a 0.06-acre parcel "A" that would not be developed, and a 0.04-acre parcel "B" for an existing agricultural well site.

The 25 attached units would be income restricted, with 5 units affordable to very low-income families, and 20 to moderate income families. The 51 lots would be developed with single-family market-rate housing units (one dwelling per lot). The Proposed Project applicant has proposed accessory dwelling units on 11 of the single-family lots, designated for above-moderate income groups. The City's Zoning Ordinance (Municipal Code Section 17.116.030) and state law provides for the construction of an accessory dwelling unit on any lot which is zoned for residential use and has an existing single-family residence. The 87 residential units (including single-family, multi-family and accessory dwelling units) would have an average density of 5.1 dwelling units per acre.

Project Objectives

Proposed Project objectives allow for the analysis of reasonable alternatives to the Proposed Project. Reasonable alternatives must be analyzed in accordance with Section 15126.6 of the CEQA Guidelines.

The Proposed Project objectives are as follows:

- Subdivide the site consistent with the City's General Plan and Zoning for the site to accommodate residential development.
- Provide opportunities to develop a variety of housing types, including multi-family, single-family, and accessory dwelling units, affordable to a range of incomes including, very low, low and moderate-income households.
- Provide opportunities to contribute to the provision of workforce and affordable housing consistent with the City's adopted Housing Element and the Regional Housing Needs Assessment (RHNA) approved by the Association of Bay Area Governments (ABAG).
- Minimize traffic-related environmental impacts, such as noise, air quality and greenhouse gases by lowering commute patterns for St. Helena workers by providing more local housing opportunities.

[1] For consistency, this EIR refers to the "General Plan Update 2040" as the "2019 General Plan," reflecting the year it was adopted (as with the "1973 General Plan" and the "1993 General Plan").

- Support alternative transportation by providing a pedestrian and bicycle linkage through St. Helena, eventually connecting the regional Vine Trail from Calistoga to the Vallejo Ferry.
- Exceed the City's green building ordinance (Municipal Code Chapter 15.53) and incorporate sustainable design features including water conservation measures, drought resistant landscaping with low flow watering systems, south and west side tree placement to reduce reliance on air conditioning units, and pre-wiring for photovoltaic systems.
- Implement the General Plan Circulation Element by completing the planned extension of Starr Avenue and the partial planned extension of Adams Street from where Adams Street terminates to connect to the Project site.
- Minimize City water use by continuing the use of an existing on-site water well for irrigation of Proposed Project landscaped areas.

ES.4 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Section 15123(b) (2) of the CEQA Guidelines requires that areas of controversy known to the lead agency must be stated in the executive summary prepared as part of the EIR. Section 15123(b)(3) of the Guidelines requires that an EIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts. Issues of interest to the public and public agencies were identified during the 30-day public comment period for the Notice of Preparation that was circulated from March 6, 2018 through April 9, 2018.

Concerns raised from public agencies and the public include impacts to the property from potential flooding, traffic and circulation impacts, increased water demand, and impacts to cultural resources. All of these concerns are addressed in this EIR.

The Notice of Preparation and comment letters received during the Notice of Preparation review period are included in Appendix A of this EIR.

ES.5 EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

Due to certain aspects of the Proposed Project, characteristics, or existing regulatory requirements, the Proposed Project is not anticipated to have significant impacts regarding wildfire. The following provides an overview of why the effects associated with this issue area was found this be less than significant and therefore not further analyzed in further in Chapter 3 of this Draft EIR.

Wildfire

The Proposed Project is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) as designated by the California Department of Forestry and Fire Protection (CAL FIRE). The

Project site is located in a non-VHFHSZ within a Local Responsibility Area, with the closest VHFHSZ in a State Responsibility Area approximately 1 mile to the northeast (CAL FIRE 2008). Between the Project site and the VHFHSZ is the Napa River.

Starting in August 2020 there were a number of wildfires including the LNU Lightning Complex Fire and the Glass Fire that burned large areas of Napa County including a small portion of the Project site. Based on the current CAL FIRE maps the Project site is not located within a State Responsibility Area and is not designated as a VHFHSZ. Emergency access and the potential for the Proposed Project to expose people or structures to loss, injury or death involving wildland fires is addressed in Section 3.8, Hazards and Hazardous Materials. Adequate emergency access is addressed in Section 3.8 and Section 3.14, Transportation. The Project site is flat so fire hazards due to proximity to hilly terrain or landslides due to post-fire conditions would not be a concern. In addition, the Proposed Project does not require installation of infrastructure that could exacerbate fire risk. Because the Project site is not located within a VHFHSZ and future development is not anticipated to have significant impacts due to wildfire this topic is not further analyzed in this document.

ES.6 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis and a summary of environmental impacts resulting from implementation of the Proposed Project pursuant to CEQA Guidelines Section 15123(b)(1). For a more detailed discussion of Proposed Project impacts, please see Chapter 3 of this EIR. Table ES-1 also lists the level of significance of an impact prior to mitigation and lists all applicable mitigation measures identified for significant impacts, as well as providing the level of significance after mitigation.

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.1 Aesthetics/Visual Resources			
3.1-1: Would the project have a substantial adverse effect on a scenic vista? This would be a less-than-significant impact.	LTS	None required.	LTS
3.1-2: Would the project conflict with applicable regulations governing scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings? This would be a less-than-significant impact.	LTS	None required.	LTS
3.1-3: Would the project potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? This would be a potentially significant impact.	PS	AES-1: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.	LTS
3.1-4: Would the proposed project contribute to cumulative changes in the existing visual character or conflict with applicable regulations governing scenic quality? The project's contribution would not be considerable.	LTS	None required.	LTS
3.1-5: Would the proposed project contribute to a cumulative increase in light and glare? The project's contribution would not be considerable with mitigation.	PS	See Mitigation Measure AES-1. Mitigation Measure AES-1 mitigates this impact and no additional mitigation is required.	LTS
3.2 Agriculture and Forestry Resources			
3.2-1: Would the project convert Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? This is a less-than-significant impact.	LTS	None required.	LTS
3.2-2: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use? This is a less-than-significant impact.	LTS	None required.	LTS
3.2-3: Would the proposed project contribute to cumulative impacts associated with the loss or conversion of existing agricultural resources? The project would result in a less than considerable contribution.	LTS	None required.	LTS

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.3 Air Quality			
3.3-1: Would implementation of the proposed project conflict with or obstruct implementation of the applicable air quality plan? This is a less-than-significant impact.	LTS	None required.	LTS
3.3-2: Would implementation of the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? This is a less-than-significant impact.	LTS	None required.	LTS
3.3-3: Would implementation of the proposed project expose sensitive receptors to substantial pollutant concentrations? This is a less-than-significant impact.	LTS	None required.	LTS
3.3-4: Would the proposed project contribute to cumulative air quality emissions within the existing area? The contribution would not be considerable.	LTS	None required.	LTS
3.4 Biological Resources			
3.4-1: Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? This would be a significant impact.	PS	BIO-1: A qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony. BIO-2: If construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds: • Preconstruction surveys by a biologist of all potential nesting habitats within 500-feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim. • If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department. • If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging. See Mitigation Measure AES-1. Mitigation Measure AES-1, which addresses spillover light that can affect some species mitigates this impact and no additional mitigation is required.	LTS
3.4-2: Would the proposed project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means? This would be a significant impact.	PS	BIO-3: Wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.	LTS

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Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.4-3: Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? This would be a potentially significant impact.	PS	See Mitigation Measures AES-1, BIO-1 and BIO-2. Mitigation Measures AES-1, BIO-1 and BIO-2 mitigate this impact and no additional mitigation is required. BIO-1 (requires preconstruction habitat assessment and avoidance of roosting bats), BIO-2 (requires preconstruction surveys and avoidance of nesting birds), and AES-1 addresses spillover light that can affect some species.	LTS
3.4-4: Would the proposed project contribute to cumulative impacts with respect to biological resources? The project's contribution would not be considerable.	LTS	None required.	LTS
3.5 Cultural and Tribal Cultural Resources			
3.5-1: Would the project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? This would be a significant impact.	PS	CUL-1: The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present at depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material. The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City in consultation with the Tribe, this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.	LTS
3.5-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? This would be a potentially significant impact.	PS	See Mitigation Measure CUL-1. Mitigation Measure CUL-1 mitigates this impact and no additional mitigation is required.	LTS
3.5-3: Would the project disturb human remains, including those interred outside of formal cemeteries? This would be a less-than-significant impact.	PS	CUL-2: In the event any human remains are unearthed during site disturbing activities, Section 7050.5(b) of the California Health and Safety Code and Section 15064.5(e) of the CEQA Guidelines specifies protocols to follow in the event human remains are discovered. The Code mandates stopping work within 100 feet of the find and contacting the County Coroner to determine the origin of the remains. If the remains are determined to be Native American the Coroner shall contact the Native American Heritage Commission within 24 hours to request that the Commission determine the person or persons it believes to be descended from the deceased Native American. The most likely descendant shall be provided with the opportunity to make recommendations regarding the means of treating or disposing of the remains with appropriate dignity. Project-related ground disturbance in the vicinity of the find shall not resume until all statutory requirements have been met and evidence of completion has been submitted to the City, in consultation with the Tribe.	LTS
3.5-4: Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined	PS	See Mitigation Measure CUL-1. Mitigation Measure CUL-1 mitigates this impact and no additional mitigation is required.	LTS

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
by the lead agency to be significant? This impact is considered potentially significant.			
3.5-5: Would the proposed project contribute to cumulative impacts to cultural resources, including historical and archeological resources as defined in CEQA Guidelines Section 15064.5 and human remains? This impact is considered potentially significant.	PS	See Mitigation Measure CUL-1. Mitigation Measure CUL-1 mitigates this impact and no additional mitigation is required.	LTS
3.5-6: Would the proposed project contribute to cumulative impacts to tribal cultural resources, currently listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency to be significant? This impact is considered potentially significant.	PS	See Mitigation Measure CUL-1. Mitigation Measure CUL-1 mitigates this impact and no additional mitigation is required.	LTS
3.6 Geology and Soils			
3.6-1: Would implementation of the proposed project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or liquefaction? This would be a potentially significant impact.	PS	GEO-1: Prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City of St. Helena Building Department for review and approval in accordance with adopted City standards. The structural designs shall adhere to the currently adopted version of the California Building Code. The report shall identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction. Specifically, the following requirements for the geotechnical and soils report shall be met: • Analysis presented in the geotechnical report shall conduct a detailed evaluation of liquefaction in accordance with California Department of Conservation Special Publication 117A: *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. • Additional subsurface soil borings shall be completed as necessary to represent the full range of site conditions, including the southern portion of the parcel mapped as alluvial fan. • Analysis presented in the geotechnical report shall include recommendations for building foundations and improvements, including sidewalks, parking lots, and subsurface utilities, that take into consideration the potential effects of settlement, collapse, and expansive or corrosive soils. This includes the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond) due to anticipated settlement. • All design criteria and specifications set forth in the design-level geotechnical report shall be implemented as a condition of project approval. This report shall be completed as a condition of approval of the final tentative map.	LTS
3.6-2: Would implementation of the proposed project occur on weak, compressible, and/or expansive soils that could result in adverse impacts on habitable structures? This would be a less-than-significant impact.	PS	See Mitigation Measure GEO-1. Mitigation Measure GEO-1 mitigates this impact and no additional mitigation is required.	LTS
3.6-3: Would implementation of the proposed project directly or indirectly destroy a unique paleontological resource or site? This would be a potentially significant impact.	PS	GEO-2: In the event that known or suspected paleontological resources (e.g., fossils) are unearthed during grading or trenching, the area of discovery shall be roped off by the construction contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist. The Project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines, who shall be tasked with assessing the significance of the fossil find, including documenting the nature, location, and taxa of the find. The qualified paleontologist shall use his/her professional judgement as to the significance of the find, and whether the find should be preserved in a museum repository. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Documentation of the fossil find, including appropriate salvage and recovery of fossil specimens and of transfer of to an appropriate repository (e.g., University of California Museum of Paleontology) shall be submitted to the City of St. Helena as evidence of compliance with this mitigation measure.	LTS

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.6-4: Would the proposed project contribute to cumulative impacts related to geologic or seismic hazards? This would be a less than considerable contribution.	LTS	None required.	LTS
3.7 Greenhouse Gas Emissions			
3.7-1: Would implementation of the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? This would be a less-than-significant impact.	LTS	None required.	LTS
3.7-2: Would implementation of the proposed project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? This would be a less-than-significant impact.	LTS	None required.	LTS
3.7-3: Would the proposed project contribute to cumulative GHG emissions within the region? The project's contribution would not be considerable.	LTS	None required.	LTS
3.8 Hazards and Hazardous Materials			
3.8-1: Would implementation of the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? This would be a less-than-significant impact.	LTS	None required	LTS
3.8-2: Would implementation of the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? This would be a potentially significant impact.	PS	HAZ-1: As a condition of approval for construction and grading permits for the Project site, the Project applicant shall the ensure following subsurface soils testing and follow-up analysis shall be performed prior to obtaining a grading permit: • A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, environmental engineer, or similar qualification) for the portions of the Project site historically used for agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval. • The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary endangerment assessment guidance manual). • The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight. In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped	LTS

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Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the Project. The soil testing report, and if applicable, the human health risk assessment and Operations and Maintenance Program, shall be subject to review and approval by the City of St. Helena Department of Public Works, the Napa County Division of Environmental Health and/or other regulatory oversight agencies.	
3.8-3: Would implementation of the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? This would be a less-than-significant impact.	LTS	None required.	LTS
3.8-4: Would implementation of the proposed project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? This would be a less-than-significant impact.	LTS	None required.	LTS
3.8-5: Would implementation of the proposed project contribute to a cumulative increase in the potential exposure of people to sites where soil contamination could be present from past or current uses, or to hazards associated with the use and transport of hazardous materials? The project's contribution would be less than considerable.	LTS	None required.	LTS
3.9 Hydrology and Water Quality			
3.9-1: Would implementation of the proposed project violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality? This would be a less-than-significant impact.	LTS	None required.	LTS
3.9-2: Would implementation of the proposed project deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? This would be a less-than-significant impact.	LTS	None required.	LTS
3.9-3: Would implementation of the proposed project substantially alter the existing drainage pattern of the site or area through the addition of impervious surfaces resulting in erosion or siltation on- or off-site; increasing the rate or amount of surface runoff resulting in flooding on- or off-site; contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or	LTS	None required.	LTS

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
provide polluted runoff; or impede or redirect flood flows? This would be a less-than-significant impact.			
3.9-4: Would implementation of the proposed project release pollutants during flooding? This would be a less-than-significant impact.	LTS	None required.	LTS
3.9-5: Would implementation of the proposed project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? This would be a less-than-significant impact.	LTS	None required.	LTS
3.10 Land Use			
3.10-1: Would implementation of the proposed project conflict with the City's 1993 General Plan policies or other regulations adopted for the purpose of avoiding or mitigating an environmental effect? This would be a less-than-significant impact.	LTS	None required.	LTS
3.11 Noise and Vibration			
3.11-1: Would short-term construction noise levels cause a substantial temporary increase in ambient noise levels? This would be a potentially significant impact.	PS	NOI-1: The Project applicant or its contractors shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation, and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted. *Administrative Controls* – At all times during site preparation and construction: • Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods, • Minimize idling time of onsite equipment, and • Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible, or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors. *Engineering Controls* – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and *Install Sound Abatement* – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the exterior of a residence (either offsite or onsite), do the following: • Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or • Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.	LTS
3.11-2: Would existing residential areas be exposed to vibration peak-particle velocities greater than 0.2-inch per second or vibration levels greater than 80 VdB due to project construction? This would be a less-than-significant impact.	LTS	None required.	LTS

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Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.11-3: Would on-site operation noise from the proposed residences result in noise exposure levels that would impact adjacent residences? The impact would be less than significant.	LTS	None required.	LTS
3.11-4: Would the proposed project vehicle trips result in off-site roadway noise level increases that could impact noise sensitive land uses located along such roadways? The impact would be less than significant.	LTS	None required.	LTS
3.11-5: Would the proposed project, in addition to cumulative development in the City, increase traffic noise that exceeds the City's noise standards? The project's contribution would not be considerable.	LTS	None required.	LTS
3.12 Public Services and Recreation			
3.12-1: Would the proposed project increase demand for public services requiring the need to construct new facilities, or expand existing facilities, the construction of which could cause significant environmental impacts? This would be a less-than-significant impact.	LTS	None required.	LTS
3.12-2: Would the proposed project increase the use of existing neighborhood parks or other recreational services such that a substantial physical deterioration of the facility would occur, or require the construction or expansion of facilities that could have a physical adverse effect on the environment? This would be a less-than-significant impact.	LTS	None required.	LTS
3.12-3: Would the proposed project contribute to a cumulative increase in demand for public services, schools, and recreation facilities? The project's contribution would not be considerable.	LTS	None required.	LTS
3.13 Utilities			
3.13-1: Would the proposed project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities? This is a less-than-significant impact.	LTS	None required.	LTS

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Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.13-2: Would the proposed project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? This is a less-than-significant impact.	LTS	None required.	LTS
3.13-3: Would the proposed project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? This is a less-than-significant impact.	LTS	None required.	LTS
3.13-4: Would the proposed project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? This is a less-than-significant impact.	LTS	None required.	LTS
3.13-5: Would the proposed project comply with federal, state, and local statutes and regulations related to solid waste? This is a less-than-significant impact.	LTS	None required.	LTS
3.13-6: Would the proposed project contribute to an increase in demand for water supply, wastewater treatment, stormwater or solid waste? The project's contribution would not be considerable.	LTS	None required.	LTS
3.14 Transportation and Traffic			
3.14-1: Would the proposed project conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? This would be a less-than-significant impact.	LTS	None required.	LTS
3.14-2: Would the proposed project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This is a significant impact.	SU	None available.	SU
3.14-3: Would the proposed project increase hazards due to a geometric design feature or incompatible use? This is a less-than-significant impact.	LTS	None required.	LTS

Table ES-1
Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Impact Before Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
3.14-4: Would the proposed project result in inadequate emergency access. This is a less-than-significant impact.	LTS	None required.	LTS
3.14-5: Under Cumulative conditions, would the proposed project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This is considered a significant impact.	SU	None available.	SU
3.15 Energy			
3.15-1: Would implementation of the proposed project result in wasteful, inefficient or unnecessary consumption of energy resources during construction or operation? This would be a less-than-significant impact.	LTS	None required.	LTS
3.15-2: Would implementation of the proposed project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? This would be a less-than-significant impact.	LTS	None required.	LTS
3.15-3: Would the proposed project contribute to an increase in wasteful, inefficient or unnecessary consumption of energy resources during construction or operation? The project's contribution would not be considerable.	LTS	None required.	LTS

PS= Potentially Significant SU = Significant and Unavoidable LTS = Less than Significant NI= No Impact

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ES.7 SUMMARY OF PROJECT ALTERNATIVES

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to a project should occur. As stated in this section of the CEQA Guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the project. Each alternative should be capable of avoiding or substantially lessening any significant effects of that project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per Section 15126.6.

Alternatives Evaluated

This EIR includes an evaluation of the following alternatives:

- Alternative 1 – No Project/No Development
- Alternative 2 – No Project/General Plan
- Alternative 3 – Park/Open Space Preserve
- Alternative 4 – Increased Density/Affordable Housing

Alternative 1 – No Project/No Development

The No Project Alternative assumes that the Proposed Project would not be developed and the current undeveloped Project site would remain and not be altered.

Given the development assumptions of the 1975 General Plan, the 1993 General Plan and the 2019 General Plan, all of which assumed residential development on the project site, it is unlikely that this site would remain undeveloped. The Project site is designated as Medium Density Residential (MDR) in both the 1993 General Plan and the 2019 General Plan. According to the 1993 General Plan, the Medium Density Residential (MDR) designation provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. Although the No Project Alternative would not meet the objectives identified for the Proposed Project and those development assumptions in the General Plans, CEQA requires an alternative that forgoes the project be analyzed.

Alternative 2 – No Project/General Plan

Under this alternative, it is assumed the Project would be developed consistent with the underlying MDR land use designation and MR zoning which allows development of the Project site with residential uses up to a maximum density of 12 dwelling units/acre (du/ac) under the

1993 General Plan MDR designation which was revised to 16 du/ac under the 2019 General Plan consistent with the MR zoning, which permits a maximum density of 16 du/ac.

For the purposes of this alternative a density of 9 du/ac was assumed for a total of 152 single-family residential units. Based on the number of units this alternative would result in a population of 372 residents, an increase of 159 residents as compared to the Project.

It is assumed Starr Avenue and Adams Street would both be extended to connect to the Project site and the street and lot layout would be very similar to the Project with the exception of the 3.4-acre portion of the site currently designated for multifamily units (Lot 52). This portion of the Project site would be configured to accommodate single-family residences.

Alternative 3 – Park/Open Space Preserve

This alternative includes a 1-acre park that would preserve a majority of the on-site wetlands. Although three lots would need to be removed to accommodate the 1-acre park, this alternative would include approximately the same number of units as the Proposed Project, including the 25 affordable housing units. It is assumed up to 11 Accessory Dwelling units could still be constructed on the larger lots.

Alternative 4 – Increased Density/Affordable Housing

The Increased Density/Affordable Housing Alternative includes the approximately 1-acre park to preserve a majority of the on-site seasonal wetlands with the remaining approximately 16-acres designated for up to 180 affordable housing units, assuming a density of 11.3 dwelling units per acre (du/ac) under the existing Medium Density Residential (MDR) land use designation (current zoning allows for a maximum density of 16.0 du/ac). The units would be attached housing (duplex or triplex) and would be 100% affordable. It is assumed buildings would be no taller than 30-feet, consistent with the underlying MR zoning.

Environmentally Superior Alternative

Table ES-2, Comparison of Impacts of the Alternatives, provides a summary of the alternatives impact analysis considered in the EIR and identifies the areas of potential environmental effects per CEQA, and ranks each alternative as better, the same, or worse than the Proposed Project with respect to each issue area.

Table ES-2
Comparison of Impacts of Project Alternatives

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 No Project/ General Plan	Alternative 3 Park/Open Space Preserve	Alternative 4 Increased Density/ Affordable Housing
Aesthetics/Visual Resources	LTS/MM	▼	—	—	—
Agriculture and Forestry Resources	LTS	▼	—	—	—
Air Quality	LTS	▼	—	Δ	Δ
Biological Resources	LTS/MM	▼	▼	▼	▼
Cultural Resources	LTS/MM	▼	—	—	—
Geology and Soils	LTS/MM	▼	—	—	—
Greenhouse Gas Emissions	LTS	▼	—	Δ	Δ
Hazards and Hazardous Materials	LTS	▼	—	—	—
Hydrology and Water Quality	LTS	▼	—	—	—
Land Use	LTS	▼	—	—	—
Noise and Vibration	LTS/MM	▼	—	Δ	Δ
Public Services and Recreation	LS	▼	Δ	—	Δ
Utilities	LTS	▼	—	Δ	Δ
Traffic and Circulation	SU	▼	—	▼	▼
Energy	LTS	▼	—	Δ	Δ

Δ Alternative is likely to result an increase in severity of the impact when compared to Proposed Project.
— Alternative is likely to result in similar impacts when compared to Proposed Project.
▼ Alternative is likely to result in reduced impacts when compared to Proposed Project.
LTS/MM = Less than significant impact with mitigation, LTS = Less than significant impact, SU=Significant and Unavoidable

As indicated in Table ES-2, Alternative 1, the No Project/No Development Alternative would result in the fewest environmental impacts, and subsequently would be considered the environmentally superior alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Of the alternatives evaluated above, Alternative 2, the Park Preserve alternative is the environmentally superior alternative.

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CHAPTER 1
INTRODUCTION AND SCOPE OF THE EIR

1.0 PURPOSE AND INTENDED USE OF THIS EIR

The City of St. Helena (City) has prepared this Draft Environmental Impact Report (EIR) to inform the general public, the local community, responsible agencies, trustee agencies, and other interested public agencies, and the City's decision-making bodies (City Council) regarding the potential significant environmental effects resulting from implementation of the proposed Hunter Subdivision Project (Proposed Project), as well as possible measures to mitigate those potential significant effects including alternatives to the Proposed Project. This Draft EIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the City's procedures for implementing CEQA. This Draft EIR is a "project" EIR, pursuant to CEQA Guidelines Section 15161. A project EIR examines the environmental impacts of a specific project.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to a proposed project that could reduce or avoid adverse environmental impacts. As the CEQA lead agency for this Proposed Project, the City is required to consider the information in the EIR along with any other available information in deciding whether to approve the Proposed Project entitlements requested. The basic requirements for an EIR include providing information that establishes the environmental setting (or project baseline), and identifying environmental impacts, mitigation measures, project alternatives, growth inducing impacts, and cumulative impacts. In a practical sense, an EIR functions as a method of fact-finding, allowing an applicant, the public, other public agencies, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure. Additionally, this EIR provides the primary source of environmental information for the lead agency and also those responsible agencies to consider when exercising any permitting authority or approval power directly related to implementation of this Proposed Project. It is not the intent of an EIR to recommend either approval or denial of a project.

1.1 USE OF PREVIOUSLY PREPARED ENVIRONMENTAL DOCUMENTATION

A Proposed Project application to develop the site was submitted to the City in 2010, and the City retained an environmental consultant in 2011 to prepare an EIR for the Proposed Project. The environmental review process was completed, and in September 2013, the City's Planning Commission reviewed comments received on the Draft EIR, but no action was taken by the Commission and the item was continued. Revisions were subsequently made to the Proposed Project that required the Draft EIR to be updated.

Updates to the Draft EIR were completed in 2017, but the City opted to not release the Draft EIR for public review due to problems with that document that required additional work. Ultimately, the City released a Request for Proposals for the preparation of this (2021) EIR.

The 2012 and 2017 Draft EIRs were reviewed in preparation of this EIR.

In May 2019, the City adopted the "General Plan Update 2040."[1] However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR will also evaluate consistency with the City's adopted 2019 General Plan for informational and consistency purposes.

CEQA Guidelines Section 15150 allows for incorporation by reference of "all or portions of another document which is a matter of public record or is generally available to the public." Incorporation by reference is used principally as a means of reducing the size of EIRs. This Draft EIR relies in part on data, environmental evaluations, and mitigation measures from the prior Draft EIRs, and other components of environmental documents and plans prepared by the City for areas within the Proposed Project vicinity. These documents are listed here and used as source documents for this Draft EIR. All documents are available for public review during normal business hours (Monday through Friday, 8:30 a.m. to 5:00 p.m.) at the City of St. Helena Planning Division, 1480 Main Street, St. Helena, California 94574, and on the City's website at http://www.ci.st-helena.ca.us/planning/page/ceqa-document-center.

- Hunter Subdivision Project Revised EIR, October 2017
- City of St. Helena 1993 General Plan, adopted September 28, 1993
- City of St. Helena General Plan Update 2040, adopted June 2019
- St. Helena Municipal Code, updated through October 2020

1.2 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

Lead Agency

In accordance with CEQA Guidelines Sections 15050 and 15367, the City of St. Helena has been designated the "lead agency," which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the EIR, and responding to comments received on the Draft EIR. Prior to making a decision to approve a

[1] For consistency, the "General Plan Update 2040" document is referred to in this EIR as the "2019 General Plan".

project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City.

Responsible Agencies

Responsible agencies are state and local public agencies, other than the lead agency, that have some authority to carry out or approve a project or that are required to approve a portion of the project or approve a permit for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration (CEQA Guidelines Section 15813). The following agencies would potentially act as responsible agencies for the purposes of this Proposed Project:

- **San Francisco Regional Water Quality Board**. Ensures compliance with the City's National Pollutant Discharge Elimination System Permit for any stormwater discharge associated with construction activity.
- **Bay Area Air Quality Management District.** Oversees air quality and has the authority to require mitigation fees.

Trustee Agencies

Trustee agencies are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project (CEQA Guidelines Section15386). The following agency was identified as a trustee agency with potential jurisdiction over the Proposed Project:

- California Department of Fish and Wildlife

1.3 EIR PROCESS

Notice of Preparation

In accordance with CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was circulated for public and agency review from March 6, 2018 through April 9, 2018 (included as Appendix A). The purpose of the NOP is to provide notification that an EIR for the Proposed Project was being prepared and to solicit guidance on the scope and content of the document. A summary of the comments received on the NOP is included in the Executive Summary, as well as in the introduction of each technical section.

Pursuant to CEQA Guidelines Section 15082, the lead agency held a public scoping meeting on March 12, 2018. Responsible agencies and members of the public were invited to attend and provide input on the scope of the EIR. Comments from agencies and the public in response to

the NOP are provided in Appendix A. General concerns and issues raised in response to the NOP are summarized in the Executive Summary and addressed in this Draft EIR.

Draft EIR and Public Review

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and public agencies can submit comments to the lead agency on the Draft EIR's accuracy and completeness. Release of this Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The 45-day public review period for the Draft EIR will be from September 23, 2021 through November 8, 2021. The public can review the Draft EIR at the following address during normal business hours (Monday through Friday, 8:30 a.m. to 5:00 p.m.) or on the City's website at www.cityofsthelena.org.

City of St. Helena
Planning Division
1572 Railroad Avenue
St. Helena, California 94574

The City encourages all comments on the Draft EIR be submitted in writing. All comments or questions regarding the Draft EIR should be addressed to:

Maya DeRosa, AICP, Planning and Building Director
City of St. Helena Planning Division
1572 Railroad Avenue
St. Helena, California 94574
(707) 967-2783
mderosa@cityofsthelena.org

Final EIR and EIR Certification

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and the City's responses to those comments. The Final EIR will also include the Mitigation Monitoring Program prepared in accordance with Section 21081.6 of the California Public Resources Code. The Final EIR will address any revisions to the Draft EIR made in response to agency or public comments. The Draft EIR and Final EIR together will comprise the EIR for the Proposed Project. Before the City can review the Proposed Project for approval, it must first certify that the EIR has been completed in compliance with CEQA, that the City Council has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City. The City Council would also be required to adopt Findings of Fact and a Statement of

Overriding Considerations (if any significant and unavoidable impacts are identified). If no significant and unavoidable impacts (assuming the City Council finds all proposed mitigation measures to be feasible), are identified the City Council would not be required to adopt a Statement of Overriding Considerations if it approves the Proposed Project (see also Public Resources Code Section 21081).

EIR Adequacy

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.4 SCOPE OF THE DRAFT EIR

This Draft EIR has been prepared in compliance with CEQA (California Public Resources Code Section 21000 et seq.) and the procedures for implementation of CEQA set forth in the CEQA Guidelines (14 CCR 15000 et seq.).

According to CEQA Guidelines Section 15161, an EIR should focus primarily on the changes in the environment that would result from implementation of a proposed project. This EIR evaluates the potential environmental impacts that may occur from construction and operation of the Proposed Project, including direct, indirect, cumulative, and growth-inducing impacts. Based on a review of the Proposed Project and comments received during the NOP public review period, the City determined that an EIR should be prepared that addresses the following technical issue areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources

- Cultural and Tribal Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise and Vibration
- Public Services/Recreation
- Public Utilities
- Transportation and Circulation
- Energy

This EIR evaluates the direct impacts, reasonably foreseeable indirect impacts, and cumulative impacts resulting from planning, construction, and operation of the Proposed Project using the most current information available and in accordance with the provisions set forth in CEQA and the CEQA Guidelines. In addition, the EIR recommends potentially feasible mitigation measures, where possible, and Proposed Project alternatives that would reduce or eliminate significant adverse environmental effects.

The alternatives chapter of the EIR (Chapter 5, Project Alternatives) was prepared in accordance with Section 15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Proposed Project alternatives are not required, if no significant environmental impacts would occur.

The EIR evaluates the following alternatives to the Proposed Project:

Alternative 1: No Project/No Build Alternative. This alternative assumes no development would occur, and the site would remain in its current undeveloped condition.

Alternative 2: No Project/General Plan Alternative. This alternative assumes development would occur consistent with the General Plan land use designation and zoning.

Alternative 3: Park Preserve Alternative. This alternative includes a 1-acre park that would preserve a majority of the on-site wetlands and would include the same number of units as the Proposed Project, including the affordable housing units and accessory dwelling units.

Alternative 4: Increased Density/Affordable Housing Alternative. This alternative includes a 1-acre park along with up to 180 affordable housing units.

1.5 ORGANIZATION OF THE DRAFT EIR

Chapter 2, Executive Summary—Summarizes the elements of the Proposed Project and the environmental impacts that could result from implementation of the Proposed Project and provides a table that lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts before and after mitigation.

Chapter 1, Introduction and Scope of the Draft EIR—Provides an introduction and overview of the EIR process and describes the intended use of the EIR and the review process.

Chapter 2, Project Description—Provides a detailed description of the Proposed Project, including its location, background information, Project objectives, and technical characteristics.

Chapter 3, Introduction to the Analysis—Describes the baseline environmental setting and provides an assessment of potential Proposed Project impacts for each technical issue area presented. Each section is divided into four sub-sections: Introduction, Environmental Setting, Regulatory Background, and Impacts and Mitigation Measures (Proposed Project–specific and cumulative).

Chapter 4, CEQA Considerations—Provides information required by CEQA regarding impacts that would result from the Proposed Project, including a summary of cumulative impacts, secondary impacts including potential impacts resulting from growth inducement, and significant irreversible changes to the environment.

Chapter 5, Project Alternatives—Describes and compares the Proposed Project alternatives to the Proposed Project.

Chapter 6, EIR Preparers—Lists report authors who provided technical assistance in the preparation and review of the EIR.

Appendices—Includes various documents and data that support the analysis presented in the Draft EIR.

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CHAPTER 2
PROJECT DESCRIPTION

2.0 INTRODUCTION

Ben and Kelly Vanzutphen (Project applicants) have requested approval of a Tentative Subdivision Map. This proposed subdivision, which is the only discretionary action being considered by the City of St. Helena (City) at this time, would form the basis for the proposed Hunter Subdivision Project (Proposed Project), which is the "project" examined in this Environmental Impact Report (EIR). Development of the Proposed Project would require the approval of the Tentative Subdivision Map and several subsequent discretionary approvals, as outlined under Section 2.6 later in this chapter.

The Proposed Project's reasonably foreseeable and potentially significant adverse environmental effects are evaluated in this EIR.

Consistent with California Environmental Quality Act (CEQA) Guidelines Section 15124, this chapter includes: the location and boundaries of the Proposed Project, as shown on a project location map and on a regional map; a statement of the objectives sought by the Proposed Project; a general description of the Proposed Project's environmental characteristics, supporting public facilities; and a statement briefly describing the intended uses of the EIR, including a list of public agencies that are expected to use the EIR in their decision making, and a list of permits and approvals required to implement the Proposed Project.

Information has been provided by the Proposed Project applicant and City planning staff. The following project description serves as the basis for the environmental analysis contained in this EIR. The City will serve as the lead agency with final authority to certify the EIR and approve the Proposed Project (both the Tentative Subdivision Map and subsequent approvals).

2.1 PROJECT SITE

Location and Surrounding Land Uses

The 16.9-acre Project site (Assessor's Parcel Number is 009-030-057) is located in the northeast portion of the City, at the eastern terminus of Adams Street, three blocks east of downtown and State Route 29 (SR 29), and west of the Napa River, as shown in Figure 2-1, Regional Location.

The Project site is generally rectangular with a "panhandle" extension that connects the site to Adams Street west of the panhandle, as shown in Figure on Figure 2-2, Project Location. Adjacent land uses include single-family and multi-family residential development to the south, including the Vineyard Valley Mobile Home Park and the Hunt's Grove Apartments. Office uses

are located immediately adjacent to the site's most western edge at the terminus of Adams Street. Undeveloped land currently under cultivation is located to the north and northwest. A single-family residence along with a barn and accessory dwelling unit is currently (May 2021) under construction to the west/north of the Project site. A gravel maintenance road used by the public as an informal trail borders the site along the north/northwest boundary along with a separate public trail located on the north/northwest side of the maintenance road (referred to as the "maintenance road/public trail"), and a City storm water detention basin borders the site to the south/southeast. A drainage ditch is located along the northern edge of the property. Figure 2-3 depicts existing and adjacent land uses.

The open space located north and east of the site is part of the St. Helena Comprehensive Flood Protection Project (Flood Protection Project). The Napa River flows from northwest to southeast approximately 500 feet north/northeast of the Proposed Project boundary.

Existing Uses and On-Site Characteristics

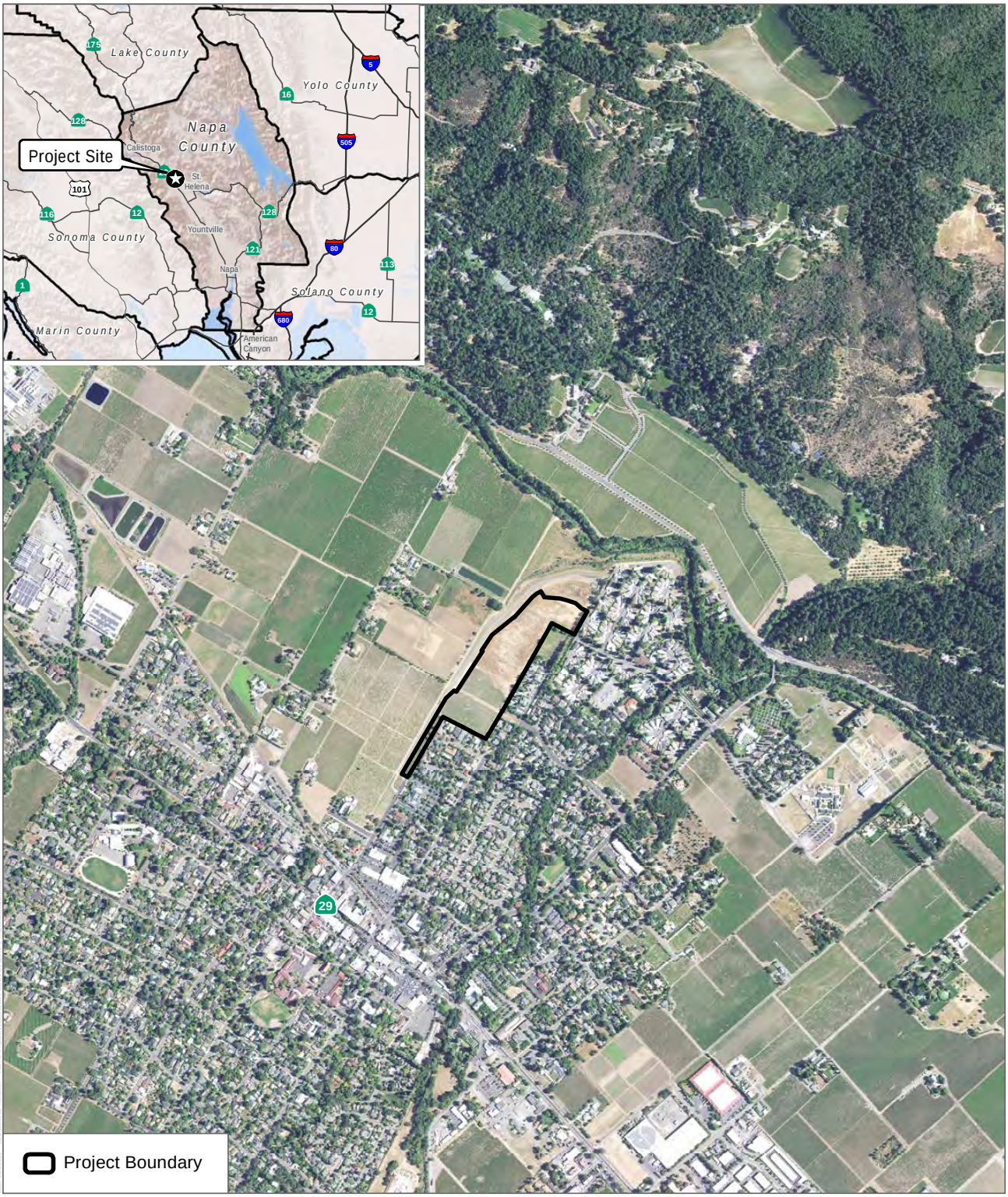
Approximately 40% (6 acres) in the southwestern portion of the Project site is under cultivation with a vineyard. Approximately one acre of vineyard is located in the western '"panhandle" portion of the Project site. The remainder of the site is undeveloped. An existing agricultural well is located near the southeastern end of the Project site, adjacent to proposed lot 19 of the Tentative Subdivision Map, shown as Parcel B on the proposed Tentative Map (see Figure 2-4).

Based on the Proposed Project's grading plan, the elevation across the Project site as developed would range from approximately 230 feet above mean sea level (amsl) on its southern edge to approximately 212 feet amsl on its northern edge. The portion of the site planned for the extension of Adams Street ranges from 243 feet amsl to 230 feet amsl.

An existing 10-foot wide public water line easement containing an active 12-inch water line bisects the north/northeast portion of the site. This easement is proposed to be abandoned as part of the proposed Tentative Subdivision Map and the water line relocated.

The existing gravel maintenance road/public trail that starts at the end of Adams Street and borders the Project site along the north/northwest is a popular walking trail for City residents.

Several small Valley Oak trees are present along the eastern boundary of the site along Del Rio Court that would not be removed as part of the Proposed Project. In addition, there is a drainage ditch located in this area and also along a portion of the eastern Proposed Project boundary. The Proposed Project would not impact these existing ditches.



SOURCE: Napa County 2015, USDA 2016

DUDEK

0 600 1,200 Feet

FIGURE 2-1

Regional Location

Hunter Subdivision Project

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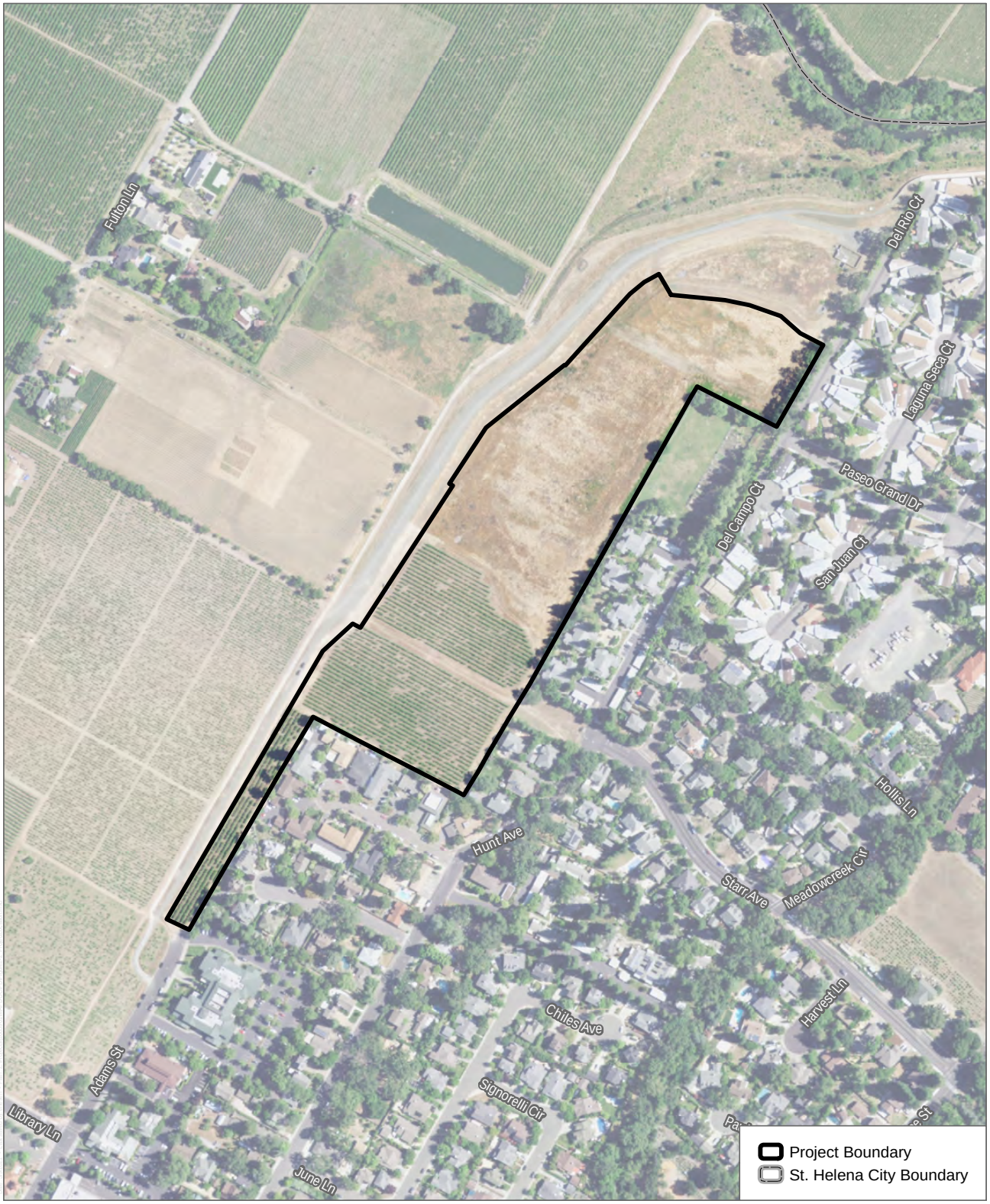

SOURCE: USDA 2016, USGS 2018, Napa County 2015

DUDEK

0 165 330 Feet

FIGURE 2-2

Project Location

Hunter Subdivision Project

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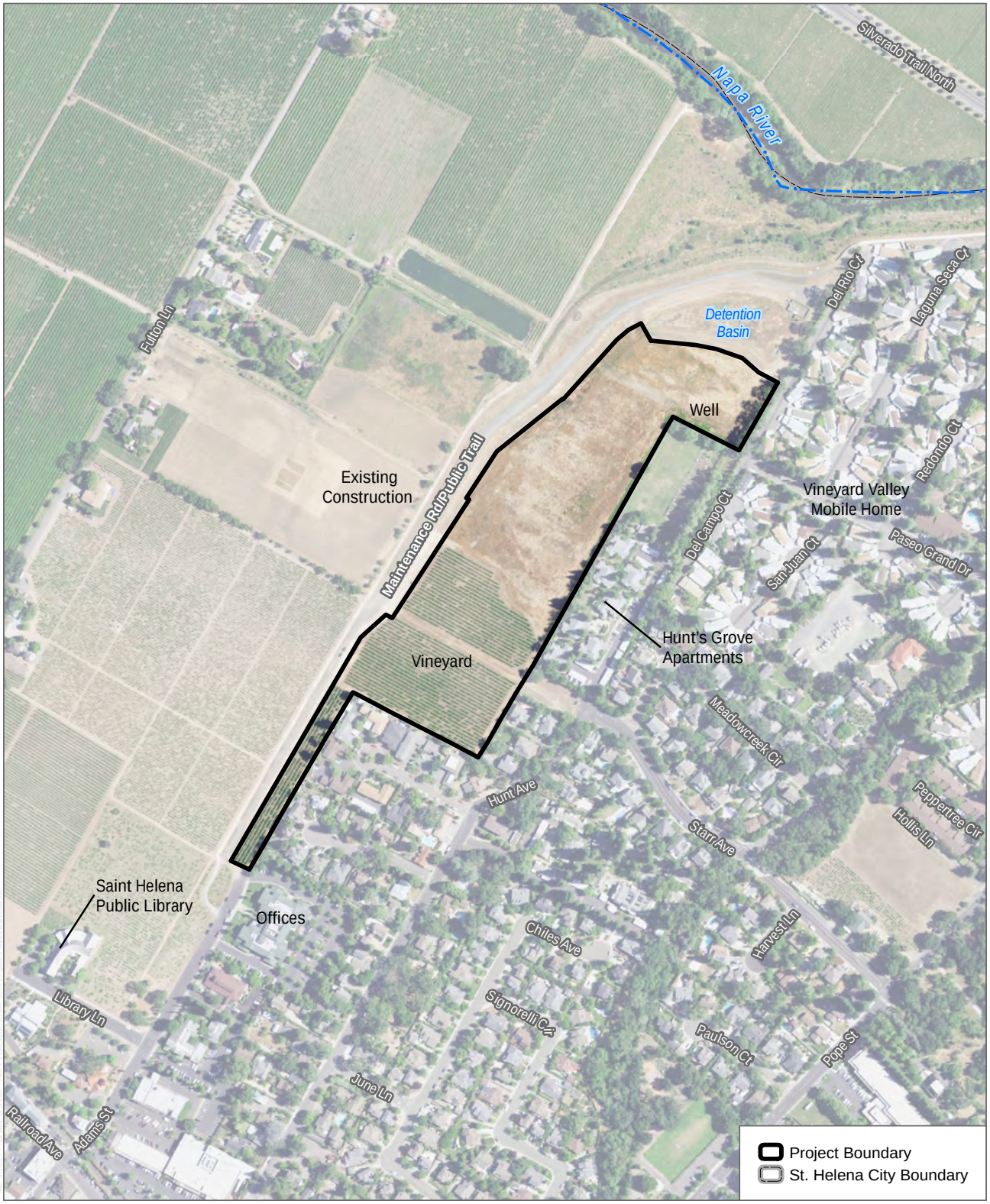

SOURCE: USDA 2016, USGS 2018, Napa County 2015

DUDEK

0 200 400 Feet

FIGURE 2-3

Existing On-Site and Adjacent Land Uses

Hunter Subdivision Project

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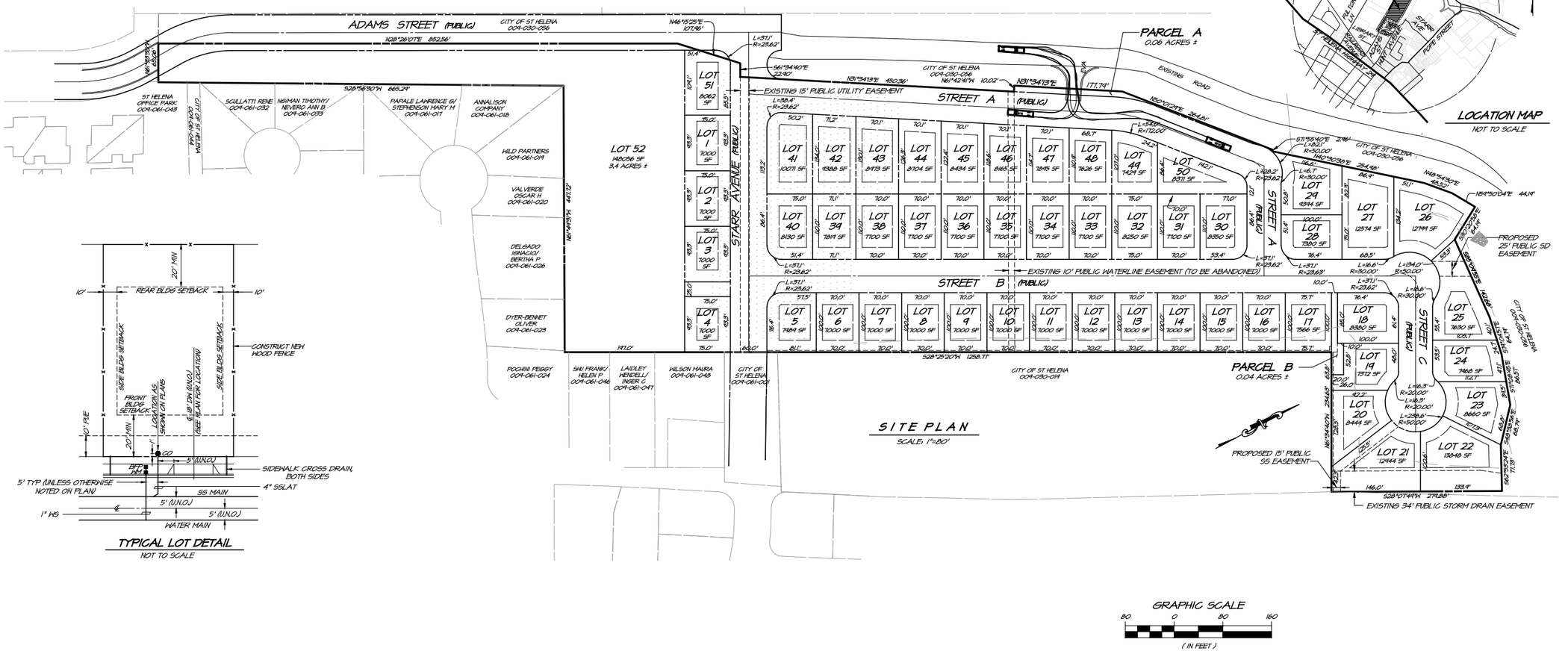

SOURCE: RSA 2019

FIGURE 2-4

Proposed Tentative Map

Hunter Subdivision Project

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Agenda Item #6.2.

There are no significant natural features on the site, and the City has not officially designated any significant viewsheds that would be affected by development of the site.

Project Background

The majority of the Project site was acquired by Dennis Hunter in 1997. Planning efforts were first initiated for developing the property in 2005. In 2008, the City and Mr. Hunter agreed to a land trade and a lot line adjustment to facilitate the City's Flood Protection Project (see below), resulting in the current configuration of the Project site in 2009. Mr. Hunter allowed the placement of excess fill material from the Flood Protection Project on the site.

The applicant's planning for the Project site was reinitiated later in September 2010, and an application was filed with the City for a Tentative Subdivision Map to subdivide the property for residential development. The application was accepted as complete by the City on March 28, 2011.

In 2011, the City completed construction of the Flood Protection Project which consisted of river channel improvements, a levee, and floodwall construction along the Napa River adjacent to the Project site. The Flood Protection Project was designed and constructed to meet or exceed all design criteria for Federal, State and local flood control projects. In December 2011, the City submitted an application to the Federal Emergency Management Agency (FEMA) to request a Letter of Map Revision (LOMR) that would revise the National Flood Insurance Program (NFIP) map and Flood Insurance Study report for the area subject to the Flood Protection Project. FEMA completed its review of the LOMR and officially revised the FIRM that covers the Project site and effectively removed the Project site from the 100-year flood hazard area. The effective date of the revised FIRM is November 5, 2012. The Project site is now designated Zone X, which FEMA identifies as an area with a moderate to low risk of flooding due to a levee failure and is considered protected from a 100-year flood event (FEMA 2018).

In 2012, the City prepared an EIR to evaluate the Proposed Project[1] and in 2013 the Proposed Project came before the City's Planning Commission for review. The Planning Commission did not take action on the Proposed Project and the item was continued. Additional information was submitted by the Proposed Project applicant, which resulted in the need to revise and update the Draft EIR.

[1] As noted earlier, the Proposed Project requires the approval of the proposed tentative subdivision map and several subsequent discretionary actions. These subsequent actions are discussed later in this chapter.

City of St. Helena 1993 General Plan and 2019 General Plan Land Use Designations and Zoning

The Project site was designated for residential development in the 1975 City of St. Helena General Plan , as Medium Density Residential (MDR) in the City of St. Helena 1993 General Plan, and is designated MDR in the City's recently adopted "General Plan Update 2040" (the 2019 General Plan). Because the tentative map application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project, since this version of the plan was in effect in 2011. This EIR also evaluates consistency with the City's current General Plan (adopted 2019) for informational and consistency purposes.

The 1993 General Plan described the MDR land use category as follows:

> **Medium Density Residential (MDR).** The MDR designation provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. Residential densities shall be in the range of 5.1 to 12.0 dwelling units per gross acre. The MDR designation is the predominant residential designation, occurring throughout large areas of the City. The wide distribution of this designation is intended to maintain a development pattern in newly developing areas that is consistent with historic development patterns.

The current (adopted 2019) General Plan describes the MDR land use category as follows:

> **Medium Density Residential (MDR).** The MDR land use designation includes single-family attached and detached homes, and compatible uses. This designation permits residential densities between 5.1 and 16.0 dwelling units per acre. Retained from the 1993 General Plan, the MDR designation is the City's predominant residential designation and it is intended to maintain a development pattern in St. Helena's higher density areas that is consistent with historic development patterns.

Both versions of the General Plan contain the same basic description of the MDR land use category, except for the maximum density. Under the 1993 General Plan, this land use designation permits densities of 5.1 to 12.0 dwelling units per acre (du/acre) which would allow a maximum of 202 dwelling units assuming a density of 12.0 du/acre. The 2019 General Plan maintains the same MDR land use designation but allows a maximum density of 16 du/acre, which would allow a maximum of 270 dwelling units.

In order to comply with the General Plan, development on the site must include at least 87 dwelling units. The applicant intends to meet this requirement with a combination of 51 single family homes (to be built on the 51 single family lots created by the proposed subdivision), attached multi-family units on lot 52 of the subdivision, and accessory dwelling units (ADUs).

The zoning designation for the Project site is also Medium Density Residential (MR). The MR district implements the MDR General Plan designation. The MR district is described in the current Zoning Code as follows:

> The MR district is established for consistency with the medium density residential general plan designation. The district provides for single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses. Residential densities shall not be less than 5.1 dwelling units per acre nor more than sixteen (16) dwelling units per acre.

Uses in the MR zoning district include single-family detached homes, ADUs, limited agricultural uses and compatible uses. The MR district also allows attached duplex and triplex units, condominiums, and townhouses, and similar uses with a conditional use permit. Included within the MR zoning is a density bonus that may be given for housing projects that are affordable for persons of very low, low, or moderate income (Chapter 17.40, Section 17.40.60 (F)). The applicant has not requested consideration of a density bonus as part of the Proposed Project application.

The City's General Plan Housing Element Update 2015-2023 was revised and last updated in May 2015. The City's 2015-2023 Housing Element identifies the site as vacant and underutilized (City of St. Helena 2015b, p.133, Table 43).

2.2 PROJECT OBJECTIVES

CEQA requires an EIR to include a statement of objectives for a project, including the underlying purpose of the project. These objectives help the lead agency determine the alternatives to evaluate in the EIR (CEQA Guidelines, Section 15124(a)). The following is a list of objectives for the Proposed Project:

- Subdivide the site consistent with the City's General Plan and Zoning for the site to accommodate residential development.
- Provide opportunities to develop a variety of housing types, including multi-family, single-family, and accessory dwelling units, affordable to a range of incomes including, very low, low and moderate-income households.
- Provide opportunities to contribute to the provision of workforce and affordable housing consistent with the City's adopted Housing Element and the Regional Housing Needs Assessment (RHNA) approved by the Association of Bay Area Governments (ABAG).
- Minimize traffic-related environmental impacts, such as noise, air quality and greenhouse gases by lowering commute patterns for St. Helena workers by providing more local housing opportunities.

- Support alternative transportation by providing a pedestrian and bicycle linkage through St. Helena, eventually connecting the regional Vine Trail from Calistoga to the Vallejo Ferry.
- Exceed the City's green building ordinance (Municipal Code Chapter 15.53) and incorporate sustainable design features including water conservation measures, drought resistant landscaping with low flow watering systems, south and west side tree placement to reduce reliance on air conditioning units, and pre-wiring for photovoltaic systems.
- Implement the General Plan Circulation Element by completing the planned extension of Starr Avenue and the partial planned extension of Adams Street from where Adams Street terminates to connect to the Project site.
- Minimize City water use by continuing the use of an existing on-site water well for irrigation of Proposed Project landscaped areas.

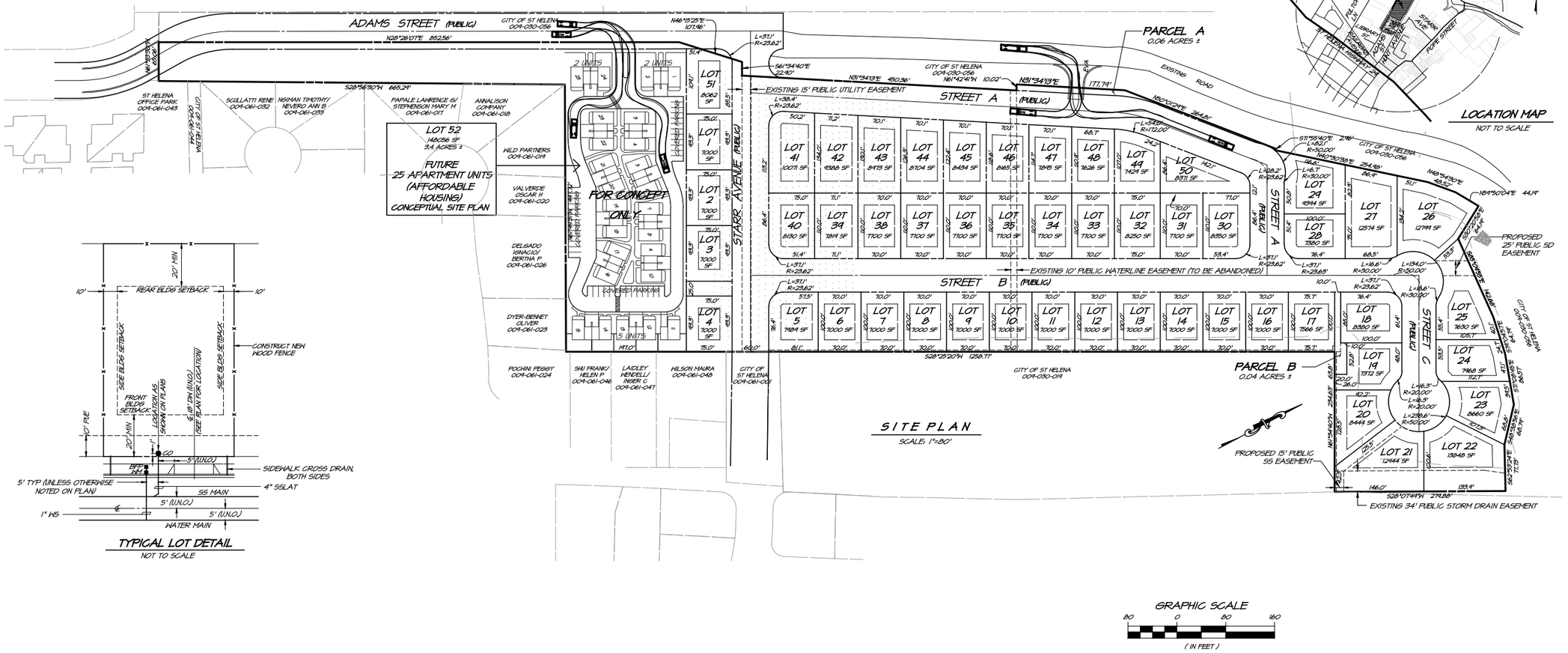
2.3 PROPOSED PROJECT

The Proposed Project applicant has applied for a Tentative Subdivision Map to subdivide the site into 51 lots (sized for single-family residences), a 3.4-acre parcel, and two lettered lots: a 0.06-acre parcel (Parcel "A") and a 0.04-acre parcel (Parcel "B"), as shown in Figure 2-4, Proposed Tentative Map.

Beyond the Tentative Subdivision Map application before the City at this time, the Proposed Project applicant has stated their intent to ultimately develop the 51 lots with 51 single-family, market-rate residences. Additionally, homes on 11 of the 51 lots would be developed with an ADU as part of their initial construction. Affordability of the attached units would be addressed in an Affordable Housing Agreement which would require approval by the City Council subsequent to approval of the Tentative Subdivision Map.

The applicant intends to ultimately develop the 3.4-acre parcel with 25 attached multifamily residential units. The affordability of these multi-family units will be the subject of the future Affordable Housing Agreement. A conceptual layout of how the multifamily units could be designed is shown in Figure 2-4A. However, this layout has not been formally submitted and is not under consideration for approval at this time.

The applicant has not expressed any intent to develop the 0.06-acre Parcel A.



SOURCE: RSA 2019

FIGURE 2-4a

Proposed Tentative Map with Conceptual Multi-Family Layout

Hunter Subdivision Project

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Agenda Item #6.2.

The 0.04-acre Parcel B is being created to accommodate an existing agricultural well, which would be retained and used to irrigate onsite landscaped areas. No other development would take place on Parcel B.

The Proposed Project applicant's ultimate intended development of the site would require several subsequent discretionary approvals—beyond the current application for a Tentative Subdivision Map—that are not before the City at this time. Nevertheless, to ensure full analysis of what is reasonably foreseeable, this EIR analyzes the applicant's ultimate intended development of the site as the Proposed Project.

Table 2-1 provides a breakdown of the total development proposed by the applicant.

Table 2-1
Proposed Project Land Use

Proposed Land Use	Zoning	Acres	Residential Units	Average Density (du/ac)
Single Family Residences	MR	13.4	51	
Accessory Dwelling Units[1]			11	
Attached Units[2]	MR	3.4	25	
Undeveloped	MR	.06	--	
Agricultural Well Site	MR	.04	--	
	Project Total	16.9[3]	87	5.1

Source: Hunter Subdivision Tentative Map 2021.
Notes:
1 Accessory units would be constructed by the applicant/developer concurrently on 11 of the single-family lots.
2. Attached units include duplex or triplex units would be included within Lot 52.
3 Numbers above add to 17 due to rounding. Site area is 16.9 acres.

The 87 residential units (51 single family homes, 25 attached units, 11 ADUs) would provide for an average density of 5.1 du/ac. Because the General Plan establishes a minimum density for the MDR land use category, this is the minimum number of units which can be constructed on the Project site. (The 2019 General Plan allows up to 16 units per acre, for a maximum potential buildout of 270 units.)

As shown on the proposed Tentative Subdivision Map, the single-family lots would range in size between approximately 7,000 and 12,000 square feet, with most of the lots in the 7,000 to 8,000 square foot range. A number of irregular shaped lots would be located along the eastern edge of the Project site and along the cul-de-sac (see Figure 2-4).

Each lot would have a minimum size of 7,000 square and a minimum width of 70 feet, per the standards of the MR zoning district. The development standards of the MR zoning district require a minimum 20-foot front and rear setback, and a 10-foot setback on the sides (or a 20-

foot setback in a street side yard). The MR zoning establishes a maximum height for principal dwellings of 30 feet (allowing for a 2-story home). Any accessory structure, such as an ADU, would be limited to a maximum height of 15 feet.

The 3.4-acre parcel (Lot 52), is proposed to be developed with 25 attached multifamily housing units including 30,000 to 45,000 total square feet of building area. The applicant's conceptual design for Lot 52 shows two-story, two-bedroom units each with a single-car garage and an on-site parking space plus covered guest parking spaces. A conceptual layout of the Lot 52 site along with conceptual renderings of the structures are shown in Figures 2-5 and 2-6. A specific design for these units has not been filed with the City and would be the subject of a future Design Review application.

Access to Lot 52 would be provided from Adams Street and a driveway connection to Starr Avenue, which would be extended to intersect Adams Street north of the Project site.

As discussed in Section 2.4, below, construction of detached and attached residential units would require design review approval by the Planning Commission, while development of the attached residential units would also require approval of a conditional use permit.

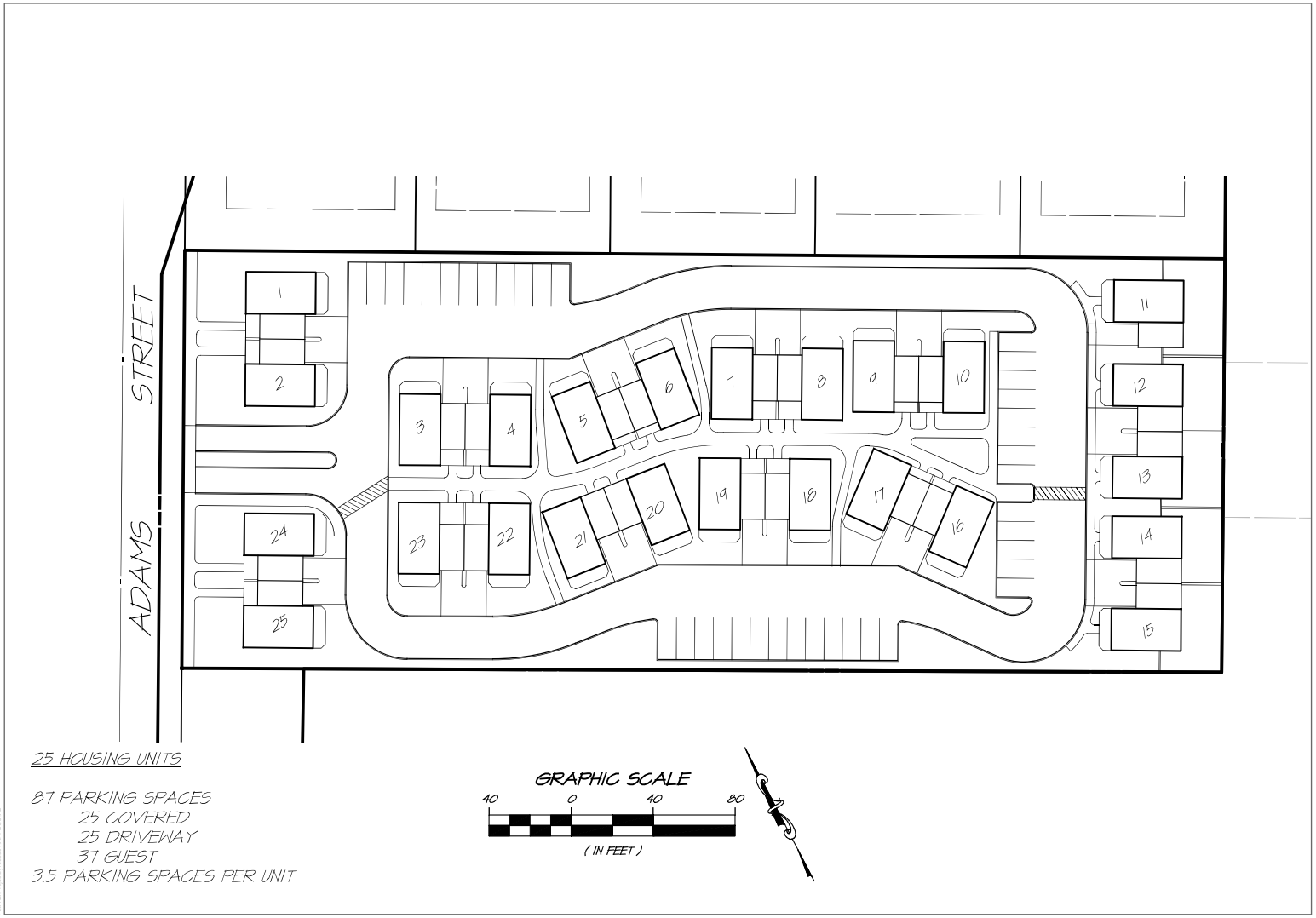
Affordable Units

The Proposed Project applicant has proposed to enter into an Affordable Housing Agreement with the City for the 25 multi-family units. The agreement will stipulate how these units would be managed (such as by the Proposed Project applicant or a non-profit organization) to ensure the required affordability requirements are met and maintained over the term of the agreement.

The Affordable Housing Agreement is still being discussed by the City and the Proposed Project applicant and is not proposed or required for review and approval with the Tentative Subdivision Map. A final Affordable Housing agreement approved by the City Council would be required prior to recordation of a final subdivision map.

Accessory Dwelling Units

The City's Zoning Ordinance (Municipal Code Section 17.116.030) and state law provides for the construction of an ADU on any lot which is zoned for residential use and has an existing single-family residence. Such units may be rented (for a period of not less than 30 days) but may not be sold separately from the main residence. As discussed earlier in this section, the Proposed Project applicant proposes to construct 11 ADUs on 11 of the 51 single family lots created by the proposed Tentative Subdivision Map.



SOURCE: RSA 2017

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FIGURE 2-5
Conceptual Layout of Lot 52
Hunter Subdivision Project

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SOURCE: Ben Vanzutphen 2018

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FIGURE 2-6

Conceptual Rendering of Multi-Family Housing

Hunter Subdivision Project

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Construction of an ADU would require only ministerial approval on any lot which contains a single-family residence (as is the case in all residentially zoned lots in the City which contain one single-family residence).

The Proposed Project is proposing 11 ADUs which equates to approximately 22% of the total number of single-family residences. By comparison, applications for ADUs in St Helena between 2013 and 2020 totaled approximately 37, equal to about 1.7% of all single-family residences in the city.

Population

The City uses a persons per household factor of 2.45 people per unit for medium/higher density residential land uses (City of St. Helena 2013). Using this factor, the 87 units in the applicant's development proposal (including ADUs) would conservatively generate 213 residents.[2]

Site Access and On-site Circulation

Development of the Project site would require the extension of Adams Street and Starr Avenue onto the Project site to provide two points of ingress and egress, as shown in Figure 2-4.

Adams Street would be extended from the terminus of the existing roadway approximately 550 feet to the northeast, ending at the Project site and connecting to the Project's internal roadway network. The southwestern portion of the existing gravel maintenance road at the end of Adam's Street would be modified by the Proposed Project to enable access to the Project site. The remainder of the maintenance road would remain a gravel road (see Figure 2-4). The existing trail parallel to the maintenance road would remain and would not be altered by the Proposed Project. Sidewalks would be installed on both sides of the Adams Street extension along with a 6-foot wide planting strip.

Starr Avenue would be extended approximately 165 feet northward from Hunt Avenue, crossing a City-owned parcel before entering the Project site and connecting to the Project's internal roadway network before ultimately intersecting with the extension of Adams Street. Sidewalks would be installed on both sides of the Adams Street extension along with a 6-foot wide planting strip.

The extension of Starr Avenue would divide the site into two portions. The western portion would include five single-family lots and the 3.4-acre multi-family lot. The eastern portion would include the other 46 single-family lots, the 0.06-acre remainder parcel "A" and the 0.04-acre parcel "B" for the agricultural well.

[2] Note: ADUs typically are occupied by 1 or 2 people; therefore, it is anticipated fewer than 213 people would occupy the Proposed Project upon completion.

The portion of the site south of the proposed Adams Street extension consists of approximately one acre of existing vineyards, which would be preserved as part of the Proposed Project.

The Adams Street extension is currently a City-owned right-of-way. The Proposed Project applicant would dedicate the additional right-of-way necessary for the extensions of Adams Street and Starr Avenue and would be responsible for construction of the two public road extensions. All new streets would be designed and constructed consistent with existing City street standards.

As shown on Figure 2-4, three new local streets (Streets A, B, and C) are proposed within the Project site. Single-family lots would be located on the south side of Street A, and on both sides of Streets B, C and the Starr Avenue extension.

As shown on the proposed Tentative Subdivision Map (Figure 2-4), the proposed width of the Adams Street and Starr Avenue extensions is 60 feet, consistent with the City's minor residential street standard. Streets A, B, and C would be 56 feet wide and would allow parking on both sides. All streets would include curb, gutter, and 4-foot-wide sidewalks and 6-foot wide planting strips on both sides of the street.

The Proposed Project would provide sidewalks for pedestrians. Bicyclists would use the on-site streets. The Proposed Project would also support subsequent extensions to provide non-vehicular access. Streets A, B, and C would be constructed by the Proposed Project applicant and dedicated to the City.

Emergency vehicle access would be provided via the extension of Adams Street, Starr Avenue, and an emergency vehicle access (EVA) to the existing gravel maintenance road that borders the north/northwest boundary of the Project site. The EVA would prohibit through traffic by installing bollards or other devices to prevent vehicle access. In the event of an emergency the City's Fire and/or Police department would access a knox box to unlock the bollards or other device to allow vehicle access.

On-street parking would be permitted along all Proposed Project streets including the extension of Starr Avenue and Adams Street.

No Class 1 (off-street bike path) or Class II (on-street striped) bikes lanes would be included as part of the Proposed Project.

Landscaping and Lighting

The applicant's proposed landscape plan includes approximately 185 trees, including 24-inch box scarlet maple (*Acer Rubrum*), Chinese pistache (*Pistacia Chinensis*) and tulip tree (*Liriodendron*

Tulipifera), as shown on Figure 2-7. Approximately 74 scarlet maple trees would be planted along the Adams Street extension to the intersection with Starr Avenue and along the Starr Avenue extension. Approximately 57 Chinese pistache trees would be planted along Street A. Approximately 54 tulip trees would be planted along Street B and the Street C cul-de-sac.

Trees would be planted mostly in rows of two to five with 10 feet of separation from streetlights. On the western edge of Starr Avenue the Scarlet Maples are proposed in a solid row of nine trees between Street A and Street B. Sidewalk planting strips would have hydro seed native grasses and drought tolerant plantings between the trees that are adapted to the City's climate.

The existing vineyards on the Project site would be removed with the exception of an approximately one-acre portion of the vineyard that would remain located in the westernmost "panhandle" portion of the site.

All public landscaping and irrigation would be required to meet the California Code of Regulations Title 23. Chapter 2.7 Model Water Efficient Landscape Ordinance requirements.

The Proposed Project includes 28.5-foot-tall standard streetlights along all residential streets.

A Homeowners Association (HOA) would oversee maintenance of public landscaping, including the approximately one-acre vineyard located in the southwestern "panhandle" portion of the site, and streetlights. The streetlights would be designed to conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations.

Walls/Fences

Per the proposed Tentative Subdivision Map, the rear yard of Lots 1 through 51 would include a 6-foot high wood fence for privacy. A retaining wall that varying in height from 2 to 4 feet is proposed along the rear property line of Lots 5 through 22. The wall would be constructed of concrete masonry block.

Infrastructure Improvements and Public Services

Water, sewer, and storm drain services would be provided by the City. The Proposed Project would include new water, sewer, and storm drain infrastructure on site to serve the residential development designed in compliance with City specifications. The Project site is currently not served by City utilities. There is an existing groundwater well in the eastern area of the site (on proposed Lot 19). The Proposed Project's on-site water, sewer, and storm drain lines are proposed to be located within the street/driveway rights-of-way within the Project site.

Water Supply

With the abandonment of the 10-foot public water main easement and the existing 12-inch water main within this easement, a 12-inch public water main would be realigned and constructed by the City, proposed to be within the Starr Avenue right-of-way, as shown on Tentative Map page TM5. The existing 12-inch water line traverses the site generally north/south to the east of Starr Avenue within a 10-foot easement; this line would be relocated as part of development of the site.

The Project is proposing a looped 8-inch water main within Streets A and B that would connect to the existing water main at two locations. A new 8-inch water main is also proposed within the extension of Adams Street to connect to the existing water main at the southwest end of the Project site. As noted above, an existing 12-inch water line would also be relocated within the site to provide continued service to customers.

Fire hydrants and other appurtenances would be located and installed pursuant to City standards.

An existing agricultural well is located near the eastern end of the Project site that is proposed to be maintained in place (in proposed Lot 19) and used to provide non-potable irrigation of all on-site landscaping areas, including private front and rear yards. The well is proposed by the Project applicant to be owned and maintained by a homeowners' association or similar method; public ownership or operation is not proposed. A lot is shown on the proposed tentative map for the well site and access to the local street for maintenance, power, and water lines.

Water lines would be extended within the Project site from the agricultural well to serve the landscaped areas in the public right-of-way, at the individual homes and the future multi-family site, and the retained vineyard.

The Proposed Project would be designed not to exceed 0.4 acre-feet/year/dwelling unit of water based on the installation of increasingly efficient and lower-water-using fixtures and appliances and irrigation systems. For further detail on the Proposed Project's water demands, see Section 3.12, Public Services/Recreation and Section 3.13, Utilities. For information specific to the agricultural well and use of this well to provide the Project's landscape irrigation requirements, please see Section 3.9, Hydrology and Water Quality.

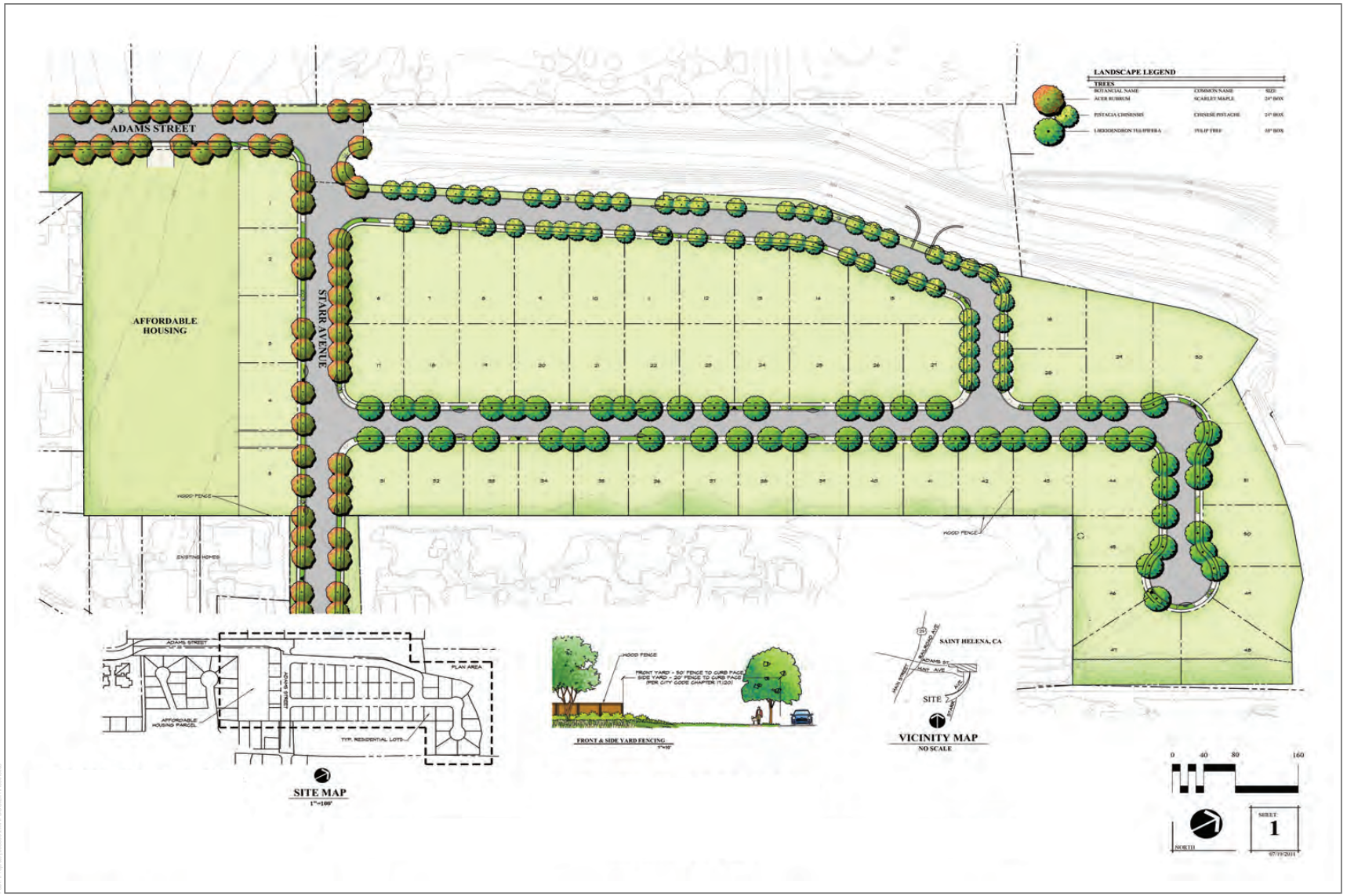

FIGURE 2-7

Landscape Plan

Hunter Subdivision Project

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Sewer System

Wastewater flows from the western end of the Project site are proposed to drain into an existing public manhole at the corner of Starr and Hunt Avenue via new 8-inch sewer pipes, as shown on Tentative Map page TM5. The area east of Starr Avenue, lower in elevation, is proposed to drain east through the Project site via new 8-inch sewer pipes, through Lot 21 within a public easement and into an existing public manhole on the adjacent parcel in the Vineyard Valley Mobile Home Park. The Proposed Project would install 8-inch sewer lines within all roadways to service the residences.

All sewer mains are sized to accommodate Proposed Project flows, per City standards, and designed at slopes to provide required self-cleaning velocities. Sewer laterals would be installed per City specifications.

Storm Drainage and Stormwater Quality

The Proposed Project would connect to existing storm drain infrastructure. New storm drain lines would be installed in Streets A, B, C and Adams Street. As shown on Tentative Map page TM 5, the southwesterly portion of the Project site is proposed to drain via gutter flow and proposed storm drain pipes and discharge into the existing Starr Avenue storm drain at several different locations. The rest of the Proposed Project is proposed to drain to the northeast via gutter flow and storm drain pipes and discharge into the existing detention basin. The City requires that all storm drain pipes be sized to accommodate a 10-year storm within the pipe and 100-year storm within the street section.

Police and Fire Services

The Project site would be served by the St. Helena Police Department located at 1480 Main Street in St. Helena. The Police Department provides law enforcement services within the city limits and maintains 24-hour security patrol throughout the community. Fire protection services are provided by the St. Helena Fire Department located on the same site as the police department, which is less than a ¼-mile from the Project site. The fire department provides fire protection services within the city limits, including fire suppression, fire prevention, education, emergency medical and rescue services, and response to incidents involving hazardous materials.

Schools

The Proposed Project site is located within the St. Helena Unified School District, which operates four schools, including a primary school, elementary school, middle school, and a high school. The Proposed Project would be required to pay school impact fees to the School District at the time of building permit issuance.

Solid Waste Disposal

Upper Valley Disposal provides solid waste services to residents and businesses in the City. Solid waste is disposed of at the Clover Flat Landfill, a Class III landfill site, located off Silverado Trail north of the City.

Natural Gas, Electricity, Cable, and Telephone

The Proposed Project also includes natural gas, electrical, cable television, and telephone to serve proposed development. Natural gas is provided by PG&E and electric services would be provided by PG&E or MCE Clean Energy Community Choice Electricity program. Telephone service would be provided by AT&T and cable and internet services would be provided by a variety of providers including Xfinity, AT&T, and Valley Internet.

Offsite Improvements

Off-site improvements required for the Proposed Project include extending Starr Avenue approximately 165-feet to connect to the Project site and extending Adams Street approximately 550-feet to provide access to the site.

An emergency access for fire equipment would also be built to connect Street A with the existing maintenance road. All of these improvements would take place on land owned by the City.

Construction Details, Phasing, and Timeline

The applicant has not prepared a proposed phasing plan. According to the applicant, buildout of the Proposed Project would occur based on market conditions and the timeliness of obtaining building permits. The City may require the site be graded and construction of the backbone infrastructure be completed for the entire site as the first phase; however, the details of the Project's phasing plan have not yet been finalized.

If the Tentative Subdivision Map is approved and the applicant seeks and obtains all other required approvals, it is assumed the first phase of construction would require site clearing, grading, and trenching for utilities followed by construction of the roadways and residences.

For the purposes of the analysis it is assumed construction of homes would occur over a 6+ year period with the exception of the multi-family units, which the applicant proposes to build within a year of approval of Design Review, Use Permit to construct the units, and approval of the Final Subdivision Map.

Grading

Grading of the site would create a gradual downward slope from west to east towards the existing City storm water detention basin. To level the site and to ensure a stable base for new development, the existing fill/soils on the site would be removed, recompacted and returned to the site along with additional fill. The finish grade of most of the area east of Starr Avenue would be increased over the existing grade by the placement of approximately 1.5 to 2.5 feet of fill material; west of Starr Avenue the finish grade would be approximately 1 foot lower than the existing grade. The maximum depth of cut would be approximately 1.5 feet and the maximum depth of fill would be 5.0 feet. A former pond, located in the southeastern portion of the Project site, would require excavation of up to 10 feet due to anticipated settlement.

The estimated net grading quantity, as provided by the Proposed Project applicant, is approximately 24,321 cubic yards of fill to replace the 10,202 cubic yards of cut (RSA 2020).[3] This quantity does not include the spoils from the joint trench, roadways, curb and gutter, or foundations. It is the applicant's intent to balance the soils on site and not require the export or import of soils. Importing of some material, such as base rock, sand, and peat gravel that is used in the joint trenches, building foundations, and roadways would be required.

A summary of estimated earthwork quantities, provided by the applicant, is shown below.

Table 2-2
Earthwork Summary

Location/Item	Cut (CY)	Fill (CY)
Site Total	10,202	24,321
Pad Spoils[1]	5,200	
Trench Spoils[2]	4,500	
Vertical Spoils[3]	3,825	
Expansion[4]	510	
Subtotal	*24,237*	*24,321*
Import[5]	84	
Total	24,321	24,321

Notes:
1 Pad spoils assumed to be 100 cubic yards (CY) per lot due to post tension slab construction.
2 Trench spoils include water, sewer, storm drain, bioretention, irrigation water from well and joint trench.
3 Vertical spoils assumed at 75 yards per house and includes utility trenching in lot, landscape and final grading excavations to remove dirt from finished pad for drainage purposes.
4 Expansion assumed at 5% of the site total cut amount.

3 Earthwork quantities estimated by the applicant are based solely on a subtraction of finished grades from existing grades. They do not account for implementation of geotechnical recommendations, which based on a preliminary geotechnical study, is likely to consist of over-excavation and re-compaction of site soils to an average depth of 4.5 feet as part of site preparation for structural foundations, utility lines and streets. See Section 3.6 (Geology and Soils) for details.

[5] Net import or export less than 1% of the total volume amount (24,321 CY in this case) can be considered a balanced site.
Source: RSA Engineers, 2021.

Post-Construction Best Management Practices

The following post-construction best management practices (BMPs) would be implemented as part of the Proposed Project:

- Inlet labels “Drain to River”
- Private Street sweeping
- Downspouts to landscape swales
- Vegetated swales
- Homeowner education on storm water pollution prevention
- Hydrodynamic oil, water, and solid separation

Construction staging and parking for construction workers would be provided on site.

2.4 DISCRETIONARY ACTIONS AND USE OF THIS EIR

As part of the approval process, the City of St. Helena City Council will need to certify this EIR as meeting the requirements of CEQA and reflecting the independent judgement of the lead agency.

The City would then consider approval of the Tentative Subdivision Map. In order to approve the Tentative Subdivision Map, the City must find that the proposal is consistent with the 1993 General Plan and zoning.

In order for the Proposed Project applicant to commence grading and development of the site and homes, the City would require additional subsequent discretionary approvals including the following:

- Affordable Housing Agreement
- Design Review
- Use Permit required to construct attached multifamily units in MDR District

The City Council will also review the Final Map to ensure that all conditions have been satisfied.

The following permits and approvals[4] would be required to implement the Proposed Project, but are considered ministerial actions:

- Encroachment Permit for the road extensions
- Grading and Building Permits
- Water and Sewer Connections
- Other Administrative permits such as temporary and permanent encroachments, traffic management/construction parking, etc., and approvals would be required from other City departments

Responsible and Trustee Agencies

The EIR prepared for the Proposed Project would be used by responsible agencies and trustee agencies that may have some discretionary review or authority over approval of certain Proposed Project elements. Responsible agencies are public agencies, other than the lead agency, that have some approval authority over a project (i.e., issue a permit). Trustee agencies are state agencies having jurisdiction by law over natural resources held in trust for the people of the State of California, as identified in the CEQA Guidelines. The Proposed Project applicant would be responsible for obtaining all necessary permits, as required by law. The following responsible agency has been identified:

- San Francisco Regional Water Quality Control Board

The following agency has been identified as a trustee agency:

- California Department of Fish and Wildlife – Effects on special-status species

2.5 REFERENCES

FEMA (Federal Emergency Management Agency). 2018. National Flood Hazard Layer FIRMette. Accessed September 4, 2018.

City of St. Helena. 1993. City of St. Helena General Plan September 28, 1993.

[4] Note: Due to recent legislation under SB 330 (new Gov't Code sec. 66300), cities are prevented from "establishing or implementing any provision that . . . [a]cts as a cap on the number of housing units that can be approved or constructed either annually or for some other period. Thus, the City's Residential Growth Management System that limits residential development is no longer enforceable so would not apply to this Proposed Project.

City of St. Helena. 2018. St. Helena General Plan Update 2040, Draft Environmental Impact Report. SCH# 2010042001. October 23, 2018.

City of St. Helena. 2019. City of St. Helena 2040 General Plan Update. Adopted June 2019.

RSA. 2020. Approximate Raw Earthwork Quantities Based on Tentative Map. February 6, 2020.

CHAPTER 3.0
INTRODUCTION TO THE ANALYSIS

3.0.1 SCOPE AND FORMAT OF THE EIR

This chapter of the Draft Environmental Impact Report (EIR) discusses the environmental and regulatory setting, impacts, and mitigation measures from the proposed Hunter Subdivision Project (Proposed Project) for each of the following technical issue areas (Sections 3.1 through 3.15):

3.1 Aesthetics
3.2 Agricultural Resources
3.3 Air Quality
3.4 Biological Resources
3.5 Cultural, Paleontological and Tribal Cultural Resources
3.6 Geology and Soils
3.7 Greenhouse Gas Emissions
3.8 Hazards and Hazardous Materials
3.9 Hydrology, Drainage, and Water Quality
3.10 Land Use
3.11 Noise and Vibration
3.12 Public Services and Recreation
3.13 Public Utilities
3.14 Transportation and Circulation
3.15 Energy

It is important to note impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required California Environmental Quality Act (CEQA) review. “[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project” (*Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473 and *California Building Industry Association v. Bay area Air Quality Management District* (2015) Cal.App 4th).

The Residential Growth Management System Ordinance (Chapter 17.152) of the City of St. Helena (City) regulates the residential growth within the City to approximately 2% per year. It limits the number of building permits to nine per year for market rate housing and caps the number of dwelling units to approximately 2,800, not including regulated affordable units, guest cottages, or accessory dwelling units. Since the City adopted its Residential Growth Management System in 1979 and last updated in 2002, the state passed Senate Bill 330 (see Government Code Section 66300). Section 66300 includes language that prevents cities from “establishing or implementing any provision that . . . [a]cts as a cap on the number of housing

units that can be approved or constructed either annually or for some other period" (Section 66300(b)(1)(D)(ii) [emphasis added]).

Under current state law the City can no longer implement a restriction on the number of residential units that can be constructed. There is an exception for growth control measures of this type approved by the voters prior to Jan. 1, 2005, if the affected city is in a "predominantly agricultural county," which is defined as a county that has more than 550,000 acres of agricultural land, and at least half the county area is agricultural land. Napa County does not meet the definition of an agricultural county; therefore, this exception is not applicable to the City.

Technical Studies

A number of technical studies were prepared as part of this Draft EIR and are included in the technical appendices. Studies prepared include the results of a Land Evaluation and Site Assessment to assess agricultural land (Appendix B), Biological Resource Assessment and Wetland Delineation (Appendix D), Cultural Resources Report (Appendix E), Geotechnical Reports (Appendix F), a Phase I Environmental Site Assessment (Appendix G), Hydrology Report (Appendix H), Preliminary Water Calculations (Appendix J), and a Traffic Impact Assessment (Appendix K).

Environmental Setting

According to Section 15125 subdivision (a) of the CEQA Guidelines, an EIR must include a description of the existing physical environmental condition in the vicinity of the project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this EIR, unless noted otherwise, are based on conditions that existed in March 2018, when the NOP was published. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis.

For analytical purposes, impacts associated with implementation of the Proposed Project are compared against two different baselines: first, Proposed Project–specific effects are assessed against existing conditions at the time the NOP was first published; and second, cumulative effects are assessed against future, or "cumulative," conditions, generally defined as buildout of the City of St. Helena's 1993 General Plan because this General Plan was in effect when the Proposed Project application was deemed complete in September 2011. The City adopted the 2040 General Plan Update in May 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993

General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR will also evaluate consistency with the General Plan Update 2040 for informational purposes and the cumulative analysis will note any changes, if relevant between buildout assumptions under the 1993 General Plan as compared to the 2040 General Plan.

Existing conditions and the cumulative baseline can differ by issue area. In some instances the cumulative analysis information from the City's General Plan Update 2040 Draft EIR released in in October 2018 is referenced because this was the most current information regarding future cumulative development at the time of writing the technical section. Each technical section defines the existing conditions and cumulative baseline for the impacts being analyzed.

Project Analysis Assumptions

The Proposed Project is requesting approval of Tentative Subdivision map that includes 51 single-family lots, a lot designated for 25 attached multi-family units, and 11 accessory dwelling units. The City's Zoning Ordinance (Municipal Code Section 17.116.030) and state law provides for the construction of an accessory dwelling unit on any lot which is zoned for residential use and has an existing single-family residence. Such units may be rented (for a period of not less than 30 days) but may not be sold separately from the main residence. The Proposed Project applicant has proposed construction of 11 accessory dwelling units as part of the Proposed Project.

The Proposed Project application does not include a formal phasing plan. Therefore, for the purposes of this EIR buildout of the Project would occur based on market conditions and the timeliness of obtaining building permits. Therefore, it is assumed that the Project could take anywhere from 6 years or longer for full buildout, based on market and growth management factors. Most environmental impacts assessed in this EIR are analyzed in terms of the post-Project condition and are not substantially affected by the construction schedule. Air Quality and Greenhouse Gas Emissions for construction are affected by the length of construction. Therefore, emissions associated with a six-year buildout are conservatively assumed and provided in the air quality and greenhouse gases analysis (Sections 3.3 and 3.7).

In determining the level of significance of environmental impacts associated with the Proposed Project, the analysis in this Draft EIR assumes that the Proposed Project would comply with relevant federal and state laws and regulations, City General Plan policies, ordinances, and other adopted City documents, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the "Regulatory Setting" governing the Proposed Project and compliance with these requirements often mitigate potential impacts.

Section Format

Each technical section in Chapter 3 begins with an **introduction** that explains the issues to be evaluated, provides a general summary of comments received in response to the NOP, and identifies the primary sources reviewed to prepare the analysis. The introduction is followed by a description of the Proposed Project's **environmental setting** and **regulatory setting** as it pertains to a particular issue.

The environmental setting establishes the baseline for that particular issue area and includes information relevant to the analysis of potential impacts. The regulatory setting provides a summary of applicable federal, state, and local regulations, plans, policies, and laws that are relevant to each issue area. The regulatory setting description in each section is followed by a discussion of the **methods of analysis** and the **thresholds of significance** used to evaluate Proposed Project–specific impacts. The **project-specific impacts** discussion is followed by an analysis of the **cumulative impacts** of the Proposed Project. This section addresses what the Proposed Project's incremental contribution to any existing cumulatively significant impacts would be and identifies mitigation measures, if required. The impact statement is prefaced by a number for ease of identification. An explanation of each impact and an analysis of its significance follow each impact statement. All **mitigation measures** are identified immediately following each impact discussion. The degree to which the identified mitigation measure(s) would reduce the impact is also described. Compliance with applicable laws, policies, and City regulations is assumed and will be identified in the impact analysis. In many cases, compliance with applicable laws, policies, or regulations would reduce the significance of a potential impact; and thus, would not be identified as a separate mitigation measure.

An example of an impact statement is shown below.

3.1-1: Would the Proposed Project have a substantial adverse effect on a scenic vista? This impact would be less than significant. (The significance finding prior to mitigation is included in each impact statement).

A discussion of potential impacts of the Proposed Project is presented in paragraph form. The Proposed Project–specific impacts associated with construction and operation of the Proposed Project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local, state, and federal laws and regulations along with applicable general plan goals and policies that would reduce impacts, and assumes that the Proposed Project would comply with applicable laws, ordinances, goals, policies and regulations, and that the Proposed Project applicant would obtain all necessary permits and comply with all required conditions of those permits. In many instances, the actions that are necessary to reduce a Proposed Project impact are already required by existing laws or

requirements. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g., **significant impact, significant and unavoidable impact, potentially significant impact, less-than-significant impact, or no impact)**.

Mitigation Measures

A discussion of the applicable mitigation measures identified to reduce the significance of an impact immediately follows the impact analysis.

This section includes a statement indicating whether the mitigation measure would reduce the impact to a **less-than-significant level** or if the impact remains **significant and unavoidable** due to the absence of any available mitigation that could reduce the impact below the applicable threshold. A discussion of how the mitigation would reduce the impact is included before the mitigation measure.

Mitigation measures, if applicable, are numbered and presented in the following format.

> **AES-1** Statement of what, if any, mitigation measures are required.

Note that CEQA Guidelines, Section 15370, defines mitigation as follows:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

In addition, provided there is a "reasonable plan for mitigation" and contributions are "sufficiently tied to the actual mitigation" of the project's impacts, a commitment to contribute a fair share to such a program discharges an agency's mitigation duty under CEQA (*Save Our Peninsula Com. v. Monterey County Bd. of Supervisors* 2001) 87 Cal.App.4th 99, 141); see also CEQA Guidelines, Section 15130(a)(3) [recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"]; see also *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173).

Cumulative Impacts

An analysis of cumulative impacts follows the evaluation of Proposed Project impacts under existing conditions in each section in Chapter 3. As defined in CEQA Guidelines, Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Proposed Project, together with other past, present, and reasonably foreseeable projects causing related impacts.

An introductory statement that defines the cumulative analysis methodology and the cumulative context being analyzed for the respective sections (e.g., buildout of the City's General Plan, development within the Bay Area Air Basin) is included under the "Cumulative Analysis" discussion. In some instances, a Proposed Project–specific impact may be considered less than significant but would be considered potentially cumulatively significant in combination with other development within the surrounding area. Or, in some instances, a potentially significant impact could result on a project level but would not result in a cumulatively considerable impact. The cumulative impacts analysis is presented in the same format as the impacts section, shown above.

3.0.2 TERMINOLOGY USED IN THIS EIR

This Draft EIR uses the following terminology to describe environmental effects of the Proposed Project:

- **Thresholds of Significance:** A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Standards of significance used in this Draft EIR include those set forth in CEQA Guidelines Section 15065 (Mandatory Findings of Significance) and those derived from questions set forth in the most recent update to Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the City of St. Helena 1993 General Plan. In fashioning criteria based on these sources, City staff has also relied on its own professional judgment and experience in some instances. In determining the level of significance, the analysis assumes that the Proposed Project would comply with relevant federal, state, and local regulations and ordinances.
- **Less-than-Significant Impact:** A project impact is considered less than significant when it does not reach the standard of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Potentially Significant Impact:** A potentially significant impact is an environmental effect that could cause a substantial adverse change in the environment; however,

additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

- **Significant and Unavoidable Impact:** A significant and unavoidable impact is an environmental impact that cannot be mitigated to a less-than-significant level. There are no feasible mitigation measures available to reduce the significance of the impact; therefore, the impact is considered significant and unavoidable.
- **Cumulative Impact:** According to CEQA, “cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the “project’s incremental effect is cumulatively considerable” (CEQA Guidelines, Section 15130[a]).

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3.1 AESTHETICS / VISUAL RESOURCES

3.1.1 Introduction

This section describes the aesthetics and visual resources present in the Project area and discusses applicable federal, state, and local regulations pertaining to protection of visual resources. This section evaluates the potential effects on visual resources associated with development of the proposed Hunter Subdivision Project (Proposed Project).

Comments received in response to the Notice of Preparation (NOP) included concerns regarding the proposed design of the residential units, impacts to surrounding viewsheds and scenic vistas, impacts to landscape buffers, and light spillover impacts to the night sky. All of the concerns raised are addressed in this section. A copy of the NOP and comments received is provided in Appendix A. The Proposed Project applicant is only requesting approval of a Tentative Subdivision Map at this time; therefore, no building design details have been provided and an analysis of project design features is not included. As noted in Chapter 2, Project Description, if the Proposed Project is approved the City would require additional subsequent discretionary approvals, including Design Review.

Information contained in this section is based on site plans, a field survey, and City planning documents (including the 1993 General Plan and the 2019 General Plan). Other sources consulted are listed in Section 3.1.6, References.

3.1.2 Environmental Setting

This section describes the existing setting in the Project area and identifies the resources that could be affected by implementation of the Proposed Project.

Regional Setting

The City of St. Helena (City) is situated within the Napa Valley floor, bounded by the Mayacamas Mountain Range on the western and northern sides and the Howell Mountains on the eastern side. The region is located within the Napa Valley American Viticultural Area and is famous for the widespread vineyards that characterize the valley. The Napa River bisects the valley and flows through the eastern portion of the City. The City's terrain ranges from flat agricultural areas to gently rolling foothills. The primary regional access route to the City is State Route (SR) 29, a north-south corridor that passes through the Napa Valley. The City has a rural aesthetic characterized by open space, agricultural lands, wineries, wooded hillsides, and stream corridors. The City has views of many hills and mountainsides, including Mount St. Helena, a peak of the Mayacamas Mountain Range located in Robert Louis Stevenson State Park.

Development within the City is relatively compact, with the majority of commercial development and wineries situated along the SR 29 corridor, and residential development surrounding the Central Business District along SR 29 between Sulphur Springs Creek and Pine Street. Residential development within the City is primarily located west of Main Street and north of Sulphur Springs Creek. Flat agricultural lands surround the central developed area of the City, while limited rural residential development occupies wooded hillsides to the east and west of the City.

Project Site

The 16.9-acre Project site is characterized by row vineyards in the western portion and undeveloped land consisting of annual grasses in the eastern portion of the site (see Figure 2-2 in Chapter 2, Project Description). Approximately 40% of the Project site currently supports a small vineyard. Based on the Proposed Project's grading plan, the elevation of the site ranges from approximately 230 feet above mean sea level (amsl) on its southern edge to approximately 212 amsl on its northern edge. Adams Street terminates at the western boundary of the site, three blocks east of downtown and SR 29. Office uses, including an off-white two-story building with large reflective windows, are located immediately adjacent to the site's most western edge at the terminus of Adams Street.

Vineyards are located to the north and northeast of the Project site, with a small number of large 1- and 2-story single-family residences located north of the Project site. The George and Elsie Wood Public Library, a one-story tan-colored building with a small patch of vineyards, is located approximately 0.1 of a mile northwest of the Project site. A gravel maintenance road/public trail lined with a simple wood-post and barbed wire fence abuts the northern boundary of the Project site. One and two-story single-family and multi-family residential development is located to the south of the site. Residences to the south of the Project site include a mix of neutral-colored buildings in a variety of styles with mature trees and shrubs. Single-family residences front Grove Court and Monte Vista Avenue to the east and some include backyards while others do not. The Vineyard Valley Mobile Home Park and multi-family housing in the Hunts Grove Apartments complex are located south and east of the Project site. Multi-family residences are primarily located along Hunt Avenue and either front the street or face the Project site. These residences are separated from the Project site by either a low stone wall or a taller wood and wire fence. Residences along Del Campo Court and Del Rio Court are neutral-colored single-family residences that face the Project site.

The Napa River is located approximately 0.1 miles north and northeast of the Project site.

The Project site was designated as high-density housing in the 1975 St. Helena General Plan as Medium Density Residential (MDR) in the City's 1993 General Plan (City of St. Helena 1993), and as MDR in the 2019 General Plan. Land designated as MDR typically is for residential

purposes, and provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. The zoning designation for the Project site is also Medium Density Residential (MR) (City of St. Helena 2018).

Viewpoints

A viewshed is an analytical tool used to aid in the identification of views that could be affected by a project. The viewshed is defined as the surrounding geographic area from which a project is likely to be seen. Locations of key viewpoints that depict the viewshed visible in the Proposed Project vicinity are depicted in Figure 3.1-1 and photos from these representative viewpoints are shown in Figures 3.1-2 through 3.1-5.

Views from the Project Site

Long-range views from the Project site include views of surrounding wooded hillsides with tall trees. Surrounding hillsides including the Howell and Mayacamas mountains are visible from the Project site looking west and northwest due to the flat topography and lack of tall intervening structures. Short to mid-range views to the north of the Project site consist of the gravel maintenance road/public trail that borders the site, with vineyards visible beyond. Buildings associated with vineyards to the north of the site are also visible. Views to the south/east include views of single-family residences along Grove Court and Monte Vista Avenue, along with grassland vegetation and native plants and shrubs associated with undeveloped areas to the east of the gravel maintenance road/public trail. Adams Street is visible to the west of the Project site, along with a two-story off-white office building and the George and Elsie Wood Public Library, which are located on Adams Street. Short-range views of single-family and multi-family residences with a mix of mature trees are visible looking south/east from the Project site.

Views of the Project Site

The Project site is visible from residences to the south, as well as from the intersection of Hunt Avenue and Starr Avenue, where there is a clearing in the dense vegetation that borders the site to the south and southwest (Figure 3.1-2). From this intersection, the on-site vineyard and annual grasses on the site are visible in the foreground, with the Howell Mountains visible in the background.

The Project site is visible from the eastern terminus of Adams Street, which is adjacent to the western portion of the site (Figure 3.1-3). Views from this location are of the on-site vineyard, as well as vineyards on surrounding properties. Surrounding wooded hillsides can be clearly seen in the background from this location. Large, mature trees are also visible at the southern boundary of the site. From the gravel maintenance road/public trail to the north and northwest of the Project site there are uninterrupted views of the vineyard and grass areas on the Project site

in the foreground with views of multi-story residential units and tall evergreen trees in the background (Figure 3.1-4). Surrounding mountain ranges are largely blocked from view from the gravel maintenance road/public trail looking south towards the Project site. Views of the Howell Mountains can be seen looking to the east from the trail (Figure 3.1-3), and the Mayacamas Mountains can be seen looking towards the west from the trail (Figure 3.1-5). Residences along Del Rio Court to the southeast of the Project site experience views of grass and vegetation on the site in the foreground, and views of the Howell Mountains in the background (Figure 3.1-5). Adjacent residences are considered to have high sensitivity – both their expectations of visual quality and their time of exposure is typically greater than motorists traveling on adjacent roadways that comprise the other viewer groups.

The Project site is not visible from major transportation corridors such as SR 29/Main Street or the Silverado Trail, which is located approximately 0.2 miles east of the Project site. The Project site is also not visible from public parks in the vicinity of the site.

Scenic Resources

The California Department of Transportation designates SR 29 as an eligible state scenic highway (Caltrans 2018). The Project site is located approximately 0.2 miles east of SR 29. However, it is not visible from the highway due to intervening trees, buildings and structures. While there are many scenic resources and vistas within the City, there are no specific scenic resources or vistas designated for protection in the City's 1993 General Plan or the 2019 General Plan. No other scenic viewsheds or scenic highways are identified in the Project vicinity. No rock outcroppings or other significant natural or historical features exist on the site.

Light and Glare

Nighttime lighting is necessary to provide and maintain a safe and secure environment. Light that falls beyond the intended area of illumination is referred to as "light trespass." Types of light trespass include spillover light and glare. Spillover light, which is light that illuminates surfaces beyond the intended area, is typically caused by artificial lighting sources, such as from building security lighting, signs, parking lot lights, roadway lights, and stadium lights on playing fields. Spillover light can adversely affect light-sensitive uses (i.e., adjacent residences), by creating unwanted illumination. Because light dissipates as it moves farther from its source, the intensity of the lighting source is often increased to compensate for dissipating light, which can increase the amount of light that illuminates adjacent uses. The type of light fixture determines the extent to which light will spill over onto adjacent properties and/or be visible from far away. Modern, energy-efficient fixtures that face downward, such as cutoff-type fixtures and shielded light fixtures, are less obtrusive than light fixtures that have been used in the past.



SOURCE: Bing Maps 2019

DUDEK

0 120 240 Feet

FIGURE 3.1-1

Photo Locations

Hunter Subdivision Project

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View 1: Views from Gravel Maintenance Road/Public Trail Looking North



View 2: View from intersection of Hunt Avenue and Starr Avenue looking north

FIGURE 3.1-2

Existing Views

Hunter Subdivision Project

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View 3: View from the eastern terminus of Adams Street looking toward project site



View 4: View from the existing gravel maintenance road/public trail looking east

FIGURE 3.1-3
Existing Views
Hunter Subdivision Project

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View 5: View from the existing gravel maintenance road/public trail looking south



View 6: Views of on-site vineyards from gravel maintenance road/public trail

FIGURE 3.1-4

Existing Views

Hunter Subdivision Project

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View 7: View from the existing gravel maintenance road/public trail looking west



View 8: View from Del Rio Court looking west

FIGURE 3.1-5
Existing Views
Hunter Subdivision Project

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The second type of light trespass is glare, which results when a light source in the field of vision is brighter than the eye can comfortably accept. Glare can result from sunlight or from artificial light reflecting off building exteriors, such as glass windows, metal roofs or other highly reflective surface materials. Squinting or turning away from a light source is an indication of glare. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles. Glare resulting from sunlight reflecting off building exteriors can be reduced with design features that use low-reflective glass and exterior materials and colors that absorb, rather than reflect, light.

As the Project site is undeveloped, it does not contain existing light or glare sources. Existing light sources in the vicinity of the site include internal and external lighting from residences to the south, west and east of the Project site, vehicle headlights along adjacent roadways and buildings to the north of the site. Streetlights also line Adams Street to the west and Starr Avenue to the south at regular intervals up until the Proposed Project boundary.

3.1.3 Regulatory Setting

Federal Regulations

There are no federal regulations pertaining to visual resources that would apply to the Proposed Project.

State Regulations

The following state regulations would apply to the Proposed Project.

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. County roads can also become part of the Scenic Highway System. To receive official designation, the county must follow the same process required for official designation of State Scenic Highways.

SR 29 throughout Napa County is eligible for designation as a state scenic highway. Although SR 29 is located approximately 0.2 miles from the Project site, the site is not visible from the highway due to intervening buildings and structures. There are no other designated or eligible highways within the Project vicinity (Caltrans 2018).

Local Regulations

The following local land use policies would apply to the Proposed Project.

City of St. Helena 1993 General Plan

The Land Use and Growth Management Element, Community Design Element and Open Space Element of the St. Helena 1993 General Plan provides guiding and implementing policies regarding visual resources. The City's General Plan states, "The "planned unit development" approach provides developers with greater design flexibility while ensuring the City adequate design review. The intent is to create developments that complement existing community character. The City will favor planned unit developments that provide generous amounts of open space, covered parking, the separation of pedestrian and vehicle traffic, and on larger tracts, a variety of housing types: single-family detached, duplex, and multi-family dwellings, in one and two-story structures" (City of St. Helena 1993).

Land Use and Growth

Policy 2.6.15: Encourage new residential development in all density ranges that is consistent with scale and character of the older residential districts of the City, particularly the neighborhoods west of Main Street.

Policy 2.6.17: Minimize situations where new residential development will block public view of surrounding vineyards.

Policy 2.6.19: Permit higher density housing in single family neighborhoods as long as the development character of the single family area is maintained (i.e., lot widths, orientation to street, building heights, etc.).

Policy 2.6.20: Encourage the subdivision and development of larger parcels (3 acres or more) as "planned unit developments" to ensure a more comprehensive and creative approach to planning the development as a single unit.

Community Design

Policy 4.3.4: Strengthen community identity by appropriate building design, size, and site landscaping.

Policy 4.3.5: Require future residential development to conform to the pattern and density of older, neighboring areas of town in order to complement existing town character and ensure that densities are high enough to protect against unnecessary incursion into vineyard agricultural areas.

Policy 4.3.23: Set residential densities throughout St. Helena at levels that will ensure that minimum encroachment on productive vineyard land or open space will occur during the life of the plan.

Policy 4.3.24: Encourage higher density residential development near the commercial core to provide convenient pedestrian access to shopping and services. Ensure that higher density projects are similar in design and scale to adjacent single family neighborhoods.

Policy 4.3.25: Within the primary urban area of St. Helena, encourage variety in housing types and density consistent with those found in the older neighborhoods of town. Encourage varying lot widths and configuration, but limit the allowable building envelope by parcel size to avoid overbuilt conditions.

Policy 4.3.26: Encourage residential building siting and design that is similar to that found in the older neighborhoods in town. In these areas consistent setbacks, porches and generously landscaped front yards add to community enjoyment by all. Restrict location of driveways and garages to minimize their visual impact on the street.

Policy 4.3.27: Encourage large specimen street trees and generous landscaping to shade homes and the street and to link various neighborhoods.

Policy 4.3.28: Limit residential development that backs up to vineyards and thereby blocks views of those vineyards by passersby.

Policy 4.4.2: When reviewing development proposals in areas not already served by a system of streets, City staff shall ensure that proposed development is sited in such a manner that it will not obstruct the logical extension of existing streets and infrastructure, or the expansion of the City's grid-like pattern of streets into newly developing areas. As with existing street patterns, new extensions of the city grid need not be rigid in their dimensions and layout, but should be evaluated on their contribution to the formation of a logical, interconnected system of streets that facilitates the safe and efficient flow of pedestrian, bicycle, and vehicular traffic, and establishes an attractive neighborhood environment. Staff can consider variations to the logical extension of existing streets if the project proponent can demonstrate that safety, aesthetics, topography, or other factors make such an extension ineffective or undesirable, or that such an extension would cause the landowner undue hardship. Street widths should be the minimum adequate for two-way traffic and parking. Narrower street widths as found in the older parts of St. Helena contribute to a more intimate small town scale and discourage speeding.

Policy 4.4.3: Driveways and garages should be as unobtrusive as possible, with garages preferably located at the rear of the lot.

Policy 4.4.4: Where streets are at the edge of the community, adjacent to vineyards, development should only occur on one side, leaving open views to the agricultural lands and hillsides.

Policy 4.5.1: The sense of a strong connection to the surrounding agricultural open space and hillsides must be preserved in the future. Views of vineyard, hillsides, creeks and major landscape features should be maintained.

Policy 4.5.2: Open space should be brought into the community wherever possible as a reminder of the natural setting of the community. Landscaping of residential areas should be generously oriented toward the enjoyment of the passerby. Street tree planting programs shall be pursued throughout the city to provide shade, a special character, and pedestrian comfort. Vineyard plantings within residential and commercial areas is encouraged.

Policy 4.6.1: Retain key undeveloped open space areas where views to the vineyard and hills can be maintained. Require that these areas be planted in vines or other low vegetation.

Policy 4.6.2: Discourage the use of cul-de-sacs. Where cul-de-sacs are necessary, do not allow houses to block views out to the vineyards. View corridors out from the ends of streets should be preserved.

Policy 4.6.3: Use streets to form the edge of the developed community. Maintain the edge fronting the vineyards as permanently undeveloped so that views of vineyards and beyond can be enjoyed by the general populace. Orient lots facing across the street to orient toward this view.

Policy 4.7.3: The new eastern entry via the Adams extension should be planned to maximize open space and vineyard views. Where possible, vineyards should be maintained up to the road edge. Residential development should front on the road with sufficient lot depth to allow a generous setback for sound and privacy. Large specimen street trees should be planted in residential areas to mitigate the scale of the street and encourage pedestrian and bicycle movement.

Policy 4.7.4: Existing east and west entries should be maintained in their current appearance, protecting views of vineyards and the surrounding hillsides wherever possible.

Open Space and Conservation

Policy 6.4.11: Integrate existing significant trees into future development.

Policy 6.4.12: Require replacement trees where existing significant trees cannot be saved.

Policy 6.4.13: Require street trees as a condition of new development.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Land Use and Growth Management Element, Community Design Element, and Open Space Element of the 2019 General Plan provide guiding and implementing policies regarding visual resources. Compared to the 1993 General Plan, the 2019 General Plan is similar in encouraging residential development that is consistent with the design and character of the City's existing older neighborhoods (City of St. Helena 2019).

Land Use and Growth Management

Policy LU2.2: Encourage new residential development that is consistent in design, size, color, and floor area ratio (FAR) with the older residences in the neighborhood.

Policy LU2.4: Encourage the subdivision and/or development of larger parcels as Planned Unit Developments to ensure a more comprehensive and creative approach to planning the development as a single unit. This does not prohibit use of Planned Unit Developments on parcels less than three acres.

Policy LU2.5: Encourage the development of higher density housing in areas near the center of the city and close to recreation and services, such as transit, retail, and public facilities.

Policy LU2.6: Allow residential density at the higher end of the permitted range for single family development within Medium and High Density Residential Land Use designations as long as the development character of the single family area is maintained, including lot widths, orientation to street, building heights, onsite parking, traffic, and noise, among other considerations.

Policy LU2.7: Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.

Community Design

Policy CD1.1: Ensure high-quality design and construction through a robust design review process.

Policy CD1.8: Require, to the extent feasible, that all new development include underground utilities to minimize their negative visual impact. In addition, funding sources to underground electrical lines shall be sought so the undergrounding of existing overheard lines can occur over time.

Policy CD3.1: Limit building envelope sizes and require adequate side and rear setbacks to preserve the character of existing residential areas and to avoid overbuilt lots. Require future development to conform to the pattern and density of the neighboring areas. In order to complement existing town character and protect against incursion into vineyard agricultural areas.

Policy CD3.2: Ensure that new residential designs contribute positively to existing neighborhoods by complementing character and incorporating design features, such as front porches, façade articulation and stepbacks.

Policy CD3.3: Encourage the use of landscaping and tree plantings as buffers between sidewalks and residential uses. Discourage the removal of existing trees and adopt more comprehensive tree preservation standards.

Policy CD5.1: Preserve the visual and physical connection to agriculture by protecting views from streets, parks, and open spaces to vineyards, agriculture, and hillsides. Where new streets are extended adjacent to agriculture, encourage hillside, and vineyard views by maintaining agricultural activities at the road edge. Existing east and west entries should be maintained in their current appearance, protecting and improving views of vineyards and the surrounding hillsides wherever possible.

Policy CD5.C: New development shall not result in significant light, glare, and noise that could affect residents, visitors, and wildlife. Lighting shall be shielded to reduce glare and shall be cast downwards. Outdoor lighting shall occur primarily for the purpose of security and safety. Upcast lighting shall be discouraged to minimize impacts on wildlife and to retain the agricultural ambience of St. Helena. All lighting shall conform to the Lighting Zone 2 requirements of Title 24 of the California Building Code.

Open Space and Conservation

Policy OS4.1: Protect and enhance tree resources in developed and undeveloped areas. Efforts should include: adequate maintenance of street trees, requiring replacement trees where existing significant trees cannot be saved, and requiring street trees as a condition of new development.

St. Helena Zoning Ordinance

Chapter 17.164, Design Review, of the City's Zoning Ordinance addresses requirements for design review of a project. Design review is required for any new development or the modification of the exterior of structures within the City. Design review is conducted to promote qualities in the environment which bring value to the community, to foster attractiveness and functional utility within the community, to preserve the character and quality of the community's heritage, to protect public investments in the area, and to encourage a mix of uses within permissible use zones. If the Proposed Project is approved, future construction of residential structures within the Project area would require design review.

St. Helena Subdivision Ordinance

Chapter 16.32, Design Standards and Improvements, Section 130 of the City's Municipal Code protects areas such as ridges, hilltops, and other scenic areas from development that impacts scenic resources. The ordinance mandates that development must ensure adequate mitigation for protection and/or preservation of scenic resources within these areas and encourages using the form of the land and vegetation to ensure separation of building areas from scenic areas. Mitigation may require the use of plantings that are consistent and compatible with those in the area. The ordinance states that screening required for shielding of development areas should consist of natural materials of the area, including natural vegetation or land form modification to conform to the natural terrain.

The City's Municipal Code does not contain lighting requirements pertinent to the Proposed Project and does not contain any policies that address the protection of dark skies from lighting and glare impacts.

3.1.4 Impacts

Methods of Analysis

The value attached to changes in visual character is largely subjective. This EIR does not assign a judgment of "good" or "bad" to a proposed change; rather, it identifies any "substantial adverse effect," as defined below, as a significant environmental impact.

The determination of when changes to the visual environment become a substantial adverse effect is based on the following primary factors: (a) the existing scenic quality of an area; (b) the level of viewer exposure and concern regarding visual change; and (c) the level of actual visual change caused by the project as seen by a given viewer group. The overall visual sensitivity is first established based on existing visual quality, viewer exposure, and viewer concern. These factors are then considered together with the level of expected visual change or contrast and significance. Visual change is an overall measure of the alteration or change in basic visual attributes such as form, line, color, and texture as a result of the project. Thus, a substantial adverse effect can occur when a project results in high levels of visual change or obstruction of scenic views by sensitive receptors.

The California Environmental Quality Act (CEQA) does not require that privacy be addressed in an EIR because it is not an environmental issue. In addition, views of a project by a limited number of individuals do not constitute public views and are typically not evaluated under CEQA (See *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477). This case confirmed that if agency policy does not protect private views, then impacts to such private views are not significant impacts under CEQA. The most recent update to the CEQA Guidelines also clarifies that public views "are those that are experienced from a publicly accessible vantage point." (CEQA Guidelines Appendix G).

A description of the Project site and the surrounding area is derived from a site visit and photographs. The City's 1993 General Plan and 2019 General Plan were both reviewed to determine what visual elements have been deemed valuable by the community. The impact analysis focuses on the manner in which development of the Project site could alter the visual elements or features that exist in or near the Project area.

Visual simulations of what the site could look like from various viewpoints were prepared for the Proposed Project, which are referenced to prepare the impact analysis. Because the Proposed Project applicant is only requesting approval of a Tentative Subdivision Map, no building designs or architectural features are available. Therefore, the visual simulations are provided only to help the reader visualize how the Project site could change once developed. The visual simulations only depict building massing and proposed landscaping, consistent with the MR zoning and the landscape plan provided by the Proposed Project applicant. To represent future development a random mix of one and two-story buildings is included. Building heights range from approximately 18-feet for a one-story residence up to 28-feet for a two-story unit. The multi-family units were assumed to be up to 30-feet tall, the maximum building height allowed under the MR zoning. The grade of the Project site, with the exception of the multi-family housing (Lot 52), is based on the Proposed Project's grading plan. Since no grading plan was provided for the multi-family housing, all buildings and roads were placed on existing grade level. Trees are shown at an estimated 10 years growth with heights varying from 16 to 25 feet.

All tree species are shown during the summer months with full green leaves. The Proposed Project's proposed landscape plan shows a tree on the east side of Adams Street, directly in front of where the photo was taken (see Figure 2-6 in Chapter 2, Project Description). In Simulation 1, this tree was removed as it blocked views of the proposed development.

Adverse visual effects can include the loss of natural features or areas, the removal of urban features with aesthetic value, or the introduction of contrasting urban features into natural areas or urban settings. Natural features may include but are not limited to open space; native or ornamental vegetation/landscaping; topographic or geologic features; and natural water sources. The loss of natural aesthetic features or the introduction of contrasting urban features may have a local impact, or, if part of a larger landscape, may contribute to a cumulative decline in overall visual character. The vineyard present in the southwestern portion of the Project site would be considered a natural feature.

Urban features that may contribute to a valued aesthetic character or image may include: structures of architectural or historic significance or visual prominence; public plazas, art or gardens; heritage oaks or other trees or plants protected by the City; consistent design elements (such as setbacks, massing, height, and signage) along a street or district; pedestrian amenities; landscaped medians or park areas; etc. There are no urban features present on the Project site.

This analysis assumes that development of the Proposed Project would comply with the City's 1993 General Plan goals and policies and other relevant requirements; therefore, such policies and requirements are not specifically identified as mitigation.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views (public views are those experienced from a publicly accessible vantage point) of the site and its surroundings. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Regarding the visual character and quality of the site, this site exhibits characteristics of both urban and non-urban character. The Project site is within the City's adopted Urban Limit Line, is designated for urban (medium density residential) development and is adjacent to existing residential development. The site is also adjacent to an agricultural area and the Napa River, and therefore exhibits non-urban characteristics. The City's Municipal Code includes Chapter 16.32, Design Standards and Improvements, which provides guidance for scenic resources (Section 16.32.130), aesthetics, and design, including zoning standards for height, bulk, and setbacks which are relevant to the Project and have been reviewed.

The visual impacts of the Proposed Project are evaluated within this framework, while giving consideration to the non-urban aspects of the Proposed Project location.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Scenic Resources within a State Scenic Highway

As discussed previously, although the Project site is located approximately 0.2 miles from SR 29, an eligible state scenic highway, it is not visible from the highway due to intervening trees, buildings and structures. The Project site does not contain any scenic resources such as rock outcroppings, or other significant natural or historical features that are visible from a state scenic highway and the Proposed Project would not limit views of such features from SR 29. Therefore, potential impacts to scenic resources (second significance threshold listed above) are not discussed further.

Impacts and Mitigation Measures

3.1-1: Would the Proposed Project have a substantial adverse effect on a scenic vista? This impact would be less than significant.

The City's 1993 General Plan as well as the City's recently adopted 2019 General Plan do not designate any specific scenic resources or vistas within the City for protection. The term vista generally implies an expansive view, usually from an elevated point or open area. A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. This can include public views of agricultural open space, vineyards, creeks, and major landscape features. Scenic vistas can also provide views of significant structures and buildings.

The Proposed Project is proposing a Tentative Subdivision Map that includes lots for single-family homes as well as a 3.4-acre parcel designated for multi-family housing. Future development of the site would introduce new housing in an area that is currently undeveloped grassland with the exception of a small vineyard. Public views of the Project site are limited and generally available from the gravel maintenance road/public trail that borders the site along the north and northwest in addition to nearby public and private roads including Adams Street to the south, Starr Avenue to the southeast, and Del Rio Court to the northeast of the site. Public views from these areas include views of green grass during the early spring before the grass areas turn brown through the remainder of the year. Included are views of a mature vineyard with elevated trellises located in the south/southwest portion of the site. The Project site does not represent a scenic vista because it does not contain unique resources that would be considered a highly valued landscape enjoyed by the public, nor is the site visible from an elevated area that affords public views of a highly valued landscape. In addition, given the size and location of the Project site it does provide expansive views that constitute a vista. Views of the mountains and hillsides to the north and northwest of the site would be considered a scenic vista.

The 1993 General Plan does not contain any goals or polices specific to protecting or preserving scenic vistas, but Policy 4.5.1 of the 1993 General Plan is intended to preserve a sense of a strong connection to the surrounding agricultural open space and hillsides by maintaining views of vineyards, hillsides, creeks and major landscape features. This is essentially re-stated in Policy CD5.1 in the 2019 General Plan, which intends to "Preserve the visual and physical connection to agriculture by protecting views from streets, parks, and open spaces to vineyards, agriculture, and hillsides." The Proposed Project has been designed to protect views of the surrounding hillsides and open spaces areas through the orientation of Starr Avenue and Adams Street.

Development of the Project site would be required to comply with the City's land use, and development guidelines set forth in the City's Municipal Code. Specifically, Chapter 16.32, Design Standards and Improvements which requires scenic areas, defined as areas that contain ridges or hilltops, to include adequate mitigation for protection and/or preservation of the scenic resources, defined as intermittent, seasonal, or permanent waterways; tidal marshes or freshwater marshes; significant wildlife habitat; or significant archeological, paleontological or historic sites; undergrounding of utilities unless exempted; and grading plans that maximize retention of natural landforms such as rolling hills and areas of extensive vegetation. In addition, the Proposed Project applicant is required to comply with Chapter 17.164, Design Review, of the City's Zoning Ordinance which sets forth specific design standards for residential development. Although development of the Project site would remove a majority of the existing vineyard and open space on-site and may decrease unobstructed views of the hillsides to the north and west visible from public viewpoints, the Project site itself is not considered a scenic

vista, does not contain a highly valued landscape, nor is it located within a scenic vista identified in either the 1993 General Plan or the 2019 General Plan. Therefore, the Proposed Project would not have a substantial adverse impact on a City-designated scenic vista and the impact would be **less than significant.**

Mitigation Measures

None required.

3.1-2: Would the Proposed Project conflict with zoning and other regulations that govern scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings, or conflict? This impact would be less than significant.

The Proposed Project includes a Tentative Subdivision Map, which, if approved, would allow for development of the Project site with single-family residential units as well as accessory dwelling units, attached multifamily residential units, roads, and landscaping. The Project site is presently undeveloped with the exception of an existing vineyard located in the southwestern portion of the site, as described in Section 3.1-2. Development of the Project site would change the undeveloped character of the site from vineyard and annual grasslands to a developed urbanized environment. Based on the Proposed Project's grading plan the proposed elevation of the site would be approximately 4 feet higher than the existing elevation of surrounding properties, primarily along the southeast boundary. Vineyards in the southwestern "panhandle" portion of the Project site would be retained, but the remainder of the existing vineyard would be removed to accommodate development.

Because the current Proposed Project entitlement is a Tentative Subdivision Map, once housing plans are submitted the Proposed Project applicant is required to comply with the City's Design Review Ordinance (Chapter 17.164 of the City's Zoning Ordinance) and undergo design review to ensure the proposed development is visually consistent and compatible with the applicable General Plan and with adjacent buildings as well as the existing environment.

It is assumed future development would comply with the building height and mass requirements of the site's MR zoning which allows buildings up to 30 feet tall, accessory buildings up to 15 feet tall, and widths not exceeding 60% of the width of the lot as measured at the front elevation (see Section 17.40.060 of the Zoning Code). The Proposed Project is consistent with the type and density of existing residential development in the Project vicinity, and is consistent with 1993 General Plan Policy 2.6.15, which encourage new residential development consistent with the scale and character of the older residential neighborhoods in the City. Under the 1993 General Plan MDR land use designation a density of between 5.1 to 12.0 dwelling units per acre (du/acre) is permitted. The Proposed Project is proposing an average density of 5.1 du/ac. In

addition, the Proposed Project is also consistent with Policy LU2.2 included in 2019 General Plan, which is similar to the previous policy in encouraging new residential development that is consistent in design and floor area ratio with older residences in the neighborhood, as well as Policy CD3.1 which limits building envelopes and requires side and rear setback to preserve the character of existing residential areas. Proposed streets also include landscape strips or medians for street trees. Appropriate landscaping is required under the City's Design Review Ordinance (Chapter 17.164) and Subdivision Ordinance (Chapter 16.32 Section 130).

The Proposed Project is within the City's Urban Limit Line and would be consistent with the type and character of residential development adjacent to the site. The design of the subdivision maintains the existing street pattern and maintains existing street views of the surrounding area, consistent with 1993 General Plan Policies 4.4.2, 4.4.4, 4.5.1 and 4.6.3, and 2019 General Plan Policy CD5.1. New and extended streets within the Project site would be consistent with existing roadway patterns, per 1993 General Plan Policy 4.4.2. Importantly, Street "B" would terminate in an easement that would maintain views of the riparian corridor and hills to the northeast (see Figure 2-4, in Chapter 2, Project Description). On-site electrical, natural gas and telecommunications connections would all be installed subsurface and no overhead facilities would be provided, consistent with 2019 General Plan Policy CD1.8 which encourages undergrounding of such services to reduce visual clutter. The Proposed Project would not conflict with the underlying MR zoning designation and is generally consistent with goals and policies that address visual resources in the City's 1993 General Plan and 2019 General Plan and the impact would be **less than significant.**

Due to the location of the Project site adjacent to the 1993 General Plan Urban Limit Line and near rural undeveloped land to the north/northwest and the Napa River to the northeast, an analysis of the how development of the site could degrade the existing visual character and affect the quality of public views of the Project site and its surroundings is included. Due to the flat topography of the City and dense development to the west and south of the Project site along with trees and other landscaping, views of the site are limited and primarily available from private property (i.e., backyards), at the terminus of Starr Avenue and Adams Street, and along Del Rio Court (a private street) within the immediate vicinity of the site. The gravel maintenance road/public trail that borders the north/northwest boundary of the site used by the public as a walking trail also provides public views of the site. Long-range views of surrounding wooded hillsides are visible from public areas surrounding the site due to its flat topography and lack of tall intervening structures. The Proposed Project would modify long-range views of existing vineyards located to the west and on the Project site as well as views of rolling hillsides which would be partially blocked by development of new residences. However, although long-range views of hillsides and views of the on-site vineyard and open space are available in the vicinity of the Project site, these views are not unique in that views of these features are available throughout the City.

To illustrate how development of the site could look and how it could affect public views and the existing visual character, visual simulations have been prepared. The visual simulations do not provide building designs or architectural features because the Proposed Project applicant is only requesting approval of a Tentative Subdivision Map at this time, thus the visual simulations only include building massing and proposed landscaping to demonstrate how the Project site could be altered with development.

A description of these viewpoints is included in the discussion below and the location of viewpoints is provided on Figure 3.1-6. These viewpoints include public views of the Project site from Starr Avenue, the extension of Adams Street, the gravel maintenance road, and from Del Rio Court (a private street). As described previously, vineyards in the southwestern "panhandle" portion of the Project site would not be removed. However, these viewpoints shown in Figure 3.1-7 through 3.1-10 include those areas where the vineyards would be removed and visual changes to the Project site would be greatest.

As shown in Figure 3.1-7, the view looking northeast from the proposed extension of Adams Street currently includes views of the existing maintenance road, a portion of the existing vineyard, open space with green grasses, evergreen trees in the background to the northeast bordering homes, and hillsides in the background to the north. The Proposed Project would change views at this viewpoint through removal of the vineyards and development of roads, residences, and new landscaping. The existing maintenance road at the forefront of this view would be replaced with a small section of paved road (Adams Street). Proposed Project streets also include landscape strips or medians for street trees which would reduce the effects of visual change and provide consistency with the surrounding neighborhoods. Hillsides in the background would still be available to the north, but trees bordering residences closer to the northeast would be blocked from view by the new residential units. While these views from the existing eastern terminus of Adams Street would change, as shown in the visual simulation provided in Figure 3.1-7, the road would form an edge between the proposed residential development and agricultural uses to the north and northwest and would preserve public views to the north and west from the existing trail, consistent with 1993 General Plan Policy 4.4.4 to leave open views of agricultural lands and hillsides, Policy 4.6.3 to maintain the edge fronting vineyards as undeveloped to preserve views, and Policy 4.7.3 to maximize open space and vineyard views near Adams Street.



SOURCE: Bing Maps 2020

DUDEK

0 120 240 Feet

FIGURE 3.1-6

Visual Simulation Locations

Hunter Subdivision Project

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Existing Conditions - Looking northeast from the proposed extension of Adams Street



Visual Simulation - Looking northeast from the proposed extension of Adams Street

FIGURE 3.1-7
Simulation 1
Hunter Subdivision Project

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As shown in Figure 3.1-8, public views from the proposed extension of Starr Avenue looking north and northwest across the Project site would change from the existing undeveloped character to a developed environment. Existing views include limited views of the hillsides to the north and evergreen trees bordering residential uses farther to the east as well as green grassland that characterizes the Project site. A portion of the vineyard is also visible, with plantings arranged in a parallel fashion running northwest to southeast. The visual simulation in Figure 3.1-8 illustrates how public views could be affected by the Proposed Project due to the introduction of new buildings into the area. The extension of Starr Avenue would maintain the existing northwest view of open space and the hills in the background, although new houses would partially restrict this view from the existing road terminus, as shown in the figure. The existing vineyards would be replaced with residential homes and a paved road would replace the on-site grassland. The change to the Project site would be similar to the views presented in Figure 3.1-7 from the extension of Adams Street.

Figure 3.1-9 shows the existing and proposed views from the area looking south/southeast from the maintenance road. Existing long-range views include evergreen trees and hillsides in the distance. On the Project site itself, there is a view of a stretch of undeveloped green grassland in the foreground with vineyards visible in the distance. The Proposed Project would change public views of this area by introducing residential homes and a paved road (Street “C”) surrounded by street trees. As shown in the visual simulation in Figure 3.1-9, new housing development in the foreground would be generally consistent with the height of existing trees in the background, ensuring that views of the hillsides to the south from this area are maintained. The Tentative Subdivision map includes a setback of undeveloped space between the proposed Street “C” and the maintenance road, as shown in the visual simulation.

As shown in Figure 3.1-10, the existing view generally looking west from Del Rio Court includes views of a large grassy depression in the center of a stretch of undeveloped grassland (City’s detention basin). A few shrubs exist around the edge of this depression. There are also views of evergreen trees farther west, with buildings visible in the distance, along with hillsides in the background. Existing views of the Project site are generally limited from this area due to topography. The Proposed Project would alter the site from undeveloped grassland and vineyards to single-family homes, but views of the open space (including the City’s detention basin) in the foreground and distant hills would still be visible as shown in Figure 3.1-10. Views of distant buildings and a cluster of evergreen trees would be replaced by new homes bordered by fences.

As shown in the above visual simulations, the Proposed Project would remove a majority of the existing vineyard and open space that characterize the site and would decrease unobstructed views of the hillsides to the north and west visible from public viewpoints. However, views of agricultural and mountainous features in the City are not unique to the

Project site such that the Proposed Project would substantially impact publicly available views. As mentioned, additional discretionary approvals and Design Review would be required for specific Proposed Project components, as the current Proposed Project entitlement is only approval of a Tentative Subdivision Map. Therefore, the Proposed Project would not conflict with applicable regulations governing scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings and the impact to visual resources would be **less than significant**.

Mitigation Measures

None required.

3.1-3: Would the Proposed Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? This impact would be potentially significant.

Development of the Project site would introduce new sources of lighting including exterior building lights and overhead streetlights along all residential streets. Indoor and outdoor lighting associated with new residences and streetlights would increase lighting in the Project area relative to existing conditions. Additionally, sun reflecting off the windows of the proposed development could create daytime glare. However, this type of development does not include large expanses of glass or reflective building materials that can result in daytime glare conditions. Therefore, the potential for Proposed Project development to result in glare that could adversely affect daytime views in the area and result in an impact is **less than significant.**

All lighting would be required to conform to the Lighting Zone 2 requirements of Title 24 of the California Building Code. The City does not have any adopted Design Guidelines or policies in the 1993 General Plan that specify lighting be shielded and downward focused to avoid spillover light effects. However, the 2019 General Plan does include Policy CD5.C which requires new development install lights that are shielded and cast downwards, and to conform to the Lighting Zone 2 requirements of Title 24 of the California Building Code. Because new light sources would be introduced into an area that is currently undeveloped which could adversely affect nighttime views, and the City's 1993 General Plan and Zoning Ordinance do not include standards for lighting this is considered a **potentially significant impact.**



Existing Conditions - Looking north/northwest from the proposed extension of Starr Avenue



Visual Simulation - Looking north/northwest from the proposed extension of Starr Avenue

FIGURE 3.1-8
Simulation 2
Hunter Subdivision Project

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Existing Conditions - Looking south/southeast from the maintenance road



Visual Simulation - Looking south/southeast from the maintenance road

FIGURE 3.1-9
Simulation 3
Hunter Subdivision Project

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Existing Conditions - Looking west from Del Rio Court



Visual Simulation - Looking west from Del Rio Court

FIGURE 3.1-10
Simulation 4
Hunter Subdivision Project

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Mitigation Measures

Implementation of Mitigation Measure AES-1 requires lighting design guidelines be developed for the Proposed Project and that Proposed Project lighting be designed to minimize glare and light spillover. Compliance with this mitigation measure would ensure impacts related to lighting would be reduced to less than significant.

AES-1: To minimize spillover light while ensuring adequate nighttime security, the Project applicant shall prepare lighting design guidelines for the Project to be reviewed and approved by the City as part of the Design Review process. The lighting design guidelines shall include a lighting plan noting fixtures and lumens, and standards such as, lighting is to be shielded and downward focused to reduce glare and spillover light, up cast decorative lighting shall be limited to minimize effects on wildlife and to retain the rural ambience of the area, and the use of mirrored glass shall not be permitted. The lighting guidelines shall conform with Lighting Zone 2 of Title 24, Part 6, of the California Code of Regulations. The guidelines and lighting plan shall be approved as part of the Design Review application.

3.1.5 Cumulative Impacts

The cumulative analyses for aesthetics, including light and glare, is based on the buildout of development identified in the City's 1993 General Plan. While the Proposed Project is required to be evaluated under the 1993 General Plan, any changes relative to the 2019 General Plan are also evaluated for informational purposes. The geographic scope of the cumulative impact analysis for aesthetics includes the area that comprises the viewshed in which the Project site is visible, and the views visible from the Project site, which includes development in the immediately surrounding areas. As the Project site is not considered a scenic vista, this issue is not discussed as a cumulative impact.

3.1-4: Would the Proposed Project contribute to cumulative changes in the existing visual character or conflict with applicable regulations governing scenic quality? The Project's contribution would not be considerable.

As stated above, the cumulative context for aesthetics includes the area that comprises the viewshed in which the Project site is visible. There were no cumulatively significant aesthetics impacts identified in the 1993 General Plan EIR or the 2019 General Plan EIR. It was determined that the City's design review process, in combination with General Plan policies would maintain the high-quality visual character of existing and future development, would limit impacts to agricultural lands, and would primarily contain growth within the Urban Limit Line, ensuring that cumulative aesthetic impacts would be less than significant. Thus, there is no existing cumulative impact related to visual character or scenic quality.

As there is no existing cumulative impact related to this topic, the Proposed Project would not have a considerable contribution. As discussed under Impact 3.1-2, the Proposed Project would alter the existing visual character of the Project site by developing a residential subdivision on land that is currently undeveloped. However, this development would occur consistent with both the 1993 General Plan and also the 2019 General Plan 0 policies, zoning, and design review regulations to address visual quality in the City. The 2019 General Plan includes policies to minimize light and glare and a policy to encourage undergrounding of electric lines to reduce visual clutter, Policies CD5.C and CD1.8, respectively. At a localized level, there are no approved or reasonably foreseeable projects that would be visible from the Project site, with the exception of a single-family residence, accessory dwelling unit and barn under construction to the west of the Project site. With consideration of the above factors and the absence of an existing cumulative impact, the Proposed Project's contribution would not be considerable.

Mitigation Measures

None required.

3.1-5: Would the Proposed Project contribute to a cumulative increase in light and glare? The Project's contribution would not be considerable.

The cumulative context for light and glare would be other development in the surrounding area that could contribute to an increase in light and glare. As discussed under Impact 3.1-3, development of residential uses would introduce new sources of light in the area. The Proposed Project, along with existing and future development within the City, would contribute to the existing ambient light in the Project vicinity by introducing streetlights, landscape lighting, and interior and exterior buildings lights. The 1993 General Plan EIR found lighting to be a potentially significant Proposed Project impact, requiring mitigation. As undeveloped areas transition from rural to urban character, the amount of light and glare would increase due to new buildings, structures, streetlights, and vehicle lights. However, the 1993 General Plan EIR concluded that compliance with General Plan policies and the City's design review process would be adequate to mitigate cumulative aesthetic impacts. The 2019 General Plan also determined that the design review process and General Plan policies would ensure that the cumulative impact would be less than cumulatively considerable. Thus, there is no existing cumulative impact related to light and glare.

As there is no existing cumulative impact related to light and glare, the Proposed Project would not have a considerable contribution. The City does not have any adopted Design Guidelines or policies in the 1993 General Plan that specify lighting be shielded and downward focused to avoid spillover light effects. However, the 2019 General Plan does include Policy CD5.C which requires new development to be shielded and cast downwards, and to conform to the Lighting

Zone 2 requirements of Title 24 of the California Building Code. Because the Proposed Project would add new light sources to an area that is currently undeveloped, it would contribute a small increase in the overall amount of light in the City. This impact would be mitigated by Mitigation Measure AES-1 as described above under Impact 3.1-3, making the Proposed Project consistent with Policy CD 5.C. With consideration of the above factors and the absence of an existing cumulative impact related to light and glare, the Proposed Project's contribution would not be cumulatively considerable.

Mitigation Measures

See Mitigation Measure AES-1. Compliance with Mitigation Measure AES-1 mitigates this impact and no additional mitigation is required.

3.1.6 References

Caltrans (California Department of Transportation). 2018. California Scenic Highway Mapping System: Napa County. Accessed November 12, 2018. Available at: http://www.dot.ca.gov /hq/LandArch/16_livability/scenic_highways/index.htm.

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City of St. Helena. 2018. St. Helena General Plan Update 2040, Draft Environmental Impact Report. SCH# 2010042001. October 23, 2018.

City of St. Helena. 2019. City of St. Helena General Plan Update 2040. June 2019.

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3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 Introduction

This section describes agricultural resources, including farmland and forestland, and discusses applicable federal, state, and regional regulations pertaining to agriculture and forestry resources. This section evaluates the potential effects on agricultural and forestry resources associated with development of the proposed Hunter Subdivision Project (Proposed Project).

Comments received in response to the Notice of Preparation included concerns regarding removal of the existing vineyard on the Project site, loss of Prime Farmland and farmland/agricultural resources and potential mitigation to address loss of farmland, and impacts on adjacent vineyard soils and crops due to homeowner pesticide or fertilizer use. Impacts related to homeowner use of pesticides, fertilizer, and other household hazardous wastes are addressed in detail in Section 3.8, Hazards and Hazardous Materials. As stated in Section 3.8, households typically use small amounts of household hazardous wastes at quantities too small to result in a significant hazard to the public or the environment. Thus, this issue as it relates to agricultural resources is not discussed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information referenced to prepare this section includes the California Department of Conservation Farmland Mapping and Monitoring Program and City planning documents (including the 1993 General Plan and the 2019 General Plan[1]). The California Land Evaluation and Site Assessment (LESA) Model was used to assess potentially significant effects on agricultural lands and the model outputs are provided in Appendix B. Other sources consulted are listed in Section 3.2.6, References.

3.2.2 Environmental Setting

Farmland

Agriculture has historically been a part of the City of St. Helena (City), with the City's agricultural land primarily consisting of vineyards due to its deep alluvial soils that are conducive to growing wine grapes (City of St. Helena 1993). Within the City, agricultural uses, including wineries, account for 916 acres (25%) of the total land area. Agricultural areas are primarily located adjacent to the City's Urban Limit Line (City of St. Helena 2018). The majority of the Project site contains undeveloped land consisting of nonnative grasses, with the exception of a small vineyard in the southwestern portion of the site that occupies approximately 6.8 acres or 40% of the Project site along with less than an acre of vineyards located in the "panhandle" portion of

[1] The "General Plan Update 2040," adopted in 2019, is referred to in this EIR as the "2019 General Plan."

the site. There are no forest resources present on the site but there are some trees located adjacent to the southeast boundary of the Project site. The elevation of the Project site ranges from approximately 230 feet above mean sea level on its southern edge to approximately 212 feet above mean sea level on its northern edge. Lands to the north of the Project site, between Library Lane and Silverado Trail North are primarily agricultural, with vineyards located beyond the proposed Adams Street extension and the levee along the Napa River. The Napa River is located approximately 0.1 miles to the north/northeast of the Project site. Single-family and multi-family residential development is located to the south and southeast, and office uses are located immediately adjacent to the site's western boundary at the terminus of Adams Street. A gravel maintenance road/public trail borders the site along the north/northwest and a city storm water detention basin borders the site to the north/northeast.

The Project site is designated as high density housing in the 1975 St. Helena General Plan, as Medium Density Residential (MDR) in the City's 1993 General Plan (City of St. Helena 1993), and as MDR in the current 2019 General Plan (City of St. Helena 2019). Land designated as Medium Density Residential (MDR) typically is for residential purposes, and provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. The zoning designation for the Project site is also Medium Density Residential (MR) (City of St. Helena 2018).

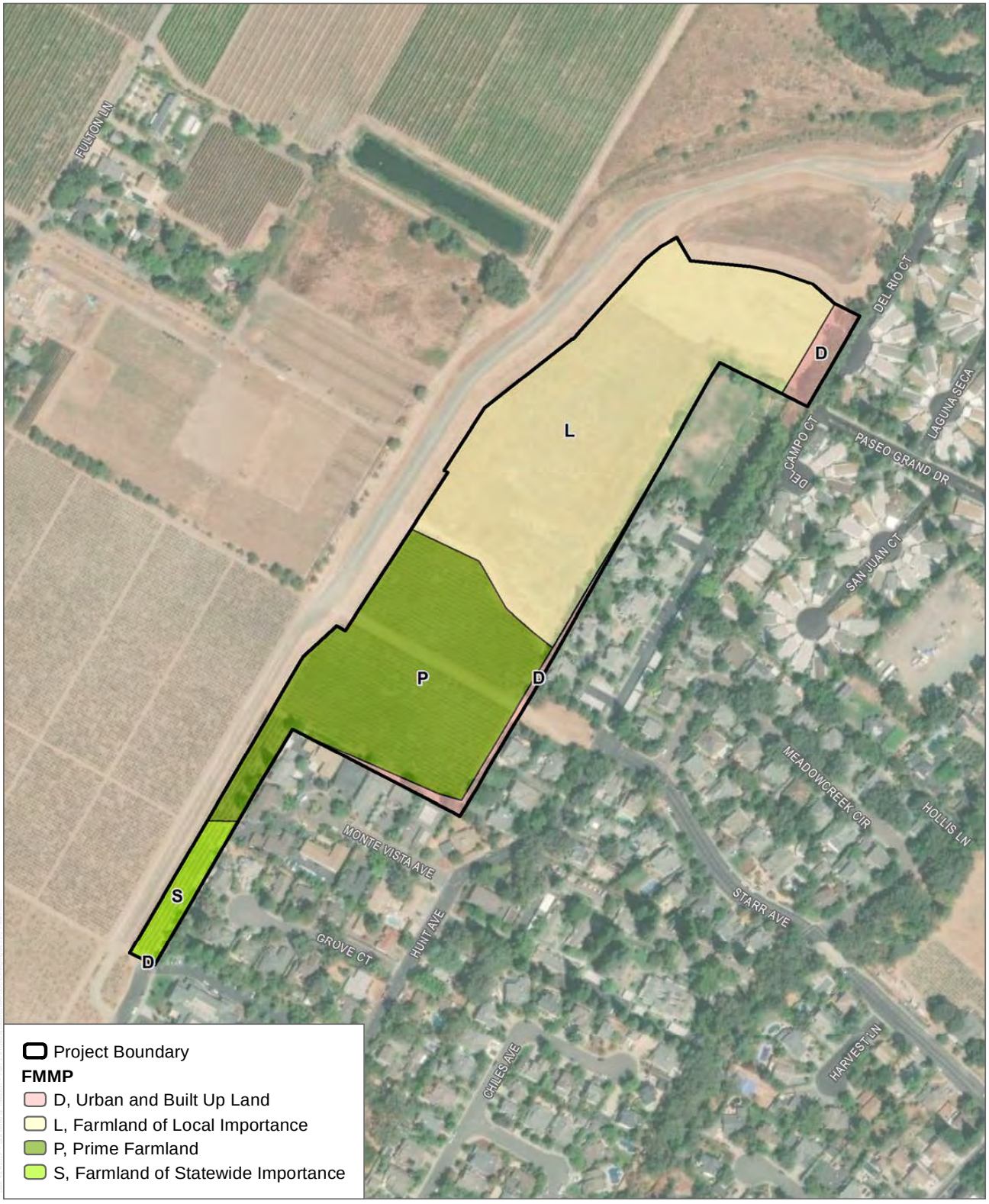
Farmland Classification

The California Department of Conservation (DOC), Division of Land Resources Protection, operates the Farmland Mapping and Monitoring Program (FMMP). The FMMP maps the state's farmland resources and monitors the conversion of farmland to (and from) other land uses. As shown in Figure 3.2-1, FMMP Classification, the FMMP categorizes the eastern portion of the Project site as Farmland of Local Importance. The western portion of the Project site is predominantly designated as Prime Farmland, with portions of Farmland of Statewide Importance and Urban and Built-Up Land in the westernmost area of the Project site. Table 3.2-1 provides acreages for the various farmland categories within the site.

Table 3.2-1
Important Farmland

Farmland Mapping and Monitoring Program Category	Acreage
Prime Farmland	5.8
Farmland of Statewide Importance	0.6
Farmland of Local Importance	9.0
Urban and Built Up Land (including existing roadways)	0.8
Total	16.2

Source: DOC 2017.
Note: The acreage/boundaries between the parcel data information and Napa County GIS data results in a 0.7-acre discrepancy.



SOURCE: Bing Maps 2019; CA Department of Conservation 2016

DUDEK

0 150 300 Feet

FIGURE 3.2-1
FMMP Classification
Hunter Subdivision Project

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Land to the north and east of the Project site is designated as Prime Farmland, and land to the northwest of the site is designated Farmland of Statewide Importance. The FMMP categories relevant to the Project site are defined as follows:

Prime Farmland

"Prime Farmland" is farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance

Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Farmland of Local Importance

Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

Urban and Built-up Land

Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Soil Types

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) conducts soil surveys and creates maps representing the location and type of soil in order to aid in agricultural, conservation, and land use decisions. The NRCS identifies the following soils as occurring on the Project site (USDA 2018):

- Bale clay loam, 0 to 2% slopes
- Bale clay loam, 2 to 5% slopes
- Cole silt loam, 0 to 2% slopes
- Cortina very gravelly loam, 0 to 5% slopes, moist

The Storie Index is a rating system that is used to classify soils that could be used for irrigated agriculture in California. The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. Soil units are also rated based on four properties: degree of soil profile development, texture of the surface layer, steepness of slope, and drainage class, landform, erosion class, flooding and ponding frequency and duration, soil pH, soluble salt content as measured by electrical conductivity, and sodium adsorption ratio (USDA 2018). The Storie Index Ratings for soils on the Project site are shown in Table 3.2-2.

Table 3.2-2
Storie Index Ratings for On-Site Soils

Soil Type	Storie Index Rating	Percent of Property Area
Bale clay loam, 0 to 2% slopes	Grade 2 – Good	22.3%
Bale clay loam, 2 to 5% slopes	Grade 3 – Fair	53.2%
Cole silt loam, 0 to 2% slopes	Grade 2 – Good	21.0%
Cortina very gravelly loam, 0 to 5% slopes, moist	Grade 3 – Fair	3.5%

Source: USDA 2018.

As shown in Table 3.2-2, the majority of the Project site, approximately 57%, contains soils that are classified as fair for irrigated agricultural production. The remainder of the site, approximately 43% contains soil units that are classified as good for irrigated agricultural production.

The Project site is not under a Williamson Land Act contract and does not contain any forest or timberland and is not zoned for forest land, timberland, or timberland production.

3.2.3 Regulatory Setting

Federal Regulations

Federal agencies must consider the impacts to Prime Farmland resulting from their actions under the Farmland Protection Policy Act (7 USC Section 4201 et seq.). This requirement does not apply to the Proposed Project.

State Regulations

The following state regulations pertaining to agricultural resources would apply to the Proposed Project.

California Civil Code Section 3482.5

Section 3482.5 of the California Civil Code specifies that no agricultural activity, operation, or facility that is conducted properly in the same location for more than three years shall be considered a nuisance to new uses in its vicinity, unless it was considered a nuisance since the time it began. This regulation also applies to activities of a district agricultural association.

Williamson Act

The Williamson Act (California Government Code Section 51200), also known as the California Land Conservation Act of 1965, is the premier legislation for the protection of agricultural land in California. The act underscores the importance of preserving a maximum amount of the state's agricultural land as an economic asset that provides for the generation of adequate and nutritious food resources for the nation and state into the future. The Williamson Act operates through 10-year contracts with agricultural landowners that confirm that agricultural land is being preserved as the land's best use while providing a substantial property tax break for the landowner. The property's agricultural value is assessed and the landowner under contract is dismissed from property taxes according to the property's urban development potential. The Project site does not contain any land under a Williamson Act contract.

Farmland Mapping and Monitoring Program

The FMMP is a non-regulatory program implemented by the DOC, Division of Land Resource Protection. Government Code Section 65570 mandates the FMMP to biennially report to the Legislature on the conversion of farmland and grazing land, and to provide maps and data to local government and the public. FMMP produces Important Farmland Maps, which are a hybrid of resource quality (soils) and land use information, based on the prior federal NRCS program. Land is classified into eight categories. Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are considered "Important Farmland" for the purposes of the California Environmental Quality Act (CEQA) (the conversion of which may be a significant impact).

Local Regulations

The following local/regional regulations pertaining to agriculture would apply to the Proposed Project.

City of St. Helena 1993 General Plan

The Open Space and Conservation Element and Land Use and Growth Management Element of the City of St. Helena 1993 General Plan provides guiding policies regarding agricultural and forestry resources, including the following:

Growth Management

Policy 2.6.5: Encourage the continuation of agricultural and low-intensity uses adjacent to the Urban Limit Line.

Agriculture

Policy 2.6.58: Promote the continuation of agricultural activities within and adjacent to the City.

Policy 2.6.59: Protect prime agricultural land and prime vineyard land from premature and/or unnecessary urban encroachment.

Policy 6.3.1: Maintain agriculture as the mainstay of the local economy by preserving agriculturally-designated lands as an invaluable and irreplaceable open space resource.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Open Space and Conservation Element and Land Use and Growth Management Element of the City of St. Helena 2019 General Plan provides guiding policies regarding agricultural and forestry resources, including the following:

Growth Management

Policy LU1.3: Support agricultural and low-intensity uses beyond the Urban Limit Line.

Agriculture

Policy LU5.1: Discourage conversion of existing farmland to non-agricultural uses.

Policy LU5.2: Encourage the County to continue to promote agricultural uses and to limit further development in unincorporated areas surrounding the city.

Policy LU5.3: Strictly limit development on properties existing at the time of the adoption of this General Plan that are designated as agricultural land.

St. Helena Municipal Code

Chapters 17.32 through 17.60 and 17.68 of the St. Helena Municipal Code protect agricultural operations on agricultural land within the City by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance. The City's municipal code contains the following "right-to-farm" provision in the regulations for each nonagricultural zoning district:

> Property owners within this district shall recognize that there exists a right to farm properties within the district and in the vicinity of the district. There is a good faith expectation that no complaints will occur regarding legal normal agricultural activities on properties in the district or in the vicinity of the district. Such activities may include day or night disbursement of chemicals, and creation of dust, noise, or fumes.

In addition, Municipal Code Section 17.04.100 (Cultivated agricultural use within established zoning districts) specifies the following:

> It is the policy of the city as expressed in the general plan to recognize and provide for cultivated agriculture within the city limits. Cultivated agricultural uses are permitted within the A-20 zoning district and regulated by use permit in the woodlands and watershed zoning district. It is the intent of the city to allow cultivated agricultural uses including, but not limited to, farming, horticulture, floriculture and viticulture, but excluding animal husbandry and livestock farming, in all zoning districts within the urban limit line prior to establishment of urban land uses. Allowing cultivated agriculture within the urban limit line shall not compromise the long-term objective of providing for designated urban uses. Water used for cultivated agriculture shall be in conformance with Section 13.04.100 of this code.

3.2.4 Impacts

Methods of Analysis

The LESA Model was used to evaluate potential impacts to agricultural land resulting from development of the Project site. The LESA Model is a point-based approach for rating the relative importance of agricultural land resources based upon specific measurable features. The LESA was first developed in 1981 by the NRCS to provide an objective rating system for the agricultural suitability of land. The development of California's LESA Model was the result of Senate Bill 850 (Chapter 812/1993), which charged the Resources Agency, in consultation with the Governor's Office of Planning and Research, with preparing an amendment to Appendix G of the CEQA Guidelines concerning agricultural lands. This model ensures a quantitative and

consistent approach to determining potentially significant impacts to agricultural resources during the environmental review process. The LESA Model evaluates various characteristics of a project site, including soil resource quality, project size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. These factors are rated, weighted, and combined to produce a single numeric score that can be used to determine significance. The final scoring is based on a scale of 100 points. Thresholds for significance are based on both the total LESA score as well as the component Land Evaluation (LE) and Site Assessment (SA) subscores (DOC 1997). Table 3.2-3 includes the LESA Model scoring thresholds. A copy of the model outputs is included in Appendix B.

Table 3.2-3
LESA Model Scoring Thresholds

Scoring	Significance
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points
80 to 100 Points	Considered Significant

Source: DOC 1997.

The LE considers the quality of the soils on a project site, as measured by Land Capability Classification and the Storie Index of the soils. The Land Capability Classification indicates the suitability of soils for most kinds of crops. Groupings are made according to the limitations of the soils when used to grow crops, and the risk of damage to soils when they are used in agriculture. The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The rating is based upon soil characteristics only. The NRCS Web Soil Survey was used to determine soil types and properties on the Project site.

The SA considers the size of a project site, the availability of water for agricultural use, the amount of active agricultural uses around the project site, and the amount of protected land (including Williamson Act contracts, publicly owned lands used for open space or recreational uses, and easements which restrict urban development). The SA portion was primarily based on City, County of Napa (County), and other public GIS data and the DOC FMMP, and the well report filed with the Department of Water Resources for the on-site groundwater well. The Proposed Project setting was developed by reviewing FMMP data and Williamson Act contract information from the DOC. This review was supplemented with field observations (as part of the biological resource fieldwork).

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact could occur if development of the Proposed Project would do any of the following:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
- Conflict with existing zoning for agricultural use, or a Williamson Act contract.
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)).
- Result in the loss of forest land or conversion of forest land to non-forest use.
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

As shown in Table 3.2-3, the loss of agricultural resources would be considered significant only if the individual LE and SA subscores are each greater than or equal to 20 points.

Significance Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this Environmental Impact Report.

Conflict with Williamson Act Contract/Conflict with Lands Zoned Forest Land or Timberland/Loss or Conversion of Forest Land

The Project site does not include forest lands, land zoned for agricultural use, or timberland, nor does the Project site contain an active Williamson Act contract; therefore, there would be no impact to conflicting with existing zoning for agricultural use, forest or timberland resources, or removal of a Williamson Act contract. Thus, these issues (second, third and fourth significance threshold listed above) are not further evaluated.

Impacts and Mitigation Measures

3.2-1: Would the Proposed Project convert Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? This impact would be less than significant.

The Project site includes 5.8 acres of Prime Farmland and 0.6 acres of Farmland of Statewide Importance (as defined by the FMMP) that would be converted to urban uses as a result of Proposed Project implementation (see Table 3.2-1). The site also includes land designated as Farmland of Local Importance and Urban Land. Due to the presence of 6.4 acres of "Important Farmland," the LESA Model (Appendix B) was used to evaluate the quality of agricultural lands on the Project site to determine the significance of potential Proposed Project impacts. As described above, under Methods of Analysis, the LESA Model is used to provide a quantitative and consistent approach to determining potentially significant impacts to agricultural resources during the environmental review process. The model results in individual scores for the LE and SA factors, along with a total score out of 100 possible points.

The dominant soil type on the Project site is Bale clay loam (see Section 3.6, Geology and Soils), which has a relatively high Land Capability Classification and average to above-average Storie Index. This resulted in a moderate LE score. The relatively small size of the Project site and the amount of urban land near the site resulted in a low SA score, despite the relatively good availability of water (due to the on-site irrigation well). The model returned an LE score of 35 and a SA score of 13.8 for a total score of 48.8 (see Appendix B). As shown in Table 3.2-3, the loss of agricultural resources would be considered significant only if the individual LE and SA subscores are each greater than or equal to 20 points. Therefore, impacts associated with the removal of prime farmland and farmland of statewide importance would be **less than significant.**

Mitigation Measures

None required.

3.2-2: Would the Proposed Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use? This impact is less than significant.

Conversion of the Project site to developed uses may impact nearby agricultural operations to the north, northeast and northwest. Existing agricultural operations may become constrained, due to concerns with the effects of dust, odor, noise, and pesticide-use from future Proposed Project residents. In addition, urban effects, such as vandalism, garbage, and predation by domestic animals (cats and dogs) can also impact agricultural uses. These are often identified as "edge effects," as the urban edge interacts with adjacent agricultural activities.

There is agricultural land to the north and northwest of the Project site, within the City boundaries, that is currently in active agricultural production. This land is designated as Prime Farmland and Farmland of Statewide Importance (FMMP 2017). The City's Municipal Code (Chapters 17.32 through 17.60 and 17.68) includes provisions that require property owners adjacent to agricultural operations to recognize that adjacent properties have the right to farm and that there is a good faith expectation that the adjacent neighbors would not complain to the City regarding legal normal agricultural activities, including day or night disbursement of chemicals, and creation of dust, noise, or fumes. This protects agricultural operations and uses within the vicinity of the Project site. There is an existing trail adjacent to a gravel maintenance road also used by the public as an informal trail which borders the site along the north/northwest. No modifications to the trail or maintenance road are proposed and these existing uses would help provide a buffer between adjacent agricultural activities and the Project site. The development of residences on the Project site would not directly or indirectly result in conversion of properties under active agriculture to the north and northwest to non-agricultural uses. Therefore, impacts would be **less than significant.**

Mitigation Measures

None required.

3.2.5 Cumulative Impacts

The effects of the Proposed Project, when considered with other projects in the region, could result in a cumulative impact to the loss of farmland resources. The cumulative context for the analysis of agricultural resources is Napa County.

3.2-3: Would the Proposed Project contribute to cumulative impacts associated with the loss or conversion of existing agricultural resources? The Project would result in a less than considerable contribution.

As stated in the Napa County General Plan, agriculture is and will continue to be the primary land use in Napa County (Napa County 2008). According to the DOC's FMMP, the County has approximately 254,543 acres of agricultural land, as of 2016. Of this, the County supports 30,619 acres of "Prime Farmland," 9,593 acres of "Farmland of Statewide Importance," 16,803 acres of "Unique Farmland," 18,326 acres of "Farmland of Local Importance," and 179,202 acres of "Grazing Land." Based on the land use conversion table prepared by the DOC, between 2014 and 2016, 35 acres of the 30,654 acres of County's Prime Farmland were converted to urban and built-up land. However, overall, Important Farmland in the County increased by 149 acres (DOC 2016). This is likely due to lands being converted to vineyards.

The City contains approximately 956 acres of land designated as Prime Farmland, 284 acres of Farmland of Statewide Importance, 53 acres of Unique Farmland, and 33 acres of Farmland of Local Importance. There is no land designated as Grazing Land within the City (City of St. Helena 2018). The Project site contains less than 6 acres of Prime Farmland and less than 1 acre of Farmland of Statewide Importance.

As described in Impact 3.2-1, the Proposed Project would not be considered to have a potential impact on agricultural resources. In addition, the Project site has long been designated for urban use. The St. Helena 1993 General Plan and also the current 2019 General Plan contains policies regarding the preservation of agricultural lands. For example, the City maintains large parcels for agricultural use and limits residential and commercial development within the Urban Limit Line to parcels already designated for such uses. The Proposed Project is not compromising the principles of urban-centered growth and agricultural preservation since the site has been designated for residential development and is located within the City limits. In addition, Countywide, conversion of agricultural lands in the County is decreasing. Therefore, the Proposed Project's contribution to a cumulative effect is not considerable, and cumulative impacts would be **less than significant.**

Mitigation Measures

None required.

3.2.6 References

DOC (California Department of Conservation). 2017. Farmland Mapping and Monitoring Program. Accessed October 8, 2018. https://maps.conservation.ca.gov/DLRP/CIFF/.

DOC. 2016. Table A-21: Napa County 2014-2016 Land Use Conversion Table.

DOC. 1997. California Agricultural Land Evaluation and Site Assessment Model Instruction Manual.

USDA (United States Department of Agriculture). 2018. Web Soil Survey. Accessed August 6, 2018. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

City of St. Helena. 1993. *City of St. Helena 1993 General Plan*. September 28, 1993.

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Napa County. 2008. Napa County General Plan. June 3, 2008.

3.3 AIR QUALITY

3.3.1 Introduction

This section of the Draft Environmental Impact Report presents potential air quality impacts of the proposed Hunter Subdivision Project (Proposed Project), which includes the environmental setting and existing air quality conditions, regulatory framework, potential short-term and long-term air quality impacts, and proposed measures to mitigate any identified significant impacts. The analysis and findings are based on the air quality emissions modeling, which can be found in Appendix C.

No comments were received that raised concerns regarding air quality in response to the Notice of Preparation. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information contained in this section is based on Proposed Project plans, the California Emissions Estimator Model (CalEEMod) to estimate Proposed Project emissions, the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act Air Quality Guidelines (BAAQMD 2017a), and the Spare the Air: Cool The Climate – Final 2017 Clean Air Plan (BAAQMD 2017b). Other sources consulted are listed in Section 3.3.6, References.

3.3.2 Environmental Setting

The City of St. Helena (City) is located in the County of Napa (County), within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties.

Air pollutants are emitted by a variety of sources, including mobile sources (vehicles), area sources (fireplaces, consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (natural gas combustion), and stationary sources (generators or other stationary equipment). Some air pollutants need to be examined at the local level, and others are predominately an issue at the regional level. For instance, ozone (O_3) is formed in the atmosphere in the presence of sunlight by a series of chemical reactions involving oxides of nitrogen (NO_x) and reactive organic gas (ROG, also termed volatile organic compounds [VOCs]). Because these reactions can occur many miles from the source, O_3 is typically analyzed at the regional level (i.e., in the Air Basin) rather than the local level. On the other hand, air pollutants such as particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), carbon monoxide (CO), and toxic air contaminants (TACs) are a potential concern in the immediate vicinity of the pollutant source because the pollutants are emitted

directly by or are formed close to the source. Therefore, the study area for emissions of PM_{10}, $PM_{2.5}$, CO, and TACs is the local area near the source, such as in the vicinity of the Project site, and the study area for regional pollutants such as NO_x and ROGs is the entire SFBAAB.

Regional Climatology

Air quality is a function of the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

The climate of the SFBAAB is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as O_3, and secondary particulates, such as nitrates and sulfates.

The Project site is located in the Napa Valley climatological subregion. Specific topographic and climatological conditions for the subregion are described in the BAAQMD California Environmental Quality Act Air Quality Guidelines (BAAQMD 2017a). The Napa Valley is bordered by relatively high mountains. With an average ridge line height of about 2,000 feet, with some peaks approaching 3,000 to 4,000 feet, these mountains are effective barriers to the prevailing northwesterly winds. The Napa Valley is widest at its southern end and narrows in the north. During the day, the prevailing winds flow up valley from the south about half of the time. A strong up valley wind frequently develops during warm summer afternoons, drawing air in from the San Pablo Bay. Daytime winds sometimes flow down valley from the north. During the evening, especially in the winter, down valley winds often occur. Wind speeds are generally low, with almost 50% of the winds less than 4 miles per hour. Only 5% of the winds are between 16 and 18 miles per hour, representing strong summertime up valley winds and winter storms (BAAQMD 2017a).

The greatest precipitation in the City occurs from October to April, during which time the rainfall averages 2–7 inches per month. The average annual precipitation is 34.61 inches. The City has a mild climate with an annual average temperature of 75°F. The coolest months of the year are typically December through February, with an annual average low of 36°F. The warmest months are typically June through September, with an annual average high of 89°F. Prevailing wind direction in the City (as measured at the St. Helena station, approximately 0.42 miles southwest of the Project site) is from the west (WRCC 2019).

The air pollution potential in the Napa Valley could be high if there were sufficient sources of air contaminants nearby. Summer and fall prevailing winds can transport O_3 precursors northward from the Carquinez Strait Region to the Napa Valley, effectively trapping and concentrating the pollutants when stable conditions are present. The local upslope and downslope flows created by the surrounding mountains may also recirculate pollutants already present, contributing to buildup of air pollution. High O_3 concentrations are a potential problem to sensitive crops such as wine grapes, as well as to human health. The high frequency of light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture, and woodburning in fireplaces and stoves.

Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), CO, sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. These pollutants, as well as TACs, are discussed in the following paragraphs.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and ROG. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric ozone) and at Earth's surface in the lower atmosphere (tropospheric ozone).[2] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse

[1] The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's "Criteria Air Pollutants" (EPA 2018a), the California Air Resources Board's (CARB) "Glossary" (CARB 2019a), and CARB's "Fact Sheet: Air Pollution Sources, Effects and Control" (CARB 2009).

[2] The troposphere is the layer of Earth's atmosphere nearest to the surface of Earth, extending outward approximately 5 miles at the poles and approximately 10 miles at the equator.

health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies of O_3's effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019b).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x, which includes NO_2 and NO, plays a major role, together with ROG, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources (such as electric utility and industrial boilers).

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards (AAQS) for NO_2, results from controlled human exposure studies that show that NO_2

exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, and light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near

large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and ROG.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause

lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. PM_{10} tends to collect in the upper portion of the respiratory system, whereas $PM_{2.5}$ is small enough to penetrate deeper into the lungs and damage lung tissue. Suspended particulates also produce haze and reduce regional visibility and damage and discolor surfaces on which they settle.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24 hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and world-wide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits. (CARB 2017).

Long-term (months to years) exposure to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above.

Reactive Organic Gases. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as ROG. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of ROG result from the formation of O_3 and its related health effects. High levels of ROG in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for ROG as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air

Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the Legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2016a). DPM is typically composed of carbon particles ("soot," also called black carbon, or BC) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2016a). The CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM; 17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars, and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2016b). Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population

and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution–sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (CARB 2005). Sensitive receptors are groups of individuals, including children, the elderly, the acutely ill, and the chronically ill, that may be more susceptible to health risks due to chemical exposure, and sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAQMD 2017a). The closest sensitive receptors are single-family residences located approximately 20 feet east of the Project site.

Regional and Local Air Quality Conditions

San Francisco Bay Area Air Basin Designation

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS). These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare.

The primary pollutants of concern in SFBAAB are ozone, PM_{10}, and $PM_{2.5}$ because SFBAAB is designated nonattainment for these pollutants by EPA and CARB. The SFBAAB is designated as nonattainment for the 8-hour NAAQS for O_3 and is also nonattainment for $PM_{2.5}$. The SFBAAB is designated as attainment for all other criteria pollutants under the NAAQS. The SFBAAB is currently designated as nonattainment for O_3, both 1-hour and 8-hour, PM_{10} and $PM_{2.5}$ under the CAAQS. Table 3.3-1 depicts the current attainment status within the air basin with respect to the NAAQS and CAAQS, as well as the attainment classifications for criteria pollutants.

Table 3.3-1
State and Federal Ambient Air Quality Standards and Attainment Status

Pollutant	Averaging Time	California Standards[a]		National Standards[b]	
		Standard	*Attainment Status*	*Standard*	*Attainment Status*
Ozone (O_3)	1 hour	0.09 ppm	N	NA	NA
	8 hour	0.07 ppm	N	0.070 ppm	N/Marginal[c]
Carbon Monoxide (CO)	1 hour	20 ppm	A	35 ppm	A
	8 hour	9 ppm	A	9 ppm	A
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm	A	0.100 ppm	U
	Annual	0.030 ppm	NA	0.053 ppm	A
Sulfur Dioxide (SO_2)	1 hour	0.25 ppm	A	0.075 ppm	A
	24 hour	0.04 ppm	A	0.14 ppm	A
	Annual	NA	NA	0.03 ppm	A
Particulate Matter (PM_{10})	24 hour	50 µg/m^3	N	150 µg/m^3	U
	Annual	20 µg/m^3	N	NA	NA
Fine Particulate Matter ($PM_{2.5}$)	24 hour	NA	NA	35 µg/m^3	N[d]
	Annual	12 µg/m^3	N	12 µg/m^3	U/A[e]
Sulfates	24 hour	25 µg/m^3	A	NA	NA
Lead	30 day	1.5 µg/m^3	NA	NA	A
	Cal. Quarter	NA	NA	1.5 µg/m^3	A
	Rolling 3-Month Average	NA	NA	0.15 µg/m^3	U/A
Hydrogen Sulfide	1 hour	0.03 ppm	U	NA	NA
Visibility-Reducing Particles	8 hour	See Note "f"	U	NA	NA

Source: BAAQMD 2017c; CARB 2018 (state); EPA 2018b (federal).

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns; ppm = parts per million by volume; A = Attainment; N = Nonattainment; U = Unclassified; NA = Not Applicable (no applicable standard)

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements can be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average.

b National standards shown are the "primary standards" designed to protect public health. NAAQS (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O_3 level in the area.

d On January 9, 2013, the EPA issued a final rule to determine that the Bay Area attains the 24-hour $PM_{2.5}$ national standard. This EPA rule suspends key State Implementation Plan requirements as long as monitoring data continues to show that the Bay Area attains the standard.

Despite this EPA action, the Bay Area will continue to be designated as "nonattainment" for the national 24-hour $PM_{2.5}$ standard until such time as the BAAQMD submits a "redesignation request" and a "maintenance plan" to EPA, and EPA approves the proposed redesignation.

e In December 2012, the EPA strengthened the annual $PM_{2.5}$ NAAQS from 15.0 to 12.0 µg/m³. In December 2014, EPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

f Statewide visibility reducing particle standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70%. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The Jefferson Avenue monitoring station, located at 2552 Jefferson Avenue, Napa, CA 94558, is the nearest air quality monitoring station to the Project site, located approximately 16.5 miles southeast from the Project site. The most up-to-date air quality data from 2016 to 2018 for O_3, NO_2, CO, PM_{10}, and $PM_{2.5}$ from the Jefferson Avenue monitoring station are provided in Table 3.3-2. The data collected at this station is considered generally representative of the air quality experienced in the Project vicinity. The number of days exceeding the ambient air quality standards is also shown in Table 3.3-2.

Table 3.3-2
Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	2018	2016	2017	2018
Ozone (O_3)										
Napa-Jefferson Avenue	ppm	Maximum 1-hour concentration	State	0.09	0.080	0.098	0.047	0	1	0
	ppm	Maximum 8-hour concentration	State	0.070	0.068	0.084	0.043	0	2	0
			Federal	0.070	0.067	0.084	0.042	0	2	0
Nitrogen Dioxide (NO_2)										
Napa-Jefferson Avenue	ppm	Maximum 1-hour concentration	State	0.18	0.039	0.052	0.039	0	0	0
			Federal	0.100	0.039	0.0526	0.039	0	0	0
	ppm	Annual concentration	State	0.030	0.007	0.007	ND	—	—	—
			Federal	0.053	—	—	—	—	—	—

Table 3.3-2
Local Ambient Air Quality Data

Monitoring Station	Unit	Averaging Time	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
					2016	*2017*	2018	2016	2017	2018
Carbon Monoxide (CO)										
Napa-Jefferson Avenue	ppm	Maximum 1-hour concentration	State	20	—	—	—	—	—	—
			Federal	35	2.2	5.6	1.6	0	0	0
	ppm	Maximum 8-hour concentration	State	9.0	—	—	—	—	—	—
			Federal	9	1.5	4.7	1.1	0	0	0
Coarse Particulate Matter (PM_{10})[a]										
Napa-Jefferson Avenue	µg/m³	Maximum 24-hour concentration	State	50	33.0	ND	ND	ND (0)	ND (0)	ND (0)
			Federal	150	32.2	ND	ND	ND (0)	ND (0)	ND (0)
	µg/m³	Annual concentration	State	20	ND	ND	ND	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a]										
Napa-Jefferson Avenue	µg/m³	Maximum 24-hour concentration	Federal	35	24.3	199.1	30.2	0.0 (0)	13.3 (13)	ND (0)
	µg/m³	Annual concentration	State	12	24.3	199.1	30.2	—	—	—
			Federal	12.0	8.5	13.7	ND	—	—	—

Sources: CARB 2019f; EPA 2019.

Notes: — = data not available; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value; ppm = parts per million Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.

Exceedances of federal and state standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, nor is there a state 24-hour standard for $PM_{2.5}$.

Napa-Jefferson Avenue Monitoring Station is located at 2552 Jefferson Avenue, Sebastopol, California 94558.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

3.3.3 Regulatory Setting

The following federal, state and regulations pertaining to air quality would apply to the Proposed Project.

Federal Regulations

Clean Air Act

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated timeframes. Each State Implementation Plan is developed through a public process, formally adopted by the state, and submitted by the Governor's designee to the U.S. EPA. The Clean Air Act requires the U.S. EPA to review each plan and any plan revisions and to approve the plan or plan revisions if consistent with the Clean Air Act.

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. HAPs include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

State Regulations

California Clean Air Act

The California Clean Air Act requires all areas of the state to achieve and maintain the CAAQS by the earliest practicable date. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB,

which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS air quality standards are presented in Table 3.3-3.

Table 3.3-3
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as Primary Standard
	annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as Primary Standard
	annual arithmetic mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—
	calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as Primary Standard
	rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—

Table 3.3-3
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m^3)	—	—
Sulfates	24 hours	25 µg/m^3	—	—
Visibility-reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016c.

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[ff] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 700 pollutants, a subset of which have carcinogenic and noncarcinogenic toxicity criteria established pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation (CARB 2014), On-Road Heavy Duty (New) Vehicle Program (CARB 2005b), In-Use Off-Road Diesel Vehicle Regulation (CARB 2011), and New Off-Road Compression-Ignition (Diesel) Engines and Equipment program (CARB 2008). These regulations and programs have timetables to which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

Local Regulations

Bay Area Air Quality Management District

The BAAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SFBAAB, where the Project site is located. The clean air strategy of the BAAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the federal and California Clean Air Acts.

On April 19, 2017, the BAAQMD adopted the Spare the Air: Cool The Climate Final 2017 Clean Air Plan (2017 Clean Air Plan) (BAAQMD 2017c). The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the 2017 Clean Air Plan includes all feasible measures to reduce emissions of O_3 precursors (ROG and NO_x) and reduce O_3 transport to neighboring air basins. In addition, the 2017 Clean Air Plan builds on BAAQMD efforts to reduce $PM_{2.5}$ and TACs. To protect the climate, the 2017 Clean Air Plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

BAAQMD establishes and administers a program of rules and regulations to attain and maintain state and national air quality standards and regulations related to TACs. The rules and regulations that may apply to the Proposed Project include the following:

- **Regulation 2, Rule 1 – Permits.** This rule specifies the requirements for authorities to construct and permits.
- **Regulation 6, Rule 1 – General Requirements.** This rule limits the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, concentration, visible emissions, and opacity.
- **Regulation 6, Rule 3 – Wood-Burning Devices.** This rule limits the emissions of particulate matter and visible emissions from wood-burning devices used for primary heat, supplemental heat or ambiance.
- **Regulation 6, Rule 6 – Prohibition of Trackout.** This rule addresses fugitive road dust emissions associated with trackout of solid materials onto paved public roads outside the boundaries of large bulk material sites, large construction sites and large disturbed surface sites (sites of 1-acre or more), and large disturbed surface sites.

- **Regulation 8, Rule 1 – General Provisions.** This rule limits the emission of organic compounds into the atmosphere.
- **Regulation 8, Rule 3 – Architectural Coatings.** This rule limits the quantity of volatile organic compounds in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the BAAQMD.
- **Regulation 8, Rule 15 – Emulsified and Liquid Asphalts.** This rule limits the emissions of VOCs caused by the use of emulsified and liquid asphalt in paving materials and paving and maintenance operations.

City of St. Helena 1993 General Plan

The Land Use and Growth Management and Public Health and Safety Elements of the City of St. Helena 1993 General Plan (City of St. Helena 1993) provides policies regarding air quality, including the following:

Policy 2.6.21: Require new residential projects to be designed to facilitate non-automobile modes of travel (i.e., walking, biking, transit, etc.).

Policy 8.2.3: Urge and support effective regulation of those sources of air pollution both inside and outside of St. Helena, which affect air quality, by implementing as many of the recommendations of the Napa County Congestion Management Plan (CMP) as feasible:

- The Napa County CMP recommends a number of land use-based measures to manage traffic congestion, and thereby reduce auto emissions. The recommendations are organized into two categories:
  - Destination-based Strategies: 1) Concentrate major work locations in nodes or employment centers; 2) Encourage mixed-based development that allows people to combine or avoid vehicle trips; and 3) Require site design features that encourage transit use.
  - Origin-based Strategies: 1) Match housing opportunities to income levels; 2) Provide housing opportunities near employment centers; and 3) Require design features that encourage transit use.

Policy 8.2.4: Consider cumulative air quality impacts from proposed developments and promote balanced land use development.

Policy 8.2.5: Support a population and employment growth policy which will not exceed Association of Bay Area Governments population and employment projections. This includes balancing the ratio of employment to population to protect, preserve and enhance the air quality within the area.

Policy 8.2.6: Minimize local adverse air quality impacts related to construction by requiring dust abatement procedures for local projects.

Policy 8.2.8: Encourage the use of EPA-approved wood stoves or fireplace inserts, rather than fireplaces, as a means of reducing emissions into the air.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Land Use and Growth Management and Public Health and Safety Elements of the City of St. Helena 2019 General Plan (City of St. Helena 2019) provides policies regarding air quality, including the following:

Policy LU2.7: Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.

Policy PS1.1: Achieve and maintain clean, healthy air for the residents of St. Helena to preserve environmental quality and community health.

Policy PS1.2: Support regional efforts to achieve and maintain state ambient concentration standards to protect public health, reduce adverse industrial plant effects, and enhance the visual environment. In particular, provide local support for implementation of policies and measures set forth in the Napa County Congestion Management Program.

Policy PS1.3: Encourage effective regulation of those sources of air pollution, both inside and outside of St. Helena, which affect air quality, by implementing as many of the recommendations of the Napa County Congestion Management Plan as is feasible.

Policy PS1.4: Promote an optimized land use development pattern that minimizes cumulative air quality impacts from proposed developments.

3.3.4 Impacts

Methods of Analysis

Construction

Emissions from the construction phase of the Proposed Project were estimated using CalEEMod Version 2016.3.2 (CAPCOA 2017). CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities.

For the purposes of modeling, a 6-year build out was assumed. Under a 6-year buildout it is assumed site grading and all backbone infrastructure would be completed in the first Phase.

Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the applicant and CalEEMod generated default values. Complete detailed construction assumptions are included in Appendix C. Implementation of the Proposed Project would include construction of 87 residential units including 51 single-family residences, 11 accessory dwelling units (ADUs), and 25 multi-family units.

Buildout under the 6-year buildout scenario assumes no more than 9 single-family residences would be constructed each year and the 25 affordable housing units would be constructed by the third year. All of the other assumptions related to grading, site preparation and construction equipment would not change under this buildout scenario, only the timing when residences could be constructed.

As described in Chapter 2, Project Description, the Proposed Project would grade the 16.9-acre site. Soil balance would occur within each subset area and hauling would not be required between subset areas.[3] Balancing activities are anticipated to be performed through the use of off-road construction equipment (e.g., excavators, graders, dozers, and scrapers). The Proposed Project schedule was based on information provided by the Proposed Project applicant and illustrates a realistic buildout assuming the Tentative Subdivision Map is approved sometime in 2021. Table 3.3-4 provides the phasing assumptions under the 6-year Buildout.

Table 3.3-4
Construction Phasing Assumptions – 6-Year Buildout[1]

Proposed Project Construction Phase	Construction Start Month/Year	Construction End Month/Year
Phase 1		
Site Preparation	03/20/2023	03/31/2023
Grading	04/01/2023	04/28/2023
Paving	04/29/2023	05/26/2023
Building Construction	05/27/2023	12/22/2023
Architectural Coating	12/23/2023	01/19/2024
Phase 2		
Building Construction	03/18/2024	10/11/2024
Architectural Coating	10/12/2024	11/08/2024

[3] The estimated net grading quantity, as provided by the Proposed Project applicant, is approximately 24,321 cubic yards of fill to replace the 10,202 cubic yards of cut. This quantity does not include the spoils from the joint trench, roadways, curb and gutter, or foundations. It is the applicant's intent to balance the soils on site and not require the export or import of soils. Importing of some material, such as base rock, sand, and peat gravel that is used in the joint trenches, building foundations, and roadways would be required.

Table 3.3-4
Construction Phasing Assumptions – 6-Year Buildout[1]

Proposed Project Construction Phase	Construction Start Month/Year	Construction End Month/Year
Phase 3		
Building Construction	03/17/2025	01/30/2026
Architectural Coating	01/31/2026	02/25/2026
Phase 4		
Building Construction	03/23/2026	10/16/2026
Architectural Coating	10/17/2026	11/11/2026
Phase 5		
Building Construction	03/22/2027	10/15/2027
Architectural Coating	10/16/2027	11/10/2027
Phase 6		
Building Construction	03/20/2028	10/13/2028
Architectural Coating	10/14/2028	11/08/2028

Source: Appendix C.
Notes: See Appendix C for details.
1. Phase 1 = grading, site clearing, backbone infrastructure, 9 residential units and 2 accessory dwelling units (ADUs); Phase 2 = 9 residential units, 2 ADUs; Phase 3 = 9 residential units, 2 ADUs, 25 affordable units; Phase 4 = 9 residential units, 2 ADUs, Phase 5 = 9 residential units and 2 ADUs; Phase 6 = 9 residential units and 1 ADU.

The construction equipment mix used for estimating the construction emissions of the Proposed Project is shown in Table 3.3-5. Notably, because detailed specific information regarding the construction equipment fleet is unknown at the time of analysis, the analysis is based on the default construction equipment fleet provided by CalEEMod. The construction tabs within CalEEMod contain default information that was obtained from a survey of construction sites conducted by the South Coast Air Quality Management District (CAPCOA 2017). The construction survey data is grouped by construction phase and lot acreage. The default construction equipment list and phase length data were determined to be the most appropriate for the size and types surveyed.

Table 3.3-5
Construction Scenario Assumptions

Construction Phase	One-way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Site Preparation	18	0	0	Rubber Tired Dozers	3	8
				Tractors/Loaders/Backhoes	4	8
Grading	20	2	0	Excavators	2	8
				Graders	1	8
				Rubber Tired Dozers	1	8
				Scrapers	2	8
				Tractors/Loaders/Backhoes	2	8
Paving	15	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8
Building Construction	55	11	0	Cranes	1	7
				Forklifts	3	8
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	3	7
				Trenchers	1	8
				Welders	1	8
Architectural Coating	11	0	0	Air Compressors	1	6

Source: Appendix C.

For the analysis, it was generally assumed that heavy construction equipment would be operating for approximately 8 hours per day, 5 days per week (22 days per month) during Proposed Project construction. CalEEMod defaults were applied for the worker, haul, and vendor trips (CAPCOA 2017). Notably, CalEEMod counts trips associated with road base materials, cement, and water trucks as vendor trips and are incorporated into the calculations of the Building Construction phase, as shown in Table 3.3-5.

Construction of Proposed Project components would be subject to BAAQMD's Regulation 6. This rule requires that Proposed Project construction include steps to restrict visible emissions of fugitive dust (BAAQMD 2018). Compliance with Regulation 6 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities.

A detailed depiction of the construction schedule—including information regarding subphases and equipment used during each subphase—is included in Appendix C.

Operations

Emissions from the operational phase of the Proposed Project (if the Proposed Project is approved and when the Proposed Project is completed) were estimated using CalEEMod. Operational year 2029 was assumed as it would be the first full year following completion of construction.

Area Sources. CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment associated with the Proposed Project. Emissions associated with natural gas usage in space heating, hearths, water heating, and stoves were calculated in the building energy use module of CalEEMod, as described in the following text. Notably, it was assumed that hearth emissions would be from natural gas combustion.

Consumer products in this analysis are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, and architectural coatings are not considered consumer products in this case (CAPCOA 2017). Consumer product ROG emissions were estimated in CalEEMod based on the floor area of residential buildings, and on the default factor of pounds of ROG per building square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential and nonresidential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. Low VOC paint would be used in construction and regular maintenance activities. Low VOC paint is generally considered to contain less than 50 grams of VOC per liter, which was assumed for both interior and exterior painting. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, trimmers, chain saws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days as a conservative measure. It is assumed that landscaping equipment would likely only operate during the week (not weekends); therefore, landscape operational days were assumed to be 180 days per year in CalEEMod (CAPCOA 2017).

Energy Sources. As represented in CalEEMod, energy sources would include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site. The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The 2019 standards became effective on January 1, 2020. CalEEMod default values were updated to reflect that the Proposed Project would comply with the requirements of the 2019 standards for this analysis.

Mobile Sources. Mobile sources for the Proposed Project would primarily be motor vehicles traveling to and from the Proposed Project. The anticipated trip generation, including the trip rates and total trips, are based on the Proposed Project's Traffic Impact Study prepared by Dudek (see Appendix K). CalEEMod was used to calculate the emissions resulting from on-road mobile sources associated with residents traveling to and from the proposed land use types.

Default trip generation rates included in CalEEMod for each proposed land use were adjusted to match the Proposed Project's trip generation. In addition, Saturday and Sunday trip rates were adjusted based on the CalEEMod default trip rates and the Proposed-Project-specific trip rates presented in the traffic study. The CalEEMod default and assumed trip rates are depicted in Table 3.3-6.

Table 3.3-6
CalEEMod Default and Adjusted Trip Rates

Land Use Type	Size Metric	CalEEMod Default Vehicle Trip Rates			Proposed Project Vehicle Trip Rates[1]		
		Weekday Trip Rate	*Saturday Trip Rate*	*Sunday Trip Rate*	*Weekday Trip Rate*	*Saturday Trip Rate*	*Sunday Trip Rate*
Single-Family Residential	Dwelling Unit	9.52	9.91	8.62	9.44	9.56	8.31
Accessory Dwelling Units	Dwelling Unit	6.59	7.16	6.07	7.36	8.18	6.94
Multi-Family Units	Dwelling Unit	5.81	5.67	4.84	9.44	9.56	8.31

Sources: CAPCOA 2017; Dudek 2020.
Note:
1 Weekday and Saturday trip rates were provided in the Proposed Project's Traffic Impact Study. Sunday trips rates was adjusted based on the ratio of the CalEEMod default Sunday trip rates to the CalEEMod default Saturday trip rates.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Notably, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly exacerbate an existing environmental condition. Accordingly, the significance criteria above related to exposure of sensitive receptors to substantial pollutant concentrations is relevant only to the extent that the project exacerbates existing air quality conditions.

The BAAQMD adopted updated CEQA Air Quality Guidelines, including new thresholds of significance, in June 2010 (BAAQMD 2010), and revised them in May 2011.[4] The CEQA Air Quality Guidelines advise lead agencies on how to evaluate potential air quality impacts, including establishing quantitative and qualitative thresholds of significance. The BAAQMD CEQA Air Quality Guidelines were recently re-released in May 2017 and include the same thresholds as in the 2010 and 2011 Guidelines for criteria air pollutants, TACs, and GHGs (BAAQMD 2017a). These thresholds are based on substantial evidence identified in BAAQMD's 2009 Justification Report (BAAQMD 2009) and are summarized in Table 3.3-7.

In general, the BAAQMD significance thresholds for criteria pollutants (ROG, NO_x, PM_{10}, $PM_{2.5}$, and CO) address the first two air quality Appendix G CEQA significance criteria (listed above). The BAAQMD maintains that these criteria pollutant thresholds are intended to maintain ambient air quality concentrations below state and federal standards and to prevent a

[4] The BAAQMD resolutions adopting and revising the significance thresholds in 2011 were set aside by a judicial writ of mandate on March 5, 2012. In May 2012, the BAAQMD updated its CEQA Air Quality Guidelines to continue to provide direction on recommended analysis methodologies, but without recommended quantitative significance thresholds (BAAQMD 2012). On August 13, 2013, the First District Court of Appeal ordered the trial court to reverse the judgment and upheld the BAAQMD's CEQA thresholds.

cumulatively considerable contribution to regional nonattainment with ambient air quality standards. The TAC thresholds (cancer and noncancer risks) and local CO thresholds address the third Appendix G significance criterion, and the BAAQMD odors threshold addresses the fourth Appendix G significance criterion.

Table 3.3-7
Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	*Average Daily Emissions (lbs/day)*	*Maximum Annual Emissions (tons/year)*
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
$PM_{10}/PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risks and Hazards (Individual Project)	Compliance with Qualified Community Risk Reduction Plan or Increased cancer risk of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase >0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from property line of source or receptor		
Risks and Hazards (Cumulative)	Compliance with Qualified Community Risk Reduction Plan or Cancer risk of >100 in a million (from all local sources) Noncancer risk of >10.0 Hazard Index (chronic, from all local sources) Ambient $PM_{2.5}$ >0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor		
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous material located near receptors or new receptors located near stored or used acutely hazardous materials considered significant	
Odors	None	Five confirmed complaints to BAAQMD per year averaged over 3 years	

Source: BAAQMD 2017a.
Notes: lbs/day = pounds per day; tons/year = tons per year; ppm = parts per million; µg/m^3 = micrograms per cubic meter; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

The BAAQMD established their thresholds of significance for CEQA purposes based on the regional goal to attain the NAAQS and CAAQS. Since an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, this means that the thresholds established by air districts are also protective of human health.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable to the Proposed Project and therefore, are not considered potential impacts. These criteria are addressed briefly below but are not discussed further in this document.

Other Emissions/Odors

The BAAQMD has identified typical sources of odor in the CEQA Air Quality Guidelines, a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. While sources that generate objectionable odors must comply with air quality regulations, the public's sensitivity to locally produced odors often exceed regulatory thresholds. Heavy-duty equipment on the Project site during construction would emit odors. However, the construction activity would be short-term and would cease to occur after individual construction is completed. Additionally, no other sources of objectionable odors have been identified for the Proposed Project. In regards to the exposure of objectionable odors to sensitive receptors, the Proposed Project is not a typical land use associated with the generation of a source of odor and would not generate odor impacts. Thus, Proposed-Project-related odor issues (the last significance threshold listed above) are not further evaluated.

Impacts and Mitigation Measures

3.3-1: Would the Proposed Project obstruct implementation of the applicable air quality plan? This impact would be less-than-significant.

An area is designated as "in attainment" when it is in compliance with the federal and/or state standards. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare with a margin of safety. The Project site is located within the SFBAAB, which is designated non-attainment for the federal 8-hour O_3 and 24-hour $PM_{2.5}$ standards. The area is in attainment or unclassified for all other federal standards. The area is designated non-attainment for state standards for 1-hour and 8-hour O_3, 24-hour PM_{10}, annual PM_{10}, and annual $PM_{2.5}$.

On April 19, 2017, the BAAQMD adopted the Spare the Air: Cool The Climate - Final 2017 Clean Air Plan (BAAQMD 2017c). The BAAQMD CEQA Air Quality Guidelines identify a three-step methodology for determining a project's consistency with the current Clean Air Plan. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then the BAAQMD considers that project to be consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is “does the project support the goals of the Air Quality Plan”? The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 Clean Air Plan. As indicated in the following discussion with regard to Impact 3.3-2 below, the Proposed Project would result in less than significant construction and operational emissions and would not result in long-term adverse air quality impacts. Therefore, the Proposed Project would be considered to support the primary goals and be consistent with the BAAQMD current Clean Air Plan.

The second question to be assessed is “does the project include applicable control measures from the Clean Air Plan?” The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. The control strategies of the 2017 Clean Air Plan include measures in the categories of stationary sources, the transportation sector, the buildings sector, the energy sector, the agriculture sector, natural and working lands, the waste sector, the water sector, and super-GHG measures. Depending on the control measure, the tools for implementation include leveraging the BAAQMD rules and permitting authority, regional coordination and funding, working with local governments to facilitate best policies in building codes, outreach and education, and advocacy strategies.

Stationary Source Control Measures. The stationary source control measures are designed to reduce emissions from stationary sources including metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD. Since the Proposed Project would not include any stationary sources of emissions. Therefore, the stationary source control measures of the Clean Air Plan are not applicable to the Proposed Project.

Transportation Control Measures. The transportation control measures aim to decrease emissions of criteria pollutants, TACs, and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The Proposed Project would develop new residences located near existing residential uses. Furthermore, the Proposed Project would also develop pedestrian and bicycle facilities, eventually connecting the Regional Vine Trail from Calistoga to the Vallejo Ferry once these improvements are completed. Therefore, the Proposed Project would not conflict with the BAAQMD’s initiatives to reduce vehicle trips and vehicle miles traveled and would support alternative transportation.

Energy Control Measures. The energy control measures are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the

Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Notably, these measures apply to electrical utility providers and local government agencies, which would serve the Proposed Project. Therefore, the energy control measures of the Clean Air Plan are not applicable to the Proposed Project.

Building Control Measures. The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate buildings themselves. Therefore, the strategies in the building control measures focus on working with local governments that do have authority over local building codes, to facilitate adoption of best GHG control practices and policies. The Proposed Project is required to meet Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Therefore, the Proposed Project would not conflict with the building control measures of the Clean Air Plan.

Agriculture Control Measures. Since the Proposed Project does not include any agricultural activities (the remaining one-acre vineyard is too small to be considered agriculture), the agriculture control measures of the Clean Air Plan are not applicable to the Proposed Project.

Natural and Working Lands Control Measures. Since the Proposed Project does not include the disturbance of any rangelands or large areas of wetlands, the natural and working lands control measures of the Clean Air Plan are not applicable to the Proposed Project.

Waste Management Control Measures. The waste management control measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The Proposed Project would comply with local requirements for waste management (e.g., recycling and/or composting services). Therefore, the Proposed Project would be consistent with the waste management control measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works, and promoting the use of biogas recovery systems. These measures would apply to publicly owned treatment works and local government agencies and not the Proposed Project.

Super GHG Control Measures. The super-GHG control measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies, which are not applicable to the Proposed Project.

The Proposed Project would not conflict with any applicable control measures from the 2017 Clean Air Plan, as discussed above.

The third question to be assessed in this consistency methodology is "does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?" Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. The Proposed Project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area, nor would it include excessive parking. Therefore, the Proposed Project would not hinder implementation of 2017 Clean Air Plan control measures.

In summary, the responses to all three of the questions with regard to Clean Air Plan consistency are affirmative and the Proposed Project would not conflict with or obstruct implementation of the Clean Air Plan. This is a **less-than-significant impact.**

Mitigation Measures

None required.

3.3-2: Would implementation of the Proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? This impact would be less than significant.

Past, present, and future development projects may contribute to the SFBAAB adverse air quality impacts on a cumulative basis. Per BAAQMD's CEQA Air Quality Guidelines, by its nature air pollution is largely a cumulative impact; no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. Therefore, if the Proposed Project's emissions are below the BAAQMD thresholds or screening criteria, then the Proposed Project would not result in a cumulatively considerable net increase of any criteria air pollutant.

The CalEEMod Version 2016.3.2 model was used to estimate emissions related to construction activities. CalEEMod input parameters, including the Proposed Project's land use type and size, construction schedule, and anticipated construction equipment, were based on information provided by the Proposed Project applicant, or default model assumptions if Proposed Project specifics were unavailable.

Construction

Sources of emissions during Proposed Project construction would include off-road construction equipment exhaust, on-road vehicles exhaust and entrained road dust (i.e., material delivery trucks and worker vehicles), paving, and architectural coating activities. Detailed assumptions associated with Proposed Project construction are included in Appendix C.

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAQMD construction thresholds of significance. Table 3.3-8 shows average daily construction emissions of O_3 precursors (ROG and NO_x), PM_{10} exhaust, and $PM_{2.5}$ exhaust during Proposed Project construction under a 6-year buildout scenario.[5]

Table 3.3-8
Average Daily Unmitigated Construction Emissions – 6-Year Buildout

Years	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	Pounds per Day			
2023-2028 Construction	3.1	12.7	0.5	0.5
BAAQMD Construction Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	No	No	No	No

Source: See Appendix C for detailed results.
Notes: The values shown are average daily emissions based on total overall tons of construction emissions, converted to pounds, and divided by1,142 active work days.
ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.3-8 construction of future residences would not exceed BAAQMD significance thresholds under either buildout scenario. Criteria air pollutant emissions during construction would be less than significant. Although the BAAQMD does not have a quantitative significance threshold for fugitive dust, the BAAQMD's CEQA Air Quality Guidelines recommend that projects determine the significance for fugitive dust through application of best management practices (BMPs). The Proposed Project contractor would be required as conditions of approval to implement the following BMPs that are required of all construction projects:

1. All exposed surfaces (e.g., parking/staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

[5] Fuel combustion during construction and operations would also result in the generation of SO_2 and CO. These values are included in Appendix C. However, since the SFBAAB is in attainment of these pollutants, the BAAQMD has not established a quantitative mass-significance threshold for comparison and are not included in the project-generated emissions tables in this document. Notably, the BAAQMD does have screening criteria for operational localized CO, which are discussed in more detail below.

3. All visible mud or dirt track-out onto local roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of the required fugitive dust control measures would ensure air quality and fugitive dust-related impacts associated with Proposed Project construction would remain **less than significant**.

Operations

Operation of the Proposed Project would generate criteria pollutant (including ROG, NO_x, PM_{10}, and $PM_{2.5}$) emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, and landscaping equipment), and energy sources (electrical consumption). CalEEMod was used to estimate daily emissions from Proposed-Project-related operational sources. Table 3.3-9 summarizes the operational emissions criteria pollutants that would be generated from the Proposed Project. Operational emissions were then compared to the BAAQMD operational thresholds.

Table 3.3-9
Daily Unmitigated Operational Emissions

Source	ROG	NO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Area	3.6	1.8	0.2	0.2
Energy	0.1	0.5	<0.1	<0.1

Table 3.3-9
Daily Unmitigated Operational Emissions

Source	ROG	NO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Mobile	0.9	4.6	3.6	1.0
Total	4.6	6.9	3.8	1.2
BAAQMD Operational Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	No	No	No	No

Source: See Appendix C for detailed results.
Notes: The values shown are the maximum summer or winter daily emissions results from CalEEMod.
ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; <0.01 = value less than reported 0.1.

As indicated in Table 3.3-9, operational emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$ would not exceed the BAAQMD significance thresholds resulting from development of the Proposed Project. Therefore, the Proposed Project would have a **less-than-significant impact** in relation to regional operational emissions.

Health Effects of Criteria Air Pollutants

Construction and operation of the Proposed Project would not result in emissions that exceed the BAAQMD emission thresholds for any criteria air pollutants, including ROG, NO_x, PM_{10}, or $PM_{2.5}$. ROG emissions would be associated with motor vehicles, construction equipment, and architectural coatings; however, Proposed-Project-generated ROG emissions would not result in the exceedances of the BAAQMD thresholds, as shown in Table 3.3-8 and Table 3.3-9. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, the Proposed Project would be required to adhere to Regulation 8, Rule 3 – Architectural Coatings, which restricts the VOC content of coatings.

ROG and NO_x are precursors to O_3, for which the SFBAAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROG and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SFBAAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the O_3 AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, because ROG and NO_x emissions associated with Proposed Project construction and/or operation would not exceed the BAAQMD daily thresholds, it is not anticipated the

Proposed Project would contribute substantially to regional O_3 concentrations and the associated health effects.

Construction and operation of the Proposed Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, Proposed Project construction would be relatively short-term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of the Proposed Project would not create substantial, localized NO_x impacts. Therefore, the Proposed Project is not anticipated to result in potential health effects associated with NO_2 and NO_x.

CO tends to be a localized impact associated with congested intersections. As described in Impact 3.3-3 below, the Proposed Project would result in minimal new traffic trips that would not exceed the BAAQMD CO screening criteria resulting in the formation of potential CO hotspots. Thus, the Proposed Project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the Proposed Project would also not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SFBAAB from coming into attainment for these pollutants. The Proposed Project would also not result in substantial DPM emissions during construction and operation, and therefore, would not result in significant health effects related to DPM exposure. Additionally, the Proposed Project would implement dust control strategies and be required to comply with Regulation 6, Rule 6 – Prohibition of trackout and the BAAQMD fugitive dust BMPs, which limit the amount of fugitive dust generated during construction. Due to the minimal contribution of PM_{10} and $PM_{2.5}$ during construction and operation, it is not anticipated that the Proposed Project would result in potential health effects associated related to particulate matter.

In summary, because construction and operation of the Proposed Project would not result in the exceedances of the BAAQMD significance thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$, and because the BAAQMD thresholds are based on levels that the SFBAAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established to protect public health and welfare, it is anticipated that the Proposed Project would not result in health effects associated with criteria air pollutants.

Notably, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or

potential additional nonattainment days, and methods available to quantitatively evaluate health effects may not be appropriate to apply to emissions associated with the Proposed Project, which cannot be estimated with a high-level of accuracy. Notwithstanding, because construction and operation of the Proposed Project would not result in exceedances of the BAAQMD significance thresholds for criteria pollutants, potential health impacts associated with criteria air pollutants would be **less than significant**.

Mitigation Measures

None required.

3.3-3: Would the Proposed Project expose sensitive receptors to substantial pollutant concentrations? This impact would be less than significant.

Criteria Air Pollutant Emissions and Associated Pollutant Concentrations

As discussed above in Impact 3.3-2, because construction and operation of the Proposed Project would not result in the exceedances of the BAAQMD significance thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$, and because the BAAQMD thresholds are based on levels that the SFBAAB can accommodate without affecting the attainment date for the AAQS and the AAQS are established to protect public health and welfare, it is anticipated that the Proposed Project would not result in health effects associated with criteria air pollutants. Therefore, potential health impacts associated with criteria air pollutants would be **less than significant**.

Toxic Air Contaminants

The BAAQMD has adopted project and cumulative thresholds for three risk-related air quality indicators to sensitive receptors: cancer risks, noncancer health effects, and increases in ambient air concentrations of $PM_{2.5}$. These impacts are addressed on a localized, rather than regional, basis in relation to sensitive receptors identified for a project. Sensitive receptors are groups of individuals, including children, older adults, the acutely ill, and the chronically ill, that may be more susceptible to health risks due to chemical exposure. Sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes. As previously discussed, the nearest sensitive receptors are single-family residences located approximately 20 feet east of the Project site.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy equipment operations and heavy-duty trucks during construction of the Proposed Project, and the associated health impacts to sensitive receptors. As shown in Table 3.3-8, average daily particulate matter (PM_{10} or $PM_{2.5}$) exhaust emissions generated by construction equipment

operation would be minimal, well below the BAAQMD significance thresholds. Moreover, for the purposes of modeling it is assumed construction would occur over an approximate 6-year period (1,142 active construction days), which equates to approximately 10% of the total 30-year analysis exposure period for residential receptors, after which Proposed-Project-related TAC emissions would cease. Furthermore, the Proposed Project would not require the extensive use of heavy-duty construction equipment, which is subject to CARB's Airborne Toxic Control Measures for in-use diesel construction equipment to reduce DPM emissions, and it would not involve extensive use of diesel trucks.

Operation of the Proposed Project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators) or result in substantial diesel vehicle trips (i.e., delivery trucks). Therefore, the Proposed Project would not result in exposure of sensitive receptors in the vicinity of the Project site to substantial TAC concentrations due to either construction or operation and impacts would be **less than significant**.

Local Carbon Monoxide Concentrations

The BAAQMD thresholds of significance for local CO emissions is the 1-hour and 8-hour CAAQS of 20 ppm and 9ppm, respectively. By definition, this represent levels that are protective of public health. According to the BAAQMD, a proposed project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met (BAAQMD 2017a):

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The Proposed Project would generate minimal new traffic trips, estimated to be approximately 900 weekday vehicle trips, and would comply with the BAAQMD screening criteria. Accordingly, Proposed-Project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. Thus, the CO emissions impact would be **less-than-significant on a project-level and cumulative basis.**

Mitigation Measures

None required.

3.3.5 Cumulative Impacts

The cumulative context of an air pollutant is dependent on the specific pollutant being. O_3 precursors are a regional pollutant; therefore, the cumulative context would be existing and future development within the entire SFBAAB. This means that O_3 precursors generated in one location do not necessarily have O_3 impacts in that area. Instead, precursors from across the region can combine in the upper atmosphere and be transported by winds to various portions of the air basin. Consequently, all O_3 precursors generated throughout the air basin are part of the cumulative context.

The geographic scope for the cumulative analysis is Napa County and surrounding areas, which are located within the SFBAAB for O_3. The SFBAAB includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, as well as the southern half of Sonoma County and the southwestern portion of Solano County. The BAAQMD establishes emissions thresholds for regional emissions.

Particulates (fugitive dust and DPM) and TACs would result in localized impacts in close proximity to pollutant sources. There are no other active cumulative projects in the immediate vicinity of the Project site that are anticipated to contribute to localized TAC exposure; therefore, an analysis of the cumulative effects is not addressed below.

3.3-4: Would the Proposed Project contribute to cumulative air quality emissions within the existing area? The Project's contribution would not be considerable.

As previously discussed under Impact 3.3-2, the Proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Therefore, the Proposed Project's cumulative contribution would be negligible and impacts would not be considerable resulting in a **less-than-significant cumulative impact**.

Mitigation Measures

None required.

3.3.6 References

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3.4 BIOLOGICAL RESOURCES

3.4.1 Introduction

This section describes the existing biological resources present within the proposed Hunter Subdivision Project (Proposed Project) site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies feasible mitigation measures.

Comments received in response to the Notice of Preparation included general concerns regarding potential Proposed Project impacts to wildlife species and the Napa River, and specific concerns regarding potential Proposed Project effects on fish species in the Napa River. All of the concerns raised are addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Biological resources discussed herein were identified through the review and compilation of existing information and field reconnaissance surveys conducted by Dudek staff. Existing documentation of potential biological resources at the Project site include an Updated Biological Assessment report prepared by Wetland Research Associates (WRA), a Wetland Delineation prepared by Dudek, and the results of a rare plant survey all provided in Appendix D. Other sources reviewed are listed in Section 3.4.6, References.

3.4.2 Environmental Setting

This section provides information on the condition of natural resources in the region and on the Project site, the extent of sensitive natural communities and critical habitat, presence or absence of jurisdictional wetlands on the site, and the distribution and habitat requirements of special-status species that have been recorded from or are likely to occur in the Proposed Project vicinity and identifies the biological resources that could be affected by implementation of the Proposed Project.

Summary of Previous Studies

Wetland Delineation **(North Fork Associates 2006):** North Fork Associates conducted a formal wetland delineation of the Project site in July 2006. Two ditches were mapped as present in the Project site. No wetlands were identified during the fieldwork. The results of the delineation were summarized in a formal report (dated September 12, 2006). The U.S. Army Corps of Engineers (USACE) verified the delineation in 2008, which is valid for 5 years from the date of the letter.

Biological Assessment **(WRA 2011):** WRA conducted a field reconnaissance survey of the Project site in November 2011, to verify site conditions, assess habitat suitability for special-

status species, and evaluate the potential presence of any wetlands or other waters of the U.S. The survey was conducted after any wetlands that may have formed as a result of the placement of fill assocated with the Napa River Flood Control project in 2010. No special-status species were detected in or near the Project site during the 2011 survey.

***Updated Biological Assessment* (WRA 2015):** WRA conducted a biological assessment of the Project site in March 2015. The purpose of the survey was to compare existing site conditions to those documented in 2011. The report concluded that existing site conditions have not changed substantially since 2011. No special-status species were detected during the 2015 site assessment.

Summary of Studies Conducted as Part of This Project

The following technical studies and site assessments were conducted in 2018 and/or 2019 by Dudek and are included in Appendix D:

- In February 2018, Dudek conducted a biological reconnaissance survey to to verify WRA's 2015 Biological Assessment. The survey included a general assessessment of on-site habitats and their potential to support various special-status plant and wildlife species and to characterize and map on-site vegetation communities. The survey consisted of pedestrian transects throughout the Project site to collect data related to biological resources present or potentially present within the site. An aerial photograph and digital georeferenced map with an overlay of the property boundary was used to map the vegetation communities and record any anecdotally observed special-status or sensitive biological resources while in the field. Incidental observations of wildlife (common and/or special-status) or wildlife sign (e.g., tracks, scat) were also recorded. The field survey included the Project site only; however, general characteristics of adjacent properties were also noted during the survey by scanning with and without binoculars. A separate report summarizing Dudek's February 2018 survey was not prepared because the results of the survey have been incorporated into this section.
- In February and April 2019, Dudek biologists conducted a jurisdictional delineation to characterize and map wetland/aquatic areas potentially under the jurisdiction of USACE pursuant to Section 404 of the federal Clean Water Act and under California Department of Fish and Wildlife (CDFW) jurisdiction pursuant to Section 1600 of the California Fish and Game Code. Potentially jurisdictional features were delineated based on methodology described in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). Non-wetland waters of the United States are delineated based on the presence of an ordinary high water mark, as determined using the methodology in A Field Guide to

the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2010).

- In June 2020, a Dudek botanist conducted a plant survey for the bent-flowered fiddleneck (*Amsinckia lunaris),* a California Rare Plant Rank (CRPR) 1B.2 species, which is defined by the California Native Plant Society (CNPS) as "fairly endangered in California." The survey was conducted according to the 2018 CDFW plant survey protocol during the blooming period (March through June) when the plant would be evident and identifiable. No bent-flowered fiddleneck plants were detected.

Regional Setting

The City of St. Helena (City) is situated within the Napa Valley floor, bounded by the Mayacamas Mountain Range on the western and northern sides and the Howell Mountains on the eastern side. The City is generally characterized by a mix of urban development and agricultural uses with some undeveloped wooded hillsides to the east and west of downtown and wooded hillsides interspersed with residential development to the west of downtown (City of St. Helena 2018). The Project site is located approximately three blocks east of downtown and State Route 29, and west of the Napa River in an area of medium- to low-density housing.

The Proposed Project site is located in the North Coast Ranges geographic subregion, on the border of the Inner North Coast Ranges district and the Outer North Coast Ranges District (Jepson Flora Project 2019). The Inner North Coast Ranges district is characterized by low rainfall and hot, dry summers while the Outer North Coast Ranges district has more marine influences and is characterized by higher rainfall (Baldwin et al. 2012). The Napa Valley, in which the city is located, separates these two districts. The western hills of the Napa Valley contain more redwoods and mixed evergreen forest while the eastern hills are dominated by chaparral and oak woodlands. Rainfall is intermediate between the two districts and averages 34.61 inches a year and temperatures range from an average low of 36°F in January to an average high of 89°F in July (WRCC 2019).

Local Setting

The Project site has been extensively altered by past activities associated with agriculture, and the construction of the City's Flood Protection Project, which included the placement of excess fill material from the Flood Protection Project on the site. The Project site is bordered on the south and east by medium-density residential development, to the northeast by the Napa River and associated riparian vegetation, and to the northwest by a gravel levee maintenance road/public trail and agricultural and rural residential land.

Topography

The Project site is generally flat, with micro topography created by past agriculture and grading practices, including the placement of fill on the site. The current elevation of the site varies from approximately 230 feet above mean sea level on its southern edge to approximately 212 feet above mean sea level on its northern edge. The portion of the site planned for the extension of Adams Street ranges from 243 feet above mean sea level to 230 feet above mean sea level. See Section 3.6, Geology and Soils, for an in-depth discussion of soils, geology, and topography of the Project site.

Soils

The United States Department of Agriculture's Natural Resources Conservation Service conducts soil surveys and creates maps representing the location and type of soil in order to aid in agricultural, conservation, and land use decisions. The Natural Resources Conservation Service identifies the following soils as occurring on the Project site (USDA 2019):

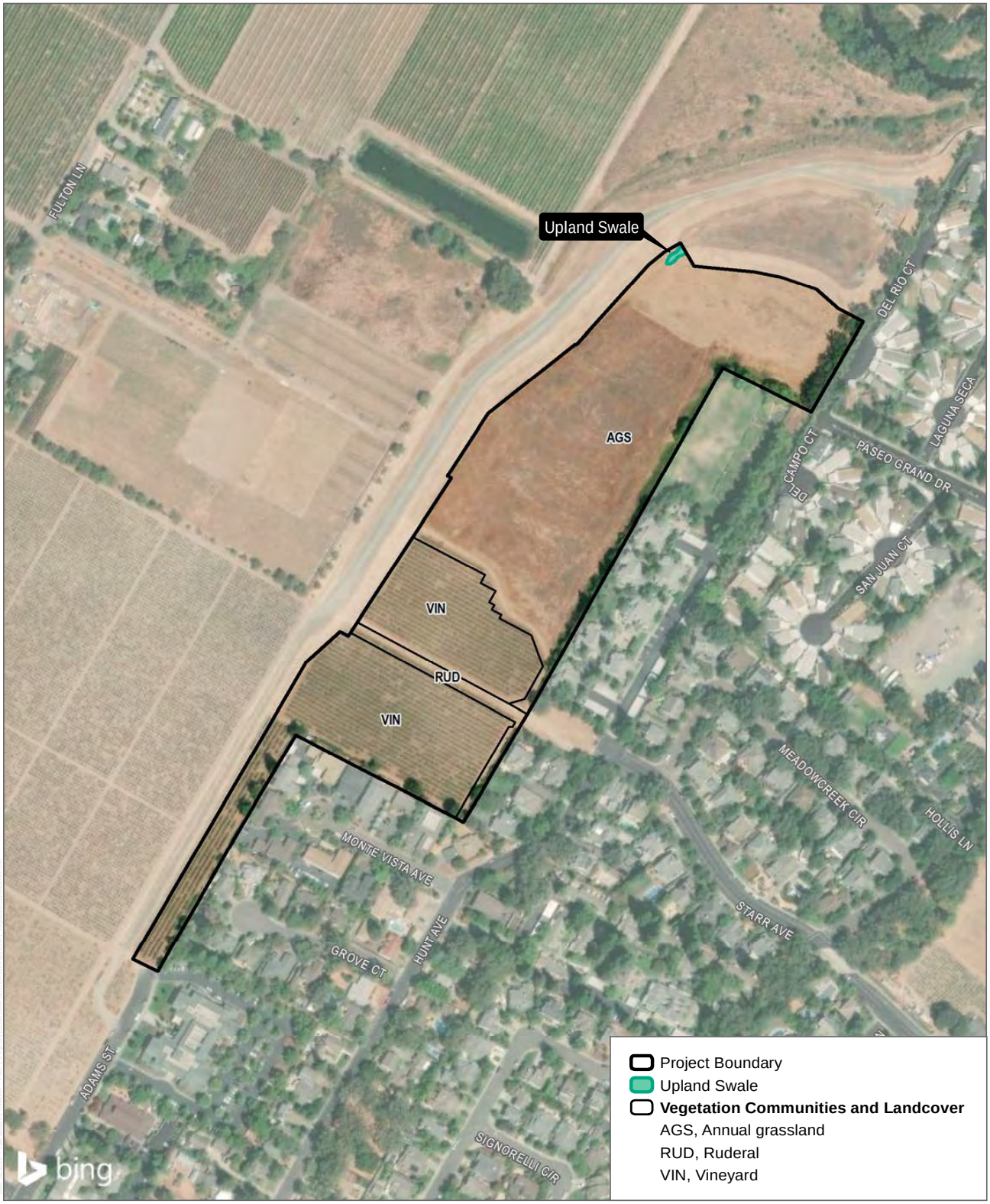
- Bale clay loam, 0 to 2% slopes
- Bale clay loam, 2 to 5% slopes
- Cole silt loam, 0 to 2% slopes
- Cortina very gravelly loam, 0 to 5% slopes, moist

Hydrology

The Project site is within the greater Napa River Watershed, which drains water from hillsides through the Napa Valley and into the San Pablo Bay, approximately 50 miles to the south (NCWICC 2019a). The Napa River flows from northwest to southeast approximately 500 feet north/northeast of the Project site. The Project site has been partially graded in the past for construction of a City storm water detention basin which is currently located directly north/northeast of the site. A drainage ditch along the southwestern edge of the Project site drains rainwater runoff from the site north and east and into this detention basin. See Section 3.9, Hydrology and Water Quality, for an in-depth discussion of drainage and hydrology on the Project site.

Vegetation Communities and Land Cover Types

One vegetation community, three anthropogenic land cover types, and two aquatic land cover types are present in the Project site. The vegetation community is California annual grassland. Anthropogenic land cover types include agriculture (vineyard), ruderal, and upland swale. Aquatic land cover types include seasonal wetlands and a drainage ditch. Table 3.4-1 provides a breakdown of the various vegetation communities or land cover types and Figures 3.4-1 and 3.4-2 graphically depicts this information. A more detailed discussion is included below.



SOURCE: Bing Maps 2019

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FIGURE 3.4-1

Vegetation Communities and Land Cover Types

Hunter Subdivision Project

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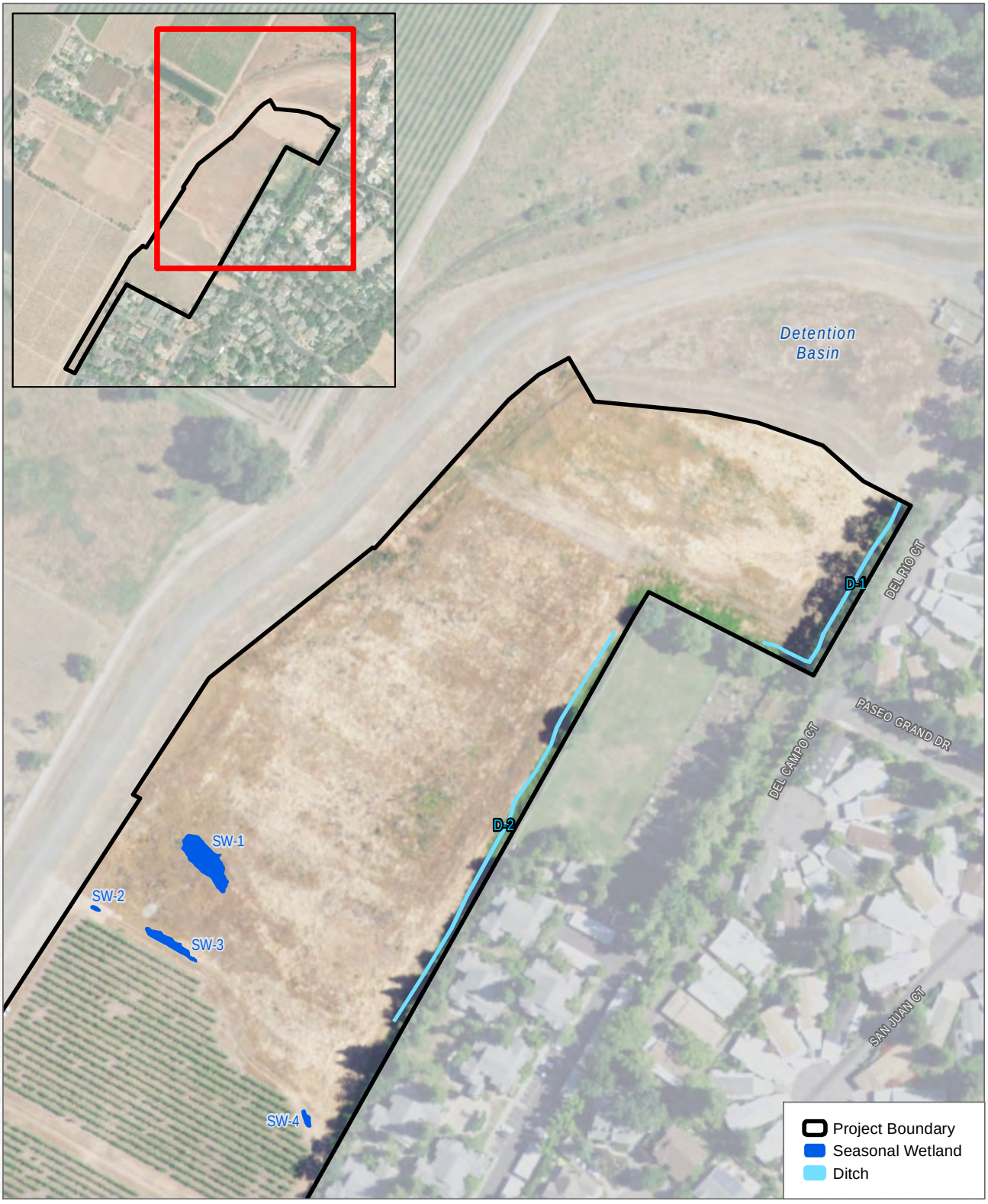

SOURCE: USDA 2016

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FIGURE 3.4-2

On-Site Seasonal Wetlands and Drainage Features

Hunter Subdivision Project

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Table 3.4-1
Vegetation Communities and Land Cover Types

Vegetation Community or Land Cover Type	Acres
Vegetation Communities	
California Annual Grassland	9.67
Subtotal	9.67
Anthropogenic Land Cover Types	
Agriculture (Vineyard)	6.02
Ruderal	0.45
Upland Swale	0.02
Subtotal	6.49
Aquatic Land Cover	
Seasonal Wetland	0.07
Ditch	0.06
Subtotal	0.13
Total	16.29

Source: Dudek 2019.

California Annual Grassland. California annual grassland comprises 9.67 acres of the Project site. Non-native and ruderal grass and forb species such as wild oat (*Avena fatua*), Mediterranean barley (*Hordeum murinum*), seaside barley (*Hordeum marinum*), redstem stork's bill (*Erodium cicutarium*), wild radish (*Raphanus sativus*), and Italian thistle (*Carduus pycnocephalus*) are common in this vegetation community. This vegetation community does not correspond to any identified community in the *Manual of California Vegetation, Online Edition*, and it is not a sensitive natural community (CDFW 2018; CNPS 2018).

The California annual grassland on the Project site is mowed or disked on a semi-annual basis. Although dominated by non-native grasses, the California annual grassland onsite provides foraging opportunities for raptor species. Additional wildlife that may use this vegetation community for foraging or breeding include ground-nesting birds such as mourning dove (*Zenaida macroura*), black-tailed jackrabbit (*Lepus californicus*), and fossorial mammals such as California vole (*Microtus californicus*) and Botta's pocket gopher (*Thomomys bottae*).

Agriculture (Vineyard). An approximately 6.02-acre vineyard occupies the southwestern portion of the Project site along with an approximately 1-acre area of vineyard located in the southwestern "panhandle" portion of the site. These vineyards are maintained on an annual basis through pruning, mowing, and disking. Cultivated grapes (*Vitis* spp.) is the primary species in this land cover type, with a sparse herbaceous layer between vine rows consisting of non-native grasses and forbs similar to those found in the adjacent California annual grasslands.

Ruderal. Ruderal non-natural land cover type includes areas disturbed by anthropogenic or human activities that retain a pervious surface without vegetation or that support an assortment of weedy, non-native vegetation. Vegetation common in the 0.45 acres of ruderal land cover onsite include wild oat, prickly lettuce (*Lactuca serriola*), black mustard (*Brassica nigra*), and yellow star thistle (*Centaurea solsitialis*). On the Project site, ruderal areas include areas regularly maintained through disking and mowing. Vegetation in these areas is dominated by non-native annual species such as cheeseweed (*Malva parviflora*), winter marigold (*Calendula arvensis*), and grasses similar to those discussed in the annual grasslands.

Upland Swale. There is one upland swale in the northwest corner of the Project site. The swale directs surrounding surface runoff to the detention basin north of the Project site. Apart from the detention basin, the upland swale is isolated from aquatic features. Vegetation in the swale is consistent with the surrounding California annual grassland. No defined bed and bank are associated with the swale, which was likely excavated specifically for stormwater drainage purposes.

Seasonal Wetlands. Four seasonal wetlands occur in the California annual grassland onsite. These areas are approximately 0.07 acres, combined, and are discernable from the surrounding grassland by a change in the dominant vegetation and/or lack of vegetation in the deepest portions due to seasonal ponding of water. Vegetation common in seasonal wetlands onsite include seaside barley, curly dock (*Rumex crispus*) and fiddle dock (*Rumex pulcher*), all of which are common in areas of seasonal inundation.

Drainage Ditch. An approximately 0.06-acre ditch runs the length of the northwestern edge of the Project site (see Figure 3.4-2, On-Site Seasonal Wetlands and Drainage Features). Himalayan blackberry (*Rubus armeniacus*) brambles dominate the vegetation in the ditch. The farther northeast the ditch travels, the more incised it becomes. At the northeastern end of the Project site, the ditch is approximately five feet deep with a defined bed and bank, as well as a canopy of valley oak (*Quercus lobata*) trees. Himalayan blackberry, toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), and oak seedlings dominate the understory of the valley oak canopy.

Sensitive Natural Communities

Sensitive natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. The CDFW maintains a list of natural vegetation communities. Those communities with a State or Global Rarity ranking of S or G 1 through 3 are considered sensitive (CDFW 2018). In addition to sensitive natural communities, wetlands and riparian vegetation communities otherwise protected under state and federal law are also considered sensitive.

Based on review of available resources and observation of the previously disturbed nature of vegetation communities and land cover types within the Project site, no sensitive natural communities, as defined by the CDFW (2018), occur within the Project site (Figure 3.4-1). Seasonal wetlands onsite, as well as the drainage ditch may be considered sensitive (Figure 3.4-2); these features are discussed in more detail under potentially jurisdictional wetlands and waters below.

Wildlife Movement and Nursery Sites

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by assuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation (extinction) or ecological catastrophes (e.g., fires). Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as “steppingstones” for dispersal.

The Project site is bordered by development to the east, south, and agriculture to the north/northwest. The Napa River riparian corridor is located approximately 500 feet northeast of the Project site and is identified as a major, regional north-south wildlife movement route in Napa County (Napa County Watershed Information & Conservation Council 2018). Additional landscape blocks and habitat linkages are located to the north, east, and west of the Project site, but are at least 1.4 miles from the site (refer to Figure 3.4-3, Wildlife Corridors and Habitat Linkages).

While the mature trees and shrubs along the Napa River provide cover and essential habitat linkage for resident and migratory wildlife, the Project site itself does not function as a wildlife movement corridor due to the surrounding development, lack of connectivity with other undeveloped areas, and existing and historic agricultural uses of the site. The grassland on the Project site does not provide adequate cover or nursery sites for mammal species with the exception of small, fossorial mammals such as pocket gophers and field mice.

The Napa River, generally north of the site, supports native resident and migratory fish, including Chinook salmon and steelhead. The two linear features onsite are ephemeral and separated from the Napa River to the north by culverts that are not regularly open for drainage to the river (see details in Section 3.9, Hydrology and Water Quality). As such, these fish species are not expected to occur on or adjacent to the Project site.

Special-Status Resources

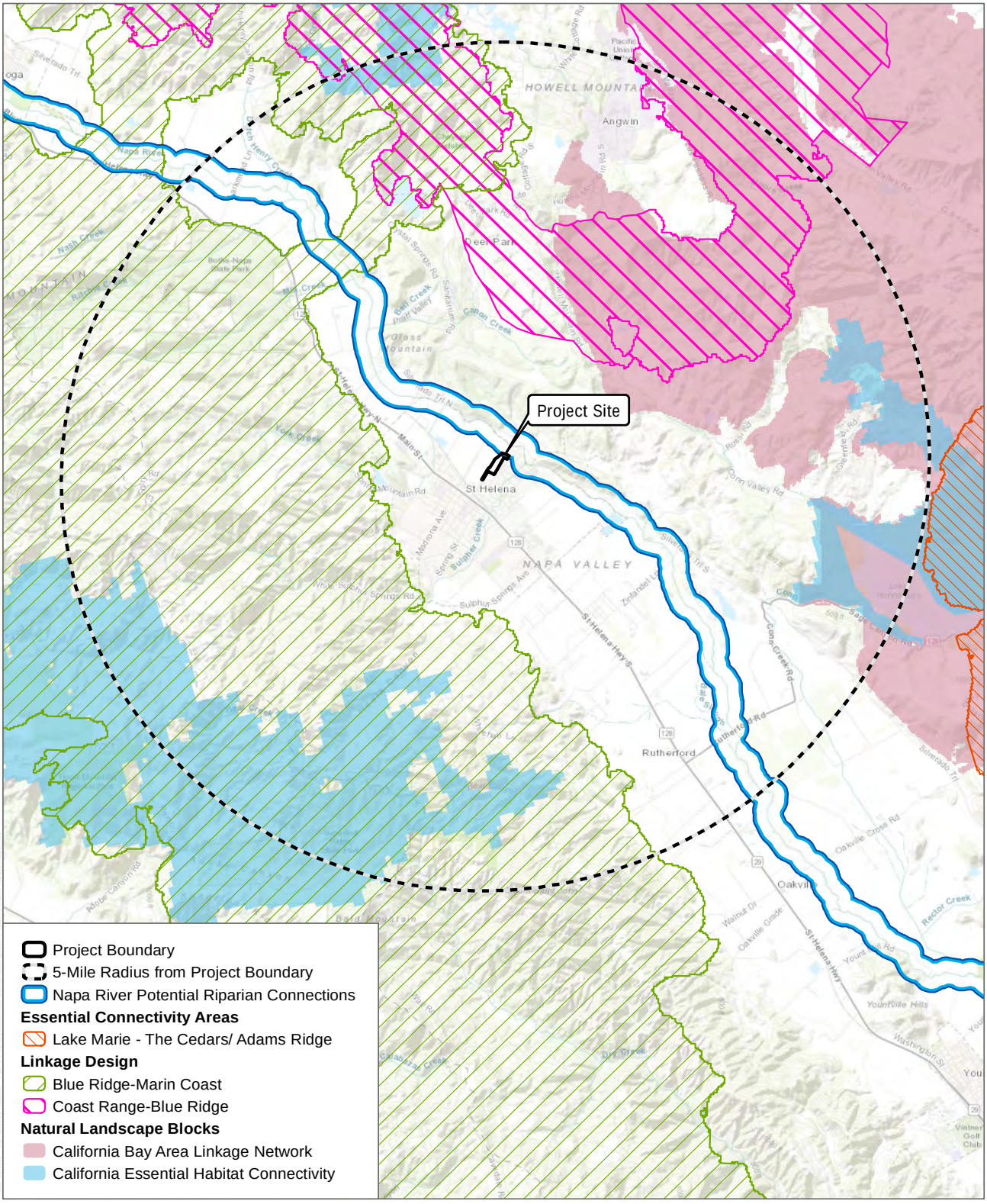
For the purposes of this report, special-status plant species are those plants listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (FESA) (16 USC Section 1531 et seq.); those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA) (Fish & Game Code, Section 2050 et seq.); and plants that are CRPR 1 and 2 in the CNPS's online Inventory of Rare and Endangered Plants (CNPS 2019). Special-status wildlife species are those that are designated as either rare, threatened, or endangered (or candidate) by CDFW or the USFWS; are protected under either the CESA or FESA; meet the California Environmental Quality Act (CEQA) definition for endangered, rare, or threatened (CCR Tit. 14, Section 15380(b),(d)); are considered fully protected under the California Fish & Game Code, Section 3511, 4700, 5050, and 5515; or that are on the CDFW Special Animals List (CDFW 2018) and determined by CDFW to be a Species of Special Concern.

As noted in the Methods of Analysis section below, WRA initially evaluated the potential occurrence of special-status plant and wildlife species on the Project site in 2015. Dudek biologists conducted additional resource database searches in 2018, 2019, and the species list was updated (Tables 3.4-2 and 3.4-3 and Figure 3.4-4, CNDDB Occurrences). This list was primarily derived from a review of the California Natural Diversity Database (CNDDB) (CDFW 2019), the CNPS Inventory of Rare and Endangered Plants (CNPS 2019), and the USFWS lists of federal endangered and threatened species (USFWS 2019).

The potential for those species identified in the literature search to occur on the Project site were evaluated based on the habitat requirements of each species relative to the observed existing conditions, results of previous general and focused habitat assessments and surveys for plants and animals conducted in November 3, 2011, and March 20, 2015 (WRA 2015), and surveys conducted by Dudek biologists on February 20, 2018, April 10, 2019, and June 1, 2020.

Special-Status Plants

Based on the review of the databases and other information sources, 57 special-status plant species are documented as occurring or potentially occurring in the vicinity of the Project site (Table 3.4-2). Review of Project site conditions and results of surveys conducted by WRA and Dudek staff biologists demonstrate that no special-status plants are expected to occur on the Project site for varying reasons such as the absence of habitat requirements for the species, the distance to known occurrences, the species distribution or elevation ranges, or species absence during focused protocol surveys.



SOURCE: CDFW 2015/2016, Bing Maps 2019

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FIGURE 3.4-3

Wildlife Corridors and Habitat Linkages

Hunter Subdivision Project

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Project Boundary

CNDDB Species Occurence

Plant

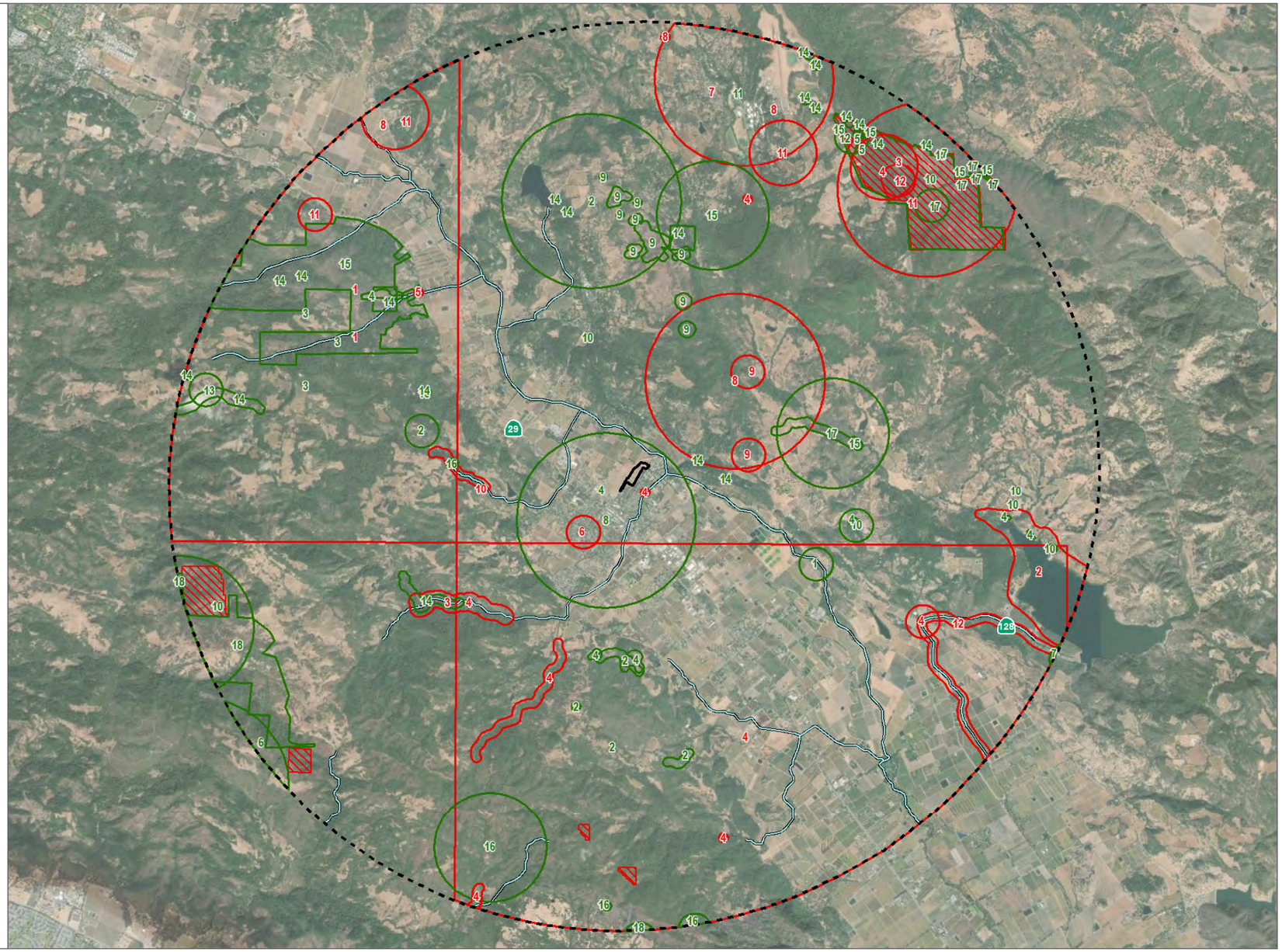
1, Bent-flowered fiddleneck (*Amsinckia lunaris*)
2, Calistoga ceanothus (*Ceanothus divergens*)
3, Calistoga popcornflower (*Plagiobothrys strictus*)
4, Clara Hunt's milk-vetch (*Astragalus claranus*)
5, Cobb Mountain lupine (*Lupinus sericatus*)
6, Colusa layia (*Layia septentrionalis*)
7, Green jewelflower (*Streptanthus hesperidis*)
8, Greene's narrow-leaved daisy (*Erigeron greenei*)
9, Holly-leaved ceanothus (*Ceanothus purpureus*)
10, Jepson's leptosiphon (*Leptosiphon jepsonii*)
11, Marsh checkerbloom (*Sidalcea oregana ssp. hydrophila*)
12, Napa bluecurls (*Trichostema ruygtii*)
13, Napa checkerbloom (*Sidalcea hickmanii ssp. napensis*)
14, Napa false indigo (*Amorpha californica var. napensis*)
15, Narrow-anthered brodiaea (*Brodiaea leptandra*)
16, Rincon Ridge ceanothus (*Ceanothus confusus*)
17, Sharsmith's western flax (*Hesperolinon sharsmithiae*)
18, Sonoma ceanothus (*Ceanothus sonomensis*)

Wildlife

1, American peregrine falcon (*Falco peregrinus anatum*)
2, Bald eagle (*Haliaeetus leucocephalus*)
3, California giant salamander (*Dicamptodon ensatus*)
4, Foothill yellow-legged frog (*Rana boylii*)
5, Fringed myotis (*Myotis thysanodes*)
6, North American porcupine (*Erethizon dorsatum*)
7, Obscure bumble bee (*Bombus caliginosus*)
8, Pallid bat (*Antrozous pallidus*)
9, Purple martin (*Progne subis*)
10, Steelhead - central California coast DPS (*Oncorhynchus mykiss irideus pop. 8*)
11, Townsend's big-eared bat (*Corynorhinus townsendii*)
12, Western pond turtle (*Emys marmorata*)

Critical Habitat

Northern Spotted Owl (*Strix occidentalis caurina*)
Steelhood (*Oncorhynchus mykiss*)



SOURCE: CDFW 2019, USFWS 2005/2012, Bing Maps 2019

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FIGURE 3.4-4
CNDDB Occurrences
Hunter Subdivision Project

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Agenda Item #6.2.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Allium peninsulare var. *franciscanum*	Franciscan onion	None/None/1B.2	Cismontane woodland, Valley and foothill grassland; clay, volcanic, often serpentinite/perennial bulbiferous herb/(Apr)May–June/170–1,000	Not expected to occur. No clay, volcanic, or serpentinite soils present.
Alopecurus aequalis var. *sonomensis*	Sonoma alopecurus	FE/None/1B.1	Marshes and swamps (freshwater), Riparian scrub/perennial herb/May–July/15–1,200	Not expected to occur. No marsh or riparian scrub habitat present.
Amorpha californica var. *napensis*	Napa false indigo	None/None/1B.2	Broadleafed upland forest (openings), Chaparral, Cismontane woodland/ perennial deciduous shrub/Apr–July/390–6,560	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Amsinckia lunaris	bent-flowered fiddleneck	None/None/1B.2	Coastal bluff scrub, Cismontane woodland, Valley and foothill grassland, often serpentine/annual herb/Mar–June/5–1,640	Not expected to occur. The annual grassland onsite provides marginal habitat for this species due to a lack of serpentine soils and past and present anthropogenic disturbances at the site. Present mowing/vegetation management and past grading and agricultural uses of the site likely preclude the potential for this species to in the Project site. The plant survey did not identify the presence of the plant (see Appendix D).
Arctostaphylos manzanita ssp. *elegans*	Konocti manzanita	None/None/1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest; volcanic/perennial evergreen shrub/(Jan)Mar–May(July)/1,295–5,300	Not expected to occur. The site is outside of the species' known elevation range and there is no chaparral or woodland habitat present.
Arctostaphylos stanfordiana ssp. *decumbens*	Rincon Ridge manzanita	None/None/1B.1	Chaparral (rhyolitic), Cismontane woodland/ perennial evergreen shrub/Feb–Apr(May)/ 245–1,215	Not expected to occur. No chaparral or woodland habitat present.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Astragalus claranus	Clara Hunt's milk-vetch	FE/ST/1B.1	Chaparral (openings), Cismontane woodland, Valley and foothill grassland; serpentinite or volcanic, rocky, clay/annual herb/Mar–May/245–900	Not expected to occur. No serpentinite or volcanic, rocky, clay soils present.
Astragalus rattanii var. *jepsonianus*	Jepson's milk-vetch	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; often serpentinite/ annual herb/Mar–June/ 965–2,295	Not expected to occur. The site is outside of the species' known elevation range.
Brodiaea leptandra	narrow-anthered brodiaea	None/None/1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland; volcanic/perennial bulbiferous herb/May–July/360–3,000	Not expected to occur. The site is outside of the species' known elevation range.
Calycadenia micrantha	small-flowered calycadenia	None/None/1B.2	Chaparral, Meadows and seeps (volcanic), Valley and foothill grassland; Roadsides, rocky, talus, scree, sometimes serpentinite, sparsely vegetated areas/annual herb/June–Sep/15–4,920	Not expected to occur. No chaparral, meadows and seeps, or volcanic or serpentine soils with sparse vegetation present.
Castilleja ambigua var. *meadii*	Mead's owl's-clover	None/None/1B.1	Meadows and seeps, Vernal pools; Gravelly, volcanic, clay/annual herb (hemiparasitic)/Apr–May/1,475–1,560	Not expected to occur. The site is outside of the species' known elevation range.
Ceanothus confusus	Rincon Ridge ceanothus	None/None/1B.1	Closed-cone coniferous forest, Chaparral, Cismontane woodland; volcanic or serpentinite/ perennial evergreen shrub/ Feb–June/245–3,495	Not expected to occur. No forest, chaparral, or woodland habitat present.
Ceanothus divergens	Calistoga ceanothus	None/None/1B.2	Chaparral (serpentinite or volcanic, rocky)/ perennial evergreen shrub/Feb–Apr/555–3,115	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Ceanothus purpureus	holly-leaved ceanothus	None/None/1B.2	Chaparral, Cismontane woodland; volcanic, rocky/perennial evergreen shrub/Feb–June/390–2,100	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Ceanothus sonomensis	Sonoma ceanothus	None/None/1B.2	Chaparral (sandy, serpentinite or volcanic)/perennial evergreen shrub/ Feb–Apr/705–2,625	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Centromadia parryi ssp. *parryi*	pappose tarplant	None/None/1B.2	Chaparral, Coastal prairie, Meadows and seeps, Marshes and swamps (coastal salt), Valley and foothill grassland (vernally mesic); often alkaline/annual herb/May–Nov/0–1,380	Not expected to occur. No alkaline soils present within the vernally mesic areas of the annual grassland onsite.
Cryptantha dissita	serpentine cryptantha	None/None/1B.2	Chaparral (serpentinite)/ annual herb/Apr–June/1,295–1,905	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Downingia pusilla	dwarf downingia	None/None/2B.2	Valley and foothill grassland (mesic), Vernal pools/annual herb/Mar–May/0–1,460	Not expected to occur. No vernal pool habitat present.
Erigeron greenei	Greene's narrow-leaved daisy	None/None/1B.2	Chaparral (serpentinite or volcanic)/perennial herb/May–Sep/260–3,295	Not expected to occur. No chaparral habitat present.
Eryngium constancei	Loch Lomond button-celery	FE/SE/1B.1	Vernal pools/annual/perennial herb/Apr–une/1,505–2,805	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Eryngium jepsonii	Jepson's coyote thistle	None/None/1B.2	Valley and foothill grassland, Vernal pools; clay/perennial herb/Apr–Aug/5–985	Not expected to occur. No potential vernal pool habitat or clay soils present.
Fritillaria liliacea	fragrant fritillary	None/None/1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland; Often serpentinite/perennial bulbiferous herb/Feb–Apr/5–1,345	Not expected to occur. No serpentine soils present in the annual grassland onsite.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Fritillaria pluriflora	adobe-lily	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; often adobe/perennial bulbiferous herb/Feb–Apr/195–2,315	Not expected to occur. No adobe soils present within the annual grassland onsite.
Harmonia hallii	Hall's harmonia	None/None/1B.2	Chaparral (serpentinite)/ annual herb/Apr–June/1,000–3,200	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Hesperolinon bicarpellatum	two-carpellate western flax	None/None/1B.2	Chaparral (serpentinite)/ annual herb/ May–July/ 195–3,295	Not expected to occur. No chaparral habitat present.
Hesperolinon sharsmithiae	Sharsmith's western flax	None/None/1B.2	Chaparral; serpentinite/annual herb/May–July/885–985	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Juncus luciensis	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/980–6,695	Not expected to occur. The site is outside of the species' known elevation range.
Lasthenia burkei	Burke's goldfields	FE/SE/1B.1	Meadows and seeps (mesic), Vernal pools/annual herb/Apr–June/45–1,970	Not expected to occur. No vernal pool habitat present.
Lasthenia conjugens	Contra Costa goldfields	FE/None/1B.1	Cismontane woodland, Playas (alkaline), Valley and foothill grassland, Vernal pools; mesic/annual herb/Mar–June/0–1,540	Not expected to occur. No vernal pool habitat or alkaline mesic areas present.
Layia septentrionalis	Colusa layia	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; sandy, serpentinite/annual herb/Apr–May/325–3,595	Not expected to occur. The site is outside of the species' known elevation range.
Leptosiphon jepsonii	Jepson's leptosiphon	None/None/1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland; usually volcanic /annual herb/Mar–May/ 325–1,640	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Limnanthes vinculans	Sebastopol meadowfoam	FE/SE/1B.1	Meadows and seeps, Valley and foothill grassland, Vernal pools; vernally mesic/annual herb/Apr–May/45–1,000	Not expected to occur. No vernal pool or vernally mesic habitat present.
Lupinus sericatus	Cobb Mountain lupine	None/None/1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest/perennial herb/Mar–June/900–5,005	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	None/None/1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Mesic/annual herb/Apr–July/15–5,710	Not expected to occur. No vernal pool or vernally mesic habitat present.
Navarretia leucocephala ssp. *pauciflora*	few-flowered navarretia	FE/ST/1B.1	Vernal pools (volcanic ash flow)/annual herb/ May–June/1,310–2,805	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Navarretia leucocephala ssp. *plieantha*	many-flowered navarretia	FE/SE/1B.2	Vernal pools (volcanic ash flow)/annual herb/ May–June/95–3,115	Not expected to occur. No potential vernal pool habitat present.
Navarretia myersii ssp. *deminuta*	small pincushion navarretia	None/None/1B.1	Vernal pools (clay loam)/ annual herb/Apr–May/ 1,160–1,165	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Navarretia paradoxinota	Porter's navarretia	None/None/1B.3	Meadows and seeps; Serpentinite, openings, vernally mesic, often drainages/ annual herb/May–June(July)/ 540–2,755	Not expected to occur. The site is outside of the species' known elevation range.
Navarretia rosulata	Marin County navarretia	None/None/1B.2	Closed-cone coniferous forest, Chaparral; serpentinite, rocky/annual herb/ May–July/ 655–2,085	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Penstemon newberryi var. *sonomensis*	Sonoma beardtongue	None/None/1B.3	Chaparral (rocky)/ perennial herb/Apr–Aug/2,295–4,495	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Plagiobothrys strictus	Calistoga popcornflower	FE/ST/1B.1	Meadows and seeps, Valley and foothill grassland, Vernal pools; alkaline areas near thermal springs/annual herb/Mar–June/295–525	Not expected to occur. No alkaline areas near thermal springs or vernal pool habitat present.
Poa napensis	Napa blue grass	FE/SE/1B.1	Meadows and seeps, Valley and foothill grassland; alkaline, near thermal springs/perennial herb/May–Aug/325–655	Not expected to occur. The site is outside of the species' known elevation range.
Puccinellia simplex	California alkali grass	None/None/1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Alkaline, vernally mesic; sinks, flats, and lake margins/ annual herb/Mar–May/5–3,050	Not expected to occur. No alkaline, vernally mesic, or lake margin habitat present.
Sagittaria sanfordii	Sanford's arrowhead	None/None/1B.2	Marshes and swamps (assorted shallow freshwater)/ perennial rhizomatous herb (emergent)/May–Oct(Nov)/0–2,135	Not expected to occur. No potential habitat present.
Sidalcea hickmanii ssp. *napensis*	Napa checkerbloom	None/None/1B.1	Chaparral; rhyolitic/perennial herb/ Apr–June/1,360–2,000	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Sidalcea oregana ssp. *hydrophila*	marsh checkerbloom	None/None/1B.2	Meadows and seeps, Riparian forest; mesic/perennial herb/(June)July–Aug/3,605–7,545	Not expected to occur. The site is outside of the species' known elevation range.
Sidalcea oregana ssp. *valida*	Kenwood Marsh checkerbloom	FE/SE/1B.1	Marshes and swamps (freshwater)/perennial rhizomatous herb/June–Sep/375–490	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Spergularia macrotheca var. *longistyla*	long-styled sand-spurrey	None/None/1B.2	Meadows and seeps, Marshes and swamps; Alkaline/perennial herb/Feb–May/0–835	Not expected to occur. No meadows, seeps, marsh or swamp habitat present.

Table 3.4-2
Special-Status Plant Species Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State/CRPR)[1]	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (Feet)[2]	Potential to Occur
Streptanthus batrachopus	Tamalpais jewelflower	None/None/1B.3	Closed-cone coniferous forest, Chaparral; serpentinite/ annual herb/Apr–July/1,000–2,135	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Streptanthus brachiatus ssp. *brachiatus*	Socrates Mine jewelflower	None/None/1B.2	Closed-cone coniferous forest, Chaparral; usually serpentinite/perennial herb/May–June/1,785–3,280	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Streptanthus hesperidis	green jewelflower	None/None/1B.2	Chaparral (openings), Cismontane woodland; serpentinite, rocky/annual herb/May–July/425–2,495	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Streptanthus morrisonii ssp. *elatus*	Three Peaks jewelflower	None/None/1B.2	Chaparral (serpentinite)/ perennial herb/June–Sep/295–2,675	Not expected to occur. No chaparral habitat present.
Streptanthus vernalis	early jewelflower	None/None/1B.2	Closed-cone coniferous forest, Chaparral; serpentinite/ annual herb/Mar–May/2,000–2,000	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.
Trichostema ruygtii	Napa bluecurls	None/None/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland, Vernal pools/annual herb/June–Oct/95–2,230	Not expected to occur. No vernal pool habitat present.
Trifolium amoenum	two-fork clover	FE/None/1B.1	Coastal bluff scrub, Valley and foothill grassland (sometimes serpentinite)/ annual herb/Apr–June/15–1,360	Not expected to occur. No serpentine soils present in the annual grassland onsite.
Trifolium hydrophilum	saline clover	None/None/1B.2	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), Vernal pools/annual herb/Apr–June/0–985	Not expected to occur. No mesic, alkaline habitat present.
Viburnum ellipticum	oval-leaved viburnum	None/None/2B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest/perennial deciduous shrub/May–June/ 705–4,595	Not expected to occur. The site is outside of the species' known elevation range and there is no potential habitat present.

Sources: Jepson Flora Project (2019) and CNPS (2019).

Status Legend:
- FE: Federally listed as endangered
- FT: Federally listed as threatened
- SE: State listed as endangered
- ST: State listed as threatened
- CRPR 1A: Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
- CRPR 2A: Plants Presumed Extirpated in California, But More Common Elsewhere
- CRPR 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- .1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Bent-flowered fiddleneck (*Amsinckia lunaris*). Bent-flowered fiddleneck is a CRPR 1B.2[1] species found in coastal bluff scrub, cismontane woodland, and valley and foothill grasslands between 5 and 1,640 feet above mean sea level (CNPS 2019). This species often occurs on serpentine soils (Jepson Flora Project 2019). Bent-flowered fiddleneck blooms March through June (CNPS 2019). The nearest documented CNDDB occurrence for this species is located approximately 2 miles southeast of the Project site (Figure 3.4-1) (CDFW 2019b). This occurrence is based on a March 2010 collection of the species in ruderal grassland at the edge of a vineyard located approximately 2 miles to the southeast (CDFW 2019b). Due to a lack of serpentine soils, as well as the disturbed nature of the Project site, and past grading activities associated with development of the vineyard and the nearby detention basin, there is only marginally suitable habitat for this species on the site. Surveys conducted by Dudek biologists and botanists in April 2019 and again in June 2020, were conducted within the period when this plant would be evident and identifiable. Dudek botanists did not find evidence of this species on the Project site, nor were any species within the genus *Amsinckia* observed during the surveys, which involved one focused survey for the plant conducted according to CDFW plant survey protocol (CDFW 2018; refer to Appendix D). This species is not anticipated to occur within the Proposed Project development footprint.

A polygon representing previously documented occurrences for Geene's narrow-leaved daisy (*Erigeron greenei*) and Clara Hunt's milk-vetch (*Astragalus claranus*) encompass the Project site; however, this polygon is large and non-specific and represents historic occurrences. These occurrences are old and likely extirpated as a result of development within the city limits (CDFW 2019b). Additionally, past disturbance and the ubiquity of non-native grass cover at the site likely precludes the presence of these sensitive species.

[1] CRPR 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere; 2 Fairly endangered in California (20%–80% occurrences threatened/moderate degree and immediacy of threat).

Special-Status Wildlife

Based on results of the surveys conducted by WRA and Dudek staff biologists, review of the databases and other relevant sources, 24 special-status wildlife species have been documented as occurring or potentially occurring in the vicinity of the Project site. Of these species, two are considered to have potential for occurrence (Palid Bat and White-Tailed Kite); they are identified in Table 3.4-3 and discussed below. The remaining special-status animals are not expected to occur on the Project site for varying reasons such as the absence of essential habitat requirements for the species, the distance to known occurrences, and/or the species distribution and elevation ranges.

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
Fish				
Oncorhynchus mykiss irideus pop. 8	steelhead – central California coast DPS	FT/None	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead	Not expected to occur. Although the Project site is located in the Napa River watershed, the site is not accessible to fish residing in the Napa River.
Oncorhynchus tshawytscha	Chinook – Napa River fall-run	None/None	Genetically similar to the Central Valley fall/late fall-run Evolutionary Significant Unit (ESU). Known to occur in the Napa River watershed (NCWICC 2019b).	Not expected to occur. Although the Project site is located in the Napa River watershed, the site is not accessible to fish residing in the Napa River.
Amphibians				
Dicamptodon ensatus	California giant salamander	None/SSC	Known from wet coastal forests and chaparral near streams and seeps from Mendocino Co. south to Monterey Co. and east to Napa Co. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	Not expected to occur. No stream or seep habitat in the present site. The nearest documented occurrence was observed in 2016 along Sulphur Creek, approximately 1.9 miles southwest of the Project site (CDFW 2019b).

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
Rana boylii	foothill yellow-legged frog	None/PST, SSC	Rocky streams and rivers with open banks in forest, chaparral, and woodland	Not expected to occur. No rocky stream or river habitat in the Project site. The nearest documented occurrence was observed in 2015 approximately 0.3 miles southwest of the intersection of Pope Street and Silverado Trail, along Sulphur Creek (CDFW 2019b).
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent habitat associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. There is no breeding habitat for this frog at the Project site. The Riparian woodland along Napa River may provide dispersal and/or migration habitat; however, the nearest documented occurrence of this species is located greater than 9 miles west of the Project site (CDFW 2019b).
Taricha rivularis	red-bellied newt	None/SSC	Redwood forests (and sometimes other forest types) along coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean rocky substrate.	Not expected to occur. No redwood forest or breeding habitat present.

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
		Reptiles		
Actinemys marmorata	western pond turtle (WPT)	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No aquatic habitat present. The detention basin just north of the site does not contain sufficient water during the active season to support WPT. The nearest potential aquatic habitat for WPT is in Napa Creek, which is nearly 600 feet from the site. Given the lack of aquatic habitat on and adjacent to the site, it is unlikely WPT would disperse through the Project site or remain present for nesting or overwintering purposes. The nearest documented occurrence is in Conn Creek adjacent to Lake Hennessy, approximately 3.5 miles southeast of the site (CDFW 2019b). No WPT, nor their sign, were observed on the Project site during the 2011, 2015, 2018, and 2019 biological fieldwork.
		Birds		
Accipiter striatus (nesting)	sharp-shinned hawk	None/WL	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats	Not expected to occur. No coniferous forest, black oak, or woodland nesting habitat present.

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SE, SSC	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Although the annual grassland onsite may provide foraging habitat, no breeding habitat for this species is present within or adjacent to the Project site. The nearest documented occurrence of this species was observed in 2014 approximately 7.8 miles northeast of the Project site (CDFW 2019b).
Aquila chrysaetos (nesting & wintering)	golden eagle	BCC/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur. No breeding habitat present. The nearest documented occurrence is located greater than 10 miles southwest of the Project site (CDFW 2019b).
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. Although the grassland at the Project site may provide breeding and foraging habitat, no suitable burrows for this species were observed during the biological site surveys. The nearest documented occurrence for this species is located greater than 12 miles southwest of the Project site (CDFW 2019b).

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. Although the Project site provides potential foraging habitat, the site is outside the geographic range of this species and there are no suitable nesting trees present. The nearest documented occurrence is located along the Napa River just south of Rutherford, approximately 5.2 miles southeast of the Project site (CDFW 2019b).
Cypseloides niger (nesting)	black swift	BCC/SSC	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats	Not expected to occur. The Project site is outside the geographic range of this species, and there is no cave or cliff nesting habitat present.
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to occur. Trees on the perimeter of the Project site and directly offsite to the north may provide nesting habitat for this species. Grassland at the Project site may provide foraging habitat for this species. The nearest documented occurrence for this species is located approximately 8 miles southeast of the Project site (CDFW 2019b).

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
Falco mexicanus (nesting)	prairie falcon	BCC/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Although grassland at the Project site provides potential foraging habitat, there is no nesting habitat present onsite or in the vicinity. The nearest documented occurrence is approximately 8.4 miles northwest of the Project site (CDFW 201b9).
Falco peregrinus anatum (nesting)	American peregrine falcon	FDL, BCC/SDL, FP	Usually nests on high cliffs, dunes, buildings, bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present	Not expected to occur. No nesting or foraging habitat present. The nearest documented occurrence is located in habitat consisting of small, volcanic cliffs, approximately 2 miles west of the Project site (CDFW 2019b).
Haliaeetus leucocephalus (nesting & wintering)	bald eagle	FDL, BCC/SE, FP	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to occur. No suitable large trees for nesting or aquatic hunting habitat present.
Pandion haliaetus (nesting)	osprey	None/WL	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast	Not expected to occur. No suitable large trees for nesting or aquatic hunting habitat present.
Phalacrocorax auritus (nesting colony)	double-crested cormorant	None/WL	Nests in riparian trees near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries,	Not expected to occur. No suitable large trees for nesting or aquatic hunting habitat present.

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
			and open coastlines; winter habitat includes lakes, rivers, and coastal areas	
Progne subis (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways	Not expected to occur. Although there are documented occurrences in the vicinity of the Project site (CDFW 2019b), there is no nesting or foraging habitat present onsite.
Strix occidentalis caurina	northern spotted owl	FT/ST	Nests and forages in dense, old growth forests with a complex, multi-layer canopy; prefers narrow, steep-sided canyons with north-facing slopes in northern California	Not expected to occur. No nesting or foraging habitat present.
Fish				
Hypomesus transpacificus	Delta smelt	FT/SE	Sacramento–San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay	Not expected to occur. The site is outside of the species' known geographic range and there is no potential habitat present.
Oncorhynchus mykiss irideus pop. 8	steelhead - central California coast DPS	FT/None	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead	Not expected to occur. There is no aquatic habitat present. Although the Project site is located in the Napa River watershed, the site is not accessible to fish residing in the Napa River.
Oncorhynchus tshawytscha	Chinook – Napa River fall-run	None/None	Genetically similar to the Central Valley fall/late fall-run Evolutionary Significant Unit (ESU). Known to occur in the Napa River watershed (NCWICC 2019b)	Not expected to occur. There is no aquatic habitat present. Although the Project site is located in the Napa River watershed, the site is not accessible to fish residing in the Napa River.

Table 3.4-3
Special-Status Wildlife Occurrence Potential on the Project Site

Scientific Name	Common Name	Status (Federal/State)[1]	Habitat[2]	Potential to Occur
		Mammals		
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in built structures and trees; extremely sensitive to disturbance of roosting sites	Low potential to occur. The Project site lacks roosting habitat due to ongoing anthropogenic activity in the vicinity. Grassland at the Project site could provide potential foraging habitat, although use of the site for foraging is unlikely given the lack of roosting habitat in the surrounding area.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, built structures, and tunnels; extremely sensitive to disturbance of roosting sites	Not expected to occur. No suitable caves, lava tubes, or tunnels for roosting. Ongoing anthropogenic activity at adjacent residences likely preclude roosting on residential properties.
		Invertebrates		
Syncaris pacifica	California freshwater shrimp	FE/SE	Endemic to Marin, Napa, and Sonoma Counties; found in low-elevation, low-gradient streams where riparian cover is moderate to heavy	Not expected to occur. No low-gradient, freshwater stream habitat present.

Sources: CDFW 2019c.
Status Abbreviations

FE: Federally Endangered
FT: Federally Threatened
PFE: Proposed Federally Endangered
PFT: Proposed Federally Threatened
FC: Federal Candidate
FDL: Federally Delisted
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
BLM: Bureau of Land Management Sensitive Species
USFS: U.S. Forest Service Sensitive Species
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
SE: State Endangered
ST: State Threatened
PSE: Proposed State Endangered
PST: Proposed State Threatened
SDL: State Delisted
SS: List Special Animals List, but no other status
CDF: California Department of Forestry Sensitive Species

Native bats [including Pallid Bat (*Antrozous pallidus*)]. Pallid bats, a California Species of Special Concern, are widespread throughout the western United States; southern British Columbia, Canada; and mainland and Baja California, Mexico (Hermanson and O'Shea 1983; Hall 1981). Within the United States, it ranges east into southern Nebraska, western Oklahoma, and western Texas. The pallid bat is locally common in arid deserts and grasslands throughout the western United States, and occurs in shrublands, woodlands, and forests at elevations up to 8,000 feet (Hermanson and O'Shea 1983; Hall 1981). Although this species prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging, it has been observed far from such areas (Hermanson and O'Shea 1983). Pallid bat day roosts of single- or mixed-sex colonies, often including greater than 20 individuals and sometimes more than 200 individuals, usually are established in crevices or built structures (Hermanson and O'Shea 1983). This species has also been observed using live trees and snags for day and night roosts; however, preference appears to be for tall, large-diameter trees located in mature stands with low overstory cover (Baker et al. 2008).

Pallid bats forage for a variety of species, including flightless arthropods picked up from the ground (e.g., scorpions and ground crickets), insects gleaned from vegetation (e.g., cicadas), insects taken in flight, and small vertebrates that are taken on the ground. Although the species is capable of flying more than 18 miles, most foraging occurs within about 2 miles of the day roost (Hermanson and O'Shea 1983).

While mature trees north and east of the site along the Napa River, as well as barns and other agricultural buildings to the north of the site may provide roosting habitat for this species, the absence of caves, mines, rocky outcrops, and cliffs, as well as past development and current human uses of the site limits habitat suitability. The grassland onsite provides potential foraging habitat for these species. The CNDDB lists a sighting of pallid bat approximately 0.34 miles northeast of the Project site; however, this occurrence is very old (1953) and no bats or signs of bats were observed on the Project site during field surveys (CDFW 2019b). It is unlikely any bat species would occur on the site given the ruderal nature of potential roosting habitat, the history of disturbance, and the lack of proper hydrology and topography for preferred foraging.

Other native bats, such as silver-haired bat (*Lasionycteris noctivagans*) and fringed myotis (*Myotis thysanodes*) have a potential to forage and/or roost in the vicinity of the Project site. These species are protected by California Fish & Game Code Section 4150.

White-tailed Kite (*Elanus leucurus*). The white-tailed kite is a California Fully Protected species. It is commonly associated with certain types of agriculture areas (Grinnell and Miller 1944). It also generally occurs in low-elevation grassland, wetland, oak woodland, low shrub, open woodlands, or savannah habitats. It is tolerant of moderate disturbance, such as occurs near residential subdivision developments. This species also uses fencerows and irrigation ditches

(with residual vegetation). Riparian areas adjacent to open space areas are typically used for nesting, where kites prefer dense, broadleafed deciduous trees for nesting and night roosting (Brown and Amadon 1968). They also nest in young redwoods and mid-sized Douglas firs in Northern California.

White-tailed kite was not observed by WRA or Dudek biologists during the site surveys. The nearest documented occurrence for this species is approximately 7.8 miles southeast of the Project site. However, mature trees along the eastern boundary and trees located north of the Project site provide potential nesting habitat for this species. The riparian tree canopy associated with the Napa River, approximately 500 feet northeast of the Project site, also provides potential nesting habitat for white-tailed kite, and grasslands within the Project site provide potential foraging habitat for this species.

3.4.3 Regulatory Setting

Federal Regulations

Federal Endangered Species Act

Section 9 of the FESA protects federally-listed endangered and threatened wildlife species from unlawful take (16 USC Section 1538(a)(1)). “Take” is defined to mean “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 USC Section 1532(19)). In addition, federal agencies are required to determine whether a project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat designated for such species (16 USC 1536[3], [4]). Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain authorization from the National Marine Fisheries Service and/or USFWS through either Section 7 (interagency consultation) or section 10(a) (incidental take permit) of the FESA, depending on whether the federal government is involved in permitting or funding that project.

No federally listed threatened or endangered species are anticipated to occur within the Project site. As a result, the provisions of the FESA would not apply to the Proposed Project.

Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). In December 2017, Department of Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) that interprets the MBTA to only prohibit intentional take. Similarly, the Ninth Circuit Court of

Appeals, like the Fifth Circuit and the Eighth Circuit, has held that the MBTA applies only to intended takes. See Seattle Audubon Soc'y v. Evans, 952 F.2d 297, 303 (9th Cir. 1991). Unintentional or accidental take is not prohibited. In January 2021, USFWS published in the Federal Register the final regulation codifying the interpretation of the 2017 memorandum. This rule has an effective date of March 8, 2021, unless the USFWS opts to amend, rescind, or delay the rule. Regardless, USFWS reviews actions that might affect these species.

Birds may use vegetation communities or land cover types within the Project site for nesting. Intentional take of any of these birds or their nests and young, if present, is prohibited under the MBTA.

Clean Water Act

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of waters of the United States (as defined in the Code of Federal Regulations [CFR]: 33 CFR 328.3[a]). Section 401 of the Act (33 USC 1341) prohibits the discharge of any pollutant into waters of the United States. Project applicants for a federal license or permit to conduct activities including, but not limited to, the creation or operation of facilities, which may result in discharge into waters of the United States, must obtain certification that a project would not violate applicable effluent limitations and water quality standards. Section 404 of the Act (33 USC 1344) requires a federal license or permit from USACE prior to the discharge of dredge or fill material into waters of the United States, unless the activity is exempt from Section 404 permit requirements. Permit applicants must demonstrate that they have attempted to avoid or minimize impacts on the resource; however, if no further minimization of impacts is possible, the applicant is required to mitigate remaining impacts on all federally regulated waters of the United States. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards are responsible for the protection of water quality.

Based on a delineation of wetlands and other waters of the United States (Dudek 2019), seasonal wetlands and ditches within the Project site are not anticipated to be jurisdictional under Section 404 of the Clean Water Act as they are isolated and lack connectivity to any downstream waters of the United States. These features may be considered waters of the state and would be regulated by the Regional Water Quality Control Board under Section 401 of the Clean Water Act.

State Regulations

California Endangered Species Act

The CESA and Section 2081 of the California Department of Fish and Game Code identifies measures to ensure state-listed species and their habitats are conserved, protected, restored,

and enhanced. The Act requires permits from the CDFW for activities that could result in the take of a state-listed threatened or endangered species. “Take” is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86). Section 2080 of the Fish and Game Code prohibits the take of state-listed plants and animals unless otherwise permitted under Sections 2080.1, 2081, and 2835. Section 20814(b) affords CDFW the authority to issue permits for incidental take for otherwise lawful activities. To authorize an incidental take, the impacts of the take must be minimized and fully mitigated. Issuance of incidental take permits may not jeopardize the continued existence of a state-listed species. For species listed as threatened or endangered under FESA, CDFW may rely on a federal incidental take statement or permit to authorize an incidental take under CESA.

The California Fish and Game Commission maintains a list of threatened and endangered species (Fish and Game Code Section 2070). The California Fish and Game Commission maintains two additional lists: a Candidate species list, which identifies species under review for addition to either the endangered or threatened species list, and a Species of Special Concern list which serves as a watch list based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value.

No state-listed threatened or endangered species are anticipated to occur within the Project site. As a result, the provisions of the CESA would not apply to the Project Proposed.

California Fully Protected Species and Species of Special Concern

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. California Fish and Game Code sections (fish at Section 5515, amphibians and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with “fully protected” species state that these species may not be taken or possessed at any time, and no provisions in this code or any other law shall be construed to authorize permits for the take of fully protected species.

In October 2011, the State passed legislation allowing take of a fully protected species covered under an approved Natural Community Conservation Plan. Species of Special Concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or they historically occurred in low numbers and known threats to their persistence currently exist. This classification is intended to elicit special consideration for these animals by the CDFW, land managers, consulting biologists, and others. Additionally, this classification is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them.

One California Fully Protected species, white-tailed kite, has the potential to use the Project site for foraging. Potential nesting habitat is present in trees adjacent to the southeast boundary of the Project site and offsite, but within sound and visual range of the Project site. Take of this species, including harm or harassment of any kind, is not permitted.

California Department of Fish and Game Code Sections 3503 and 4150

Birds of prey are protected in California under the Fish and Game Code Section 3503.5 (1992). Under Section 3503.5, it is "unlawful to take, possess, or destroy any birds in the order Falconiformes (diurnal birds of prey) or Strigiformes (owls) or to take, possess, or destroy any nest or egg of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Disturbance during breeding season that results in the incidental loss of fertile eggs or nestlings or otherwise leads to nest abandonment is considered "taking" by the CDFW.

There is potential for common raptor species such as red-tailed hawk (*Buteo jamaicensis*) and great horned owl (*Bubo virginianus*) to use mature trees for nesting to the north and east of the Project site, primarily along the Napa River corridor. If present offsite but within visual and auditory range of the Project site, nests of these species are protected during the breeding season.

Fish and Game Code Section 4150 states a mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A nongame mammal may not be taken or possessed under this code. All bat species occurring naturally in California are considered nongame mammals and are therefore prohibited from take as stated in Fish and Game Code Section 4150.

There is a potential for native bats to forage in the Project site and/or roost in the vicinity. If these species are present during construction, measures must be implemented to avoid take of these species.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Sections 1900–1913) and the Natural Communities Conservation Planning Act provide guidance on the preservation of plant resources. Vascular plants which have no designated status or protection under state or federal endangered species legislation, but are ranked as rare or endangered by the CNPS, are defined as follows:

1. Rank 1A: Plants presumed extinct
2. Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
3. Rank 2: Plants rare, threatened, or endangered in California, but more numerous elsewhere

4. Rank 3: Plants about which more information is needed – a review list
5. Rank 4: Plants of limited distribution – a watch list

Generally, plants with a CRPR of 1A, 1B, or 2 are considered to meet the criteria for endangered, threatened, or rare species as outlined by Section 15380 of the CEQA Guidelines. Additionally, plants listed on CNPS List 1A, 1B, or 2 also meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (CESA) of the California Fish and Game Code.

One plant, bent-flowered fiddleneck, has a CRPR of 1B and has low potential to occur within the grassland habitat on the Project site; however, it was not observed within the site during site surveys conducted when it would be evident and identifiable. Plants protected under the Native Plant Protection Act are not anticipated to be present at the Project site. As a result, the provisions of the Native Plant Protection Act would not apply to the Proposed Project.

California Department of Fish and Game Code Sections 1600–1616

Under Sections 1600–1616 of the California Fish and Game Code, CDFW regulates activities that would substantially alter the flow, bed, channel, or bank of streams and lakes. Such activities require a 1602 Lake and Streambed Alteration Agreement from CDFW. The California Code of Regulations (CCR) defines a stream as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” includes rivers, creeks, ephemeral streams, dry washes, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Removal of riparian vegetation also requires a Section 1602 Lake and Stream Alteration Agreement from CDFW.

Because ditches on the Project site contain a defined bed and bank and flow periodically, they are potentially regulated under Sections 1600–1616 of the California Fish and Game Code. Alteration of ditches onsite would require a Section 1602 Stream Alteration Agreement from CDFW. It is anticipated the Proposed Project would not fill or remove any of the existing ditches located adjacent to the Proposed Project boundaries.

State Water Resources Control Board

The SWRCB administers Section 401 of the Clean Water Act which requires that an applicant for a Clean Water Act Section 404 permit first obtain a certification, or waiver thereof, that a project will not violate applicable state water quality standards. The authority to either grant certification or

waive the requirement for certification has been delegated by the SWRCB to nine regional boards, including, in St Helena, the San Francisco Bay Regional Water Quality Control Board. The SWRCB protects all waters of the state, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resources value but are vulnerable to filling and may lack regulation by other programs. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the state are required to comply with the terms of the Water Quality Certification Program. If a project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the state, the water boards have the option to regulate such activities under its state authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

Seasonal wetlands and ditches within the Project site may be considered waters of the state and fall within the jurisdiction of the SWRCB. Discharge in these features would require regulation in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

Local Regulations

City of St. Helena 1993 General Plan

The Open Space and Conservation Element of the St. Helena 1993 General Plan provides guiding and implementing policies regarding biological resources, including the following:

> **Policy 6.2.3:** Protect the riparian vegetation and habitat value of the City's stream corridors by requiring development setbacks and open space easements along the Napa River, Sulphur Creek, York Creek, and Spring Creek.
>
> **Policy 6.2.10:** Protect natural habitats which have the potential to support rare, endangered, or special status wildlife and plant species.
>
> **Implementing Policy 6.2.13:** Require new development to be sited to maximize the protective tree species, riparian vegetation, important concentrations of natural plants, and important wildlife habitat.
>
> **Implementing Policy 6.2.14**: Require all proposed projects adjacent to a riparian corridor or located in the City's hillside areas, to submit management plans for protecting natural habitat values, including provisions to:
>
> - Employ supplemental planting and maintenance of grasses, shrubs and trees of similar quality and quantity to provide adequate vegetation cover to keep the watersheds, on steep slopes and along streams, in good condition and to provide shelter and food for wildlife.

- Provide protection for wildlife habitat.
- Provide replacement habitat of like quantity and quality.

Implementing Policy 6.2.15: Require a biological assessment of any proposed project site where species or the habitat of species defined as sensitive or special status by the California Department of Fish and Game or the U.S. Fish and Wildlife Service might be present.

Policy 6.4.11: Integrate existing significant trees into future development.

Policy 6.4.12: Require replacement trees where existing significant trees cannot be saved.

Policy 6.4.13: Require street trees as a condition of new development.

City of St. Helena 2019 General Plan ("General Pan Update 2040")

The Open Space and Conservation Element of the St. Helena 2019 General Plan provides policies regarding biological resources, including the following:

Policy OS1.1: Preserve and enhance St. Helena's riparian corridors for their value in providing wildlife habitat, biodiversity, natural drainage, and visual amenity.

Policy OS1.2: Prohibit development, alteration, and/or removal of native vegetation from riparian areas. Disallow invasive species that degrade habitat quality.

Policy OS1.3: Protect and enhance contiguous corridors of riparian vegetation along the Napa River and its tributaries in order to support regional wildlife movement and enhance aquatic habitat.

Policy OS1.4: Protect natural habitats that have the potential to support rare, endangered, or special-status wildlife and plant species. Control invasive species that degrade habitat quality.

Policy OS1.5: Restrict development of hillside areas in order to protect wildlife, vegetation, viewsheds, and open space characteristics.

Policy OS1.6: Manage invasive species that degrade habitat quality, especially along the Napa River and its tributaries.

Policy OS1.7: Promote, encourage, and require sustainable agricultural practices that are sensitive to natural habitat and do not harm wildlife.

Policy 6.4.12: Require replacement trees where existing significant trees cannot be saved.

Policy 6.4.13: Require street trees as a condition of new development.

St. Helena Municipal Code

Title 12, Chapter 12.24 of the St. Helena Municipal Code protects trees and other vegetation within the City by executing provisions to protect protected trees. Protected trees include heritage trees, protected replacement trees, street trees, and city trees (Section 12.24.020). Heritage trees are defined as "any tree or grove of trees within the city boundaries designated by a resolution of the city council and having met the requirements set for in [Chapter 12.24, Section 12.22.020]."

Section 12.24.130 provides guidance for pruning, maintenance and removal of any protected trees, while Sections 12.24.140 and 12.24.150 address damage to protected trees and protection of trees during and after construction.

No tree removal is anticipated as a result of the Proposed Project. There are multiple oak trees on the banks of the ditch that runs along the southeast boundary of the Project site, near Del Rio Court. These trees would be retained and would not be removed to accommodate the Proposed Project.

3.4.4 Impacts

Methods of Analysis

The following resource databases and documents were reviewed in the course of preparing the biological resources review for the Proposed Project to establish the existing conditions as they relate to biological resources including plant and wildlife species, vegetation, and wetland and water resources. This review was supplemented with field observations as part of the previous biological resources studies conducted by WRA in 2011 and 2015, and reconnaissance surveys conducted by Dudek in 2018, 2019, and 2020.

- North Fork Associates. 2006. Wetland Delineation for the ±16-acre Hunter-St. Helena Property, St. Helena, Napa County, California. Technical Report. September 12, 2006.
- WRA 2015. Hunter Subdivision Project, St. Helena, CA. Technical Letter Report. September 15, 2015.
- Updated queries of the CNDDB (CDFW 2019), CNPS's Inventory of Rare and Endangered Vascular Plants (CNPS 2019), and the USFWS Information for Planning and Consultation (IPaC) occurrence data (USFWS 2019).

- Dudek. 2019. Preliminary Jurisdictional Delineation of Wetlands and Waters of the United States: Hunter Subdivision Project, Napa County, California. Technical Report.
- Dudek. 2020. Rare Plant Survey Results for the Hunter Subdivision Project. Memorandum.

CEQA requires that projects analyze the potential impacts on special-status plant and wildlife species, as well as on sensitive habitats, wildlife corridors, and waters of the United States. Impacts on wildlife species that are not considered special-status under CEQA are generally not considered significant unless impacts are associated with the species' migration routes or movements, or the species are considered locally important. In the area surrounding the Project site, other common species (e.g., skunk, raccoon, possum, deer) would not be considered special-status species; however, impacts on their movements and migration routes would be considered significant under CEQA. Regardless of status, all nesting native bird species are protected from harm under the state Fish and Game Code and the federal MBTA.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Sensitive Natural Communities

As discussed in Section 3.4.2 Environmental Setting, there are no natural communities identified as sensitive by CDFW and the USFWS within the Project site. The natural communities present onsite are not regulated by CDFW, USFWS, regional plans, or policies. Because the Project site lacks sensitive natural communities, there would be no impact and this issue (second significance threshold listed above) is not further addressed.

Conflict with any Local Policies or Ordinances Protecting Biological Resources

The Proposed Project would not conflict with applicable 1993 General Plan policies and city ordinances designed to protect biological resources including habitat (see Section 3.4.3, Regulatory Setting). For example, no tree removal is required; therefore, the Proposed Project would not need to obtain a tree permit. As such, there would be no impacts and this issue (fifth significance threshold listed above) is not further addressed.

Habitat Conservation Plan/Natural Communities Conservation Plan

The Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Because the Project site is not located in an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other similar plan, there would be no impacts and this issue (last significance threshold listed above) is not further addressed.

Impacts and Mitigation Measures

3.4-1: Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? This impact would be potentially significant.

As discussed above and in Section 3.4.2, Environmental Setting, habitat for special-status species is generally limited in the Project site. The site is seasonally mowed/disked, and in 2010, approximately 2 feet of clean fill was spread across the site in support of the Napa River Flood Control Project. Given the disturbed nature of the site, and its proximity to frequent human

disturbance (e.g., residences and dog walkers), the site has a low potential to support sensitive plant and wildlife species. The few resources that have potential to occur are discussed below, including any potential impacts to these resources as a result of future development.

Special-Status Plants

No federal or state-listed plant species have the potential to occur onsite. One CRPR 1B.2 species, bent-flowered fiddleneck (*Amsinckia lunaris*), has the potential to occur onsite, but the likelihood of occurrence is low (see Section 3.4.2 for details). No evidence of the plant was identified on the Project site during the focused plant survey conducted in June 2020. The survey followed recommended methodology described in the CDFW Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The timing of the survey was such that bent-flowered fiddleneck would be evident and identifiable. In addition, bent-flowered fiddleneck was not identified on the Project site during multiple surveys conducted by biologists and botanists since 2006, including site visits during the bloom period in March and April (refer to Appendix D). Because the plant is not present on the site, the potential direct impact is considered **less than significant.**

Special-Status Wildlife

Comments received in response to the Notice of Preparation included concerns over potential impacts to salmonids (a grouping of fish that includes steelhead trout and salmon) residing in the Napa River. A summary of why the Proposed Project development would not adversely impact salmonids is provided below.

Salmonids: The Project site is located within the Napa River watershed; however, the Project site is not located adjacent to the river and there is no aquatic habitat for salmonids within the Project site (including central California coast steelhead DPS [distinct population segment] and fall-run Chinook salmon). The Central California coast steelhead DPS (hereafter ‘steelhead’) and fall-run Chinook salmon (hereafter ‘Chinook’) are known to occur in the Napa River, located approximately 500 feet north/northeast of the Project site. Although aquatic habitat for steelhead and Chinook is present in the Napa River, there are no fish passage opportunities between the Napa River and the Project site. As such, no direct impacts to steelhead would occur as a result of the Proposed Project.

Indirect impacts to steelhead and Chinook during construction, such as those related to water quality, are not expected to occur. Indirect impacts to salmonids as a result of poor water quality are limited to instances when salmonids are exposed to relatively high quantities of pollutants for prolonged periods of time (Bisson and Bilby 1982; Sigler et al. 1984). It is extremely unlikely that water quality stressors associated with Proposed Project construction activities such as increased turbidity or pollutants would enter the Napa River at a quantity that would harm

salmonids. The Project site does not drain directly into the Napa River, instead draining to an existing City-owned detention basin located adjacent to the site with a low-flow outlet to the Napa River. This lack of direct drainage would provide additional buffering of any discharge from Proposed Project construction, allowing additional time for mixing, settling, or other amelioration of pollutant concentrations before entering the river. Considering these factors, together with mixing provided by Napa River flows, any waterquality stressors generated by Proposed Project construction would not be expected to remain present for a prolonged time (i.e., several hours to days), further limiting potential for indirect harm to salmonids. Implemention of Proposed Project permitting requirements and conditions of approval, such as those discussed in Section 3.9 Hydrology and Water Quality would be sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives, and prevent adverse effects on salmonids during Proposed Project construction.

Indirect impacts to steelhead and Chinook as a result of Proposed Project operation are also not anticipated. As discussed Section 3.9, Hydrology and Water Quality, the Proposed Project would result in impervious surface area as compared to existing conditions, which has the potential to increase storm water runoff rates and transport of accumulated pollutants to surface waters. However, the Proposed Project is not expected to adversely impact surface waters via storm water runoff, as all development would be subject to the most recent standards and performance criteria contained in the City's Small Municipal Separate Storm Sewer System (MS4) Permit (described in Section 3.9.3, Regulatory Setting). Further, the Proposed Project's grading plan includes all the elements necessary to demonstrate it can successfully comply with post construction MS4 Permit requirements. The Small MS4 Permit requires the Proposed Project to prepare and submit for City approval a Stormwater Control Plan that complies with the Bay Area Stormwater Management Agencies Post Construction Manual. Best management practices listed in the grading plans would be implemented including water quality features such as downspouts to landscaped swales; vegetated swales; hydrodynamic oil, water and solid separators; private street sweeping; labeled storm drains ("drains to river") and homeowner educational materials on stormwater pollution prevention are best management practices to be implemented to prevent storm runoff of poor quality from entering the Napa River or seeping into the underlying groundwater table. For more details regarding the specific best management practices proposed, refer to Section 3.9.4 (Hydrology and Water Quality; Impacts). Compliance with these requirements would prevent indirect impacts to salmonids during Proposed Project operation.

Additionally, as discussed in Section 3.9, according to the groundwater basin assessment report, groundwater pumping is a relatively small outflow component compared to surface water stormflows and groundwater baseflow discharged to the Napa River. Therefore, the basin groundwater is dominated more by precipitation than it is by groundwater pumping and the proposed groundwater pumping by the Project would be expected to have a negligible effect on flows in the Napa River (LSCE 2016). This includes any indirect impacts to salmonids within the Napa River.

No federal or state-listed wildlife species have the potential to occur onsite. Only two special-status wildlife species have the potential to occur onsite; these species are addressed below.

White-tailed kite: There is potential for white-tailed kite to use trees along the southeastern margins of the Project site or directly north of the Project site for nesting. No white-tailed kites have been observed on or near the Project site during the 2011, 2015, 2018, and 2019 biological surveys of the site. However, should white-tailed kite be breeding near the site prior to Proposed Project initiation, construction-related activities could potentially cause an adult kite to abandon an active nest that is in close proximity to the construction area and therefore leave eggs or chicks vulnerable to predation or without provisions. In addition, increased noise, glare, and lighting associated with Proposed Project operation could result in indirect impacts to nesting habitat for this species. However, noise levels associated with Proposed Project operation would be well within the City's noise thresholds and would be typical of noise from existing residential land uses directly south and west of the Project site; refer to Section 3.11, Noise and Vibration, for a full discussion.

No tree removal is proposed as part of the Proposed Project, so no direct impacts, such as mortality and/or injury to nesting kites, is anticipated. However, the potential indirect impacts associated with construction and operation of the Proposed Project are considered substantial effects on a special-status species and, therefore, would be considered a **potentially significant impact.**

Native bats (including pallid bat): There is a low potential for native bats, including pallid bat, to roost onsite. Roosting habitat, such as rock outcrops, trees, caves, and human-made structures, are absent from the Project site. Moreover, pallid bat is unlikely to roost on or near the site due to frequent human disturbance (see Section 3.4.2 for details). However, there are trees and buildings near the Project site that provide potential roosting habitat for bats, and onsite grassland could be used for foraging by these species, or others roosting within dispersal distance of the Project site.

Should native bats roost near the site or use the on-site grassland for foraging, they could be impacted by the Proposed Project. If bats were to roost in the area during construction, they could be indirectly impacted by construction-related noise. Potential direct impacts from noise include acute acoustic trauma, degradation of physiological condition and social order, avoidance of foraging areas, and disturbance from and/or abandonment of roost sites. In particular, loud ultrasonic noise (i.e., having frequencies above the range of human hearing >20 kilohertz) can deter bats from accessing and using known roosts [Caltrans 2016]). Depending on noise attenuation rates and other factors, construction equipment such as graders, dozers, and diesel engines can produce sound sufficient to disturb roosting bats.

Indirect impacts to roosting bats could also result from increased noise, light, glare, and activity associated with Proposed Project operation; however, noise levels would be within City thresholds and lighting associated with the Proposed Project would adhere to guidelines and standards set forth in Mitigation Measure AES-1 (see Section 3.1, Aesthetics) that would reduce glare and spillover light. Such standards include, but are not limited to, shielded and downward focused lighting, limited up-cast decorative lighting, and no use of mirrored glass .

No direct impacts to roosting bats are anticipated as potential roost sites, such as the trees along the southeastern margin of the site, would be avoided by the Proposed Project. However, the potential indirect impacts associated with construction and operation of the Proposed Project are considered substantial effects on a special-status species and, therefore, would be considered a **potentially significant impact** pursuant to the CEQA significance thresholds identified above.

Nesting and Migratory Birds

Trees, shrubs, grassland, and vineyards on or adjacent to the Project site provide potential nesting habitat for bird species protected under the MBTA and the California Fish and Game Code Section 3500. The quality of nesting habitat on the Project site is marginal due to regular mowing of the grassland and cultivation of the vineyard and lack of trees. No active nests were documented on or near the Project site during the 2011, 2015, 2018, and 2019 biological surveys. However, no focused surveys for nesting birds or birds of prey have been conducted at the site to date.

Direct impacts to nesting birds could result from vegetation clearing and site grading during Proposed Project construction. A majority of the Proposed Project footprint is limited to the annual grassland and vineyard, which generally do not provide nesting habitat for birds of prey, but would support some nesting bird species. Should active nests become established in the Proposed Project footprint during the time of construction, potential direct impacts could include direct harm or mortality due to construction equipment and destruction of an active nest due to vegetation removal or grading activities.

Potential indirect impacts to birds nesting near the Project site during construction would essentially be identical to those described above for white-tailed kite. The impact of noise on avian species varies among species and depends on source, duration and schedule (e.g., Hirvonen 2001; Reijnen et al. 1996; Slabbekoorn and Peet 2003; Wood and Yezerinac 2006). However, noise levels associated with Proposed Project operation would be well within the City's noise thresholds and would be typical of noise from residential land uses directly south and west of the Project site; refer to Section 3.11, Noise and Vibration. The potential direct and indirect impacts associated with construction and operation of the Proposed Project are considered substantial effects on a special-status species and, therefore, would be a **potentially significant impact**.

Mitigation Measures

Measures to mitigate potentially significant impacts on special-status wildlife species, known to occur or could potentially occur on the Project site, are described below. Implementation of the actions and measures described in Mitigation Measures BIO-1 and BIO-2, and Mitigation Measure AES-1 (see Section 3.1, Aesthetics), which also addresses this impact by reducing spillover light that can affect some species. Compliance with these mitigation measures addresses impacts to nesting birds, birds of prey, and special-status bat species and would avoid/minimize potential impacts to these species ensuring impacts would be reduced to less than significant.

BIO-1: A qualified biologist shall conduct a habitat assessment for bats in trees adjacent to the Project site within 2 weeks prior to any Project construction (site clearing, grading). The habitat assessment shall include a visual inspection of potential roosting features (bats need not be present) and presence of guano within the Project site and 50 feet around these areas. Potential roosting features found during the survey shall be mapped and described in a survey letter report. If roosting bats (individuals or colonies) are detected within the Project site, California Department of Fish and Wildlife shall be notified as soon as possible prior to any construction activity to confirm the bats can be avoided during construction. If a bat roosting or maternity colony cannot be completely avoided, a qualified biologist shall prepare a bat mitigation and monitoring plan for California Department of Fish and Wildlife review and approval, and that plan shall be implemented prior to commencement of construction that could impact the roosting bats or maternity colony.

BIO-2: If construction activities are scheduled to occur during the breeding season for birds (February 1 through August 31), the Project applicant or their contractor shall implement the following measures to avoid potential adverse effects to nesting raptors and other nesting birds:

- Preconstruction surveys by a biologist of all potential nesting habitats within 500-feet of construction activities, where accessible, shall be conducted by a qualified biologist. Surveys shall occur no more than 14 days prior to the initiation of site disturbance. If construction is stopped for 14 days or more during the breeding season, a new preconstruction nesting bird survey must be conducted before work can be restarted to ensure no new nesting has occurred in the interim.
- If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required, following submittal of a survey report letter to the City of St. Helena Planning Department.

- If active nests are found during preconstruction surveys, a no-disturbance buffer shall be created around active nests during the breeding season or until it is determined by the biologist that all the young have fledged. The buffers shall be established by the biologist in conjunction with the California Department of Fish and Wildlife. Typical buffers may include 500 feet for raptors and 50 to 250 feet for other bird species based on the location of the nest, the nesting species present, and types of construction activities that may cause potential nest abandonment. The perimeter of the buffer zone shall be fenced or marked with staked flagging.

3.4-2: Would the Proposed Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means? This impact would be potentially significant.

The Project site supports 0.07 acres of wetlands and 870 linear feet of other waters, in the form of four seasonal wetlands and two agricultural ditches, as shown on Figure 3.4-2. These features are anticipated to meet the criteria for jurisdictional waters of the United States based on the jurisdictional delineation conducted on the Project site in February and April 2019, on an analysis of the three parameters for wetlands (soils, hydrology, and vegetation), and connectivity/proximity to known waters of the United States in the site vicinity (i.e., Napa River).

Four seasonal wetlands are present within the Proposed Project footprint. Construction activities would result in the fill of the four wetlands. As part of the current Proposed Project design, construction of a retaining wall on or near the property line may potentially impact the agricultural ditches by filling or otherwise altering the structure or flow of these features. This is considered a **potentially significant impact.**

Mitigation Measures

Implementation of Mitigation Measure BIO-3 would ensure no net loss of wetlands or other protected waters of the U.S. or state[2] and would reduce impacts to less than significant.

BIO-3: Wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) shall be obtained prior to any grading work. Prior to issuance of a grading permit, the Project applicant shall demonstrate authorization from the Army Corp of Engineers and any other regulatory agency to alter the wetland.

[2] Note: Permit processing can take six to nine months for minor impacts less than one half-acre in size; and up to 2 years for impacts greater than one half-acre and with special-status species impacts (Individual Permit).

3.4-3: Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? This impact would be potentially significant.

As discussed in Section 3.4.2 Environmental Setting, the Project site does not provide an essential habitat linkage or migratory corridor functions for resident or migratory wildlife. As shown on Figure 3.4-3, the Project site itself does not function as a wildlife movement corridor due to the surrounding development, lack of connectivity with other undeveloped areas, and existing and historic uses of the site. Moreover, the Project site does not provide suitable aquatic habitat for native resident or migratory fish species (see Section 3.4.2 for details). Indirect impacts, such as construction run-off to the onsite agricultural ditches, has the potential to impact fish in the Napa River. Existing permitting requirements and conditions of approval (i.e., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives; therefore, potential indirect impacts to any native resident or migratory fish via construction runoff in the Napa River are **less than significant.** See Section 3.9, Hydrology and Water Quality, for further details.

Although the annual grassland onsite does not provide adequate cover or nursery sites for many mammal species, trees along the edge of the site provide suitable habitat for nesting birds and roosting bats. In addition, some birds may use the grassland for nesting when sufficient (i.e., tall) vegetation is present. In addition, the riparian corridor along the Napa River is located approximately 500 feet north of the Project site. Lighting and increased usage of the site by humans may result in indirect effects to local wildlife using the riparian corridor for nursery sites or as a migratory corridor. Any site disturbance to these resources could result in a **potentially significant impact**.

Mitigation Measures

Implementation of Mitigation Measure AES-1 (see Section 3.1, Aesthetics) would ensure that lighting associated with the Proposed Project would adhere to guidelines and standards that reduce glare and spillover light and impacts would be less than significant. Such standards include, but are not limited to, shielded and downward focused lighting, limited up-cast decorative lighting, and no use of mirrored glass in the Proposed Project design. Compliance with Mitigation Measure BIO-5 that reimposes Mitigation Measures BIO-1, BIO-2, and BIO-3 would ensure direct and indirect impacts to the movement of any wildlife species or migratory wildlife corridors, or to wildlife nursery sites (e.g., bird nests, bat maternity roosts) would be reduced to less than significant.

Compliance with Mitigation Measures AES-1, BIO-1, and BIO-2 mitigate this impact. No additional mitigation is necessary.

3.4.5 Cumulative Impacts

The geographic context for the analysis of cumulative biological impacts includes the areas contained within the Napa Valley and adjacent foothills (identified as the region), but primarily focused on the area within the city limits. Present and probable future projects within the region (which include, but not limited to, development in the city of St. Helena, Napa County, cities of Calistoga and Napa) are anticipated to permanently remove plant and wildlife resources, which could affect both common and special-status species and their habitat.

3.4-4: Would the Proposed Project contribute to cumulative impacts with respect to biological resources? The Project's contribution would not be considerable.

The City recently updated its General Plan and adopted the 2019 General Plan and certified the Environmental Impact Report in May 2019. The 2019 General Plan Draft Environmental Impact Report (City of St. Helena 2018) notes that development in the City and elsewhere in the cumulative analysis area could cause significant cumulative impacts to nesting raptors and other special-status species; however, these cumulative impacts would be mitigated by compliance with General Plan policies. The Project site is located within an area that has been developed for residential and agricultural purposes and development of this site would not result in the reduction of available habitat, migration corridors, or other essential elements required by special-status species in the region. No special-status species have been documented at the Project site. While the Proposed Project would convert approximately 9 acres of potential foraging habitat for raptor species, the area has been disturbed in the past and provides only marginal habitat for burrowing mammal species that are the preferred prey for many resident raptor species. The existing disturbance at the site also greatly limits availability of insect prey for special-status bat species. Additionally, agriculture and natural lands in the vicinity of the city provide greater function and value as foraging habitat for these species. Due to the lack of biological value provided by the Project site, the Proposed Project's contribution to any effects on biological resources would be considered negligible. Implementation of Mitigation Measures BIO-1 through BIO-7, would further reduce the Proposed Project's cumulative contribution to regional biological resources impacts. However, absent mitigation the Proposed Project's contribution would not represent a considerable contribution to potentially significant impacts on biological resources. The Proposed Project's contribution to any existing cumulative impacts is not considerable resulting in a **less-than-significant cumulative contribution**.

Mitgation Measures

None required.

3.4.6 References

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3.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

3.5.1 Introduction

This section describes the cultural and tribal cultural resources present in the proposed Hunter Subdivision Project (Proposed Project) area and discusses applicable federal, state, and regional regulations pertaining to protection of cultural resources. This section evaluates the potential effects on cultural resources associated with development of the Proposed Project.

No comments were received that raised concerns regarding cultural or tribal cultural resources in response to the Notice of Preparation. The City of St. Helena (City) sent letters to all tribes requesting notification pursuant to Assembly Bill (AB) 52 and received responses from the Federated Indians of Graton Rancheria and the Yocha Dehe Wintun Nation. A copy of the Notice of Preparation and comments received is included in Appendix A. The Yocha Dehe Wintun Nation notes that the Project site is within their aboriginal territories and requests the cultural resources study prepared for the Proposed Project be provided for their review. The City provided the cultural report to the Yocha Dehe Nation in May 2020. Neither the Federated Indians of Graton Rancheria nor the Yocha Dehe Wintun Nation tribe requested formal consultation with the City.

The primary source referenced to prepare this section is based on the Cultural Resources Inventory and Extended Phase I and Phase II Report prepared by Dudek in March 2020. The reports are included in a confidential appendix (Appendix E) that is not available for public review given the sensitivity of the information.

3.5.2 Environmental Setting

Existing Site

The Project site is located on undeveloped land within the Napa Valley, immediately south of the Napa River, and within the City of St. Helena. The Pacific Ocean is located approximately 30 miles west, San Pablo Bay is 25 miles to the south, and Lake Berryessa is 12 miles northeast. A canal constructed for the St. Helena Flood Protection Project in 2010 bounds the site to the west and north and a residential community is present to the south. Local vegetation consists primarily of low-laying plants and grasses, with some scattered oak woodland and riparian community trees and shrubs along the drainages at the margins of the Project site. The western portion of the Project site includes an existing vineyard. The gradual slope throughout most of this area (less than 5 degrees) and proximity of Napa River and smaller drainages, would have historically resulted in the regular seasonal inundation of much of this area. The high level of surrounding topographic variability lends to the biodiversity of the area, this has traditionally provided for a broad range of flora and fauna that historically could have been used by local Wappo populations.

Geologic maps of the Project area indicate it is underlain primarily by Quaternary Alluvium consisting of Holocene-era alluvial soils deposited through stream action and erosion of the surrounding hillslopes and Franciscan Complex metamorphic deposits (Jennings et al. 1977, updated 2010). Napa Glass Mountain, the primary source of obsidian in Napa Valley, is upriver from the Project site. Soils within the Project site are mapped as Bale Clay Loam with 0 to 5% slopes. These soils are formed through alluvial action on a Holocene alluvial fan, with soils comprised of sit and clay with moderate gravel and sand components (see also Section 3.6, Geology and Soils).

Cultural Context – Ethnography

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

The Project area was traditionally occupied by the Wappo, whose language origins are associated with the Yukian language group. The name “Wappo” is said to be taken from the Spanish word “guapo” meaning handsome or brave, which was given to the group during Mission times by the Franciscans (Kroeber 1925). The Wappo language is the only Southern Yukian language and differs greatly from Northern Yukian with less than 20% of the basic vocabulary shared (Golla 2011). Isolated from other Yukian-speaking peoples, this group was bound on all sides by other native groups: the Lake Miwok to the north, the Patwin (Wintun) to the south and east, the Pomo to the north and west, and the Coast Miwok to the southwest (Heizer and Whipple 1971). The split between Northern Yukian and Wappo is somewhat unclear, likely ranging between 1,000 and 3,000 years ago (Kroeber 1925; Golla 2007). This split was likely related to the intrusion of Pomo-speaking communities during this period, which is evidenced through structural linguistic changes found within Wappo. These Wappo-speaking communities are indicated to have moved into the Napa region relatively, 500-1,500 years ago, based on the relatively limited presence of Miwok within the Wappo lexicon.

The territory occupied by the Wappo included Alexander Valley, most of Napa Valley, and the northern portion of Sonoma Valley. There are numerous regional subgroups including the Mishewal people of the Alexander and Knights Valley whose territory also included a small segment of the Russian River; the Mayacama people of the upper Napa Valley whose major village of *mayakma* was located near present-day Calistoga; and the Caymus people whose territory was centered around a village located at Yountville. The *Guilicos* Wappo community were situated over the mountains to the west at the head of Sonoma Creek. Yet another Wappo group was located on the south shore of Clear Lake known as Lile’ek (Golla 2011).

Wappo settlements were organized in permanent villages throughout the valleys, typically found along major watercourses, such as rivers and creeks (Sawyer 1978). Districts of smaller settlements or tribelets were generally arranged around a larger community site (Kroeber 1925). The chiefs of these smaller tribelets resided in the larger villages but were responsible for maintaining close relationships with their tribelet as well as neighboring tribes. Subsistence for the Wappo was largely dependent upon the acorn (a staple food item), as well as other native plants, and hunting of a variety of animals, including deer, bear, elk, and rabbits.

Material cultural for the Wappo included tools made of stone, sticks, and shells. Basket making, likely influenced by the Pomo, was also an important aspect of the group's material culture and was of particularly high quality and aesthetic. The last description of a traditional village (Driver 1936) describes oval-shaped houses made of grass thatch placed over bent poles (Sawyer 1978). A lack of geographical restrictions in combination with their central location between the Pomo to the west and the Patwin to the east gave the Wappo the opportunity to act as middlemen in trading of items, such as shells for use as beads or ornaments (Heizer and Elsasser 1980). The Wappo would both bury and cremate the remains of the dead. Death rituals were complex and could involve burning personal possessions and relatives cutting their hair, rubbing clay on their heads, scoring of their flesh, and participating in intense ritual dances (Sawyer 1978).

Historic Period

Spanish Period (1769–1822)

The first Spanish expedition to enter the San Francisco Bay Area occurred under Gaspar de Portola in 1769. Portola's chronicler, Fray Juan Crespi, detailed the journey of the group as it ventured up the coast. The first Spanish overland expedition into the San Francisco Bay region was led by Juan Bautista de Anza. The expedition reached San Francisco in 1776, where its members founded Mission Dolores and the Presidio. Spanish missionization of Alta California was initiated in San Diego (1769). A total of 21 missions were constructed by the Dominican and Franciscan orders between 1769 and 1823. Missions in the region included San Francisco de Asís (1776), Santa Clara de Asís (1776), San José de Guadalupe (1797 in Alameda County), San Rafael Arcángel (1817 in Marin County), and San Francisco Solano (1823 in Sonoma County; Grunsky 1989).

Mexican Period (1822–1848)

Spanish-Mexican settlers arrived in the Napa Valley in 1823. In 1836, the first land grant within the Napa Valley area was awarded to George Yount at Caymus (Bartoy et al. 2005). Local Native Americans assisted Yount in constructing his two-story Kentucky-style log house. Within the next ten years, the Napa Valley was divided and parceled into numerous ranchos. In 1836,

Nicolás Higuera, a soldier who served at the San Francisco Presidio, received several land grants from the Mexican government within Napa Valley, including an area called the Rancho Entre Napa, which included property that is now part of the present-day City of Napa.

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to Native American populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger Land Grants to affluent Mexican citizens and rancheros. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to Native Americans, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony.

Under the command of General Vallejo, Mexican soldiers had a series of conflicts with Wappo Native American tribes and allied Pomo tribes. Known as the Satiyomi Campaigns, the Wappo fought successfully against Vallejo and his Patwin allies in 1834, 1836, and 1842 (Bartoy et al. 2005). Largely as a result of these conflicts, Vallejo signed two treaties with the Wappo in 1836.

American Period (Post 1848)

California was officially ceded to the United States in 1848, which led to the continued appropriation of Native American Lands by ranchers, prospectors, and an increasing number of settlers. The United States Government did little to dissuade these trespasses. From 1850, with the passage of California's Indian Act, until legislative reforms in the late 1880s, state laws promoted conditions that amounted to indentured servitude for much of the Native American population throughout California. On February 8, 1850, Napa became one of California's original 27 counties, with the City of Napa as the seat of the county. In 1852, the first mineral springs resort in California was established at White Sulphur Springs, approximately 4 miles to the west of St. Helena (Bartoy et al. 2005). These bolstered the local economy, supporting the presence of multiple hotels and other businesses. A tremendous influx of individuals occurred in this area as a result of the California Gold Rush, which initiated in 1848. Since 1850, the economic growth of Napa County has been largely based on agriculture, ranching, timber, and mineral resources.

By 1868, the railroad had been extended to St. Helena, and with easier transportation came more residents and a thriving community. St. Helena, officially founded in 1876, was originally part of Dr. Edward Turner Bale's Rancho Carne Humana (Napa County Historical Society 2019). Bale died in 1849, leaving his wife, Maria Ygnacia Soberanes, a member of the prominent Vallejo family. Maria built Bale's grist and lumber mill into a profitable enterprise, and later sold 126 acres in the City to Henry Still and Charles Walters. She also provided land to numerous individuals as an incentive to open local businesses.

A portion of downtown St. Helena was designated a National Register Historic District in 1998. Based on records maintained by the Napa County Historical Society, it contains 35 historic buildings mostly along Main Street but also extending onto Railroad Avenue and Money Way (2019).

Records Search

The Cultural Resources Inventory and Extended Phase I and Phase II Report (confidential Appendix E) prepared for the Proposed Project included a California Historical Resources Information System (CHRIS) records search, which was conducted at the Northwest Information Center (NWIC) on October 22, 2018, for the Project site and surrounding 0.5-mile radius. This search included their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/California Register of Historical Resources (CRHR) and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

The records search conducted at the NWIC concluded that 59 previous cultural resources technical investigations have been conducted within a one half-mile of the Project site. Of these, seven have included a portion of the Project site (Appendix E, Table 1). Approximately 90% of the Project site has been included in previous investigations. Cultural resource technical investigations S-043810 through S-043810d, which include the Project site, are summarized below.

Archaeological investigations conducted by Pacific Legacy in support of the St. Helena Flood Protection Project (Flood Protection Project) occurred between 2004 and 2013. The Flood Protection Project overlapped the western and northern portions of the present Project site. As a result of the survey and Extended Phase I exploratory work, eight archaeological resources were identified (all in the general vicinity of the present Project site): CA-NAP-399, CA-NAP-406, CA-NAP-413, CA-NAP-843, CA-NAP-863, CA-NAP-1007 (formerly HMS Vineyards Site), CA-NAP-1008 (formerly Miller Vineyard Site), and CA-NAP-1009/H (formerly HMS Historic Stone Wall). Based on the results of the Phase I Inventory and Phase II Evaluation efforts conducted for the Flood Protection Project, the U.S. Army Corps of Engineers (USACE) and State Water Resources Control Board (SWRCB) determined that five of the identified archaeological sites (CA-NAP-413, CA-NAP-843, CA-NAP-1007, CA-NAP-1008, and Cal-NAP-1009H) lacked sufficient data potential and integrity to meet the criteria for NRHP eligibility. It was determined that three sites (CA-NAP-399, CA-NAP-406, and CA-NAP-863) were eligible for listing in the NRHP listing under Criterion D. Avoidance of the sites was considered, and it was determined that the objectives of the proposed Flood Protection Project were important and could not be met without destroying or damaging the identified Historic Properties. The State Historic Preservation

Office (SHPO) concurred with these findings in 2006. A Historic Properties Treatment Plan was prepared outlining a program for Phase III Data Recovery and analysis that addressed the research potential of cultural deposits situated within the Flood Protection Project area of potential effects (APE). As part of this process, a Memorandum of Agreement was prepared between SHPO, USACE, and SWRCB in 2007. With the expectation that human remains would be encountered during investigations and later monitoring activities, the Mishewal Wappo Tribe of Alexander Valley and the City developed a burial agreement for the treatment of human remains in 2007 (Bartoy and Holson 2007: 87). Phase III Data Recovery was completed of the entirety of CA-NAP-399 and CA-NAP-863, as well as an approximate 500 x 100-foot section of CA-NAP-406. Site CA-NAP-406 was indicated in report maps to continue eastward into what represents the present Project site (Bartoy et al. 2005: 90). The eastern limits of this site were not determined as part of this work, nor was subsurface evaluation or data recovery completed of this area within the present Project site.

The NWIC records search indicated that 30 individual cultural resources have been recorded within the records search area. Three of the above-mentioned resources intersect the Project site: CA-NAP-406, CA-NAP-843, and CA-NAP-1008 (Appendix E). Of these three resources, CA-NAP-406 is the only resource that meets the criteria for NRHP eligibility. As described above, work for the Flood Protection Project resulted in a substantial level of previous archaeological investigation work along the western and northern portions of the Project site. This work has demonstrated the area to contain significant and highly sensitive archaeological resources. A total of 163 human burials were recovered from one site (CA-NAP-399) as part of the Flood Protection Project, the largest number of burials recovered from a single site in Napa Valley to date (Schneider et al. 2013: 44). Human remains were not documented within archaeological resources intersecting the Project site. Documented cultural resources that intersect or are located within the Project site (CA-NAP-406, CA-NAP-843 and CA-NAP-1008) are described further, below.

P-28-000307 (CA-NAP-406)

P-28-000307 was recorded initially during survey and subsurface testing completed by Yolande Beard in 1976 as a small site with worked obsidian, a pestle fragment and a small piece of magnesite. The resource was relocated by Stuart Guedon on June 13, 1995, at this recorded location. Guedon observed light scatter of obsidian debitage. The site was recorded as part of investigations and data recovery efforts for the Flood Protection Project between 2004 and 2009 (Bartoy et al. 2005; Schneider et al. 2013). The eastern and western extent of this site remain unconfirmed, however the resource as currently recorded measures 130 x 95 meters (m). An undetermined portion of this site intersects the Project site.

Durring Pacific Legacy's 2005 evaluation, archaeological investigation of CA-NAP-406 consisted of the placement of 17 auger bores, 22 shovel test probes (50 centimeters [cm] x 50 cm), two excavation units (1 m x 1 m), and one mechanically excavated trench (3 m x 0.5 m; Bartoy et al. 2005). Four of the auger bores were placed within excavation units and shovel test probes to ensure that the maximum depth of the cultural deposit had been reached. Testing was limited to the APE, which was defined as approximately 100 feet to the east of the then proposed Adams Street extension. The total amount of soil excavated in the 22 shovel test probes and two excavation units amounted to 4.24 cubic meters. A total of 4,244 artifacts were recovered from this site during this investigation.

Phase III data recovery at CA-NAP-406 was completed between 2007 and 2009, and involved excavation of two Control Units measuring 1 x 1 m; four Rapid Recovery Units measuring 2 x 1 m; and four trenches, measuring 3 x 1 m. In total, including Phase II investigations, the recovered assemblage included 5,711 pieces of lithic debitage, 17 bifaces, one core, seven edge-modified flakes, one hammerstone, 101 charcoal fragments, seven pieces of baked clay, and 40 historical-era artifacts.

This resource was determined eligible for inclusion in the NRHP/CRHR by the USACE and SWRCB in 2005. SHPO provided concurrence with these determinations in 2006. As such, an undetermined portion of this site, continuing from the west into the Project site, is assumed eligible for NRHP/CRHR listing.

P-28-000701 (CA-NAP-843)

CA-NAP-843 was recorded initially during the survey and subsurface testing completed by J. Abell of Archaeo-Tec on April 1, 1993, for the proposed Safeway Relocation project. The site was recorded as a sparse obsidian lithic scatter with 3 projectile point fragments, one biface and several modified flakes, and debitage distributed across an area measuring 85 x 35 m. The recorded location of this site was located immediately southwest of the Project site; however, Abell noted that the resource may continue into the parcel representing the Project site. All items were identified on the surface; auguring yielded no subsurface material or identified midden-like soils. The resource was relocated by Stuart Guedon on June 13, 1995 at this recorded location. Guedon observed an extremely light and diffuse scatter of obsidian debitage that did not extend into adjoining areas.

The site was re-identified during subsurface testing by Pacific Legacy for the Flood Protection Project in 2004. While NWIC resource files map this site to the southwest, Pacific Legacy's technical report indicates that this testing occurred within the boundaries of the Project site (Bartoy et al. 2005: 126). Archaeological investigation consisted of the placement of 29 auger bores and 15 shovel test probes (50 cm x 50 cm). The total amount of soil excavated in the

shovel test probes amounted to 1.5 cubic meters. A total of four artifacts were recovered from this site during this investigation. Testing confirmed the characterization of this site as a low-density lithic scatter with no associated midden (Bartoy et al. 2005). The site was considered a sparse surface scatter with no depth to the deposit. The artifact assemblage from the site included three edge-damaged obsidian flakes and one fragment of historic glass.

Given the low density of cultural materials and the lack of spatial patterning, this resource was determined not eligible for inclusion in the NRHP or the CRHR by the USACE and SWRCB. SHPO provided concurrence with these determinations in 2006.

P-28-001267 (CA-NAP-1008)

CA-NAP-1008 (also referred to as “Miller Vineyard Site”) was identified by Pacific Legacy for the Flood Protection Project initiating in 2004 at a location that falls within the northeastern portion of the Project site. The site was recorded as a surface scatter and shallow deposit of flaked lithic artifacts, predominantly Napa Valley obsidian, measuring 150 x 100 m. Extended Phase I Inventory and Phase II Evaluation work completed by Pacific Legacy occurred in 2004 and 2005 (Bartoy et al. 2005). Subsurface archaeological investigation included 32 augers, 13 shovel test pits (measuring 50 x 50 cm), two excavation units (measuring 1 x 1 m), and two mechanically excavated trenches (measuring 3 m x 0.5 m). A total of 396 artifacts were recovered from within 3.88 cubic meters of removed soil. Soil mixing to a depth of 60 centimeters below the surface (cmbs) was observed, presumably as a result of past discing activities associated with the surrounding vineyard. Obsidian hydration placed the sited chronologically between 2,500 years BP and 500 years BP.

The site was determined not eligible for CRHR/NRHP listing by the USACE and SWRCB based on the results of extended Phase I Inventory and Phase II Evaluation work for the Flood Protection Project (Bartoy et al. 2005). SHPO provided concurrence with these determinations in 2006.

Pedestrian Survey and Extended Phase I Testing

A Phase I Survey of the entire Project site was completed November 15, 2018 (Appendix E). The southern half of the Project site is occupied by a small vineyard, allowing for approximately one-half of the ground surface to be directly visible. Low-lying grasses were present throughout the northern half of the Project site, restricting visibility of the ground surface to less than 10% in most areas on this initial site visit. Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion/excavation exposures and the spoils from rodent burrows. The Project site has been subject to a number of past disturbances. The most notable of these have included present and past agricultural activities, as well as likely earth moving work in the northernmost portion of the Project site. During construction of the

Flood Protection Project placement of excess fill material was placed on the Project site. No artifacts were observed on the surface during the survey; however, visibility was highly restricted in most areas by low-lying vegetation and organic debris.

Subsurface probing (XPI probing or investigation) was conducted by a Dudek archeologist from November 15, 2018 to November 17, 2018. The intent of this work was to assess if subsurface conditions are present for significant archaeological deposits to be present. Excavation included three 6-inch hollow-stem augers and 5 shovel test probes. Excavations did result in the identification of soils within the Project site that had potential to contain archaeological deposits. The XPI investigations resulted in the identification of areas within the Project site that contain, and have the potential to contain, archaeological resources.

While the intent of the XPI investigation was to assess the potential for subsurface soils to be present, artifacts were identified in the locations nearest previously recorded archaeological resources. Archaeological testing was not intended to evaluate the frequencies or distribution of archaeological materials and deposits within the Project site. However, general results indicate artifact frequencies were highest in the central (near CA-NAP-406) and northern (CA-NAP-1008) portions of the Project site. One artifact was also identified in the southern portion of the Project site (near CA-NAP-843). The majority of cultural material was recovered from the lower, darker stratum (20-60 cmbs). Artifacts consisted predominantly of small obsidian tertiary flakes. These findings are generally consistent with results documented for Phase II excavations completed for the Flood Control Project along the western side of the central portion of the Project site (Bartoy et al. 2005). This study suggested that previous agricultural activities may have extended as deep as 60 cmbs in some areas, below which artifact frequencies decreased until encountering a gray clay sterile soil sub-stratum at approximately 1.5 meters below the surface (Schneider et al. 2013: 27). It is quite likely that this pattern extends into the Project site.

Phase II Testing and Ground Penetrating Radar

Based on the finding of the Phase I testing and the potential for unknown subsurface resources to be present within the site, further excavations were necessary to fully understand the extent of disturbances resulting from the previous Flood Protection Project and the changes in the soils. Dudek archeologists conducted the Phase II testing starting on January 20, 2020 through January 24, 2020. The intent of the Phase II survey was to build upon the Phase I survey and XPI investigation work. Results of these excavations are provided in Table 3.5-1.

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
AT-01	0-20	Negative	None	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	1 obsidian shatter	2.5Y 5/3 Light olive brown clay silt with gravel, compact: 1 obsidian shatter fragment
	40-60	Negative	None	2.5Y 6/2 Light brown gray clay silt with gravel, compact. Rock impasses at 60 cmbs
AT-02	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
AT-03	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
AT-04	0-20	Positive	1 green bottle glass fragment	10YR 4/1 Dark gray silty clay, no gravels: 1 fragment green bottle glass
	20-40	Negative	None	10YR 4/1 Dark gray clay, < 2% angular gravels
	40-60	Negative	None	10 YR 4/1 Dark gray clay < 5% angular gravels
	60-80	Negative	4 obsidian debitage	10 YR 4/1 Dark gray clay < 5% angular gravels. Rock impasse at 75 cmbs
AT-05	0-20	Negative	None	2.5 YR 3/2 Very dark grayish brown clay loam
	20-40	Positive	2 obsidian debitage	10YR 3/2 Very dark grayish brown silty loam with increased sand content
	40-60	Positive	2 obsidian debitage	10YR 3/2 Very dark grayish brown silty loam with increased sand content
	60-80	Positive	1 obsidian debitage	10YR 2/2 Very dark brown silty loam with increased grit, moderately compact. Rock impasse at 80 cmbs
AT-06	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	20-40	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	40-60	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	60-80	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	80-100	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	100-120	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	120-140	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	140-160	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	160-180	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	180-200	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel. Auger terminated at 187 cmbs

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
AT-07	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam, gradual increase in sand content with depth
	20-40	Negative	None	10YR 3/2 Very dark grayish brown silty loam, gradual increase in sand content with depth
	40-60	Negative	None	10YR 4/2 Dark grayish brown sandy loam
	60-80	Negative	None	10YR 4/2 Dark grayish brown sandy loam
	80-100	Negative	None	10YR 5/3 Brown sandy clay, coarse sand with 15% angular gravels. Rock impasse at 90 cmbs
AT-08	0-20	Negative	None	10YR 3/2 Very dark grayish brown clay loam
	20-40	Negative	None	2.5Y 3/2 Very dark gray brown clay loam, increased sand, <5% small cobbles and gravel
	40-60	Negative	None	2.5Y 3/2 Very dark gray brown clay loam, increased sand, <5% small cobbles and gravel
	60-80	Negative	None	2.5Y 4/3 Olive brown sandy silt, some oxidation present
	80-100	Negative	None	2.5Y 4/4 Olive brown sandy silt, some oxidation present
AT-09	0-20	Negative	None	10YR 3/3 Dark brown silt loam
	20-40	Negative	None	10YR 3/3 Dark brown silty loam
	40-60	Negative	None	10 YR 3/2 Very dark gray brown silty clay loam. Rock impasse at 55 cmbs
AT-10	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam with coarse sand
	20-40	Negative	None	10YR 3/3 Dark brown silty clay loam
	40-60	Negative	None	10YR 3/3 Dark brown silty clay loam. Rock impasse at 53 cmbs
AT-11	0-20	Negative	None	10YR 3/1 Very dark gray clay silt
	20-40	Negative	None	2.5Y 3/3 dark olive brown silty clay
	40-60	Negative	None	2.5Y 3/3 dark olive brown silty clay
	60-80	Negative	None	2.5Y 3/3 dark olive brown silty clay
	80-100	Negative	None	2.5Y 2.5/1 Black silty clay
	100-120	Negative	None	2.5Y 2.5/1 Black silty clay
	120-140	Negative	None	2.5Y 2.5/1 Black silty clay
	140-160	Negative	None	2.5Y 2.5/1 Black silty clay
AT-12	0-20	Positive	1 obsidian debitage	2.5Y 3/2 Very dark gray brown clay loam
	20-40	Positive	2 obsidian debitage	2.5Y 3/2 Very dark gray brown clay loam
	40-60	Negative	None	2.5Y 3/2 Very dark gray brown clay loam
	60-80	Negative	None	2.5Y 3/2 Very dark gray brown sandy clay loam, with 20% small-medihm gravels and cobbles. Rock impasse at 70 cmbs
AT-13	0-20	Positive	1 obsidian flake	2.5Y 3/2 Very dark gray brown silty loam
	20-40	Negative	None	2.5Y 3/2 Very dark gray brown silty loam
	40-60	Negative	None	2.5Y 4/1 dark geay silty clay loam with oxidation throughout

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	60-80	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	80-100	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	100-120	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	120-140	Negative	None	10YR 4/1 dark gray mottled with 10YR 4/3 brown clay loam, compact
	140-160	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	160-180	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	180-200	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	200-220	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam
	220-240	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam
	240-260	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam
	260-280	Negative	None	2.5Y 4/2 Dark grayish brown sandy loam, water table at 280 cmbs
STP-01	0-20	Positive	21 obsidian flakes, 1 retouched obsidian flake	10YR 3/2 very dark gray brown loamy clay with gravel, compact
	20-40	Positive	45 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-02	0-20	Positive	9 obsidian flakes	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	44 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-03	0-20	Positive	3 obsidian flakes, 1 chert flake	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	3 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-04	0-20	Positive	14 obsidian flakes	10YR 3/3 Dark Brown sandy clay silt with gravel, compact
	20-40	Positive	8 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-05	0-20	Positive	34 obsidian flakes	10YR 4/2 Dark grayish brown loamy clay with gravel, compact
	20-40	Positive	63 obsidian flakes, 1 obsidian chopper/scraper	10YR 3/2 Very dark gray brown clay silt, compact
STP-08	0-20	Positive	50 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <5% small rounded gravels
	20-40	Positive	44 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <5% small rounded gravels
	40-60	Positive	4 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <2% small rounded gravels
	60-80	Negative	None	10YR 4/3 Brown clay with <2% small angular and rounded gravels
	80-100	Negative	None	10YR 4/4 Dark yellowish-brown sandy clay, <5% gravel and cobbles
	100-120	Negative	None	10YR 4/4 Dark yellowish-brown sandy clay, <5% gravel and cobbles. Terminated at 105 cmbs due to water table

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
STP-09	0-20	Positive	21 obsidian debitage	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	20-40	Positive	14 obsidan debitage, modern plastic	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	40-60	Positive	21 obsidian debitage, brick fragment, wooden lathe fragment, and modern plastic	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	60-80	Positive	21 obsidian debitage, 1 obsidian retouched edge tool, brick fragment	2.5Y 3/2 very dark gray brown sandy silt with <15% angular gravel, very compact
	80-100	Positive	22 obsidian debitage, brick fragment	2.5Y 3/2 very dark gray brown sandy silt with <15% angular gravel, very compact
	100-120	Positive	1 obsidian debitage	Auger - 2.5Y 3/2 very dark gray brown clay loam with <15% angular gravel, slightly compact. Rock impase at 120 cmbs
STP-10	0-20	Positive	1 obsidian biface, 17 obsidian debitage	2.5Y 3/2 Very dark gray brown silty clay loam
	20-40	Positive	3 obsidian debitage, 2 glass fragments, plastic, and aluminum	2.5Y 3/2 Very dark gray brown silty clay loam, increasing clay content and compaction with depth
	40-60	Positive	1 obsidian debitage	2.5Y 3/2 Very dark gray brown sandy silty clay loam
	60-80	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	80-100	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	100-120	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	120-140	Negative	None	Auger - 2.5Y 3/1 Very dark gray sandy clay
	140-160	Negative	None	Auger - 2.5Y 3/2 Very dark gray coarse sand. Terminated at 160 cmbs
STP-11	0-20	Positive	6 obsidian debitage	7.5YR 3/2 dark brown loamy clay with <5% rounded gravel
	20-40	Positive	3 obsidian debitage	7.5YR 3/2 dark brown loamy clay with <5% rounded gravel
	40-60	Positive	3+ pieces of plastic	10YR 3/2 dark grayish brown loam with <5% rounded gravel
	60-80	Negative	None	7.5YR 3/4 dark brown loam
	80-100	Negative	None	80-90 cmbs: 7.5YR 3/4 dark brown loam 90-100 cmbs: coarse gray sand
STP-12	0-20	Positive	3 obsidian debitage	10YR 3/3 Dark brown sandy silt
	20-40	Positive	6 obsidian debitage	10YR 3/3 Dark brown sandy silt
	40-60	Positive	13 obsidian debitage	40-50 cmbs: 10YR 3/3 Dark brown sandy silt 50-60: 10YR 3/2 Very dark grayish brown sandy silt with ~50% cobbles

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	60-80	Negative	None	10YR 3/2 Very dark grayish brown sandy silt with ~50% cobbles. Terminated at 75 cmbs due to rock impasse
STP-14	0-20	Negative	None	10YR 4/3 Brown sandy loam with <5% gravel
	20-40	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	40-60	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel, cobbles at 55 cmbs
STP-16	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay, 55cmbs increased cobbles (5-10 cm diam.)
STP-17	0-20	Positive	1 obsidian debitage	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)
	20-40	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)
	40-60	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)
STP-18	0-20	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with <5% angular gravels. Angular cobbles (4-8 cm diam.) at 15 cmbs
	20-40	Negative	None	10YR 4/1 Dark gray loamy clay, < 2% angular gravels, clobbles (~10 cm diam.)
	40-60	Negative	None	10YR 4/1 Dark gray loamy clay, < 2% angular gravels, clobbles (~10 cm diam.)
STP-19	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	20-40	Negative	None	10YR 3/3 Dark brown loamy clay with cobbles (4-8 cm diam.)
	40-60	Negative	None	10YR 3/3 Dark brown loamy clay with cobbles (4-8 cm diam.)
STP-21	0-20	Positive	1 obsidian debitage	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
STP-22	0-20	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	20-40	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	40-60	Negative	None	10YR 3/3 Dark brown sandy loam with >50% cobbles (4-10 cm diam.)
STP-23	0-20	Positive	1 obsidian debitage	2.5Y 3/2 Dark Brown clay silt
	20-40	Negative	None	2.5Y 3/2 Dark Brown clay silt
	40-60	Negative	None	2.5Y 3/2 Dark Brown clay silt
	60-80	Negative	None	Auger - 60-70 cmbs: 2.5Y 3/2 Dark brown clay silt 70-80 cmbs: 2.5Y 2.5/1 Black silty clay

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	80-100	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	100-120	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	120-140	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	140-160	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
STP-24	0-20	Negative	None	10YR 3/3 Dark brown sandy silt
	20-40	Negative	None	10YR 3/3 Dark brown sandy silt
	40-60	Negative	None	10YR 3/3 Dark brown sandy silt
STP-25	0-20	Positive	1 obsidian debitage	7.5YR 3/2 Dark brown sandy loam with 5% large cobbles (5-15 cm diam.)
	20-40	Positive	1 historic ceramic	7.5YR 3/2 Dark brown sandy loam with 70% large cobbles (5-15 cm diam.)
STP-26	0-20	Negative	None	7.5YR 3/2 Dark brown silty sandy loam
	20-40	Negative	None	7.5YR 3/2 Dark brown silty sandy loam
	40-60	Negative	None	7.5YR 3/2 Dark brown silty sandy loam with 50% cobbles (5-15 cm diam.)
STP-27	0-20	Negative	None	10YR 4/2 Dark grayish brown loamy clay with ~50% gravel
	20-40	Negative	None	10YR 3/2 Very dark gray sandy clay with ~50% gravel
	40-60	Positive	12 obsidian debitage	10YR 3/2 Very dark grayish brown clay with 10% gravels: 12 obsidian debitage
	60-80	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with 10% gravels
	80-100	Negative	None	10YR 2/2 Very dark brown sandy loam
	100-120	Negative	None	10YR 2/2 Very dark brown sandy loam
	120-140	Negative	None	10YR 2/2 Very dark brown sandy loam. Terminated at 130 cmbs
STP-28	0-20	Positive	6 obsidian debitage	10YR 4/2 Dark grayish brown silty clay
	20-40	Negative	None	10YR 3/2 Very dark grayish brown clay
	40-60	Negative	None	2.5YR 3/1 Very dark grayish brown
	60-80	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	80-100	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	100-120	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	120-140	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	140-160	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
STP-29	0-20	Positive	6 obsidian debitage	10YR 2/2 Very dark brown clay
	20-40	Positive	3 obsidian debitage	10YR 2/2 Very dark brown clay
	40-60	Positive	4 obsidian debitage	10YR 3/2 Very dark grayish brown silty clay
	60-80	Positive	1 obsidian debitage, 3 glass fragments	10YR 3/2 Very dark grayish brown silty clay
	80-100	Negative	None	10YR 3/2 Very dark grayish brown silty clay
	100-120	Negative	None	10YR 3/2 Very dark grayish brown silty clay

Table 3.5-1
Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	120-140	Negative	None	10YR 3/2 Very dark grayish brown silty clay
	140-160	Negative	None	5Y 3/1 Very dark gray silty clay. Terminated at 150 cmbs.
STP-30	0-20	Positive	2 obsidian debitage	2.5Y 3/2 Dark brown sandy loam
	20-40	Positive	1 obsidian debitage	2.5Y 3/2 Dark brown sandy loam
	40-60	Negative	None	2.5Y 3/1 Very dark grayish brown sandy loam
	60-80	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt with 40% large cobbles
	80-100	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt
	100-120	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt

Source: Appendix E.
Notes: cmbs = centimeters below the surface; STP = shovel test pit

Ground-penetrating radar (GPR) was used in transects and blocks to locate any subsurface anomalies. The GPR was set up to record data to a maximum depth of 8 meters (approximately 26 feet). The GPR was useful in assessing the level of previous subsurface disturbance and presence and depth of fill within the Project site, and the potential for soils to support the presence of cultural material and deposits associated with the three previously recorded sites in the vicinity: CA-NAP-406, CA-NAP-843, and CA-NAP-1008.

Phase II testing for the Proposed Project included an additional 10 augers and 25 shovel test probes. Archaeological testing did not result in the identification of intact cultural deposits. Results indicate artifact frequencies were highest in the central (near CA-NAP-406) and northern (CA-NAP-1008) portions of the Proposed Project APE. Most cultural material was recovered from shallower contexts, above 60 cmbs. Modern debris was encountered to 100 cmbs, confirming clear disturbances to this depth. Artifacts consisted predominantly of small obsidian tertiary flakes. These findings are generally consistent with the assemblage documented by aerial imagery and Phase II excavations completed for the Flood Control Project along the western side of the central portion of the Proposed Project APE (Bartoy et al. 2005). This study suggested that a gray sandy clay sterile soil sub-stratum was present approximately 1.5 m below the surface (Schneider et al. 2013).

The portion of the Project site occupied by the vineyard, while previously disturbed through agricultural activities, was not capped by redistributed soils during the Flood Protection Project. As such, these areas would have the highest potential for intact cultural deposits to persist. The total assemblage of artifacts recovered from all XPI investigations and Phase II excavation units within this area included four fragments of obsidian debitage and one possibly historical-era

ceramic fragment. It is most likely that soils within the vineyard area are likely representative of the native soils underlying fill to the north of the Project site.

Tribal Cultural Resources and Tribal Consultation

A tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place, or object with cultural value to a tribe that is included or determined to be eligible for inclusion in the California Register of Historic Resources, included in a local register of historical resources, or otherwise determined to be significant by the lead agency of an environmental review process.

On September 28, 2018, a sacred lands file search request and a request for the Native American contact list for the area was sent to the Native American Heritage Commission (NAHC). On October 10, 2018, the NAHC responded with results from the sacred lands file search request. The sacred lands search failed to indicate the presence of recorded Native American cultural resources on the Project site or in the vicinity. The NAHC additionally provided a list of Native American tribes and individuals/organizations that might have knowledge of cultural resources in this area.

The Proposed Project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to "tribal cultural resources" as part of the California Environmental Quality Act (CEQA) process, and requires the CEQA lead agency to notify any groups (who have requested notification) of the Proposed Project who are traditionally or culturally affiliated with the geographic area of the Project site. The City sent six letters (two were sent to the Federated Indians of Graton Rancheria to two different people) dated April 23, 2018, to tribes that have requested to be notified. The City received responses from the Federated Indians of Graton Rancheria and the Yocha Dehe Wintun Nation, but neither Tribe requested formal consultation with the City. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City.

3.5.3 Regulatory Setting

The treatment of cultural resources is governed by federal, state, and local laws and guidelines. There are specific criteria for determining whether prehistoric and historic sites or objects are significant and/or protected by law. Federal and state significance criteria generally focus on the resource's integrity and uniqueness, its relationship to similar resources, and its potential to contribute important information to scholarly research. Some resources that do not meet federal significance criteria may be considered significant by state criteria. The laws and regulations seek to mitigate impacts on significant prehistoric or historic resources. The federal, state, and local laws and guidelines for protecting historic resources are summarized below.

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 established the NRHP as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. Properties listed in the NRHP, or determined eligible for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Under Section 106 of the act and its implementing regulations, federal agencies are required to consider the effects of their actions, or those they fund or permit, on properties that may be eligible for listing or that are listed in the NRHP. The regulations in 36 Code of Federal Regulations (CFR) 60.4 describe the criteria to evaluate cultural resources for inclusion in the NRHP. Properties may be listed in the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and they:

A. Are associated with events that have made a significant contribution to the broad patterns of our history;

B. Are associated with the lives of persons significant in our past;

C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

These factors are known as “Criteria A, B, C, and D.”

In addition, the resource must be at least 50 years old, except in exceptional circumstances. Eligible properties must meet at least one of the criteria and exhibit integrity, which is measured by the degree to which the resource retains its historical properties and conveys its historical character, the degree to which the original fabric has been retained, and the reversibility of the changes to the property. Archaeological sites are generally evaluated under Criterion D, which concerns the potential to yield information important in prehistory or history.

The Section 106 review process is typically undertaken between USACE as part of issuing a Section 404 permit and the SHPO, involves a four-step procedure:

- Initiate the Section 106 process by establishing the undertaking, developing a plan for public involvement, and identifying other consulting parties.
- Identify historic properties by determining the scope of efforts, identifying cultural resources, and evaluating their eligibility for inclusion in the NRHP.

- Assess adverse effects by applying the criteria of adverse effect on historic properties (resources that are eligible for inclusion in the NRHP).
- Resolve adverse effects by consulting with the State Historic Preservation Officer and other consulting agencies, including the Advisory Council on Historic Preservation, if necessary, to develop an agreement that addresses the treatment of historic properties.

The Department of the Interior has set forth Standards and Guidelines for Archaeology and Historic Preservation. These standards and guidelines are not regulatory and do not set or interpret agency policy. A project that follows the standards and guidelines generally shall be considered mitigated to a less than significant level, according to Section 15064.5(b)(3) of the CEQA Guidelines (14 CCR 15000 et seq.). Because it is not a federal agency, the City of St. Helena is not subject to the National Historical Preservation Act, including Section 106.

State Regulations

California Environmental Quality Act

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to California Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." PRC Section 21083.2 requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

"Historical resource" is a term of art with a defined statutory meaning (see PRC Section 21084.1 and CEQA Guidelines, Sections 15064.5[a] and 15064.5[b]). The term embraces any resource listed in or determined to be eligible for listing in the CRHR. The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be "historical resources" for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and 14 CCR Section 4850). Unless a resource listed in a survey has been demolished or has lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources (PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a)(3)). In general, a historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that (CEQA Guidelines Section 15064.5(a)(3)):

Is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California; and

A. Meets any of the following criteria:
    1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    2. Is associated with the lives of persons important in our past;
    3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    4. Has yielded, or may be likely to yield, information important in prehistory or history.

These factors are known as "Criteria 1, 2, 3, and 4" and parallel Criteria A, B, C, and D under the National Historic Preservation Act. The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that it may be a historical resource (PRC Section 21084.1 and CEQA Guidelines, Section 15064.5(a)(4)).

CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, as described above, and "unique archaeological resources." Under CEQA, an archaeological resource is considered "unique" if it (PRC 21083.2(g)):

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines states that if a proposed project would result in an impact that might cause a substantial adverse change in the significance of a historical resource, then an Environmental Impact Report (EIR) must be prepared and mitigation measures and alternatives must be considered. A "substantial adverse change" in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (Section 15064.5(b)(1)).

The CEQA Guidelines (Section 15064.5(c)) also provide specific guidance on the treatment of archaeological resources, depending on whether they meet the definition of a historical resource or a unique archaeological resource. If the site meets the definition of a unique archaeological resource, it must be treated in accordance with the provisions of PRC Section 21083.2.

CEQA Guidelines Section 15126.4(b) sets forth principles relevant to means of mitigating impacts on historical resources. It provides as follows:

> (1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.
>
> (2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
>
> (3) Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:
>
> (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.

(B) Preservation in place may be accomplished by, but is not limited to, the following:

1. Planning construction to avoid archaeological sites;
2. Incorporation of sites within parks, greenspace, or other open space;
3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
4. Deeding the site into a permanent conservation easement.

(C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation.

(D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.

CEQA and the California Public Records Act restrict the amount of information regarding cultural resources that can be disclosed in an EIR in order to avoid the possibility that such resources could be subject to vandalism or other damage (*Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 219). The State CEQA Guidelines prohibit an EIR from including "information about the location of archaeological sites and sacred lands, or any other information that is subject to the disclosure restrictions of Section 6254 of the Government Code [(part of the California Public Records Act)]" (Section 15120(d)). In turn, California Government Code Section 2654 of the California Public Records Act lists as exempt from public disclosure any records "of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in Sections 5097.9 and 5097.933 of the [California] Public Resources Code maintained by, or in the possession of, the Native American Heritage Commission, another state agency, or a local agency" (Cal. Gov. Code, Section 6254(r)).

PRC Section 21074 defines tribal cultural resources and Sections 5097.9 and 5097.993 of the Code list the Native American places, features, and objects, the records of which are not to be publicly disclosed under the California Public Records Act: “any Native American sanctified cemetery, places of worship, religious or ceremonial site, or sacred shrine located on public property (Section 5097.9) and any “Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources…, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site, any inscriptions made by Native Americans at such a site, any archaeological or historic Native American rock art, or any archaeological or historic feature of a Native American historic, cultural, or sacred site” (Section 5097.993(a)(1)).

The Public Resources Act also generally prohibits disclosure of archaeological records. Government Code Section 6254.10 provides: “Nothing in [the California Public Records Act] requires disclosure of records that relate to archaeological site information and reports maintained by, or in the possession of … a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency.”

CEQA Guidelines Section 15064.5(e), require that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as identified in a timely manner by the Native American Heritage Commission. Section 15064.5 of the CEQA Guidelines directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Senate Bill 297

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains (Senate Bill 297). It has been incorporated into Section 15064.5(e) of the CEQA Guidelines.

Assembly Bill 52

AB 52 requires consultation with Native American tribes traditionally and culturally affiliated with the geographic area in which a project requiring CEQA review is proposed if those tribes have requested to be informed of such proposed projects. The intention of such consultation is to

avoid adverse impacts to tribal cultural resources. This law is in addition to existing legislature protecting archaeological resources associated with California Native American tribes. AB 52 applies to all projects initiating environmental review in or after July 2015. The Proposed Project is subject to AB 52 and the City sent letters to all tribes requesting notification.

California Health and Safety Code

Section 7050.5(b) of the California Health and Safety Code specifies protocols to address any human remains that may be discovered. The code states the following:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in section 5097.98 of the Public Resources Code.

Local Regulations

The following local/regional regulations pertaining to cultural and historic resources would apply to the Proposed Project.

City of St. Helena 1993 General Plan

The Historic Resources Element of the St. Helena 1993 General Plan provides objectives, policies, and programs regarding cultural resources, including the following:

> **Policy 7.5.1:** Preserve the City's historic and cultural resources as they contribute to the special character and quality of the City and help support its economic base.
>
> **Policy 7.5.4:** Include the preservation of the City's historic resources in all future planning decisions where identified historic resources may be affected.
>
> **Policy 7.5.5:** Recognize the Historic Resources Inventory as the City's official list of historic resources.
>
> **Policy 7.5.6:** Use the Historic Resources Inventory in future planning decisions.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Historic Resources Element of the City's adopted General Plan provides objectives, policies, and programs regarding cultural resources, including the following that are relevant to the Proposed Project:

> Historic Resources Element
>
> **Policy HR1.1:** Preserve the City's historic and cultural resources, so that they may contribute to the special character and quality of the City and support its economic base.
>
> **Policy HR1.5:** For development and redevelopment proposals in archaeologically, tribal cultural, and paleontologically sensitive areas of St. Helena, require an assessment of the potential presence of archaeological, tribal cultural and paleontological resources, including a site survey and a records search of the California Historical Resources Information System at the Northwest Information Center (NWIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological, tribal cultural, and paleontological resources. The City shall incorporate the study recommendations as project conditions of approval to ensure that impacts on archaeological, tribal cultural, and/or paleontological resources are mitigated to the extent possible. Studies shall be prepared according to National Register Bulletin 24: Guidelines for Local Surveys: A Basis for Preservation Planning and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

3.5.4 Impacts

Methods of Analysis

As described above, a Cultural Resources Inventory and Extended Phase I and Phase II Report was prepared for the Proposed Project in March 2020 (Appendix E). The inventory included a review of the CHRIS records search provided by the NWIC, NAHC sacred lands file search, Native American coordination, historic research, an intensive pedestrian survey, XPI investigations, Phase II excavation, and ground penetrating radar. The study also reviewed historical aerials and topographic maps. The CHRIS records search included a review of their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the NRHP, California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impacts and Mitigation Measures

3.5-1: Would the Proposed Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? This impact would be potentially significant.

The City is the lead agency responsible for compliance with CEQA. The Proposed Project is also assumed to be subject to Section 106 compliance due to future review by USACE to authorize fill of existing wetlands prior to issuance of a grading permit for the Proposed Project (see Section 3.4, Biological Resources). According to CEQA (PRC Section 5024.1, Title 14 CCR, Section 4852), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect (adverse effect) on the environment and the cultural resource itself. A substantial adverse change in the significance of an historical resource would be constituted by physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Section 800.5(a)(1). An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. To comply with Section 106, the criteria of adverse effect are applied to historic properties, if any exist in the Project site. If no historic properties are identified in the Project site, a finding of "no historic properties affected" would be made for the Proposed Project. If there are historic properties in the Project site, application of the criteria of adverse effect would result in Proposed Project–related findings of either "no adverse effect" or of "adverse effect". There are no historic buildings present on the Project site that could be affected by construction activities. However, archaeological resource CA-NAP-406 which intersects the Project site has been determined to be eligible for CRHR and NRHP listing.

Consistent with 1993 General Plan Policies 7.5.5 and 7.5.6, and 2019 General Plan Policy HR1.5, a records search was conducted and in-depth testing was done on the Project site to determine the sensitivity of the site to contain subsurface resources. Inventory efforts associated with the Cultural Inventory and Extended Phase I and II Report (Appendix E) conducted for the Proposed Project identified three previously identified archaeological sites within the Project site (CA-NAP-406, CA-NAP-843, and CA-NAP-1008). An additional five archaeological sites have been identified in the immediate vicinity of the Project site. One recorded site within the Project site has been determined NRHP/CRHR eligible. CA-NAP-406 has been determined with SHPO occurrence to be eligible for listing in the NRHP listing under Criterion D. Resources CA-NAP-843 and CA-NAP-1008 were determined with SHPO concurrence to lack sufficient data potential and integrity to meet the criteria for NRHP/CRHR eligibility.

Resources CA-NAP-843 and CA-NAP-1008 have been subject to previous evaluation efforts as part of the prior Flood Protection Project and are not NRHP/CRHR eligible. Therefore, the Cultural Inventory and Extended Phase I and Phase II Report determined that impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect, although appropriate mitigation to account for unanticipated impacts would be required.

Resource CA-NAP-406 has been determined to be eligible for CRHR (Criterion 4) and NRHP (Criterion D) listing. However, previous investigations evaluating this resource were restricted to portions of this resource located immediately west of the Project site. Based on the results of the Phase I and Phase II archaeological excavations and a GPR investigation no intact deposits or

features associated with CA-NAP-406 appear to extend to within the Project site. It is likely that this upper layer of fill present on a majority of the site is comprised largely of redeposited and otherwise disturbed cultural deposits associated with CA-NAP-406. Soils identified below the fill were not found to contain cultural deposits or substantial frequencies of cultural material. However, because there is the potential to unearth unknown resources during Proposed Project construction and due to the presence of recorded resources nearby the impact is considered **potentially significant.**

Mitigation Measures

Compliance with Mitigation Measure CUL-1 would ensure the proper procedures and protocol are in place in the event a resource is identified. The procedures require work to stop in the event a resource is discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with this measure, along with PRC Section 5097.98, Section 7050.5 of the California Health and Safety Code, and Section 15064.5(e) of the CEQA Guidelines. Adherence to this mitigation measure would ensure impacts would be reduced to less than significant.

CUL-1: The City shall require that an archaeological monitor is present during all ground-disturbing activities with the potential to impact previously identified cultural resources or to encounter unanticipated cultural deposits including tribal cultural resources. The determination for a Native American monitor to be present shall be made by the City, in consultation with the appropriate Native American tribe prior to the initiation of ground disturbing activities. In addition, prior to the initiation of ground-disturbing work, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Areas observed to have potential to contain yet-identified subsurface cultural material or deposits are located throughout the Project site, but primarily would be in the western portion of the site where the existing vineyard is located. It is anticipated resources would not be present in depths of more than 10 feet below the surface. Archaeological and Native American monitoring may be adjusted at the recommendation of the qualified archaeological principal investigator, meeting the Secretary of the Interior Professional Qualifications for Archaeology, and in consultation with the City, based on inspection of exposed subsurface soils and their observed potential to contain intact cultural deposits or material.

The archaeological and tribal monitors shall be provided a copy of technical reports prepared for the Project and pertinent appendices to inform their monitoring efforts. The archaeological and tribal monitors shall have the authority

to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities, all construction work occurring within 100 feet of the find shall immediately stop until the qualified archaeological principal investigator, that meets the Secretary of the Interior Professional Qualifications for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted, in consultation with the Tribe. Should it be determined by the Tribe and the archeologist, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. As approved by the City, in consultation with the Tribe this buffer may be adjusted by the Tribe and the archaeological principal investigator to a distance that maintains a protective perimeter around the unanticipated resource, while still allowing for construction to continue in the surrounding area.

3.5-2: Would the Proposed Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? This impact would be potentially significant.

As described in Impact 3.4-1, the Cultural Inventory and Extended Phase I and Phase II Report (Appendix E) conducted for the Proposed Project three archeological sites were previously identified within the Project site (CA-NAP-406, CA-NAP-843, and CA-NAP-1008), two of which (CA-NAP-843 and CA-NAP-1008) were determined not to be NRHP/CRHR eligible. The Cultural Inventory Report determined that impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect, although appropriate mitigation to account for unanticipated impacts would be required. Resource CA-NAP-406 has been determined to be eligible for CRHR (Criterion 4) and NRHP (Criterion D) listing.

As discussed above under Impact 3.5-1, the Phase I and Phase II archaeological excavations and GPR investigation did not identify any intact deposits or features associated with CA-NAP-406 within the Project site. However, the report notes that such deposits have the highest potential to be present beneath redeposited and disturbed fill areas located north of the planned Starr Avenue expansion, as well as portions of the Project site to the south, presently occupied by vineyards, have a higher potential to contain intact cultural deposits at shallower depths. Due to the sensitivity of the site for unknown archeological resources that may be present subsurface that could be unearthed during construction activities this is considered a **potentially significant impact.**

Mitigation Measure

Implementation of Mitigation Measure CUL-1 provides specific procedures to follow in the event a resource is identified. The procedures require work to stop in the event a resource is discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with this measure, along with PRC Section 5097.98, Section 7050.5 of the California Health and Safety Code, and Section 15064.5(e) of the CEQA Guidelines, would ensure that potential impacts to previously unidentified subsurface resources are mitigated to less than significant and no additional mitigation is required.

3.5-3: Would the Proposed Project disturb human remains, including those interred outside of formal cemeteries? This impact would be less than significant.

The NWIC records search conducted for the Cultural Inventory and Extended Phase I and Phase II Report indicated that thirty cultural resources have been recorded within the records search area (Appendix E). As described above, work for the Flood Protection Project resulted in a substantial level of previous archaeological investigation work along the western and northern portions of the Project site. This work has demonstrated the area to contain significant and highly sensitive archaeological resources. As part of the Flood Protection Project a total of 163 human burials were recovered from one site (CA-NAP-399), the largest number of burials recovered from a single site in Napa Valley to date (Schneider et al. 2013: 44). Human remains were not documented within archaeological resources intersecting the Project site. The Phase II testing conducted for the Proposed Project by Dudek included GPR which looks for any subsurface anomalies to a depth of approximately 26 feet below the surface. Any potentially sensitive GPR anomaly was ground-truthed and no cultural features were identified as a result of these efforts. Nevertheless, due to the high archeological sensitivity of the area around the Project site, it is possible to inadvertently uncover human remains during ground-disturbing Proposed Project activities, such as grading and excavation. This is considered a **potentially significant impact.**

Mitigation Measures

Implementation of Mitigation Measure CUL-2 provides specific procedures to follow in the event human remains are identified. The procedures require work to stop and the County Coroner contacted to determine the origins of the remains. Compliance with this measure, along with PRC Section 7050.5 of the California Health and Safety Code would ensure that potential impacts to any human remains are mitigated to a less-than-significant level.

CUL-2: In the event any human remains are unearthed during site disturbing activities, Section 7050.5(b) of the California Health and Safety Code and Section 15064.5(e) of the CEQA Guidelines specifies protocols to follow in the event

human remains are discovered. The Code mandates stopping work within 100 feet of the find and contacting the County Coroner to determine the origin of the remains. If the remains are determined to be Native American the Coroner shall contact the Native American Heritage Commission within 24 hours to request that the Commission determine the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent shall be provided with the opportunity to make recommendations regarding the means of treating or disposing of the remains with appropriate dignity. Project-related ground disturbance in the vicinity of the find shall not resume until all statutory requirements have been met and evidence of completion has been submitted to the City, in consultation with the Tribe.

3.5-4: Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency to be significant? This impact is potentially significant.

Dudek contacted the NAHC to request a review of the sacred lands file. The NAHC responded to Dudek's request, stating that the sacred lands file search was conducted with "negative results." The City sent letters to all California Native American tribes traditionally and culturally affiliated with the Proposed Project area requesting notification pursuant to AB 52. None of the tribes contacted requested consultation pursuant to PRC Section 21080.3.1. The Yocha Dehe Wintun Nation requested to review a copy of the Cultural Report which was provided to the Tribe by the City for their review on May 18, 2020.

Based on a review of the Cultural Resources evaluation conducted for the Project site and letters provided by the Tribes in response to letters sent by the City pursuant to AB 52, there are no known TCRs present, as defined in PRC Section 21074, on the Project site or in its immediate vicinity. The general area was previously documented to be of importance to traditionally geographically affiliated tribes through the Flood Protection Project, and active outreach with these parties should continue into the future. The Project site is undeveloped, although has been subject to substantial previous disturbance and has historically been used for agriculture. The CHRIS records search conducted for the Proposed Project area did not identify any previously recorded TCRs on the Project site (Appendix E).

As previously stated, archaeological sites have been identified on the Project site and in the immediate vicinity during the records search and verified during the intensive Phase I and Phase II testing conducted on the Project site. Resource CA-NAP-406 was determined to be eligible for CRHR and NRHP listing, although this resource is not identified as a TCR. Due to the sensitivity

of the site for unknown archeological resources that could be unearthed during construction activities, it was determined there would be a potentially significant impact to archaeological resources. Given the sensitivity of the site for cultural resources, the potential for unknown tribal cultural resources to be encountered during Proposed Project ground-disturbing activities also exists. Therefore, this is considered a **potentially significant impact**.

Mitigation Measures

While no known TCRs have been identified that may be affected by the Proposed Project, implementation of Mitigation Measure CUL-1 would require construction work to stop and a Native American representative contacted (if not already conducting on-site monitoring) if any TCRs are unearthed and appropriate measures to be implemented to evaluate the significance of the find. Compliance with Mitigation Measure CUL-1 would ensure potential impacts would be less than significant and no additional mitigation is required.

3.5.5 Cumulative Impacts

The geographic scope of the cumulative impact analysis for the evaluation of potential cumulative impacts on cultural resources is the City of St. Helena.

3.5-5: Would the Proposed Project contribute to cumulative impacts to cultural resources, including historical and archeological resources as defined in CEQA Guidelines Section 15064.5 and human remains? The Project's contribution would be considered potentially significant.

Several historical resources and prehistoric and archeological sites have been recorded within the City, including both on and adjacent to the Project site. Development in the region could result in the damage or destruction of known and unknown archaeological and historical resources, as well as any existing undiscovered subsurface artifacts. The cumulative impact from past, present, and probable future projects, as well as the Proposed Project, is potentially significant.

The 1993 General Plan EIR concluded that the 1993 General Plan could result in substantial adverse changes in the significance of historical resources, and would have a significant and unavoidable impact to prehistoric archaeological sites that may contain human remains with religious significance to local Native American groups (City of St. Helena 2010). The 1993 General Plan states that there are a number of historic resources in the City (dating from the mid-nineteenth to mid-twentieth century) vulnerable to incompatible alterations and demolition. However, the Proposed Project does not include any known historic resources from this time period. The 2019 General Plan EIR concluded that impacts on cultural resources, including historic, archeological and prehistoric associated with buildout of the city would not result in a significant impact (City of St. Helena 2018). The EIR notes that compliance with 2019 General

Plan Policy HR1.5 would minimize or avoid potential impacts on any resources known or not known at this time and that may be encountered in the future. In addition, there are numerous laws, regulations, and statutes, on both the federal and state levels, that seek to protect cultural resources. These would apply to development within and outside the city. However, because the Project site contains a high likelihood for the discovery of unknown subsurface historical or prehistoric resources, the Proposed Project's contribution to the cumulative loss of cultural resources is considered **potentially significant.**

Mitigation Measures

Implementation of Mitigation Measure CUL-1 provides specific procedures to follow in the event a resource is identified. The procedures require work to stop in the event a resource is discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with this measure, along with PRC Section 5097.98, Section 7050.5 of the California Health and Safety Code, and Section 15064.5(e) of the CEQA Guidelines, would ensure that potential impacts to previously unidentified subsurface resources are mitigated to a less-than-significant level and the Proposed Project's incremental contribution would be reduced to less than significant and no additional mitigation is required.

3.5-6: Would the Proposed Project contribute to cumulative impacts to tribal cultural resources, currently listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency to be significant? The Project's contribution would be potentially significant.

As stated previously, the 1993 General Plan EIR determined that there would be a significant and unavoidable impact to prehistoric archaeological sites that may contain human remains with religious significance to local Native American groups (City of St. Helena 2010). However, the City of St. Helena General Plan Update EIR identified that development under the City's 2019 General Plan would result in less-than-significant impacts to TCRs. Policy HR1.5 in the 2019 General Plan would minimize or avoid potential impacts on any resources known or not known at this time that may be encountered in the future and would promote coordination with Native American tribes if any tribal resources are discovered at development sites. The impact on Native American tribal cultural resources was therefore determined to be less than significant.

Numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect cultural resources. These would apply to development within and outside the city. In addition, General Plan policies are designed to safeguard cultural resources from unnecessary impacts. Because all significant tribal cultural resources are unique and non-renewable members of finite

classes, all adverse effects or negative impacts erode a dwindling resource base. Although unlikely, there is the potential the Proposed Project could adversely affect significant tribal cultural resources that are unique and non-renewable members of finite classes if discovered contributing to a potentially considerable contribution. Therefore, the Proposed Project's incremental contribution to the cumulative loss of cultural resources is considered **potentially significant.**

Mitigation Measures

Implementation of Mitigation Measure CUL-1 provides specific procedures to follow in the event a TCR is identified. The procedures require work to stop in the event a resource is discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with this measure, along with PRC Section 5097.98, Section 7050.5 of the California Health and Safety Code, and Section 15064.5(e) of the CEQA Guidelines, would ensure that potential impacts to TCRs are mitigated to a less-than-significant level and the Proposed Project's incremental contribution would be reduced to less than significant and no additional mitigation is required.

3.5.6 References

City of St. Helena. 1993. City of St. Helena 1993 General Plan. September 28, 1993.

City of St. Helena. 2010. St. Helena General Plan Update. Prepared by ESA. August 2010.

City of St. Helena. 2018. St. Helena General Plan Update 2040 Draft Environmental Impact Report SCH# 2010042001. October 23, 2018.

City of St. Helena. 2019. St. Helena General Plan Update 2040. June 2019.

Dudek. 2020. Cultural Resources Inventory, Extended Phase I and Phase II Report for the Hunter Subdivision Project, Napa County, California (Confidential Report). May 2020.

3.6 GEOLOGY AND SOILS

3.6.1 Introduction

This section evaluates the potential effects on geologic and soil resources as well as paleontological resources associated with development of the proposed Hunter Subdivision Project (Proposed Project). This section describes the geologic setting and soil resources located on the Project site and within the Proposed Project's surrounding area, as well as the applicable federal, state, and regional regulations pertaining to geologic and soil resources.

There were no comments received in response to the Notice of Preparation specifically related to geological impacts. A copy of the Notice of Preparation and comments received is included in Appendix A. Comments related to conversion of prime agricultural farmland and excess runoff and erosion are addressed in Section 3.2, Agriculture and Forestry Resources, and Section 3.9, Hydrology and Water Quality, respectively.

Information contained in this section is based on Project site plans, City of St. Helena (City) planning documents (including the 1993 General Plan, the 2019 General Plan, and the 2019 General Plan Draft Environmental Impact Report), geotechnical engineering reports prepared for the Proposed Project, and publicly available maps, data and reports from the U.S. Geological Survey (USGS), U.S. Department of Agriculture, and the California Geological Survey. Other sources consulted are listed in Section 3.6.6, References. Copies of the geotechnical reports prepared for the Project site are included in Appendix F.

3.6.2 Environmental Setting

This section describes the existing environmental setting of the region and Project site and identifies the resources that could be affected by the Proposed Project, or which could affect the Proposed Project.

Regional Physiography

The Project site is located within California's Coast Ranges Geomorphic Province, a geologically young and seismically active region. A conspicuous characteristic of this province, including Napa County, is the general northwest-southeast orientation of physiographic features such as valleys and ridgelines. The City of St. Helena is situated within the Napa Valley floor, bounded by the Mayacamas Mountain Range on the western and northern sides and the Vaca Mountains on the eastern side. These ranges consist of Sonoma Volcanics (Pliocene rhyolite, dacite, tuff, and pyroclastic rocks) overlying Franciscan Complex mélange (sandstone, shale, chert, conglomerate, and greenstone). The region is located within the Napa Valley American Viticultural Area and is known for the agriculture that characterizes the valley. The Napa River bisects the valley and flows through the eastern portion of the city. The City's terrain ranges from flat agricultural areas to gently rolling foothills.

Site Setting

The northern edge of the Project site is located approximately 500 feet southwest of the southeasterly flowing Napa River, on a flat alluvial floodplain formed by the river and its tributaries. Important tributaries to the Napa River in the city include York Creek, which discharges into the Napa River approximately one mile further upstream from the Project site, and Sulphur Creek, which discharges into the Napa River approximately a quarter-mile further downstream. The geology of the site is dominated by unconsolidated Quaternary age[1] alluvium, with the northern half of the site consisting of an alluvial terrace deposits formed by the Napa River, and the southern half of the site consisting of the distal end of alluvial fans formed by the northeasterly-flowing streams coming out of the Mayacamas Mountains.

Topography

Based on the Proposed Project's grading plan, the elevation across the Proposed Project's development footprint ranges from approximately 230 feet above mean sea level on its southern edge to approximately 212 feet above mean sea level on its northern edge. The average slope gradient across the development footprint is less than 1.5% toward the north and east. There is a slight break in slope near the center of the site, where a gentle (nearly imperceptible) slope transitions to a flat surface. This slight break in slope is coincident with the historical extent of the Napa River floodplain that existed prior to the completion of the City's Flood Protection Project that constructed a levee along the Napa River in 2010 that now provides a 200-year level of flood protection. Prior to 2010, the topography of the site was slightly different, as mass grading associated with construction of the off-site levee and detention basin resulted in filling in a former pond and placement of a thin layer of engineered fill over portions of the Project site.

The portion of the site planned for the extension of Adams Street ranges from 243 feet to 230 feet above mean sea level, with a gradual slope of 1.5%.

Geology

The Project site is underlain by unconsolidated Holocene[2] age alluvial deposits. These deposits consist of alluvial fan and fluvial deposits, which are typically composed of varying mixtures of clay, silt, sand, gravel and cobbles, depending on location. As mapped by the U.S. Geological Survey (USGS 2007), the Project site is underlain by the following two geologic units, shown in Figure 3.6-1, Geologic Map:

[1] The Quaternary is a geologic period representing the last 2.5 million years and consists of the Pleistocene epoch and the more recent Holocene epoch.

[2] The Holocene is a geologic epoch lasting from 11,700 years ago (+/- 100 years) to the present day.

- Terrace deposits (Qht): Terrace deposits consist of moderately well sorted sand, silt, gravel, and minor clay deposited in point bar and overbank settings. Mostly undissected[3] by later erosion.
- Alluvial fan deposits (Qhf): Alluvial fan deposits consist of moderately to poorly sorted and moderately to poorly bedded sand, gravel, silt and clay deposited where streams emanate from upland regions onto valley floors or plains. The alluvial fans deposits are mostly undissected by later erosion. In places, Holocene deposits may only form a thin layer over Pleistocene and older deposits.

The surface boundary between these two geologic units, shown in Figure 3.6-1, is coincident with the aforementioned topographic break in slope. Based on regional work in reconstructing the subsurface geology exposed in water well driller logs, it is estimated that the Quaternary age alluvium extends to a depth of between 50 and 100 feet below the ground surface (bgs), with Tertiary age[4] sedimentary and volcanic rocks (e.g., Sonoma Volcanics) extending below that to over 500 feet bgs (LSCE and MBK 2013).

Geologic units can contain several types of soils that generally have similar properties or are from the same time period and formed in similar ways. Below is a description of the soils present on the Project site.

Soils

The top 5 feet of the geologic units described above is characterized by a mantle of soil that varies in thickness and character. In general, soil characteristics are strongly governed by slope, relief, climate, vegetation, and the geologic unit upon which they form. Soil types are important in describing engineering constraints such as susceptibility to soil erosion (from both water and wind), corrosion risks, and various behaviors that affect structures, such as expansion and settlement. The type, aerial extent, and some key physical and hydrological characteristics of soils within the Project site were identified based on a review of a soil survey of Napa County completed by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA 2019). Soil units are described in Table 3.6-1 and shown in Figure 3.6-2, Soils.

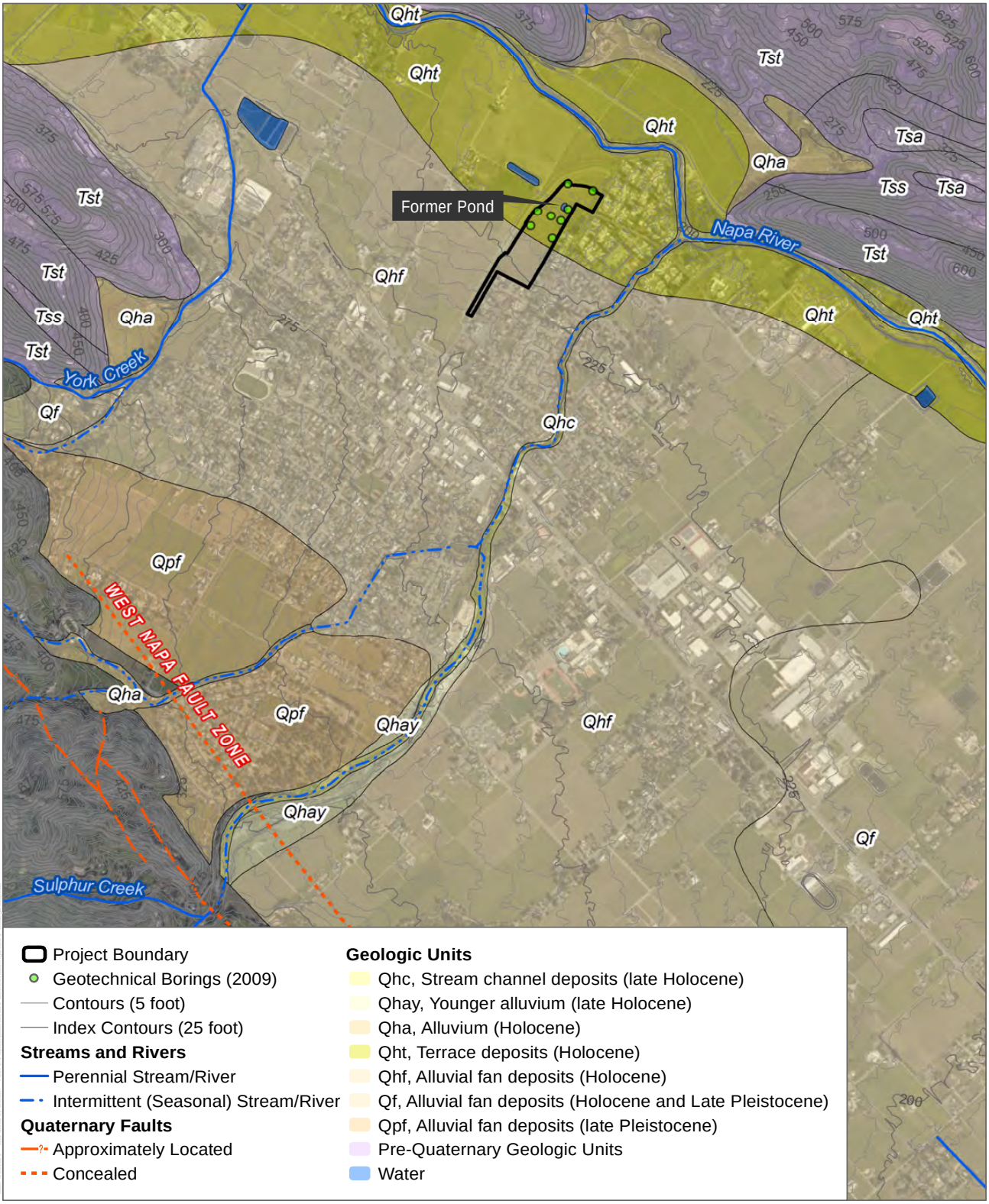
[3] This term refers to the degree to which streams have incised into the surface.
[4] Teriary is a geologic period between 2.5 million and 65 million years ago.

Table 3.6-1
Soil Map Units Within the Project Site

Soil Unit	Acres / Percent of Project Area	Depth (inches)	Shrink/Swell Potential1	Corrosion Risk2		Erosion and Runoff	
				Uncoated Steel	*Concrete*	*Hydrologic Soil Group3*	*Erosion Factor (Kf)4*
Bale clay loam, 0% - 2% slope	3.6 / 22%	60	Low (0% – 2.9%) to Moderate (3% – 5.9%)	High	Low	B	0.2
Bale clay loam, 2% - 5% slope	8.5 / 53%	60	Low (0% – 2.9%) to Moderate (3% – 5.9%)	High	Low	B	0.2
Cole silt loam, 0% - 2% slope	3.5 / 22%	64	Low (2.3% – 4.1%) to High (5.7% – 8.3%)	High	Low	C	0.37
Cortina very gravelly loam, 0% - 5% slope	0.6 / 3%	60	Low (0% – 2%)	Low	Low	A	0.43

Source: USDA 2019.
Notes:
1 "Shink/Swell potential" of soils pertains to the volume change experience by soils, particularly clays, under cycles of wet and dry conditions. This is measured by the linear extensibility of soils, or the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The shrink/swell potential is low if the soil has a linear extensibility of less than 3%; moderate if 3% to 6%; high if 6% to 9%; and very high if more than 9%. The ratings reported in this table refer to the range of soil horizons present within the soil map unit.
2 "Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete.
3 Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups (A through D) according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. Soils in Group B have a moderate infiltration rate and a moderate rate of water transmission. Soils in Group C have a slow infiltration and transmission rates and consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. Soils in Group D have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.
4 Erosion factor Kf indicates the susceptibility of a soil to sheet and rill erosion by water. Values of Kf are provided for the surface soil horizon. Values range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Geotechnical exploration of the Project site was completed by Miller Pacific Engineering Group, which provides site-specific details about shallow subsurface conditions (see Appendix F for the reports). The geotechnical exploration consisted of ten shallow exploratory borings drilled in 2009 using a 4-inch manual bucket auger and associated laboratory testing of selected soil samples (Appendix F). The location of the exploratory borings are shown in Figure 3.6-1. In late 2010, to update site conditions following completion of the City's Flood Protection Project, Miller Pacific Engineering Group conducted and reviewed field density testing to determine the relative compaction of recently placed fill. More recently, Miller Pacific Engineering Group provided a review of the liquefaction potential on the Project site (Appendix F).



SOURCE: Bing Maps 2019, USGS 2019 (National Hydrography Dataset), USGS 2007

DUDEK

0 800 1,600 Feet

FIGURE 3.6-1
Geologic Map
Hunter Subdivision Project

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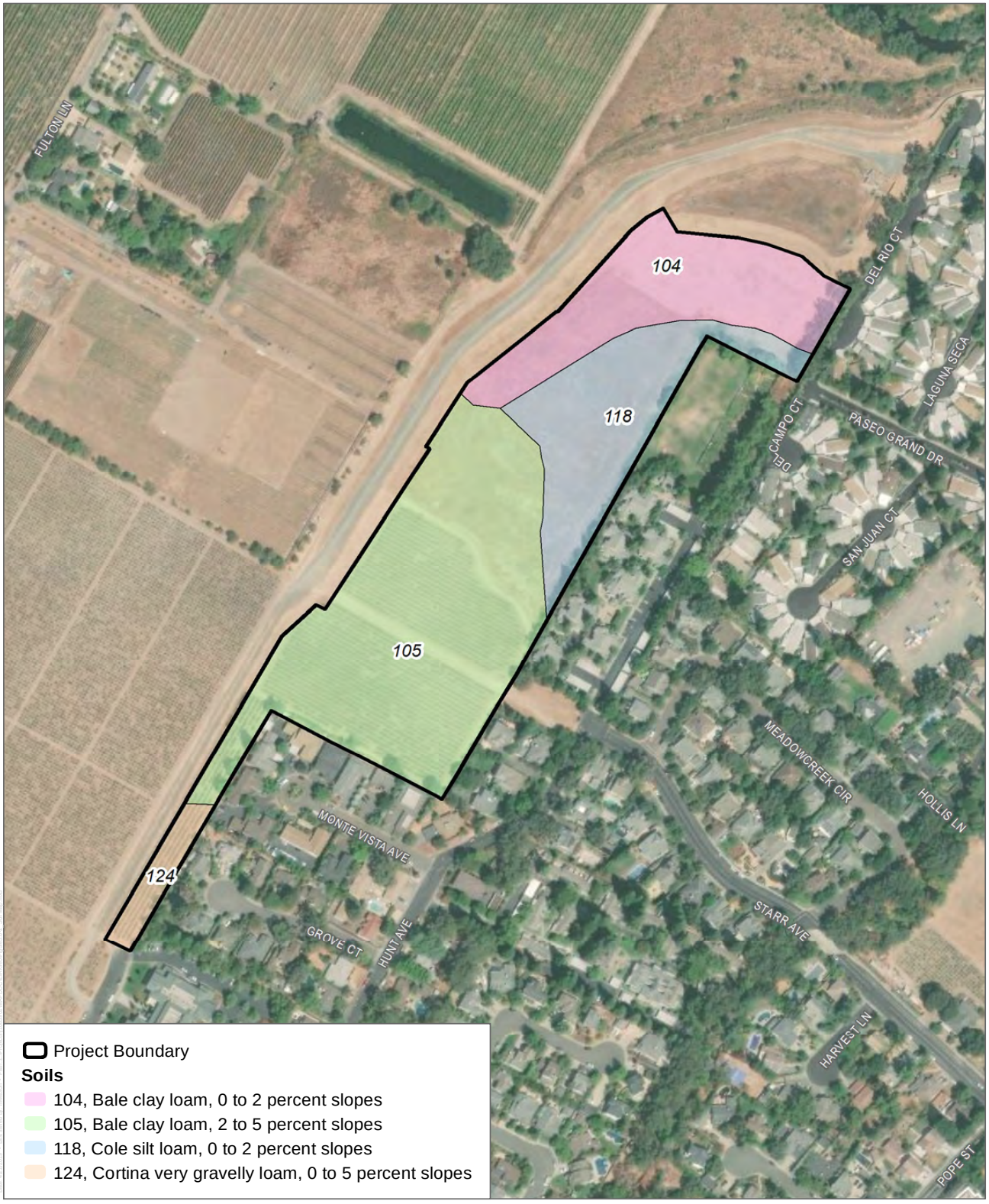

SOURCE: Bing Maps 2019, USDA 2019

DUDEK

0 250 500 Feet

FIGURE 3.6-2
Soils
Hunter Subdivision Project

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Based on geotechnical exploration, the subsurface consists of clayey silts with varying character (e.g., stiffness, color, moisture, grain size distribution). There is a 1–4-foot thick mantle of recent, compacted fill that was placed over much of the site, with deeper fill extending up to 10 feet bgs where the former pond was filled (the former pond location is shown on Figure 3.6-1). This occurred in 2010 when the City's Flood Protection Project was completed. Below the compacted fill is a 0.5–1.5-foot layer of stiff, relatively dry light brown clayey silt with some sand underlain by soft to medium stiff dark brown clayey silt to a depth of 4–7 feet. Based on laboratory testing of soil samples, there is an approximately three-foot thick layer of soft, weak natural soil that remains beneath the recently placed and compacted fill layer that does not meet American Society of Testing and Materials (ASTM) standards for optimum soil moisture and compaction (Appendix F).

Paleontological Resources

The City recently approved a new General Plan in June 2019 and certified the 2019 General Plan Environmental Impact Report. That Environmental Impact Report provides a description of the paleontological resources for each geologic unit mapped within the City's planning area (City of St. Helena 2018). The City's 1993 General Plan did not include any discussion pertaining to paleontological resources. Although there have been no recorded fossil finds within the City's boundaries (including a search of the University of California Museum of Paleontology specimen database), Pleistocene[5] age Quaternary deposits are described as potentially fossil bearing, possibly containing significant Rancholabrean fossils (126,000 to 10,000 years B.P.). Fossils found in alluvium of this age include, but are not limited to, bison, mammoth, ground sloths, sabertoothed cats, dire wolves, horses, cave bears, rodents, birds, reptiles, and amphibians. Older Pleistocene deposits typically occur as terraces incised by Holocene fluvial drainages. Due to their young age, Holocene alluvium is not considered potentially fossil bearing, since insufficient time has passed to result in fossilization of buried flora and fauna.

Although the Proposed Project is mapped at the surface as consisting of Holocene alluvium, which has a low paleontological potential, it may be underlain at unknown depths by Pleistocene alluvial fan deposits. Subsurface logs completed for geotechnical work or well drilling purposes do not typically differentiate between Holocene and Pleistocene age sediments, as they are mainly concerned with soil texture, and because both units are similar in that they consist of various layers of unconsolidated sediment (i.e., sand, gravel, silt and clay). However, Holocene alluvium extends down to at least 4 feet, as evidenced by the discovery of archeological resources down to that depth (see Section 3.5, Cultural Resources for additional information on the excavations conducted for the presence of subsurface archeological resources).

[5] The Pleisticene is a geologic epoch lasting from 11,700 years ago (+/- 100 years) to 2.5 million years ago.

Furthermore, based on the distance to the closest surface expressions of Pleistocene alluvium, which occur over a mile to the southwest (USGS 2007) and the proximity of the Napa River, the Holocene alluvium mapped within the Project site is likely of considerable thickness. However, because the subsurface boundary between Holocene and Pleistocene units has not been confirmed/verified, it is assumed for the purpose of the analysis that deeper excavations (beyond 4 feet in depth) could encounter older Pleistocene age alluvium.

Geologic Hazards and/or Soil Constraints

The following describes the potential geologic hazards and/or soil constraints potentially applicable to the site, based on the mapped soils and subsurface geotechnical investigation.

Slope Failures and/or Mudflows

The Napa Valley floor, including the majority of the City is mapped by the U.S. Geological Survey as being stable in terms of slope stability; for example, areas of less than 5% slope that are not underlain by landslide deposits (City of St. Helena 2018). The Project site is on flat to gentle slopes and therefore is not at risk of experiencing landslides. The eastern flank of the Mayacamas Mountains to the west may be the source of landslide or mudflows; however, as it is more than a mile away, the site is not subject to landslide or mudslide runout. The hills on the east side of the valley are closer (0.3–0.5 miles to the northeast), but the Project site is protected by a levee and thus would not be subject to mudslide runout from the east either.

Expansive and/or Corrosive Soils

Expansion and contraction of soil volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. As a consequence of such volume changes, structural damage to building and infrastructure may occur if the potentially expansive soils were not considered in building design and during construction. Corrosivity is a function of the chemical composition of the soils, and the materials from which it is derived. If not addressed by design measures and proper selection of building materials, corrosive soils could cause substantial damage to building foundations, pavements, utilities, and/or other improvements.

The northern part of the Project site is underlain by the Bale clay loam, which has low to medium shrink/swell potential, as shown in Table 3.6-1. The southern part of the site is underlain by the Cole silt loam which has a low to high shrink/swell potential (generally increasing with depth). The Cortina very gravelly loam underlies the southernmost portion of the site and has a low shrink/swell potential. The Bale and Cole soils generally have a high corrosion potential to steel, and low corrosion potential for concrete. The Cortina very gravelly loam has a low corrosion potential for both steel and concrete (Table 3.6-1).

Soil Settlement and/or Collapse

Soil settlement or differential settlement could occur if buildings or other improvements were built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to site inhabitants, it can cause significant building damage over time. Settlement or collapse has the potential to occur if buildings or other improvements were built on materials which are not suited for foundations of structures. As discussed above, the subsurface investigation of the site found that there is an approximately 3-foot-thick layer of clayey silts under recently placed and compacted fill that may be prone to soil settlement or differential settlement. Based on the findings of the geotechnical investigation, the settlement risk at the Project site presents a potentially significant hazard (Appendix F).

Collapsible soils consist of loose, dry, low-density materials that collapse and compact under the addition of water or excessive loading. These soils are distributed throughout the southwestern United States, specifically in areas of young alluvial fans, debris flow sediments, and loess (wind-blown sediment) deposits. Since collapsible soils occur in arid desert environments, it is not a concern for the Project site or more generally in Napa County.

Land Subsidence

Subsidence is the lowering of the land-surface elevation. The mechanism for subsidence is generally related to groundwater pumping and subsequent consolidation of loose aquifer sediments. The primary hazards associated with subsidence are increased flooding hazards and damage to underground utilities. Other effects of subsidence include changes in the gradients of stormwater and sanitary sewer drainage systems in which the flow is gravity-driven. As further discussed in Section 3.9, Hydrology and Water Quality, regional groundwater levels are reportedly stable. Furthermore, an extensive analysis of the groundwater basin associated with compliance with the 2014 Sustainable Groundwater Management Act found that land subsidence is not an issue in Napa County (LSCE 2016).

Seismic Hazards

Seismic hazards include surface rupture, ground shaking, liquefaction, lateral spreading, and landslides. These potential hazards are further described below.

Regional Seismicity

The Project site is located in the seismically active northern San Francisco Bay area. The main cause of seismic activity in the area results from the tectonic right-lateral strike-slip boundary of the North American plate and the Pacific plate. This boundary and area is named the San Andreas Fault Zone, which includes the San Andreas Fault, and numerous other active faults.

Numerous moderate and occasional large magnitude earthquakes have historically affected the Northern San Francisco Bay region. Notable earthquakes that have caused major damage to Napa County include the magnitude 7.9 California Earthquake of 1906 on the San Andreas fault and the 1969 Santa Rosa earthquakes on the Rodgers Creek fault. The 1906 and 1969 earthquakes were of moderate magnitude with earthquake epicenters located near downtown Santa Rosa. On August 24, 2014, the South Napa Earthquake, which consisted of a magnitude 6.0 earthquake along the West Napa Fault, caused strong to very strong ground shaking in the southern Napa region with significant damage, though it is estimated to have caused moderate perceived ground shaking in the City, with only light (non-structural) damage (USGS 2014). Prior to the South Napa Earthquake, the portion of the fault that ruptured in that quake was not widely known to be Holocene-active, nor was it zoned under the Alquist–Priolo Earthquake Fault Zoning Act. In addition to the San Andreas, Rodgers Creek, and West Napa faults, several other faults in the region, including the Green Valley and Rodgers Creek faults, are considered capable of generating moderate to large earthquakes.

Surface Rupture

Surface rupture occurs when the ground surface is broken and separates due to fault movement during an earthquake. Geologists commonly use the age of offset rocks as evidence of fault activity—the younger the displaced rocks, the more recently earthquakes have occurred. To evaluate the likelihood that a fault will produce an earthquake, geologists examine the magnitude and frequency of recorded earthquakes and evidence of past displacement along a fault. Under the Alquist-Priolo Earthquake Fault Zoning Act (AP Act), an *active* fault is defined by the State of California as a fault that has had surface displacement within Holocene time (last 11,000 years). Earthquake fault zones are designated by the California Geological Survey where concrete evidence (e.g., geologic offsets, geomorphic features, trench studies) demonstrates surface fault rupture has occurred within the past 11,000 years. A *potentially active* fault is a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years). Because the age of many potentially active faults are poorly constrained, and due to the sheer number of such faults in the state, the location and trace of both active and potentially active faults should be identified to examine potential for surface rupture.

The Project site is not crossed by an active earthquake fault zone designated under the AP Act, nor is it crossed by any potentially active fault mapped by the USGS or California Geological Survey (USGS and CGS 2019, DOC 2019). The closest earthquake fault zone designated under the AP Act is the Rodgers Creek Fault, located about 15 miles to the southwest of the Project site. In addition, the southern part of the West Napa Fault, located approximately 17 miles southeast of the Project site, was recently designated as an active fault zone, following the 2014 South Napa Earthquake. The northern segment of the West Napa Fault with evidence of displacement in Quaternary time, shown on Figure 3.6-1, is located approximately 1.2 miles

southwest of the Project site. However, there is no evidence of Holocene or late-Holocene movement on the northern branch of the West Napa Fault (City of St. Helena 2017). A Quaternary segment of the Green Valley Fault is located approximately 4 miles east of the Project site and the closest active portion of this fault is located approximately 17 miles southeast (USGS and CGS 2019).

Because the Project site is not crossed by an active or potentially active fault, it would not be affected by fault-related ground offset (i.e., primary fault rupture).

Ground Shaking

When an earthquake occurs along a fault, a characteristic way to measure its size is to measure the energy released during the event. When an earthquake occurs, a network of seismographs records the amplitude and frequency of the seismic waves it generates. The Richter Magnitude (M) for an earthquake represents the highest amplitude measured by the seismograph at a distance of 100 kilometers from the epicenter. Richter magnitudes vary logarithmically with each whole number step representing a 10-fold increase in the amplitude of the recorded seismic waves. While Richter Magnitude was historically the primary measure of earthquake magnitude, seismologists now use Moment Magnitude as the preferred way to measure earthquakes. The Moment Magnitude scale (Mw) is related to the physical characteristics of a fault, including the rigidity of the rock, the size of fault rupture, and the style of movement or displacement across the fault. Although the formulae of the scales are different, they both contain a similar continuum of magnitude values, except that Mw can reliably measure larger earthquakes and can do so from greater distances.

The third California earthquake rupture forecast by the "Working Group on California Earthquake Probabilities" cites a 72% chance that the greater San Francisco Bay Area will experience one or more earthquakes of M6.7 or larger at some point in the next 30 years (USGS 2015). Based on the number of active and potentially active faults in the North Bay, the Project site will likely be subject to an earthquake on near or distant faults producing moderate to strong perceived seismic ground shaking at least once over the course of a 30 year mortgage.

A primary tool that seismologists use to describe ground-shaking hazard is a probabilistic seismic hazard assessment (PSHA). The PSHA for the State of California takes into consideration the range of possible earthquake sources and estimates their characteristic magnitudes to generate a probability map for ground-shaking. The PSHA maps depict values of peak ground acceleration (PGA)[6] that have a 10% probability of being exceeded in 50 years (1

[6] The peak ground acceleration (PGA) for a given component of motion is the largest value of horizontal acceleration obtained from a seismograph. PGA is expressed as the percentage of the acceleration due to gravity (g), which is approximately 980 centimeters per second squared. In terms of automobile accelerations, one "g" of acceleration is equivalent to the motion of a car traveling 328 feet from rest in 4.5 seconds.

in 475 chance). This probability level allows engineers to design buildings for ground motions that have a 90% chance of NOT occurring in the next 50 years, making buildings safer than if they were simply designed for the most likely events. Based on the PSHA, the Project site is expected to have a 10% probability of exceeding a PGA of 0.416g (very strong perceived shaking), and a 2% probability of exceeding a PGA of 0.633g (severe perceived shaking) in the next 50 years (DOC 2019; USGS 2014). A 2% probability of exceedance in 50 years is about the same as a 2,500-year average repeat time and is a design standard used for essential services buildings or highly vulnerable occupancies. For comparison purposes, the maximum PGA value recorded during the Loma Prieta earthquake was in the vicinity of the epicenter, near Santa Cruz, at 0.64g. During low-probability events, the PGAs expected at the site range from very strong to severe, resulting in moderate to heavy damage to structures and buildings.

Liquefaction and Lateral Spreading

Liquefaction is a temporary state of loose, saturated granular sediments from a solid state to a "liquefied" state as a result of ground shaking. In the process, the soil and sediment loses stability and cohesion, which causes ground displacement and structural failure of the ground. Localities most susceptible to liquefaction-induced damage are underlain by loose, water-saturated, granular sediment within 40 feet of the ground surface (DOC 2008). The California Geological Survey determines zones of required investigation for liquefaction based on liquefaction susceptibility (which consist of a combination of the character of sediment and highest recorded groundwater level) and liquefaction opportunity (which is based on the PSHA) (DOC 2008). Although the California Geological Survey has not mapped the Napa Valley for the purpose of designating zones of required investigation under the Seismic Hazards Mapping Act (see Section 3.6.3 for a description), the Project site may be subject to liquefaction based on the combination of soil and groundwater conditions potentially present on-site.

The Project site is mapped as having a moderate liquefaction susceptibility, based on the Quaternary geologic units described above (USGS 2006). Off-site, the active river channel deposits along the Napa River are mapped as having a very high liquefaction susceptibility (USGS 2006). The Project site's proximity to the Napa River means that groundwater levels on-site are likely to be relatively shallow. As discussed in Section 3.9, Hydrology and Water Quality, groundwater levels measured at the Stonebridge Well operated by the City have fluctuated between 18 and 25 feet between 2015 and 2018. Given the proximity and similar setting, groundwater levels are expected to be similar or possibly shallower beneath the Project site. According to the well completion report for the on-site well, the static water level was recorded as being 11 feet bgs in 1992 (DWR 1992). Given these factors, there is a potentially significant risk for liquefaction at the Project site.

Lateral spreading, which is the horizontal displacement of soil toward an open channel or free face, such as an excavation boundary, is not considered to be a significant concern on-site because the site is flat and the only slope immediately adjacent to the Project site is the levee along the Napa River. Based on the Proposed Project's grading plan, the portion of the levee adjacent to the Project site is roughly 8–10 feet high with slopes 4:1 (horizontal:vertical). Since the levee was constructed in 2010 in accordance with U.S. Army Corps of Engineers and Department of Water Resources standards, it is designed to avoid saturation under normal conditions, and meet earthwork standards necessary to avoid seismic damage. Under very specific conditions, the banks of the Napa River may experience lateral spread in a strong earthquake; however, such an occurrence would not affect the Project site, since earth displacements from lateral spread would be into the river channel, not the Project site.

Seismically Induced Landslides

Because the Proposed Project is on flat to nearly flat land, there is no appreciable risk of seismically induced landslide. In the event an earthquake results in off-site slope instabilities, such as along the levee or on the southern bank of the Napa River (e.g., through lateral spread or shallow soil slumps), the impact would be highly localized to the base of the slope, and would not place the Project site or its residents at risk.

3.6.3 Regulatory Setting

Federal Regulations

The following federal regulations pertaining to geology and soils would apply to the Proposed Project.

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction activities. The Occupational Safety and Health Administration's Excavation and Trenching standard, Title 29 of the Code of Federal Regulations, Part 1926.650, covers requirements for excavation and trenching operations. The Occupational Safety and Health Administration requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

State Regulations

The statewide minimum public safety standard for mitigation of earthquake hazards (as established through the California Building Code [CBC], AP Act, and the Seismic Hazards Mapping Act) is that the minimum level of mitigation for a project should reduce the risk of

ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy, but in most cases, is not required to prevent or avoid the ground failure itself. It is not feasible to design all structures to completely avoid damage in worst-case earthquake scenarios. Accordingly, regulatory agencies have generally defined an "acceptable level" of risk as that which provides reasonable protection of the public safety, although it does not necessarily ensure continued structural integrity and functionality of a project (14 CCR 3721(a)). Nothing in these acts, however, precludes lead agencies from enacting more stringent requirements, requiring a higher level of performance, or applying these requirements to developments other than those that meet the acts' definitions of "project."

Alquist–Priolo Earthquake Fault Zoning Act

The AP Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the state geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Earthquake fault zones are designated by the California Geological Survey and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,000 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy will not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in trenches excavated across fault traces.

The Proposed Project is not within an Alquist–Priolo Earthquake Fault Zone and therefore is not subject to the requirements of the AP Act.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code, Chapter 7.8, Section 2690–2699.6) directs the California Department of Conservation to protect the public from earthquake-induced liquefaction and landslide hazards (note that these hazards are distinct from fault surface rupture hazard regulated by the AP Act of 1972). This act requires the state geologist to delineate various seismic hazard zones, and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with the California Geological Survey, Special Publication 117A, adopted March 13, 1997, by the State Mining and Geology Board as updated in 2008 (DOC 2008).

To date, Seismic Hazard Zone Maps have been prepared for portions of Southern California and the San Francisco Bay Area; however, no seismic hazard zones have yet been delineated for the City including the Proposed Project area (i.e., the Saint Helena USGS 7.5' Quadrangle). As a result, the provisions of the Seismic Hazards Mapping Act would not apply to the Proposed Project.

California Building Code

The CBC has been codified in the California Code of Regulations (CCR) as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 to be enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

The 2019 edition of the CBC is based on the 2015 International Building Code published by the International Code Conference. The 2019 CBC contains California amendments based on the American Society of Civil Engineers Minimum Design Standards 7-16, which provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site, and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

Paleontological Resources

Paleontological resources are limited, nonrenewable resources of scientific, cultural, and educational value and are afforded protection under state laws and regulations, namely California Public Resources Code Section 21000 et seq. and Public Resources Code Section 5097.5. Paleontological resources are explicitly afforded protection by the California Environmental Quality Act (CEQA), specifically in Section VII(f) of CEQA Guidelines Appendix G, the Environmental Checklist Form, which addresses the potential for adverse impacts to “unique paleontological resource[s] or site[s] or . . . unique geological feature[s]” (14 CCR 15000

et seq.). This provision covers fossils of signal importance—remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group—as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that, generally, a resource shall be considered "historically significant" if it has yielded or may be likely to yield information important in prehistory (14 CCR 15064.5 [a][3][D]). Paleontological resources would fall within this category. The California Public Resources Code, Chapter 1.7, Sections 5097.5 and 30244, also regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

Local Regulations

Local regulations relevant to geology, soils, and seismicity are discussed below.

City of St. Helena 1993 General Plan

The following goals, objectives, and policies from the City of St. Helena 1993 General Plan, Public Health and Safety element are relevant to geology, soils, and seismicity issues in the Project site.

> **Policy 8.4.1:** Restrict the intensity of development and the level of land form alteration in the hillside areas in order to minimize the potential for slope failure.
>
> **Implementing Policy 8.4.2**: Require a soils and geologic report to be submitted for new construction prior to the issuance of grading and building permits and the submission of final maps.
>
> **Implementing Policy 8.4.3**: Prohibit any development—including any land alteration, grading for roads and structural development—in areas of slope instability or other geologic concerns until mitigating measures are taken to limit potential damage to levels of acceptable risk.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The following policies from the City of St. Helena 2019 General Plan, Public Health and Safety element are relevant to geology, soils, and seismicity issues in the Project site.

> **Policy PS3.1:** Minimize risk of injury, loss of life and property damage from seismically induced and other known geologic hazards.
>
> **Policy PS3.2**: Restrict the intensity of development and the level of landform alteration in the hillside areas in order to minimize the potential for slope failure

Policy PS3.3: The required soils and geologic reports for new development shall include geotechnical analysis for construction in areas with potential geological hazards and/or for purposes of environmental analysis. The analysis shall investigate all potential geo-hazard issues for the site where there is substantial evidence of a potential risk.

Policy PS3.4: Geologic reports for new development shall describe hazards and include mitigation measures to reduce risks to acceptable levels. Where appropriate, an engineer's or geologist's certification shall be required stating that risks have been mitigated to an acceptable level.

3.6.4 Impacts

Methods of Analysis

Impacts with respect to geology, soils and seismicity are assessed by comparing conditions expected under implementation of the Proposed Project to the existing environmental setting described in Section 3.6.2. The California Supreme Court has recently confirmed that "CEQA generally does not require an analysis of how existing environmental conditions will impact a project's future users or residents." However, an agency must "evaluate existing conditions in order to assess whether a project could exacerbate hazards that are already present." The analysis evaluates if the Proposed Project would directly or indirectly place people, structures, or the general public at increased exposure to health and/or safety risks associated with soil, geologic or seismic hazards.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides.
- Result in substantial soil erosion or the loss of topsoil.

- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Fault Rupture

As discussed in Section 3.6.2, Environmental Setting, the Proposed Project is not located within a fault rupture hazard zone. This includes both earthquake fault zones designated under the AP Act, as well as potentially active faults of Quaternary age. Because the Project site is not crossed by any known active or potentially active fault, there would be no impact and this issue (first significance threshold listed above) is not further addressed.

Landslides

As discussed in Section 3.6.2, Environmental Setting, the Proposed Project is not at risk of landslides because it is nearly flat, and because there are no substantial slopes or hillside areas in the immediate vicinity. Therefore, there would be no impact and this issue (first significance threshold listed above) is not further addressed.

Soil Erosion and Loss of Topsoil

Potential impacts of erosion on water quality are discussed in Section 3.9, Hydrology and Water Quality and impacts with regard to agricultural resources (e.g., prime soils) are addressed in Section 3.2, Agriculture and Forestry Resources. In the context of this section, a substantial impact would occur if accelerated and significant soil erosion were to be sufficient in magnitude to undermine structures or compromise slope stability. Examples of this style of erosion are rills (small narrow channel) and gullies, whereby storm runoff produces deep incisions into the soils and slopes. Because the Project site is on flat land, and would be developed into a residential

subdivision, there is no reasonable potential for any rills and/or gullies to develop. Runoff would be managed and discharged into an existing detention basin, as described in more detail in Section 3.9. Therefore, this issue (second significance threshold listed above) is not applicable to the Proposed Project and is not further addressed.

Alternative Wastewater Systems

The Proposed Project would connect to the City's sewer system to provide conveyance of wastewater to the treatment plant. Therefore, this issue (fifth significance threshold listed above) is not applicable to the Proposed Project and is not further addressed.

Unique Geologic Features

The Project site is undeveloped and has been disturbed due to the placement of fill associated with the City's Flood Control Project. The Project site does not contain any unique geologic features, such as a landform or rock outcrop of scientific, cultural or aesthetic interest. Therefore, implementation of the Proposed Project would not directly or indirectly destroy a unique geologic feature. Therefore, there would be no impact and this issue (last significance threshold listed above) is not further addressed.

Impacts and Mitigation Measures

3.6-1: Would the Proposed Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or liquefaction? This impact would be potentially significant.

Seismic ground shaking is an unavoidable hazard for nearly all man-made facilities (buildings and structures) in the region. The geologic setting means proposed facilities are likely to experience ground shaking from at least one major earthquake (e.g., greater than moment magnitude 6.7) sometime during the operational life of a project. Based on the most recent PSHA for the State of California, the Project site would have an approximately 10% chance of exceeding a PGA of 0.416g, and a 2% probability of exceeding a PGA of 0.633g in the next 50 years (DOC 2019). These levels of ground shaking, while relatively improbable, are very strong to severe, and capable of producing extensive non-structural damage and limited structural damage in buildings at the site. The amount of ground shaking that actually occurs depends on the magnitude of the earthquake, the distance from the epicenter, and the type of earth materials between the receptor and the epicenter. The Project site is also underlain by soils that if not properly engineered during construction site preparation, could be subject to secondary effects such as seismically induced liquefaction, differential settlement or compression.

If future development of the site is not constructed in a manner that protects residents from geologic and seismic hazards, the Proposed Project could have a significant impact. However,

the 1993 General Plan policies implemented by the City require that any geologic or seismic risks be mitigated to an acceptable level as a condition of project approval (Implementing Policy 8.4.3). These General Plan policies (listed in Section 3.6.3) are enforced as part of the tentative subdivision map submittal process, as described under Municipal Code Section 16.32.220 (Soils Investigation and Geotechnical Report Requirements). Furthermore, Municipal Code Chapter 15 (Building and Construction) incorporates the CBC and thus enforces the structural design requirements associated with seismic loads. As part of this process, a design-level geotechnical investigation would be completed (in addition to the existing geotechnical investigation already completed) to assess site conditions at a greater level of detail and make geotechnical recommendations to be incorporated into the site development plan, grading plan and building plan. The City requires that such geotechnical recommendations be verified at time of grading and building construction prior to issuance of a certificate of occupancy.

The initial geotechnical work completed for the Proposed Project by Miller Pacific Engineering Group (Appendix F) identifies a potential issue associated with soft soils occurring under a layer of compacted fills. Specifically, it notes the following (Appendix F):

> It is not acceptable to place compacted, engineered fill (designed to support future development) on the Hunter Parcel without first over excavating and recompacting the existing weak surface layer, due to the anticipated settlement of the weak soil layer as a result of the loads imposed by the new fill, as well as future building loads. Settlement of the weak soil layer, if left in place beneath the recently placed compacted fill, could lead to damage to new residential structures, streets, utilities, and concrete flatwork supported over the weak soil layer.

It is this observation that leads to the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond). Furthermore, the Project site has the potential to be subject to seismically induced liquefaction and/or differential settlement, as discussed in the environmental setting. Because the geotechnical borings completed on-site in 2009 lacks coverage in the southern portion of the site (see Figure 3.6-1), and it occurred prior to fill placement from the Flood Protection Project, the data may no longer adequately represent shallow soil conditions. Because of this, and due to the potential for liquefaction and/or settlement of weak soils, the Proposed Project could potentially expose residences to significant impacts from a major earthquake. This is considered a **potentially significant impact.**

Mitigation Measures

Implementation of Mitigation Measure GEO-1 would ensure design-level geotechnical reports have the appropriate scope and include recommendations necessary to mitigate potential seismic hazards to a less-than-significant level. Implementation of Mitigation Measure GEO-1

expands upon the typical steps completed as part of standard building and grading permit approvals in order to ensure the identified impacts (i.e., weak/compressible soils and liquefaction risk) are mitigated. In particular, the requirement to comply with the California Department of Conservation Special Publication 117A (Guidelines for Evaluating and Mitigating Seismic Hazards in California) ensures that the site is treated in the same way as if it were designated as a zone of required investigation for liquefaction under the Seismic Hazards Mapping Act.

GEO-1: Prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City of St. Helena Building Department for review and approval in accordance with adopted City standards. The structural designs shall adhere to the currently adopted version of the California Building Code. The report shall identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction. Specifically, the following requirements for the geotechnical and soils report shall be met:

- Analysis presented in the geotechnical report shall conduct a detailed evaluation of liquefaction in accordance with California Department of Conservation Special Publication 117A: *Guidelines for Evaluating and Mitigating Seismic Hazards in California*.
- Additional subsurface soil borings shall be completed as necessary to represent the full range of site conditions, including the southern portion of the parcel mapped as alluvial fan.
- Analysis presented in the geotechnical report shall include recommendations for building foundations and improvements, including sidewalks, parking lots, and subsurface utilities, that take into consideration the potential effects of settlement, collapse, and expansive or corrosive soils. This includes the recommendation to over excavate to an average depth of 4.5 feet (and up to 10 feet in the location of the former pond) due to anticipated settlement.
- All design criteria and specifications set forth in the design-level geotechnical report shall be implemented as a condition of project approval. This report shall be completed as a condition of approval of the final tentative map.

3.6-2: Would implementation of the Proposed Project occur on weak, compressible, and/or expansive soils that could result in adverse impacts on habitable structures? This impact is potentially significant.

Construction on un-compacted and loose fill, if present, would be subject to varying rates of settlement. If the settlement is not uniform, or if collapse occurs, structural damage may result. Underground utilities may also experience differential settlement along their alignments. The preliminary geotechnical report prepared for the Proposed Project indicated that engineered fill was placed on top of a 3-foot layer of soft, weak natural soil with high moisture content across the Project site, and above uncompacted fill in a former pond area. These unconsolidated fills and soils with high moisture content were deemed unsuitable for supporting future development. Over-excavation, moisture-conditioning, and recompaction of the recent fill and the underlying weak soils was recommended to avoid future settlement after development. It is anticipated that placement of engineered fill for use as structural building pads, roads, and within utility trenches (including) over excavation and recompaction would remove and/or otherwise address the preexisting potential for expansive or corrosive soils. Therefore, compliance with standard conditions of approval, which include standard site preparation practices and compliance with ASTM standards during grading would reduce the potential impacts of expansive or corrosive soils to a less-than-significant level. However, because the Project site includes weak compressible soils which could result in structural damage, this is a **potentially significant impact**.

Mitigation Measures

Implementation of Mitigation Measure GEO-1 would ensure a design-level geotechnical report be prepared that would address any weak/compressible soils. The Proposed Project is required to comply with the California Department of Conservation Special Publication 117A (Guidelines for Evaluating and Mitigating Seismic Hazards in California) which ensures that unstable soils would be addressed and the impact would be less than significant. Compliance with Mitigation Measure GEO-1 mitigates this impact and no additional mitigation is necessary.

3.6-3: Would implementation of the Proposed Project directly or indirectly destroy a unique paleontological resource or site? This impact would be potentially significant.

Future development of the Proposed Project could result in direct or indirect impacts on paleontological resources. As described in the setting, there are no records of fossil finds within the City, and the Holocene alluvium mapped at the surface has a low potential for paleontological resources. However, there is a slight chance deeper excavations on-site for underground utilities, for example, could encounter Pleistocene age alluvium with the potential for fossils. Excavation for building foundations utilities and streets is expected to be on average 4.5 feet bgs, except up to 10 feet bgs in the area of the former pond, shown in Figure 3.6-1.

Although the thickness of Holocene age alluvium is likely to exceed the maximum excavation depths on the Project site, the boundary between Holocene and Pleistocene alluvium has not been confirmed. Therefore, destruction of a unique fossil is a **potentially significant impact.**

Mitigation Measures

In the event any paleontological resources are uncovered during site disturbance Mitigation Measure GEO-2 outlines the steps to follow. Compliance with this measure would ensure impacts are reduced to less than significant.

GEO-2: In the event that known or suspected paleontological resources (e.g., fossils) are unearthed during grading or trenching, the area of discovery shall be roped off by the construction contractor to include a 50-foot radius buffer and remain off-limits until cleared by a qualified paleontologist. The Project applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines, who shall be tasked with assessing the significance of the fossil find, including documenting the nature, location, and taxa of the find. The qualified paleontologist shall use his/her professional judgement as to the significance of the find, and whether the find should be preserved in a museum repository. Once documentation and collection of the find is completed, the monitor shall remove the rope and allow grading to recommence in the area of the find. Documentation of the fossil find, including appropriate salvage and recovery of fossil specimens and of transfer of to an appropriate repository (e.g., University of California Museum of Paleontology) shall be submitted to the City of St. Helena as evidence of compliance with this mitigation measure.

3.6.5 Cumulative Impacts

The geographic scope for the analysis of cumulative geologic and soils-related impacts consists of the Project site, as these impacts depend on the site-specific conditions and features on the Project site, such as soil composition and topography. These site-specific impacts would not combine to create cumulative impacts with other projects occurring elsewhere in the City. Therefore, the Proposed Project would not have the potential to contribute to an existing cumulative impact.

The geographic scope for the analysis of cumulative paleontological impacts consists of development slated to occur within the City or Napa County on Pleistocene age alluvium. Cumulative impacts on paleontological resources consider whether the impacts of the Proposed Project together with other related projects substantially diminish the number of paleontological resources within the same or similar context or property type.

3.6-4: Would the Proposed Project contribute to cumulative impacts related to loss of paleontological resources? This would be a less than considerable contribution.

As discussed under Impact 3.6-3, the chance of encountering paleontological resources at the site is considered low because there are no records of fossil finds within the City, and the Holocene alluvium mapped at the surface has a low potential for paleontological resources. However, there is a slight chance deeper excavations on-site for underground utilities could encounter Pleistocene age alluvium with the potential for fossils. It is possible that construction of the Proposed Project in combination with other cumulative projects in undeveloped areas in the City and County underlain by Pleistocene age alluvium could disturb multiple unknown unique paleontological resources, although unlikely to occur. Due to the size of the Project site and the low likelihood of unearthing any fossils, the Proposed Project's contribution would not be considerable resulting in a less-than-significant incremental contribution.

Mitigation Measures

None required.

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3.7 GREENHOUSE GAS EMISSIONS

3.7.1 Introduction

This section presents potential impacts regarding greenhouse gas (GHG) emissions of the proposed Hunter Subdivision Project (Proposed Project) and includes the environmental setting, regulatory framework, and impacts of the Proposed Project on the environment. The analysis and findings are based on the emissions modeling, which can be found in Appendix C.

Comments received in response to the Notice of Preparation included concerns regarding the number of trees that would be planted to accommodate for the increase in GHG emissions and a comment regarding the need for the Proposed Project to develop bicycle and pedestrian infrastructure to provide alternative transportation methods within the community. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information contained in this section is based on Proposed Project plans, the California Emissions Estimator Model (CalEEMod) (used to estimate Proposed Project emissions), the Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act Air Quality Guidelines (BAAQMD 2017), the California Air Resources Board (CARB) Climate Change Scoping Plan (CARB 2008) and The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target (CARB 2017a), and the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission Plan Bay Area: Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017–2040 (Plan Bay Area) (ABAG and MTC 2017). Other sources consulted are listed in Section 3.7.6, References.

3.7.2 Environmental Setting

Climate Change Overview

Climate change refers to any significant change in measures of Earth's climate, such as temperature, precipitation, and wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human-caused, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process, as follows: Short-wave radiation emitted by the sun is absorbed by the Earth, the Earth

emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales, and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and is the most significant driver of observed climate change (EPA 2017a; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) (see also California Environmental Quality Act [CEQA] Guidelines Section 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities.[2]

[1] Climate-forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code Section 38505, so impacts associated with other climate-forcing substances are not evaluated herein.

[2] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change's (IPCC) Second Assessment Report (1995), IPCC's Fourth Assessment Report (2007), California Air Resources Board's "Glossary of Terms Used in GHG Inventories" (CARB 2017b), and U.S. Environmental Protection Agency's "Glossary of Climate Change Terms" (EPA 2016).

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Several prevalent fluorinated gases include the following:

- *Hydrofluorocarbons*: HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- *Hydrochlorofluorocarbons*: HCFCs are compounds containing hydrogen, fluorine, chlorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone depleting substances (chlorofluorocarbons).
- *Perfluorocarbons*: PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with HFCs, to the ozone depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- *Sulfur Hexafluoride*: SF_6 is a colorless gas that is soluble in alcohol and ether and slightly soluble in water. SF6 is used for insulation in electric power transmission and

distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo [i.e., the reflection of radiation]) (EPA 2016). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of carbon dioxide equivalent (CO_2e).

The current version of CalEEMod (Version 2016.3.2; CAPCOA 2017) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the Proposed Project.

Sources of GHG Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2017 (the most recent year for which data is available) totaled approximately 50,860 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2018). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 65% of the total global emissions, or approximately 33,290 MMT CO_2e (PBL 2018). Table 3.7-1 presents the top GHG emissions–producing countries.

Table 3.7-1
Top Six Greenhouse Gas–Producing Countries and the European Union

Emitting Countries (listed in order of emissions)	GHG Emissions (MMT CO_2e)
China	13,530
United States	6,640
European Union	4,560

Table 3.7-1
Top Six Greenhouse Gas–Producing Countries and the European Union

Emitting Countries (listed in order of emissions)	GHG Emissions (MMT CO_2e)
India	3,650
Russian Federation	2,220
Japan	1,490
Brazil	1,200
Total	33,290

Source: PBL 2018.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.

National and State Inventories

Per the U.S. Environmental Protection Agency's (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2018, total U.S. GHG emissions were approximately 6,676.6 MMT CO_2e in 2018. The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 81.3% of total GHG emissions (5,428.1 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.8% of CO_2 emissions in 2018 (5,031.8 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2018 are higher by 3.7%, down from a high of 15.2% above 1990 levels in 2007. GHG emissions decreased from 2017 to 2018 by 2.9% (188.4 MMT CO_2e) and overall, net emissions in 2018 were 10% below 2005 levels (EPA 2020).

According to California's 2000–2017 GHG emissions inventory (2019 edition), California emitted 424.1 MMT CO_2e in 2017, including emissions resulting from out-of-state electrical generation (CARB 2019). The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-state and out-of-state sources, commercial and residential uses, agriculture, high GWP substances, and recycling and waste. The California GHG emissions source categories (as defined in CARB's 2008 Climate Change Scoping Plan: A Framework for Change [Scoping Plan]) (CARB 2008) and their relative contributions in 2017 are presented in Table 3.7-2.

Table 3.7-2
Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[1]
Transportation	169.86	40%
Industrial uses	89.40	21%
Electricity (in state)	38.45	9%
Electricity (imports)	23.94	6%
Agriculture	32.42	8%
Residential	26.00	6%

Table 3.7-2
Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[1]
Commercial	15.14	4%
High GWP substances	19.99	5%
Recycling and waste	8.89	2%
Totals	429.40	100%

Source: CARB 2019.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent; GWP = global warming potential. Emissions reflect 2016 California GHG inventory.
[1] Percentage of total has been rounded and total may not sum due to rounding.

Between 2000 and 2017, per-capita GHG emissions in California have dropped from a peak of 14.1 MT per person in 2001 to 14.1 MT per person in 2017, representing a 24% decrease. In addition, total GHG emissions in 2017 were approximately 5 MMT CO_2e less than 2016 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is just below the 2020 target of 431 MMT CO_2e (CARB 2019).

Local Inventory

Total GHG emissions for the City of St. Helena (City) in 2018 were estimated at approximately 76,012 MT CO_2e (City of St. Helena 2018). As shown in Table 3.7-3, transportation emissions constituted 59% of the GHG emissions while electricity and natural gas use from the commercial/industrial sectors and residential sector accounts for 17% and 13%, respectively. Other sources including solid waste, off-road transportation equipment, wastewater treatment, water conveyance, public lighting, and agriculture account for the remaining 11% (St. Helena 2018).

Table 3.7-3
Greenhouse Gas Emissions Sources in St. Helena

Source Category	Annual GHG Emissions (MT CO_2e)	Percent of Total
Residential uses	9,890	13.0%
Commercial and industrial uses	12,773	16.8%
Transportation	44,531	58.6%
Solid waste	3,734	4.9%
Water transport, distribution, and treatment	138	0.2%
Wastewater	181	0.2%
Off-road equipment	4,631	6.1%
Public lighting	37	>0.1%
Agriculture	97	0.1%
Totals	76,012	100%

Source: St. Helena 2018.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a 0.2°C (0.36°F) rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of approximately 0.2°C per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights. Shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year. Sea levels have risen, and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers, with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid- to late 21st century in central, and most notably, Southern California. By the late century, all projections show drying, and half of them suggest that 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in the Safeguarding California: Reducing Climate Risk (CNRA 2014), is provided below.

Agriculture. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in

water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production.

Biodiversity and Habitat. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss has occurs).

Energy. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise.

Forestry. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large-scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions.

Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first Century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves are likely to increase the risk of mortality due to heat related illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies.

Transportation. While the transportation industry is a source of GHG emissions it is also vulnerable to climate change risks. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand which

leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

Water. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter months. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement and post-disaster mental health problems. Prolonged and intensified droughts can also negatively groundwater reserves and result in increased overdraft and subsidence. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality.

In March 2016, the California Natural Resources Agency (CNRA) released Safeguarding California: Implementation Action Plans, a document that shows how California is acting to convert the recommendations contained in the 2014 Safeguarding California plan into action (CNRA 2016). Additionally, the CNRA released Safeguarding California Plan: 2018 Update in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018). As with previous state adaptation plans, the 2018 Update addresses the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming.

3.7.3 Regulatory Setting

Federal Regulations

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether

the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and directs the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6%–23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of phase two of the program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of one degree Celsius by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

On September 27, 2019, EPA and NHTSA published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program” (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California’s authority to set its own

GHG emissions standards and set zero-emission vehicle mandates in California (EPA and NHTSA 2019). The Part One Rule impacts some of the underlying assumptions in the CARB EMFAC2014 and EMFAC2017 models for criteria air pollutant emissions from gasoline light-duty vehicles, which CARB released off-model adjustment factors for on November 20, 2019, primarily for use in federal Clean Air Act conformity demonstration analyses. California expects Part Two of these regulations to be adopted later in the fall of 2019. Because CARB does not know the full impacts of these rules until Part Two is released, no off-model adjustments factors are available for GHG emissions at this time. In addition, the EMFAC off-model adjustments have not yet been incorporated into CalEEMod. This issue is evolving as California and 22 other states, as well as the District of Columbia and two cities, filed suit against the EPA over the vehicle waiver revocation on November 15, 2019 and a petition for reconsideration of the rule was filed on November 26, 2019, by California and 22 other states, the District of Columbia, and four cities.

State Regulations

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes EOs, Assembly Bills (ABs), Senate Bills (SBs), and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

EO S-3-05. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

AB 32. In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32. The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

CARB's 2007 Statewide Limit. In 2007, in accordance with California Health and Safety Code, Section 38550, CARB approved a statewide limit on the GHG emissions level for 2020 consistent with the determined 1990 baseline (427 MMT CO_2e).

CARB's Climate Change Scoping Plan. In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emissions limitation, emissions reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for 2020, consistent with the determined 1990 baseline (427 MMT CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with Health and Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan are the following (CARB 2008):

- Expanding and strengthening existing energy efficiency programs and building and appliance standards.
- Achieving a statewide renewable energy mix of 33%.
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020 absent GHG-reducing laws and regulations, referred to as "business-as-usual"). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, that no further regulatory action would impact vehicle fuel efficiency, and that building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the business-as-usual conditions (CARB 2011a). When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (RPS) (12% to 20%) (CPUC 2015), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the business-as-usual conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014). Those six areas are energy, transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), agriculture, water, waste management, natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

CARB's research efforts presented in the First Update indicate that it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the Intergovernmental Panel on Climate Change. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement (CARB 2011a), CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the business-as-usual conditions (CARB 2014).

On January 20, 2017, CARB released its 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017a). This update presents CARB's strategy for achieving the state's 2030 GHG target as established in SB 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the natural and working lands, agriculture, energy, and transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update states, "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. An inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA" (CARB 2017a). The Second Update was approved by CARB's Governing Board on December 14, 2017.

EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate-change-based activities, and expand dissemination of GHG and other air-quality-related emissions data to enhance transparency and accountability. More

specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 605 and SB 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state, and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of short-lived climate pollutants (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy) in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

EO B-55-18. EO B-55-18 (September 2018) establishes a statewide policy for the state to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Although not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code [PRC] Section 25402(b)(1)). The regulations receive input from members of industry and the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility

(PRC Section 25402(d)) and cost effectiveness (PRC Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy-efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards would use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards due mainly to lighting upgrades (CEC 2018).

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as California's Green Building Standards (CALGreen), and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2019 standards, which are the current standards, became effective January 1, 2020.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for

appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SB 1. SB 1 (2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8, California Solar Initiative, that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for homes and businesses within 10 years of adoption, and to place solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed “GoSolarCalifornia,” was previously titled “Million Solar Roofs.”

AB 1470. This bill established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies to reduce natural gas demand. The bill defined several terms for purposes of the act. The bill required the CEC to evaluate the data available from a specified pilot program, and, if it made a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting to reduce electricity consumption by 50% for indoor residential lighting and by 25% for indoor commercial lighting.

Renewable Energy and Energy Procurement

SB 1078. SB 1078 (2002) established the RPS program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

SB 1368. SB 1368 (2006) requires the CEC to develop and adopt regulations for GHG emissions performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2. SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Mobile Sources

AB 1493. In a response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. In 2009–2012, standards resulted in a reduction of approximately 22% in GHG emissions compared to emissions from the 2002 fleet, and in 2013–2016, standards resulted in a reduction of approximately 30%.

EO S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining low-carbon fuel standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the low-carbon fuel standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. Carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375. SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional Metropolitan Planning Organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a Metropolitan Planning Organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), an SCS does not regulate the use of land; supersede the land use authority of cities and counties; or require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

On September 23, 2010, CARB adopted the SB 375 targets for the regional Metropolitan Planning Organizations. CARB set a target of 7% per capita reduction by 2020 and a 15% per capita reduction by 2035 for the Bay Area. The ABAG and the Metropolitan Transportation Commission, which is the Metropolitan Planning Organization for the Bay Area, adopted the Plan Bay Area in July 2017 (ABAG and MTC 2017). The Plan Bay Area is a long-range plan for transportation projects within the planning area and established 13 performance targets to achieve the following goals/outcomes: Climate Protection, Adequate Housing, Healthy and Safe Communities, Open Space and Agricultural Preservation, Equitable Access, Economic Vitality, and Transportation System Effectiveness. Two of these targets are mandatory to comply with SB 375, and the Plan Bay Area exceeds the 15% reduction per capita in GHG emissions from light-trucks and cars by 2035 (Climate Protection Goal), and plans to house 100% of the region's projected growth (from a 2010 baseline year) by income level without displacing current low-income residents and with no increase in in-commuters (Adequate Housing Goal).

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single, coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011b). To improve air quality, CARB implemented new emission standards to reduce smog-forming emissions beginning with 2015 model-year vehicles. It is estimated that by 2025, cars will emit 75% less smog-forming pollution than the average new car sold before 2012. To reduce GHG emissions, CARB, in conjunction with the EPA and NHTSA, adopted new GHG standards for model years 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% by 2025. The Zero Emissions Vehicle (ZEV) Program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

EO B-16-12. EO B-16-12 (2012) directs state entities under the governor's direction and control to support and facilitate development and distribution of ZEVs. This executive order also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this executive order, the governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236. AB 1236 (2015), as enacted in California's Planning and Zoning Law, requires local land use jurisdictions to approve applications for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact on public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provides for appeal of that decision to the planning commission. The bill required local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, to create an expedited and streamlined permitting process for electric vehicle charging stations.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (PRC Sections 40000 et seq.), was passed because of the increase in waste stream and decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being

disposed of, and jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes will assist the state in reaching the 75% goal by 2020.

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the executive order extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The executive order includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increased the requirements for landscape water use efficiency and broadened its applicability to include new development projects with smaller landscape areas.

EO B-37-16. Issued May 2016, EO B-37-16 directed the State Water Resources Control Board to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the state. The State Water Resources Control Board also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The State Water Resources Control Board and Department of Water Resources will develop new, permanent water use targets that build upon the existing state law requirements that the state achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the State Water Resources Control Board permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

Other State Regulations and Goals

SB 97. SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines in the California Code of Regulations (CCR), a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4(a)). The CEQA Guidelines require a lead agency to consider the extent to which a project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through implementation of project features or offsite measures. The adopted amendments do not establish a GHG emissions threshold, but allow a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

With respect to GHG emissions, the CEQA Guidelines state in CCR Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions, or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: the extent a project may increase or reduce GHG emissions compared to the existing environmental setting; whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the executive order directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009 (CNRA 2009a), and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014 (CNRA 2014). To assess the state's vulnerability to climate change, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of updated Safeguarding California plans followed in March 2016 (CNRA 2016) and in January 2018 (CNRA 2018).

2015 State of the State Address and the 2016 State of the State Address. In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals that would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and measures to decrease emissions associated with heating fuels. In his January 2016 address, Governor Brown established a statewide goal to bring per-capita GHG emissions down to 2 MT per person, which reflects the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 Memorandum of Understanding) to limit global warming to less than 2°C by 2050. The Under 2 Memorandum of Understanding agreement pursues emission reductions of 80% to 95% below 1990 levels by 2050 and/or reach a per-capita annual emissions goal of less than 2 MT by 2050. A total of 187 jurisdictions representing 38 countries and six continents, including California, have signed or endorsed the Under 2 Memorandum of Understanding (Under 2 Coalition 2017). As of 2019, Governor Newsom has not enacted any such changes to the state's GHG reduction goals.

Local Regulations

City of St. Helena 1993 General Plan

The Land Use and Growth Management, Transportation, Public Health and Safety, and Public Facilities and Services Elements of the City of St. Helena 1993 General Plan (City of St. Helena 1993) provides the following guiding policies related to reducing GHG emissions:

> **Policy 2.6.21:** Require new residential projects to be designed to facilitate non-automobile modes of travel (i.e., walking, biking, transit, etc.).
>
> **Policy 5.8.1:** All new development on collector streets shall provide sidewalks or walkways to be located with the City's right-of-way for the collector street. Further,

unless exempted or deferred by the City Council, all residential developments shall provide sidewalks on all local streets within the development.

- It is a goal of the City that it continue to remain at a size where the majority of development is within a 10 minute walk of the downtown. Sidewalks or walkways will reinforce the pedestrian orientation of the City.

Policy 8.2.5: Support a population and employment growth policy which will not exceed ABAG population and employment projections. This includes balancing the ratio of employment to population to protect, preserve and enhance the air quality within the area.

Policy 9.2.3: Adopt and implement water conservation measures as a means of extending the capabilities of the City's water supply.

- Adoption of a Toilet Retrofit Ordinance to convert high-use fixtures to low-flow fixtures and a Water-Efficient Landscape Ordinance to require water-conserving xeriscapes could increase the number of available water connections. It is estimated that 1600 residential units could be converted to low-flow fixtures saving about 50 acre-feet of water per year which could service 125 units.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Land Use and Growth Management, Public Health and Safety, and Climate Change Elements of the City of St. Helena 2019 General Plan (City of St. Helena 2019) provide policies regarding GHG emissions, including the following:

Policy LU2.7: Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.

Policy PS1.3: Encourage effective regulation of those sources of air pollution, both inside and outside of St. Helena, which affect air quality, by implementing as many of the recommendations of the Napa County Congestion Management Plan as is feasible.

Policy CC1.1: Promote a "walkable" and "bikeable" city.

Policy CC2.1: Encourage measures to reduce energy demand through conservation and efficiency.

Policy CC2.2: Support local efforts to improve the energy supply by switching from fossil fuels to renewables.

Policy CC4.3: Strengthen water conservation measures that result in significant reductions in local water use and the protection of local water resources.

3.7.4 Impacts

Methods of Analysis

GHG emissions from construction and operation of the Proposed Project were calculated using CalEEMod Version 2016.3.2. Details relevant to the modeling assumptions is described below.

Construction

Construction model inputs are described in more detail in Section 3.3, Air Quality, of this Environmental Impact Report. In summary, the Proposed Project was assumed to be constructed over a 6-year buildout.

Operations

Operational GHG emissions were estimated for buildout of the Proposed Project. The first full year of operation was assumed to be 2029, which is based on the completion of all construction activities.

Area Sources

CalEEMod was used to estimate GHG emissions from the Proposed Project's area sources, including operation of landscape maintenance equipment, which produces minimal GHG emissions. See Section 3.3, Air Quality, for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in volatile organic compound emissions, which are analyzed as part of the air quality analysis.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the proposed residential land use**.** The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The 2019 standards became effective January 1, 2020. CalEEMod uses the 2016 version of Title 24 as a basis for energy modeling, however this analysis reflects compliance with the 2019 standards. Per the CEC Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed single-family residences, are 596 gigawatt hours of electricity, 50.4 megawatts of demand, and 4.42

million therms of gas, representing reductions from the 2016 Title 24 standard of 4% of electricity, 15% of demand, and 9% of natural gas, respectively. The first-year savings for low-rise multifamily buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the 2016 standards, the multifamily, savings are 2% of electricity, 8% of demand and 5% of gas.

Emissions were calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the default emissions factors for the proposed land uses.

Two electricity service providers would be available to provide service to the Proposed Project. The Marin Clean Energy, which is a community choice aggregation program and Pacific Gas & Electric (PG&E). While residents within the City are automatically enrolled into Marin Clean Energy, an individual can opt out and choose PG&E for electricity service. As discussed under the Regulatory Setting in Section 3.3, SB X1 2 established a target of 33% from renewable energy sources for all electricity providers in California by 2020. Marin Clean Energy provides a higher percentage of electricity from renewable sources than PG&E; however, this analysis is based on the lower RPS or conservative estimate in order to estimate the Proposed Project's GHG emissions. Therefore, the CO_2 emissions intensity factor for utility energy use in CalEEMod was adjusted consistent with the PG&E 2020 Corporate Responsibility and Sustainability Report, which reported that PG&E has delivered 30% of the electricity from RPS eligible resources and has emissions rate of 206 pounds of CO_2 per megawatt-hour (PG&E 2020).

Mobile Sources

Mobile sources for the Proposed Project would primarily be motor vehicles traveling to and from the Project site. The anticipated trip generation, including the trip rates and total trips, are based on the Proposed Project's Traffic Impact Study prepared by Dudek (see Appendix K). CalEEMod was used to calculate the emissions resulting from on-road mobile sources associated with residents traveling to and from the proposed land use types.

Default trip generation rates included in CalEEMod for each analyzed proposed land uses were adjusted to match the Proposed Project's trip generation. In addition, Saturday and Sunday trip rates were adjusted based on the CalEEMod default trip rates and the Proposed-Project-specific trip rates presented in the traffic study. The CalEEMod default and assumed trip rates are depicted in Table 3.7-4.

Table 3.7-4
CalEEMod Default and Adjusted Trip Rates

Land Use Type	Size Metric	CalEEMod Default Vehicle Trip Rates			Proposed Project Vehicle Trip Rates[1]		
		Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate	Weekday Trip Rate	Saturday Trip Rate	Sunday Trip Rate
Single-Family Residential	Dwelling Unit	9.52	9.91	8.62	9.44	9.56	8.31
Accessory Dwelling Units	Dwelling Unit	6.59	7.16	6.07	7.36	8.18	6.94
Multi-Family Units	Dwelling Unit	5.81	5.67	4.84	9.44	9.56	8.31

Note:

1 Weekday trip rates were provided in the Proposed Project's Traffic Impact Study. Proposed Project Saturday and Sunday trips rates were adjusted based on the ratio of the CalEEMod default Saturday and Sunday trip rates to the CalEEMod default weekday trip rate.

Sources: CAPCOA 2017; Dudek 2020.

Solid Waste

The Proposed Project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water to serve the Proposed Project requires the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the Proposed Project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for indoor use were based on data provided within the Preliminary Water Calculations Technical Memorandum (RSA 2019). The total water demand for each land use type as provided in the memorandum were allocated based on the default proportions from CalEEMod's indoor water use. Water consumption for outdoor water use were estimated for the Proposed Project using CalEEMod default values.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Regarding impacts from GHGs, both BAAQMD and the California Air Pollution Control Officers Association consider GHG impacts to be exclusively cumulative impacts (BAAQMD 2017; CAPCOA 2008); therefore, assessment of significance is based on a determination of whether the GHG emissions from a project represent a cumulatively considerable contribution to the global atmosphere. This analysis uses both a quantitative and a qualitative approach. The quantitative approach is used to address the first significance criterion: "Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?" This analysis considers that, because the quantifiable thresholds developed by BAAQMD were formulated based on AB 32 and California Climate Change Scoping Plan reduction targets for which its set of strategies were developed to reduce GHG emissions statewide, a project cannot exceed a numeric BAAQMD threshold without also conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, if a project exceeds a numeric threshold and results in a significant cumulative impact, it would also result in a significant cumulative impact with respect to plan, policy, or regulation consistency, even though the project may incorporate measures and have features that would reduce its contribution to cumulative GHG emissions.

Separate thresholds of significance have been established by the BAAQMD for operational emissions from stationary sources (such as generators, furnaces, and boilers) and nonstationary sources (such as on-road vehicles) (BAAQMD 2017). The threshold for stationary sources is 10,000 MT CO_2e per year (i.e., emissions above this level may be considered significant). For nonstationary sources, the following three separate thresholds have been established:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy (i.e., if a project is found to be out of compliance with a Qualified Greenhouse Gas Reduction Strategy, its GHG emissions may be considered significant).
- 1,100 MT CO_2e per year (i.e., emissions above this level may be considered significant).
- 4.6 MT CO_2e per service population per year (i.e., emissions above this level may be considered significant). (Service population is the sum of residents plus employees expected for a development project.)

The quantitative threshold of 1,100 MT CO_2e annually adopted by BAAQMD is applied to this analysis. If a proposed project's GHG emissions would exceed this threshold then, consistent with BAAQMD Guidelines, it would be considered to have a cumulatively considerable contribution of GHG emissions and a cumulatively significant impact on climate change.

Impacts and Mitigation Measures

3.7-1: Would the Proposed Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? This impact would be less than significant.

Construction

Construction of the proposed residences along with site clearing, grading and installation of utilities would result in GHG emissions, which are primarily associated with use of off-road construction equipment, vendor trucks, and worker vehicles. Since the BAAQMD has not established construction-phase GHG thresholds, construction GHG emissions were amortized assuming a 30-year development life after completion of construction and were compared to the BAAQMD operational GHG threshold. Amortized GHG emissions associated with Proposed Project construction would result in annualized generation of 17 MT CO_2e.

A detailed depiction of the construction schedule—including information regarding phasing, equipment used during each phase, trucks, and worker vehicles—is included in Appendix C. The estimated Proposed-Project-generated GHG emissions from construction activities assuming a 6-year buildout are shown in Table 3.7-5. The 6-year buildout assumes that building construction activities would be spread out over a 6-year period, occurring on average for approximately 7 months per year. Although, the construction duration could be spread out over a 6-year period, site preparation/grading/utility work would occur during the first phase of construction.

Table 3.7-5
Estimated Annual Construction Greenhouse Gas Emissions – 6-Year Buildout

Emission Source/Year	CO_2e (MT/yr)
2023	287.9
2024	225.1
2025	302.9
2026	255.0
2027	219.4
2028	200.1
Total	1,490.4
Amortized Construction Emissions	49.7

Notes: Total emissions may not sum due to rounding.
CO_2e = carbon dioxide-equivalent; MT/year = metric tons per year
Source: See Appendix C for detailed results.

Operations

Following the completion of construction activities, the Proposed Project would generate GHG emissions from mobile sources (vehicle trips), area sources (landscaping equipment), energy

sources (natural gas and electricity consumption), solid waste generation, water supply, and wastewater treatment. The estimated operational Proposed-Project-generated GHG these sources are shown in Table 3.7-6.

Table 3.7-6
Estimated Annual Operational Greenhouse Gas Emissions

Proposed Project Emission Source	CO_2e (MT/yr)
Area	12.0
Energy	158.3
Mobile	549.2
Solid Waste	34.9
Water Supply and Wastewater	10.6
Total	765.0
Amortized Construction Emissions	49.7
Operation + Amortized Construction Total	814.7
BAAQMD GHG Threshold	*1,100*
Significant (Yes or No)?	*No*

Note: CO_2e = carbon dioxide-equivalent; MT/year = metric tons per year
Source: See Appendix C for detailed results.

Table 3.7-6 indicates that the GHG emissions associated with development of the Proposed Project would be below BAAQMD's GHG threshold of 1,100 MT CO_2e per year. Therefore, the Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and this would represent a cumulatively **less-than-significant** GHG impact.

Mitigation Measures

None required.

3.7-2: Would the Proposed Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? This impact would be less than significant.

The City is currently in the process of developing a GHG Reduction Plan and a Climate Action Plan, which would include various GHG reduction measures that would help the City reduce communitywide GHG emissions. Thus, the City does not have an adopted plan that would be applicable to the Proposed Project. However, consistency with other plans including the Plan Bay Area, Scoping Plan, and future GHG reduction goals are described below.

ABAG and Metropolitan Transportation Commission's Plan Bay Area

The Plan Bay Area is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks for the San Francisco Bay Area (ABAG and MTC 2017). The Plan Bay Area is not directly applicable to the Proposed Project because the underlying purpose of the Plan Bay Area is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout the region, as stipulated under SB 375. Within the Plan Bay Area, the core strategy includes "focused growth" in existing communities along existing transportation networks. The key to implementing the focused growth strategy are Priority Development Areas and Priority Conservative Areas. In addition, the Metropolitan Transportation Commission and the ABAG Executive Board established seven goals and 13 performance targets to measure Plan Bay Area 2040's effectiveness in addressing the major challenges facing the region. Development of the Project site would support the overarching intent of the Plan Bay Area through developing residential land uses including a component dedicated for affordable housing, which would help the region attain its adequate housing targets. Therefore, the Proposed Project would generally be considered consistent with applicable goals and strategies set forth in the Plan Bay Area.

CARB's Scoping Plan

As discussed above in Section 3.7.3, the Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[3] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low-Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 3.7-7 highlights measures that have been, or will be, developed under the Scoping Plan and the Proposed Project's consistency with Scoping Plan

[3] The Final Statement of Reasons for the amendments to the State CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009b).

measures. To the extent that these regulations are applicable to the Proposed Project, its inhabitants, or uses, the Proposed Project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Table 3.7-7
Proposed Project Consistency with Scoping Plan
Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	Consistent. Proposed Project residents and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low-Carbon Fuel Standard	T-2	Consistent. Motor vehicles driven by Proposed Project residents and visitors would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	Consistent. The Project site is located near transit services (VINE Transit) which would reduce dependence on passenger vehicle trips and shorter trip lengths, which would reduce GHG emissions.
Advanced Clean Transit	Proposed	Not applicable.
Last-Mile Delivery	Proposed	Not applicable.
Reduction in VMT	Proposed	Not applicable.
Vehicle Efficiency Measures Tire Pressure Fuel Efficiency Tire Program Low-Friction Oil Solar-Reflective Automotive Paint and Window Glazing	T-4	Consistent. It is assumed motor vehicles driven by Proposed Project residents and visitors would maintain proper tire pressure when their vehicles are serviced. Replacement tires and low-friction oil would be used in compliance with CARB vehicle standards that are in effect at the time of vehicle or tire purchase.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable.
Goods Movement Efficiency Measures Port Drayage Trucks Transport Refrigeration Units Cold Storage Prohibition Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification Goods Movement Systemwide Efficiency Improvements Commercial Harbor Craft Maintenance and Design Efficiency Clean Ships Vessel Speed Reduction	T-6	Not applicable.
Heavy-Duty Vehicle GHG Emission Reduction Tractor-Trailer GHG Regulation Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable.

Table 3.7-7
Proposed Project Consistency with Scoping Plan
Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	Not applicable.
Medium and Heavy-Duty GHG Phase 2	Proposed	Not applicable.
High-Speed Rail	T-9	Not applicable.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	Consistent. The Proposed Project will comply with current Title 24, Part 6, of the California Code of Regulations energy efficiency standards.
Energy Efficiency (Natural Gas)	CR-1	Not applicable.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Not applicable.
Combined Heat and Power	E-2	Not applicable.
Renewable Portfolios Standard (33% by 2020)	E-3	Consistent. The electricity used by the Proposed Project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
Renewable Portfolios Standard (50% by 2050)	Proposed	Consistent. The electricity used by the Proposed Project would benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Consistent. The Proposed Project would be required to implement on-site generation of renewable energy using solar panels on available rooftop space to offset a portion of the Proposed Project's electricity consumption as mandated by the California Building Standards Commission. However, specifications regarding the size of rooftop solar is currently unknown.
Water Sector		
Water Use Efficiency	W-1	Consistent. The Proposed Project would be required to comply with statewide water conservation requirements reducing water usage by 20%. Furthermore, low-flow plumbing equipment would be installed including waterless urinals, two flush toilets, and automated restroom faucets, in compliance with state building codes.
Water Recycling	W-2	Not applicable. Recycled water is not available to the site.
Water System Energy Efficiency	W-3	Not applicable. This is applicable for the transmission and treatment of water but is not applicable to the Proposed Project.
Reuse Urban Runoff	W-4	Not applicable. The Proposed Project would not reuse urban water on-site.
Renewable Energy Production	W-5	Not applicable. This is applicable for wastewater treatment systems but is not applicable to the Proposed Project.

Table 3.7-7
Proposed Project Consistency with Scoping Plan
Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Green Buildings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Not applicable.
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The Proposed Project would be required to meet green building standards that are in effect at the time of design and construction.
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The Proposed Project would be required to be constructed in compliance with local green building standards in effect at the time of building construction.
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. This is applicable for existing buildings only. It is not applicable for the Proposed Project except as future standards may become applicable to existing buildings.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable.
Reduce GHG Emissions by 20% in Oil Refinery Sector	Proposed	Not applicable.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable.
Refinery Flare Recovery Process Improvements	I-4	Not applicable.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	Not applicable.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable.
Mandatory Commercial Recycling	RW-3	Consistent. During both construction and operation, the Proposed Project would be required to comply with all state regulations related to solid waste generation, storage, and disposal, including the California Integrated Waste Management Act, as amended. During construction, all wastes would be recycled to the maximum extent possible.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable.
Anaerobic/Aerobic Digestion	RW-3	Not applicable.
Extended Producer Responsibility	RW-3	Not applicable (applicable to product designer and producers).

Table 3.7-7
Proposed Project Consistency with Scoping Plan
Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Environmentally Preferable Purchasing	RW-3	Not applicable (applicable to product designer and producers).
Forests Sector		
Sustainable Forest Target	F-1	Not applicable.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	Consistent. Proposed Project residents would be prohibited from performing air conditioning repairs and would be required to use professional servicing.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	Not applicable.
Reduction of Perfluorocarbons (PFCs in Semiconductor Manufacturing	H-3	Not applicable.
Limit High GWP Use in Consumer Products	H-4	Consistent. The Proposed Project would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Consistent. It is assumed motor vehicles driven by Proposed Project residents would comply with the leak test requirements during smog checks.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable.
40% reduction in methane and hydrofluorocarbon (HFC) emissions	Proposed	Not applicable.
50% reduction in black carbon emissions	Proposed	Not applicable.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	Not applicable. The Proposed Project would not prevent CARB from implementing this measure.

Notes: CARB = California Air Resources Board; CCR = California Code of Regulations; GHG = greenhouse gas; GWP = global warming potential; SB = Senate Bill; SF_6 = sulfur hexafluoride
Sources: CARB 2008, 2017a.

Based on the analysis in Table 3.7-7, the Proposed Project would be considered consistent with the applicable strategies and measures in the CARB Scoping Plan.

SB 32 and EO S-3-05

Regarding consistency with SB 32 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and EO S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050),

there are no established protocols or thresholds of significance for that future-year analysis. However, CARB has expressed optimism regarding the 2030 and 2050 goals. It states in the First Update that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). Regarding the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update states the following (CARB 2014):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under Assembly Bill 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-3-05. This is confirmed in the Second Update, which states, "[t]his Plan draws from the experiences in developing and implementing previous plans to present a path to reaching California's 2030 GHG reduction target. The Plan is a package of economically viable and technologically feasible actions to not just keep California on track to achieve its 2030 target, but stay on track for a low- to zero-carbon economy by involving every part of the state" (CARB 2017a). The Second Update also states that although "the Scoping Plan charts the path to achieving the 2030 GHG emissions reduction target, we also need momentum to propel us to the 2050 statewide GHG target (80% below 1990 levels). In developing this Scoping Plan, we considered what policies are needed to meet our mid-term and long-term goals" (CARB 2017a).

As discussed previously, the Proposed Project would be considered consistent with the Plan Bay Area and CARB's 2017 Scoping Plan and would not conflict with the state's trajectory toward meeting future GHG reductions. Since the specific path to compliance for the state in regards to the long-term goals would likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Proposed Project would be speculative and cannot be identified at this time. With respect to future GHG targets under SB 32 and EO S-3-05, CARB made clear in its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet SB 32's 40% reduction target by 2030 and EO S-3-05's 80% reduction target by 2050; this legal interpretation by an expert agency provides evidence that future regulations would be adopted to continue the state on its trajectory toward meeting these future GHG targets.

Based on the preceding considerations, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs, and no mitigation is required. This impact would be **less than significant**.

Mitigation Measures

None required.

3.7.5 Cumulative Impacts

The geographic context for analyzing cumulative impacts is the San Francisco Bay Area Air Basin.

3.7-3: Would the Proposed Project contribute to cumulative GHG emissions within the region. The Project's contribution would not be considerable.

GHG impacts are cumulative impacts (BAAQMD 2017; CAPCOA 2008); therefore, assessment of significance is based on a determination of whether the GHG emissions from a project represent a cumulatively considerable contribution to the global atmosphere. If a project exceeds the identified significance thresholds, its contribution of GHG emissions would be cumulatively considerable, resulting in a cumulatively significant impact on climate change. As discussed in Impact 3.7-1, the Proposed Project would not result in GHG emissions in exceedance of the BAAQMD significance threshold. Therefore, the Proposed Project's GHG emissions would not be considered cumulatively considerable and the Proposed Project's contribution would be **less than significant.**

Mitigation Measures

None required.

3.7.6 References

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3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.1 Introduction

This section provides an overview of the potential presence of hazards and hazardous materials and other public health hazards on and near the proposed Hunter Subdivision Project (Proposed Project) site and evaluates the potential impact to public health and safety and the environment that could result from the development and operation of the Proposed Project.

Comments received in response to the Notice of Preparation included concerns regarding flooding hazards, hazardous materials, fire hazards, and emergency access. A copy of the Notice of Preparation and comments received is included in Appendix A. Comments regarding the potential for flooding are addressed in Section 3.9, Hydrology and Water Quality, while hazardous materials released during a flood are discussed within this section. Hazardous materials, fire hazards, and emergency access are addressed in this section.

The evaluation is based on a review of Project site plans, City of St. Helena (City) planning documents, a review of historical land use documents and regulatory agency information, a Phase I Environmental Site Assessment (ESA) included in Appendix G, and a review of other available materials from state and federal agencies and databases. Other sources consulted are listed in Section 3.8.6, References.

3.8.2 Environmental Setting

This section describes the existing hazardous materials setting on and near the Project site, the existing regulatory framework for hazardous materials and hazardous waste and applicable worker health and safety requirements, and local policies related to public health and safety.

Existing Conditions

Hazardous materials, as defined by the California Health and Safety Code, may be present in the subsurface of any site as a result of past and present land uses. Exposure to hazardous materials could adversely affect the health of construction workers or the public during construction, as well as residents, or visitors to a site during operation if the hazardous materials are not contained, removed, or remediated.

Site Description and History

As stated in Chapter 2, Project Description, the Project site consists of approximately 17 acres with a small vineyard located in the southwestern and along the northwestern “panhandle” portion of the site. There are no structures or buildings located on the Project site. An existing groundwater well is located near the southeastern portion of the site. A stormwater detention

basin, as part of a previous City Flood Protection Project, is located to the north-northeast of the Project site. Historically the site has been used primarily for agricultural cultivation; likely vineyards and orchards, discussed in more detail below.

Historic Land Uses

As noted in Appendix G, past potential hazardous materials issues associated with historic land uses at and adjacent to the Project site were evaluated by reviewing historical aerial photographs from 1947, 1953, 1958, 1968, 1973, 1982, 1993, 2006, 2010, and 2014. Historic photographs indicate that the majority of the Project site was used for agricultural cultivation, likely vineyards and orchards. As shown in the photographs from 1947 through 1968, five ponds are visible outside of the Project site boundaries generally adjacent to the south and southeast. It appears these ponds were removed after 1968 to construct the road and the adjacent Vineyard Valley Mobile Home Park. The Project site has remained as mostly agriculture with limited development.

The first development of the Project site appears to be prior to 1947 based on a review of aerial photographs, which shows an orchard in the northeast portion of the site while the remainder is visible as undeveloped grasslands. Holding ponds are visible along the southeastern border of the Project site and the surrounding areas consist of low-density residential development to the southeast and agriculture towards the north and west.

From 1953 through 1968, historic photos indicate no significant changes, other than the removal of the orchard. In 1973, vineyards appear on the southwest portion of the Project site and it appears the holding ponds were removed, and the initial stages of residential development are visible to the south and east.

Significant residential development surrounding the Project site first appears in 1982 as well as the presence of a small holding pond on the northeast portion of the Project site. The 1993 and 2006 photographs have little to no change to the site but indicate significant development of residences surrounding the site.

In the 2010 photograph, significant changes to the northern portion of the Project site are indicated. On the west, extending from the southern border, adjacent to the western boundary of the site, to the northern boundary of the site, a gravel access road appears. Grading on the Project site and to the north of the site, including the construction of a levee next to the riparian area north of the Project site is shown. In a more recent 2014 photograph, areas of fill has been covered with grasslands, the levee is completed, and an access maintenance road is shown along the northwestern boundary of the Project site extending from the southern end to north of the Project site.

Sensitive Receptors

The Project site is bordered by residential development to the south and east. The closest schools to the Project site include the public Robert Louis Stevenson Middle School (0.67 miles west), the private St. Helena Montessori School (0.61 miles east), and the public St. Helena Elementary School (0.53 miles southwest). The Santa Rosa Memorial Hospital is located approximately 15 miles west of the Project site.

The Angwin-Parrett Field airport is the closest airport to the Project site and is located approximately 4.5 miles to the north-northeast.

Previous Site Investigations

In accordance with the American Society for Testing and Materials (ASTM) Standard E-1527, a Phase I ESA (Appendix G) was prepared by EBA Engineering on March 6, 2018.

Hazardous material issues at the Project site were evaluated by a thorough review of historical land use information, regulatory agency hazardous materials records and databases, and a site reconnaissance as part of the Phase I ESA.

The Project site was not identified in any regulatory agency files or databases as having recognized environmental concerns. The Phase I ESA determined that there was no indication of the historic use, generation, or disposal of hazardous materials and/or waste. There was no indication of the presence of any underground storage tanks on the Project site.

Agricultural chemicals have been recorded for use on the onsite vineyard from the Napa County Agricultural Commissioner's Office (Appendix G). Agricultural chemicals recorded included herbicides, fungicides, and miticides. All chemicals used on the site were overseen by the Napa County Agricultural Commissioner's Office in accordance with Title 3 of the California Code of Regulations. No agricultural chemicals were stored or mixed onsite. Historic aerial photographs of the site indicate an orchard was present dating from the 1940s; an era where it was common to use organochlorines and arsenic as pesticides; however, no record of use was found and no further subsurface investigation was identified (Appendix G).

A search of nearby areas in the Phase I ESA determined that no open or active sites were within 1,000 feet of the Project site. Based on a one-mile search radius (required by ASTM Standard 1527-13), three sites were identified as open/active for generation or handling of hazardous materials and/or wastes that are regulated for such use and disposal. The Phase 1 ESA notes 20 sites were found to be closed with regulatory oversight. Other open sites included seven sites that either were in the process of remediation, or on a list for being an active business such as an automotive shop. Due to their status, distance from the Project site, and

listing type (listed for generation and not for large spills), it was determined that these sites would not pose an environmental threat to the Proposed Project and therefore were not considered a recognized environmental concern. A complete list of sites can be found in Appendix G.

Additional Database Review

In addition to the Phase I ESA, the Department of Toxic Substances Control's (DTSC) online database system, EnviroStor, was reviewed for recorded hazardous materials sites near the Project site. The Project site is not listed as a hazardous materials spill site, cleanup site, handler of hazardous materials, or facility which transports, stores, or produces hazardous materials (DTSC 2019).

Two sites are listed on the EnviroStor database, Klass Cleaners and Pacific Gas & Electric (PG&E), which are located approximately 2,440 feet and 2,700 feet south of the Project site, respectively. Klass Cleaners is an active voluntary cleanup site. The site has been a dry cleaning facility for the past 40+ years, which included the use, storage, and handling of hazardous materials including acetone, benzene, chloroform, tetrachloroethylene (PCE) and trichloroethylene (TCE) (EnviroStor 2019a). The business occupied the southern third of the building located at 1141 Main Street, approximately 2,440 feet south of the Project site. The site has been confirmed to have contaminated groundwater directly to the north (under a current gas station), and to the southeast of the building. Soil vapor contamination has been found directly under the building but has not been identified off the property. The complete lateral and vertical extent of contamination has not been determined (EnviroStor 2019a). The site became active through a Request for Agency Oversight Application on June 29, 2018. In August of 2018, PCE was detected through a site characterization report. Due to the site's location, groundwater movement, contamination characteristics, and type of contamination, it is unlikely that this site would have an impact on the Proposed Project.

The PG&E site is a certified, operation and maintenance defined site as of July 18, 2017. This site was a manufactured gas plant which operated from 1883 until 1926. The site was purchased by PG&E in 1930 and was dismantled upon introduction of natural gas to the region in 1931. The site is located at 1301 Mitchell Drive, approximately 2,700 feet south of the Project site. During a standard site screening subsurface investigation at the site in 1987, it was discovered that polycyclic aromatic hydrocarbons, petroleum hydrocarbons, arsenic, and lead were detected. Remedial actions of the site were conducted in two phases. The first phase, excavation, was completed in 2007 and a dual phase soil vapor/ groundwater extraction system was installed. This system was operated for approximately 5 years. The second phase was completed in 2014 and included excavating and removing potentially contaminated soils up to 8 feet below the ground surface (EnviroStor 2019b). Groundwater was sampled and monitored

throughout remediation. A long-term operation and maintenance plan includes continuous groundwater monitoring and site inspections to ensure compliance with property use restrictions. In addition, land use restrictions between PG&E and DTSC dated March 17, 2017, include the prohibition of a residence, hospital, public or private schools, or a day care. Due to this site's characteristics, location from the Project site, and groundwater sampling which has not peaked above remediation goals, this site is unlikely to pose a hazardous risk to the Proposed Project.

Wildland Fire Hazards

In accordance with California Public Resource Code Section 4201-4201 and Government Code Sections 51175–51189, the California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards based on available fuels, terrain, weather patterns, and other relevant factors associated with wildland fire risks. These mapped zones, referred to as Fire Hazard Severity Zones, represent the risks associated with wildland fires. Under state law Government Code Section 511182, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas. There are two responsible designated areas, Local Responsibility Areas and State Responsibility Areas, which are in control of wildland fires within their respective areas. These are mapped through CAL FIRE.

On August 17, 2020, a series of overnight lighting strikes started fires that burned over 300,000 acres across five counties including Napa County. The LNU Lighting Complex fire was fully contained by early October. In late September 2020, the Glass Fire started and burned over 67,484 acres and destroyed over 1,800 structures in Napa County and Sonoma County. The fire was fully contained on October 20, 2020. The hills visible from the Project site experienced fire damage. The Project site is located within a Local Responsibility Area that is rated as a Non Very High fire Hazard Safety Zone (Non-VHFHSZ) (CalFire 2019).

3.8.3 Regulatory Setting

The U.S. Environmental Protection Agency (EPA) has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA) for issues within the state. In turn, the local agency, Napa County Department of Environmental Management has been granted responsibility for implementation and enforcement of many hazardous materials regulations within the City under the Certified Unified Program Agency (CUPA) Program.

Federal Regulations

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA). The RCRA establishes a framework for national programs to achieve environmentally sound management of hazardous and non-hazardous wastes. The RCRA was designed to protect human health and the environment, reduce or eliminate the generation of hazardous waste, and conserve energy and natural resources. The RCRA also promotes resource recovery techniques. The Hazardous and Solid Waste Amendments of 1984 expanded the scope of the RCRA and increased the level of detail in many of its provisions. The Hazardous Waste Management subchapter of the RCRA deals with a variety of issues regarding the management of hazardous materials, including the export of hazardous waste, state programs, inspections of hazardous waste disposal facilities, enforcement, and the identification and listing of hazardous waste. In California, the EPA has authorized the DTSC to administer the RCRA program, pursuant to the State's Hazardous Waste Control Law.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act amended CERCLA on October 17, 1986. The Superfund Amendments and Reauthorization Act stresses the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, requires Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations, provided new enforcement authorities and settlement tools, increased state involvement in every phase of the Superfund program, increased the focus on human health problems posed by hazardous waste sites, encouraged greater citizen participation in making decisions on how sites should be cleaned up, and increased the size of the trust fund.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Code of Federal Regulations (CFR) Title 49. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation

emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation.

EPA Regional Screening Levels

Regional Screening Levels are tools for evaluating and cleaning up contaminated sites. Regional Screening Levels for the Superfund programs provide comparison values for residential and commercial/industrial exposures to soil, air, and tap water. These values are risk-based concentrations, derived from standardized equations combining exposure information assumptions with EPA toxicity data. They are considered to be protective for humans (including sensitive groups) over a lifetime.

State Regulations

Routine hazardous materials management in California is administered under the CUPA program. The CUPA program was established under the 1993 California Senate Bill 1082 to reduce the cost and improve the efficiency of enforcement of hazardous materials laws and regulations.

California Government Code Section 65962.5(a), Cortese List

The Hazardous Waste and Substance Sites (Cortese) List is a planning document used by state and local agencies and developers to comply with California Environmental Quality Act (CEQA) requirements to provide information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the CalEPA to develop, at least annually, an updated Cortese List. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List. The Project site is not listed on the Cortese List database.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under the RCRA and the California Hazardous Waste Control Law. Both laws impose “cradle-to-grave” regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies, including the Napa County Environmental Health Division. In California, the EPA has authorized the DTSC to administer the RCRA program, pursuant to the state’s Hazardous Waste Control Law.

California Human Health Screening Levels

California Human Health Screening Levels (CHHSLs or "Chisels") are concentrations of 54 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the EPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after the following occurs: a local declaration of emergency and the California Emergency Management Agency gives concurrence with the local declaration, or the governor issues a proclamation of a state emergency. Once the act is activated, local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

Title 14 Division 1.5 of the California Code of Regulations

Title 14 of the California Code of Regulations, Division 1.5, establishes the regulations for CAL FIRE and is applicable in all State Responsibility Areas—areas where CAL FIRE is responsible for wildfire protection. Most of the unincorporated area of Napa County is a State Responsibility Area, and any development in a State Responsibility Area must comply with these regulations. The City is not within the unincorporated area of Napa County and is not within a State Responsibility Area. Among other things, Title 14, Section 1270 et seq. establishes minimum standards for emergency access, fuel modification, setback to property lines, signage, and water supply.

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

Building, Fire and Residential Code

The State Fire Marshal's Building, Fire and Residential Code went into effect on January 1, 2011. This code incorporated the requirement of residential fire sprinklers in all new one-and two-family dwellings and townhouse construction statewide into the 2010 California Building Standards Codes. Fire sprinkler systems are also required in office buildings and multi-family dwellings (i.e. apartments).

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), and fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Local Regulations

Napa County Agricultural Commissioner's Office

The Napa County Agricultural Commissioner and staff are responsible for the implementation of federal, state, and local regulatory programs within Napa County. Specifically, these programs are designated to protect people and the environment and promote agriculture within Napa County. Agriculture in and around St. Helena uses a variety of hazardous materials, including fuels and maintenance fluids for farm equipment, fertilizers, and pesticides (including herbicides, fungicides, and insecticides).

Pesticides are regulated under the federal Insecticide, Fungicides and Rodenticide Act by the EPA. This includes labeling and registration of pesticides as to how they may be used. The EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation, under Title 3 of the California Code of Regulations and the California Food and Agriculture Code. The California Department of Pesticide

Regulation register pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses.

As stated above, the City of St. Helena's hazardous materials programs are administered and enforced by the Napa County Department of Environmental Management under the CUPA program.

Napa County Operational Area Hazard Management Plan

The City participated in the Napa County Operational Area Hazard Management Plan, which was adopted in 2013 and satisfies the requirements of the Disaster Mitigation Act of 2000. The plan includes a risk assessment that resulted in the profiling of hazards that pose risk to Napa County (including the incorporated cities), assessment of Napa County's vulnerability to those hazards, and examined the capabilities in place to mitigate them. Vulnerabilities identified, profiled, and analyzed in this plan include flooding, earthquakes, and wildland/urban interface fires. The plan also identifies goals for reducing risks from hazards. Objectives of the plan are to protect life and property; ensure emergency services; increase public awareness and understanding of hazard mitigation; protect critical facilities properties, infrastructure and other community assets from the impacts of hazards; and continue to strengthen communication and build on the collaborative success already achieved. In addition to county-wide risk assessment, the plan includes city-specific risk assessments.

Napa County Emergency Operations Plans

The Napa County's Concept of Operations Base Plans include the Napa County's Public Health Division Health and Human Services Agency Concept of Operations Base Plan; Crisis Emergency Risk Communication Plan, Strategic National Stockpile Plan, Countermeasure Distribution Plan, Outbreak/Epidemiologic Response Plan; Medical Surge Plan; Mass Care and Shelter Plan; Campus Response Plan; Local Assistance Center Plan; Excessive Heat emergencies Response Plan; Fatality Management Plan; and a Healthcare Evacuation Plan (Napa County 2019).

The Base Plans establish the Napa County Public Health Division Health and Human Services Agency's emergency organization, assigns task, specifies policies and general procedures, and provides for coordination of planning efforts using the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The primary threats to Napa County include earthquakes, floods, landslides, fires, disease outbreaks, hazardous materials releases, transportation accidents, and national security incidents (Napa County 2019).

The Base Plans include a system of operations with scenarios and procedures in the event of an emergency. Each plan listed above provides detailed training guidance for staff and volunteers- including clear and concise roles and responsibilities within each department and organization; risk communication media and outreach goals, methods, and policies; public outreach, and public health division spokesperson to deliver approved information to the public during a crisis.

Napa County Draft 2019 Multi-Jurisdictional Hazard Mitigation Plan Update

Napa County, along with other jurisdictions, is planning to develop, but has not yet adopted, an update to the Napa County Operational Area Hazard Mitigation Plan of 2013.

Hazard mitigation is the use of long-term actions to reduce the loss of life, personal injury, and property damage that can result from a disaster. Planning efforts could include capital projects and other pragmatic activities that can mitigate the impacts of hazards. The draft 2019 Multi-Jurisdictional Hazard Mitigation Plan update would cover each of the major natural hazards that pose risks to Napa County infrastructure and residents.

The 2019 draft Multi-Jurisdictional Hazard Mitigation Plan update would include, at a minimum, the jurisdictions listed below. It is understood that Napa County also encompasses areas of land controlled by federal and state land management agencies including the California Department of Forest and Fire Protection, Bureau of Land Management, and Bureau of Reclamation. The following jurisdictions would meet Federal Emergency Management Agency guidelines and requirements as a formal participating agency, City of American Canyon, City of Calistoga, City of St. Helena, Town of Yountville, Napa County Flood Control and Water Conservation District, Napa County Office of Education, and Napa Valley College (Dynamic Planning and Science 2016).

The 2019 Multi-Jurisdictional Hazard Mitigation Plan update would include a comprehensive plan for flood damage reduction, additional mapping of properties which sustain repetitive losses due to flooding, and detailed inundation mapping technology. The plan would also include updated preparedness controls for wildfire mitigation, and earthquake mitigation.

City of St. Helena 1993 General Plan

The existing 1993 General Plan does not contain policies related to hazardous materials. However, it does contain the following implementing policies regarding emergency response included in the Public Health and Safety Element:

> **Policy 8.5.2**: Protect St. Helena residents from health and safety impacts related to the use, storage, manufacture or transport of hazardous materials.

Policy 8.5.6: Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.

Policy 8.5.7: Ensure that all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.

Policy 8.5.9: Review all new development proposals for their potential to introduce the production, use, storage, and/or transport of hazardous materials, and require reasonable controls on such hazardous materials

Policy 8.7.2: Maintain and periodically update the City's Emergency Response Plan.

Policy 8.7.3: Conduct periodic emergency response exercises to test the effectiveness of City emergency response procedures.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The 2019 General Plan contains the following policies regarding hazardous materials, emergency response and best practices included in the Public Health and Safety Element:

Policy PS4.3: Protect St. Helena residents from health and safety impacts related to the use, storage, manufacture, and transport of hazardous materials.

Policy PS4.4: Discourage new uses that rely extensively on the use of hazardous materials.

Policy PS4.5: Facilitate communication and education about fire safety, non-point source pollution, household hazardous waste disposal, and recycling opportunities.

Policy PS4.6: Ensure that all streets and roads are adequate in terms of width, turning radius, and grade in order to facilitate access by City firefighting apparatus, and to provide alternative emergency routes of ingress and egress.

Policy PS4.D: Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.

St. Helena Municipal Code

Chapter 15.36 of the City's Municipal Code adopted the 2010 California Fire Code for all buildings and construction within the city. Chapter 2.64 aims to provide for the preparation and carrying out of plans for the protection of persons and property within the city in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency

functions with all other public agencies, corporations, organizations, and affected private persons. This chapter also establishes responsibilities for carrying out the City's emergency plan, which the City has not yet adopted.

The St. Helena emergency council is responsible for the development of the City's emergency plan, which shall provide for the effective mobilization of all City resources, both public and private. The council is to meet any condition constituting a local emergency, state of emergency, or state of war emergency; and provides for the organization, powers and duties, services, and staff of the emergency organization. The plan takes effect upon adoption by resolution of the City Council.

3.8.4 Impacts

Methods of Analysis

The analysis of the potential public safety and hazardous materials impacts is based on information from the Phase I ESA prepared for the Proposed Project (Appendix G), a review of City planning documents, historical land use documents, regulatory agency literature/database review, and other existing documentation used to establish existing conditions and to identify potential environmental effects based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that the Proposed Project would comply with all applicable state and local ordinances and regulations (summarized above).

As noted above, potential hazards and associated impacts related to hazards associated with flooding or a levee break and emergency procedures in the event of a flood are discussed in Section 3.9, Hydrology and Water Quality.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Threshold Criteria not Applicable to the Proposed Project

Due to the characteristics and location of the Proposed Project, certain criteria thresholds listed above are not applicable and therefore would not be considered potential impacts. These criteria are addressed below and not discussed further in this Environmental Impact Report (EIR).

Nearby Schools

The Project site is not located within one-quarter mile of an existing or proposed school. The closest schools to the Project site include Robert Louis Stevenson Middle School (0.67 miles west), St. Helena Montessori School (0.61 miles east), and St. Helena Elementary School (0.53 miles southwest). Because no existing or proposed school is within one-quarter mile of the Project site, and Proposed Project residences would not be expected to use or handle acutely hazardous materials, substances, or waste there would be no impacts and this issue (third significance threshold listed above) is not further evaluated.

Previously Listed Hazardous Site

As stated above, a Phase I ESA (Appendix G) was prepared for the Project site and included a search of databases pursuant to Government Code Section 65962.5. The Phase I ESA also included historic aerial photographs of the Project site to determine prior, un-documented land uses and the surrounding properties. The Proposed Project is not located on a site which is included on a list of hazardous materials and would therefore not create a significant hazard to the public or the environment. There would be no impact and this issue (fourth significance threshold listed above) is not further discussed.

Airports

The Project site is not located within an airport land use plan or within 2 miles of an airport. The closest airport to the Project site is the Angwin-Parrett Field airport located approximately 4.5 miles north-northeast of the site. Proposed Project residents would not be impacted by excessive noise from an airport and the Proposed Project does not include towers or other tall obstructions that could interfere with air travel. There would be no impact and this issue (fifth significance threshold listed above) is not further discussed.

Impacts and Mitigation Measures

3.8-1: Would the Proposed Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? This impact would be less than significant.

Construction

During construction activities, hazardous materials, such as petroleum (fuels, motor oil, lubricants), would be used for equipment. In general, small amounts of these materials would be on site at any one time. No acutely hazardous materials would be used during construction of the Proposed Project. In addition, materials handled would not pose a significant risk to off-site residents or construction workers because they would be used and stored in accordance with existing laws and regulations. Development of the Proposed Project would be subject to existing regulatory requirements for hazardous materials, including requirements under the National Pollutant Discharge Elimination System permit through the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), discussed in Section 3.9, Hydrology and Water Quality. The SWPPP would require implementation of control measures for hazardous material storage, soil stockpiles, inspections, maintenance, training of employees, and containment of releases to prevent contaminated runoff into nearby stormwater collection systems or waterways. Included within the SWPPP, best management practices would be required to contain hazardous materials and minimize the contact of hazardous materials with stormwater. As part of the SWPPP, spill prevention measures would be described for each chemical type and secondary containment of those chemicals would be used to ensure that spills can be managed and limited to the containment areas. Although not anticipated, if quantities of fuel or oil greater than or equal to 1,320 gallons are stored on the Project site during construction, then a Spill Prevention Control and Countermeasure Plan must be prepared in accordance with 40 CFR 112.

With the implementation of the SWPPP, and proper handling methods for each chemical type, impacts to the public or environment through the routing transport, use, and disposal of hazardous materials would be **less than significant.**

Operation

During Proposed Project operation, residents would be expected to use and store typical household hazards such as house paint, cleaning products, herbicides, and pesticides. The amounts of hazardous materials that residents store or use is negligible and not considered sufficient to create a significant safety hazard to the public, or otherwise pose a significant risk to human health or the environment. Napa County handles the disposal of household hazardous waste at their collection facility located at 889A Devlin Road in south Napa; approximately 30 miles south of the Project site.

Implementation of local hazardous materials programs and requirements as stated above, in addition to compliance with state and federal laws and regulations, would ensure that the Proposed Project would not create a significant hazard to the environment through routine transport, storage, use, and disposal of hazardous materials. Based on information provided above, this potential impact would be **less than significant.**

Mitigation Measures

None required.

3.8-2: Would the Proposed Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? This impact would be potentially significant.

Construction

During construction activities, hazardous materials such as solvents, petroleum (lubricants and fuels), and other typical construction equipment would be used. Amounts would be negligible and a hazardous spill plan would be implemented as part of the construction contractor's SWPPP (discussed under Impact 3.8-1, above). Best management practices would also be implemented as part of the SWPPP in order to reduce the likelihood of hazardous materials spills. Secondary containment containers would be used as part of storing fuels or hazardous materials on the Project site. In the event of a spill of hazardous materials, most, if not all, chemicals would be limited to the Project site or immediate vicinity as the amounts stored, used, or transported on the site would be minimal and unlikely to cause a significant impact on the public and environment. This impact is **less than significant.**

Due to the historic use of a portion of the site for agricultural uses, specifically an orchard in the late 1940s, there is a potential for contaminated soils to be encountered during construction activities. Potentially contaminated soils would include the past application of unregulated

pesticides. Prior agricultural activities may have used organochlorine pesticides (OCPs), such as DDT, toxaphene, dieldrin, etc., as well as arsenic in the form of arsenical herbicides, which has a history of use on many agricultural properties. Organochlorine pesticides were first introduced into California agriculture in 1944 and reached peak usage in the 1960s. In 1974, the use of the DDT was banned for agricultural purposes, and the elimination of remaining OCPs in California agriculture quickly followed. OCPs are biopersistent and bioaccumulate in the environment, whereas other types of pesticides have a short half-life (i.e., they degrade fairly quickly with time). Today, pesticides are required to demonstrate a lack of persistence in the environment considerably beyond their intended period of use in order to obtain EPA approval. Furthermore, when pesticides are used properly and in accordance with label specifications, potential impacts on the surrounding environment and receiving waters (surface water and groundwater) are minimized. Therefore, the primary concern from a human health perspective is the potential for residual levels of OCPs and/or arsenical herbicides which were in common use in the mid-1900s.

The Phase I ESA prepared for the Project site (Appendix G) concluded that the site is not subject to any recognized environmental concerns. Under ASTM Standard E1527-13, a recognized environmental concern means the presence or likely presence of hazardous substances or petroleum products in, on, or at a property, due to any release to the environment, under any conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment. The conclusion is based on an extensive review of regulatory agency records pertaining to the storage, use and/or potential release of hazardous materials, including pesticide use records from the Napa County Agricultural Commissioner's Office; as well as owner/operator interviews, site reconnaissance, and review of historical aerials and topographic maps. Regarding the potential for past use of OCPs, such as DDT, toxaphene, dieldrin, etc., the Phase I ESA concluded that it is unlikely that any significant concentrations would be present onsite, based on the fact that no agricultural chemicals have been stored or mixed onsite and because if such chemicals were historically used, they would have likely degraded to the point where their concentrations no longer pose a threat to human health or the environment. While the Phase I ESA concludes that it is unlikely that residual levels of pesticides would be present in significant concentrations, the absence of contaminants of concern such as OCPs and arsenic has not been confirmed through on-site soils testing. This is an issue of concern that was brought up in comments in response to Notice of Preparation. The impact to human health and the environmental from residual concentrations of OCPs and/or arsenic is considered a **potentially significant impact** because the Proposed Project includes sensitive receptors (residents), and because the finding of the Phase I ESA has not been confirmed through on-site soils testing.

In the event of a flood during construction, hazardous materials associated with construction activities may be released into flood waters and expose people or the environment to hazardous

conditions. However, as further discussed in Section 3.9, the Napa River levee has been designed to withstand a 200-year storm event. Due to the extreme volume of flood water associated with a 200-year storm event, the maximum amount of hazardous materials associated with the proposed construction activities that could be released would be negligible as compared to the amount of hazardous materials that would be transported under existing conditions. This is a considered a **less-than-significant impact.**

Operation

Future residents at the Project site would be bordered by agricultural uses to the north/northwest, existing residences to the south and east, and undeveloped land and a flood control levee along the Napa River to the north/northeast. Residences, as stated above, typically use small amounts of household hazardous wastes. The use of these types of household products would not be of a large enough quantity to result in a significant hazard to the public or the environment through the event of an accidental release.

As during construction, in the event of a flood, household hazardous materials from Proposed Project operation may be released into flood waters and expose people or the environment to hazardous materials. However, as further discussed in Section 3.9 of this EIR, the Project site is protected by a levee which was built to withstand a 200-year flooding event. Due to the extreme volume of flood water associated with a 200-year storm event, the maximum amount of hazardous materials associated with the proposed construction activities that could be released would be negligible as compared to the amount of hazardous materials that would be transported under existing conditions. This is considered a **less-than-significant impact.**

Mitigation Measures

Implementation of Mitigation Measure HAZ-1 would ensure that if soils located within the Project site contain pesticides that exceed CHHSLs for residential development and occupancy, such soils would be removed and/or remediated prior to any site disturbance or occupancy. With implementation of Mitigation Measure HAZ-1, a preliminary soil screening survey would ensure that soils on the Project site would comply with CHHHLs for residential development and occupancy ensuring the impact is mitigated to less than significant.

HAZ-1: As a condition of approval for construction and grading permits for the Project site, the Project applicant shall ensure the following subsurface soils testing and follow-up analysis shall be performed prior to obtaining a grading permit:

- A soils testing work plan shall be developed in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties (DTSC 2008) by an appropriately licensed individual (i.e., professional geologist, environmental

engineer, or similar qualification) for the portions of the Project site historically used for agriculture. Special consideration shall be given to targeting site soils that are representative of historic agricultural use, and to avoid sampling recent fill material placed during levee construction. Prior to carrying out soils testing, the work plan shall be submitted to the Napa County Division of Environmental Health (as the Certified Unified Program Agency for all cities and areas of Napa County) and the City of St. Helena for review and approval.

- The number of soil samples, sampling methods, compounds tested, background samples (if applicable), and laboratory analyses shall be completed in accordance with DTSC's Interim Guidance. Should analytical results exceed naturally occurring concentrations or applicable CHHSLs, the health risks of such a condition shall be evaluated in human health risk assessment as described in DTSC standards and guidance (e.g., preliminary endangerment assessment guidance manual).
- The risk assessment shall describe measures that must be implemented to ensure potential health risks to construction workers, site residents, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than one in one million for carcinogens and a cumulative hazard index of 1 for non-carcinogens, or as required by the Napa County Division of Environmental Health acting as the Certified Unified Program Agency and/or DTSC oversight.
- In the event human health risk assessment shows elevated chemical concentrations pose a risk to human health or the environment, the risks shall be eliminated or substantially reduced by removal (e.g., excavation of soils and off-site disposal) or remediation of contaminated soils, and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include use of a construction risk management plan, use of hardscape to cap problem areas, importation of clean soil in landscaped area to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program shall be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project.

The soil testing report, and if applicable, the human health risk assessment and Operations and Maintenance Program, shall be subject to review and approval by the City of St. Helena Department of Public Works, the Napa County Division of Environmental Health and/or other regulatory oversight agencies.

3.8-3: Would the Proposed Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? This impact would be less than significant.

Construction

Construction activities could physically interfere with an adopted emergency response or evacuation plan if it did not adhere to the requirements of such plans. The City currently does not have an adopted emergency evacuation plan and relies on the Napa County Emergency Operations Plans and the City's fire department to review site plans to ensure adequate access is provided in the event of an emergency. During construction activities in the event of a fire, hazardous spill, or other emergency access for emergency personnel and equipment as well as access for construction workers to evacuate the site would be available. The construction contractor would also implement the SWPPP, as discussed under Impact 3.8-1. The SWPPP would include an Integrated Contingency Plan and an evacuation plan for construction workers in the event of an emergency. The evacuation plan would be used in case of a fire, potential life threatening hazardous materials release, or any other emergency situation that has the potential to harm human life and safety. The evacuation plan would be prepared in accordance and oversight of City staff. Compliance with the SWPPP and the Integrated Contingency Plan would ensure impacts are **less than significant.**

Operation

The Proposed Project's tentative map is designed with three points of access; the extension of Star Avenue and Adams Street and an emergency vehicle access (see Figure 2-3 in Chapter 2, Project Description) to facilitate the ingress and egress of emergency response vehicles, including the City and County Fire Department's apparatus and Proposed Project residents. The City's Fire Department would review the site plans to determine if any additional road widening or access is recommended. The emergency vehicle access would be designed with bollards or a fence that would be kept locked. In the event of an emergency requiring evacuation, police or fire personnel/vehicles would have access to remove the bollards/unlock the gate through a locked box (e.g., knox box). Proposed Project operation would not interfere with the preparation of the City's emergency response plan or Napa County's Emergency Operations plan as it would be designed to comply with the California Building Code, as well as the 1993 General Plan and 2019 General Plan's community design standards; all of which include emergency response access features. The Community Design Element of the 1993 General Plan and 2019 General Plan include requirements for residential design to conform with the patterns and densities of neighboring areas, as well as accessibility for residents. The General Plans also include fire and hazardous materials guiding policies which require new development to meet the minimum fire flow rates specified by the City's Fire Code (Policy 8.5.6 in the 1993 General

Plan and Policy PS4.D in the 2019 General Plan), as well as ensuring all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress (Policy 8.5.7 in the 1993 General Plan and Policy PS4.D in the 2019 General Plan).

Compliance with City policies and regulations would ensure the Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

3.8-4: Would the Proposed Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? This impact would be less than significant.

Construction

The Project site is bordered by residential development to the south and east. Irrigated agricultural land and undeveloped lands surround the Project site to the southwest, west, northwest, and directly north, with the exception of the Napa River which is north/northeast of the Project site. Across the Napa River, farther to the north, are additional irrigated agricultural lands. The Project site and the surrounding land uses are located within an area mapped as "Non-VHFHSZ" under the Local Responsibility Area map by CAL FIRE (CalFire 2019).

Construction activities have the potential to cause sparks which may cause a fire. As discussed under Impact 3.8-2, best management practices included within the recommended SWPPP would include precautions to temporarily remove vegetation in areas where construction equipment or vehicles would access, as well as have a water supply onsite for fire protection. As stated in Section 3.3, Air Quality, the Bay Area Air Quality Management District's Regulation 6, Rule 6 addresses the prohibition of fugitive road dust emissions associated with trucks tracking mud onto local roads "trackout." To comply with the Bay Area Air Quality Management District's regulations for fugitive dust and trackout, the Project site would be regularly watered for dust suppression during construction activities, which would serve a dual purpose in also reducing the risk for fires to occur. Impacts related to wildland fires during construction activities would be considered **less than significant**.

Operation

The Proposed Project's residences would be built to the California Building Code requirements for fire protection in place at the time. During Proposed Project operation sparks from vehicles is lowered because vehicles accessing the site would be on paved roads and adjacent landscape strips or yards would be set back from the road via a 4-foot-wide sidewalk. Also, the landscape strip and yards would be regularly irrigated during the dry summer and fall months so it is unlikely there would be access to dry grass where many wildfires start. Likewise, landscape equipment including lawnmowers and other common handheld power tools would be used on irrigated lawns and unlikely to be used on any dry grassy areas where sparks could initiate a wildfire.

As stated previously, the Proposed Project's tentative map is designed with an emergency vehicle access to facilitate the ingress and egress of emergency response vehicles, including the City and Napa County Fire Department's apparatus. The City's Fire Department would ensure the final site plans provide adequate emergency evacuation and would be consistent with the City's emergency response plan, when it is prepared. In the event of a fire, there would be sufficient access for emergency vehicles to reach the Project site, as well as emergency evacuation access for residents. The Napa County Emergency Operations Plan does not include a vehicle evacuation plan, but in the event of a wildfire, City fire and police personnel would coordinate with Napa County to identify evacuation routes and set up temporary shelters for anyone asked to evacuate. Because the Proposed Project would not conflict with the Napa County Emergency Operations Plan and provides adequate access in the event of a wildfire; the impact is **less than significant.**

Mitigation Measures

None required.

3.8.5 Cumulative Impacts

The cumulative context for the analysis of potential hazardous materials impacts (including hazardous materials usage during construction, exposure to potentially contaminated soils) is generally site-specific, rather than cumulative in nature. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis would be required for all projects within the City. Therefore, these issues are not addressed in the cumulative impact analysis.

Hazardous materials incidents or accidents would also typically be site-specific and would involve accidental spills or inadvertent releases. The effects of such incidents, then, would not be additive to effects from other, similar incidents occurring elsewhere. Associated health and

safety risks generally would be limited to those individuals using the materials or to persons in the immediate vicinity of the materials. Therefore, these issues are not addressed in the cumulative impact analysis.

The cumulative context for the use, handling, storage, and transport of hazardous materials is buildout of the City. This geographic scope is selected because (1) cumulative hazardous effects generally require proximity, and (2) City personnel are the first responders to hazardous accidents within the vicinity of the Project site.

3.8-5: Would the Proposed Project contribute to a cumulative increase in the potential exposure of people to sites where soil contamination could be present from past or current uses, or to hazards associated with the use and transport of hazardous materials? The Project's contribution would be less than considerable.

The Proposed Project, in conjunction with other past, present, and reasonably foreseeable future development within the City, could entail development of a site where past uses could have resulted in soil contamination, the potential exists for release of hazardous substances during construction. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through dust either from soil remediation activities or from soil-disturbing activities during construction where previously unidentified contamination may exist. (Other potential pathways, such as direct contact with contaminated soils or groundwater would not pose as great a risk to the public because such exposure scenarios are site-specific and would typically be confined to the construction zones.)

The City's 1993 General Plan determined that the routine use and transport of hazardous materials, hazardous materials use near schools, emergency response, and wildfire hazards would be a potentially significant impact due to development on former agricultural, commercial, or industrial properties and potential exposure to contaminants from historic hazardous materials use and release (City of St. Helena 2010). However, the City's 2019 General Plan Draft EIR (City of St. Helena 2018) was reviewed and it concluded that the routine use and transport of hazardous materials, hazardous materials use near schools, emergency response, and wildfire hazards were less than significant based on the implementation of existing and applicable laws and regulations. Potentially significant impacts included the development on former agricultural, commercial, or industrial properties which may expose construction workers and future occupants or neighboring residents from historical hazardous materials and release; and new developments could affect groundwater or surface water resources through the use and disposal of hazardous materials. These potentially significant impacts identified within the General Plans would be less than significant through compliance with General Plan policies.

The Proposed Project, in combination with other development projects in the City, would not result in any cumulative significant effects. This assumption is based on the results of the Phase I ESA that stated impacts related to past use of pesticides on the Project site associated with former agricultural activities are minimal and do not necessitate any corrective action. However, although unlikely to be found in high concentrations, in order to further quantify any potential pesticide amounts, an on-site soil testing would be required. Therefore, it is extremely unlikely that any one individual outside of any particular project site construction zone would be exposed to maximum levels of construction-generated contaminated air emissions (if any) for the entire development period, even if controls were not in place.

Therefore, compliance with applicable hazardous materials management laws and regulations adopted at the federal, state, and local level would ensure the Proposed Project's contribution to cumulative impacts related to soil contamination related to Proposed Project construction effects would not be considerable and the Proposed Project would not contribute to a cumulative impact resulting in a **less-than-significant impact**.

Mitigation Measures

None required.

3.8.6 References

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3.9 HYDROLOGY AND WATER QUALITY

3.9.1 Introduction

This section evaluates the potential effects on hydrology and water quality associated with development of the proposed Hunter Subdivision Project (Proposed Project), including mitigation measures recommended to avoid or minimize significant impacts where feasible. The information provided describes the hydrology and water quality conditions of the Project site and surrounding area, as well as the applicable federal, state, and local regulations pertaining to protection of hydrology and water quality.

Comments received from the public in response to the Notice of Preparation included concerns about pesticide runoff impacts to the Napa River, flood hazards (e.g., Federal Emergency Management Agency [FEMA] zones and/or levee failure) and impacts to groundwater supplies. These issues are all addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information and analysis within this section is based on a review of site plans, City of St. Helena (City) planning documents, Napa County's Watershed Information & Conservation Council, as well as information from federal and state water resource agencies, including the FEMA, the U.S. Geological Survey, the California Department of Water Resources (DWR), the State Water Resources Control Board (SWRCB), and the San Francisco Regional Water Quality Control Board (RWQCB). In addition, this section is based in part on a groundwater basin analysis report for the Napa Valley Subbasin by Luhdorff & Scalmanni Consulting Engineers, a Hydrology Analysis for Hunter Subdivision, St. Helena, California, prepared for the Proposed Project by RSA Engineers and included as Appendix H, a Water Neutral Report included as Appendix J, and a peer-reviewed well capacity and sustainability analysis included as Appendix L.

3.9.2 Environmental Setting

This section describes the existing setting in the Project area and the built environment related to hydrology and water quality.

Regional Climate

Napa County has a Mediterranean climate with mild and relatively wet winters and dry warm summers. The average high temperature during the summer months (June through September) in Napa County ranges from 80ºF to 89ºF. Average low temperatures during the winter months (December through February) are 36ºF. The City has an annual rainfall of 34.61 inches (WRCC 2016). Snowfall in Napa County is common in some higher elevations, but the majority of precipitation falls as rainfall and any snow accumulation has a limited duration to a few days.

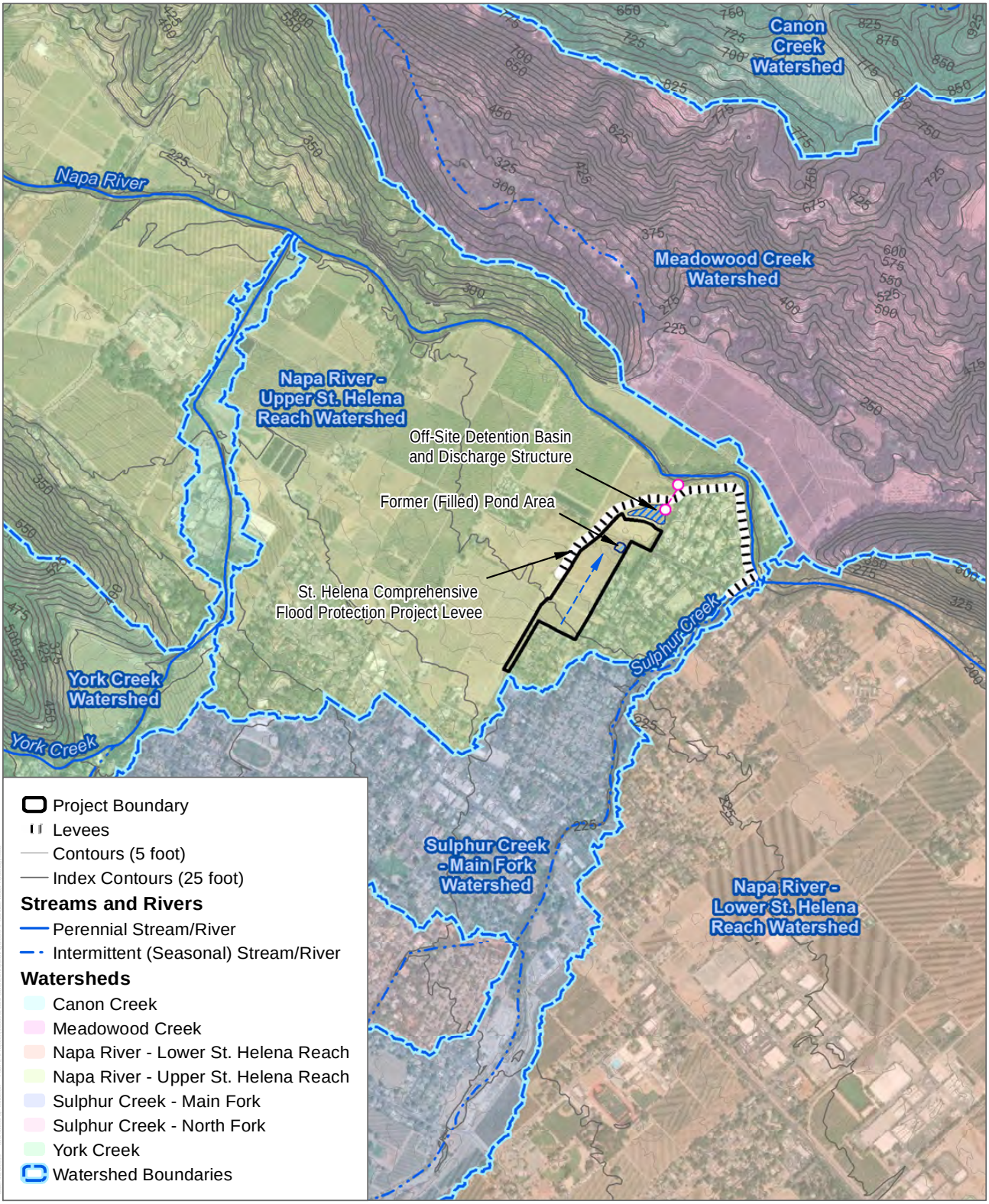
Watersheds and Hydrology

The Project site is located within the Napa River watershed. The watershed drains an area of approximately 426 square miles within Napa County and defines the western border of Napa County. The watershed's boundaries are marked by Mount St. Helena to the north (north of Calistoga); the Mayacamas Mountains to the west; Howell Mountain, Atlas Peak, and Mount George to the east; and the Napa-Sonoma Marsh to the south. The Napa River runs through the center of the watershed on the valley floor, draining numerous tributaries along a 55 mile stretch from the headwaters of Mt. St. Helena to the San Pablo Bay.

The northern edge of the Proposed Project site is located approximately 500 feet southwest of the Napa River, on a flat alluvial floodplain formed by the river and its tributaries. Important tributaries to the Napa River in the City include York Creek, which discharges into the Napa River approximately a one mile further upstream from the Project site, and Sulphur Creek, which discharges into the Napa River, approximately a quarter-mile further downstream. The County of Napa (County) has subdivided the Napa River watershed in numerous subwatersheds,[1] based on a high-resolution topography dataset completed in in 2002 (i.e., Light Detection and Ranging data processed by National Center for Airborne Laser mapping at UC Berkeley). These subwatersheds are shown in Figure 3.9-1, Surface Water Hydrology. The Proposed Project is located in the Napa River – Upper St. Helena Reach subwatershed, which is 1,985 acres in size and covers the portion of the Napa Valley floor northwest of the Pope Street bridge and south of the confluence of Canon Creek with the Napa River. Figure 3.9-1 also shows the Sulfur Creek and York Creek subwatersheds.

The Project site is relatively flat with a gentle slope towards its northwestern corner. As part of the City's Comprehensive Flood Protection Project (Flood Protection Project), described in more detail below), a levee was completed in 2011, just west and north of the Project site which separates the site and nearby residences from the Napa River (see Figure 3.9-1). Existing storm drainage infrastructure includes a detention basin on City-owned property adjacent to the northern boundary of the Project site, a bypass storm drain that routes stormwater collected in the City's conveyance system to a low-flow channel that discharges to the Napa River, and existing storm drains along Hunt Avenue and Del Rio Court. Based on existing topography shown on the Proposed Project's Tentative Map, drainage onsite occurs as sheet flow towards the north-northeast within the majority of the site, and to the northwest within the northern fifth of the site. Drainage is directed to a shallow swale at the northwestern corner of the site that connects to an offsite City detention basin.

[1] Napa County refers to the subdivision of the Napa Valley watershed as "basins." However, to avoid confusion with groundwater basins, these surface water basins are referred to herein as subwatersheds.



SOURCE: Bing Maps 2019, USGS 2019 (National Hydrography Dataset), City of St. Helena 2018

DUDEK

0 500 1,000 Feet

FIGURE 3.9-1

Surface Water Hydrology

Hunter Subdivision Project

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The detention basin, which is on the inboard or southeastern side of the levee, is drained by a levee culvert that is designed, under low- to moderate-flow conditions, to discharge stormwater by gravity flow into the Napa River. During high flood events, the water level in the Napa River will rise to an elevation that prevents storm water from draining the residential area by gravity alone. During high flood elevation, the levee culvert gate is closed, routing stormwater into the detention basin. As water fills the basin, the pump station is activated and water is pumped from the basin into the Napa River. The pump station is equipped with a back-up diesel generator in case electricity fails during a storm event. The levee culvert and discharge structure is shown in Figure 3.9-1.

Flood Hazards

The Project site is located adjacent to the southside of the Napa River and just upstream of the confluence of the Napa River and Sulphur Creek. Numerous damaging floods have been recorded since 1862 on the Napa River. The 15 most recent serious floods along the Napa River occurred in 1942, 1943, 1955, 1962, 1963, 1965, 1967, 1973, 1978, 1982, 1983, 1986, 1995, 1997, 1998 and 2005. Prior to 2019, the last four major floods to affect the City's reach of the Napa River occurred in 1986, 1995, 1997, and 2005, with peak discharges estimated to be 20,000 cubic feet per second (cfs), 21,000 cfs, 16,000 cfs, and 18,000 cfs, respectively (City of St. Helena 2012). None of the floods in recent memory have reached the threshold for a 100-year flood event (Napa County 2013). During the December 2005 event, flood waters entered the Project site and backed up against a low cinder block wall on the north side of the road along Del Rio Court (the wall is oriented east to west). The peak water level for the Napa River in the portion that passes through the City reached 21.61 feet in 2005 and is estimated to have been a 25- to 50-year flood event (USGS 2006). More recently in February 2019, a flood event occurred where flood waters rose to just under one-foot of predicted levels. Flood waters were able to be contained and handled with improved Flood Control Projects along the Napa River within the City of Napa and St. Helena (Napa Valley Register 2019). The 2019 flood event recorded a discharge of 9,570 cfs and a river depth of 19.5 feet on the Napa River at the St. Helena gauge located roughly 150 feet downstream of the Pope Street bridge crossing (Napa County FCWCD 2019).

FEMA Special Flood Hazard Areas

Flood zones identified on FEMA Flood Insurance Rate Maps (FIRMs) are identified as a Special Flood Hazard Areas (SFHAs) and "other areas of flood hazard." A SFHA is defined as the area that would be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual-chance flood is also referred to as the base flood or 100-year flood, and is the national standard used by all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. "Regulatory floodways" are areas

within the SFHA that include the channel of a river/watercourse and adjacent land areas and are expected to have the deepest and highest velocity flooding. In an unobstructed condition, the regulatory floodway can discharge a 100-year flood/base flood without any increase in water surface elevations. The area outside the floodway, but still within the 100-year floodplain can be obstructed without increasing the base flood elevation by more than 1 foot at any point. FEMA considers “other areas of flood hazard” as including areas with a 0.2% annual chance of flooding (i.e., the 500-year flood zone), and areas with reduced risk due to a levee. SFHAs are considered high risk flood areas, whereas other areas of flood hazard are considered low- to moderate-risk areas.

St. Helena Comprehensive Flood Protection Project

After passage of Measure A in 1998, the City and the Napa County Flood Control and Water Conservation District initiated a joint study of potential flood protection projects for the City and nearby County areas. After much study, hydraulic analysis, environmental review, project redesign based on funding constraints, and public input, the scope and design of the City’s Flood Protection Project was defined. The Flood Protection Project encompassed a one mile stretch of the Napa River from Adams Street to Pope Street. The goal of the project was to remove a large portion of the northeastern part of the City from the SFHA, and to enhance the hydrology of the river by returning the floodplain to a more natural state. The project included the following:

- A new levee and floodwall
- A floodwater storage area referred to as Terrace B
- Removal of 17 homes
- Rerouting of drainage along Starr Avenue into a new storm drain outside the new levee
- A design standard that provides flood protection from a 200-year event

This Flood Protection Project included the area north of the Project site. The project was designed and supervised by a private sector and public agency qualified engineers. These included the City, U.S. Army Corps of Engineers, several engineering consultants, the County, and FEMA.

In December 2005, the City began the permit application process to implement the Flood Protection Project. While the permitting work was underway, the City submitted a Conditional Letter of Map Revision application to FEMA. A Conditional Letter of Map Revision is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway and the effective SFHA. It indicates whether the project, if built as proposed, would be

recognized by FEMA. In a letter from FEMA, dated November 2007, it was determined that the submitted data of the project used to create a FIRM for the project area was sufficient and met the minimum floodplain management criteria (FEMA 2012).

Subsequently, construction on the Flood Protection Project started in May 2009. The major structural components of the Flood Protection Project were completed in April 2011; the main levee is shown in Figure 3.9-2, FEMA Flood Hazard Zones. In December 2011, the City submitted an application for a Letter of Map Revision (LOMR) from FEMA. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway or the SFHA. A LOMR officially revises the FIRM or Flood Boundary and Floodway Map, and sometimes the Flood Insurance Study report, and when appropriate, includes a description of the modifications. Once a complete LOMR application is submitted, FEMA has 90 days to review the application and issue the LOMR. FEMA completed its review of the LOMR and officially revised the FIRM to remove the Project site from being within the SFHA. The effective date of the revised FIRM is November 5, 2012 (FEMA 2012).

On-Site Flood Hazards

As shown in Figure 3.9-2 and for the reasons described above, the Project site is not within a SFHA, but is mapped as being in an area with reduced flood risk due to a levee (FEMA 2012). The base flood elevation for the Napa River in the vicinity of the Project site is 220 feet above mean seal level (amsl), whereas the top of the levee is at least 222 feet amsl. The levee transitions to a flood wall adjacent to the Vineyard Valley mobile home park to the south/southeast of the Project site that provides for the same level of protection. The base flood elevation in the vicinity of the stream gauge used for measuring the discharge and height of the Napa River, which is located downstream of the Pope Street bridge, is 216 feet amsl (FEMA 2012; Napa County FCWCD 2019).

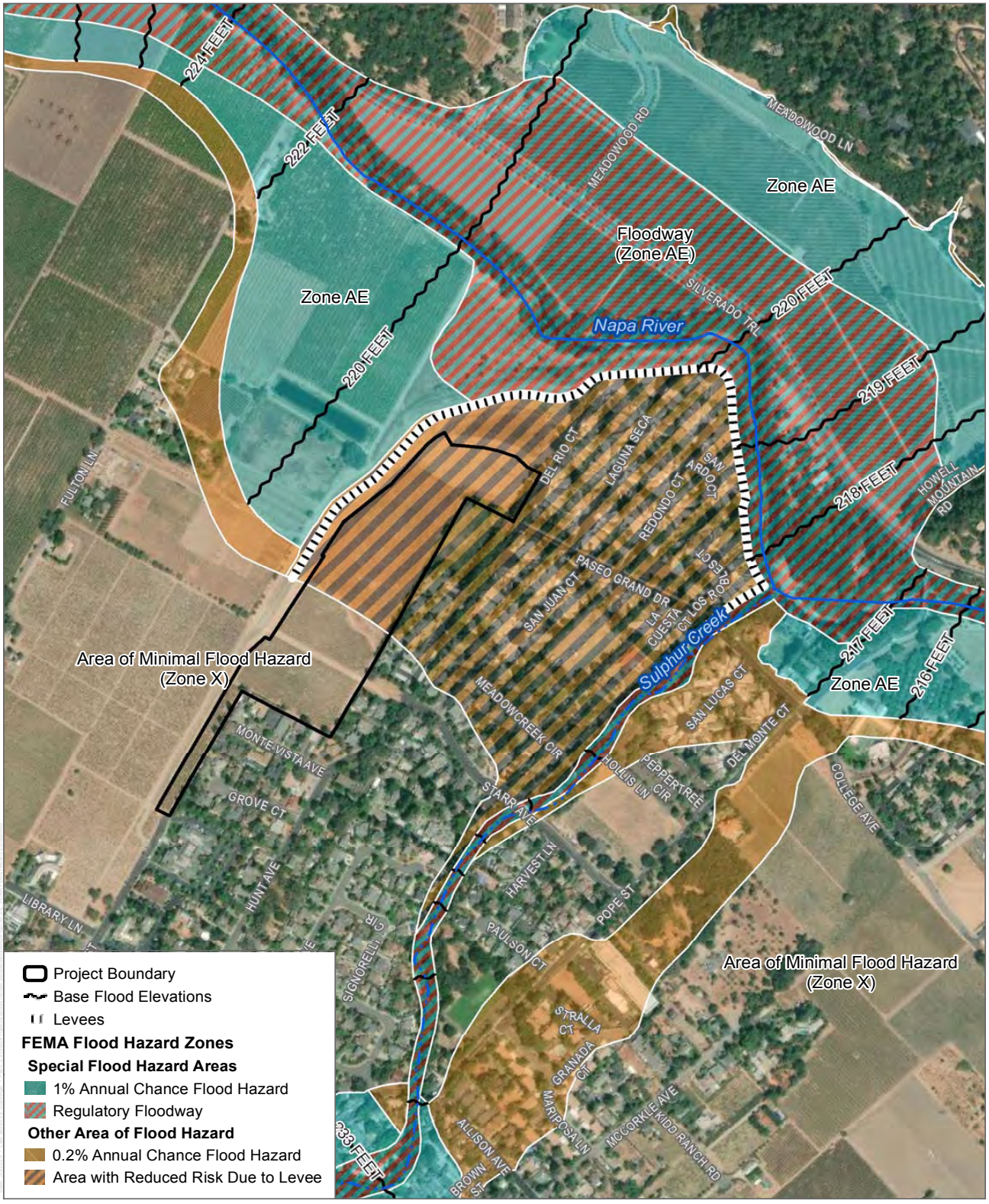
FEMA does not have a mapping category for a 200-year flood, but maps areas with a 0.2% annual chance of flooding (i.e., the 500-year flood zone) along with areas of reduced risk due to levee as “other areas of flood hazard.” By being within an area of reduced risk due to levee, the Project site is considered mapped within the 500-year flood zone (FEMA 2012). Based on the levee design, the Project site would be subject to a flood exceeding a 200-year recurrence interval, equivalent to less than a 0.5% annual chance. During such a flood, the style of flooding onsite would be slow and gradual, since the high velocity flows remain limited to the regulatory floodway. No portion of the Project site is located within the FEMA regulatory floodway. Since the FEMA FIRM has been officially revised through a LOMR, the Project site is not subject to any floodplain development restrictions (FEMA 2012).

Flooding Due to Levee Failure or 200-Year Flood Event

The Napa River is subject to significant floods, but the Project site is protected by a recently built levee that is designed to provide a 200-year level of flood protection. The Proposed Project does not include any element that exacerbates existing flood hazards for offsite properties or the general public (i.e., through floodplain encroachment that blocks or redirects flood flows, or by placing habitable structures in areas with a reasonable risk of flooding). Because the Project site is outside of a FEMA SFHA, no flood insurance would be required. However, because there remains residual risk of flooding from catastrophically large floods (such as a 500-year flood) or levee failures, residents in flood-prone areas, even if outside of a regulatory flood zone, have the option to purchase optional flood insurance (i.e., FEMA preferred risk policy).

When levees and floodwalls are used for flood protection, particularly when they protect land uses sensitive to flooding (e.g., residences), overtopping of the levee or floodwall is a source of public concern. The City's Flood Protection Project, specifically the levee and floodwall along the Napa River and Sulphur Creek, was constructed to provide protection from a 200-year flood event while maintaining an adequate amount of freeboard. The standard design level of protection is for the 100-year flood event; however, the 200-year design basis was implemented to provide an additional factor of safety and to account for potential settlement, changes in channel roughness, and potential channel aggradation. The elevated height of the levee and floodwall (i.e., a 200-year level of protection vs. a 100-year level of protection) along with the freeboard further reduces the potential for overtopping of the levee or floodwall during extreme flood events. The flood control system was also evaluated for stability during a seismic event and was found to be stable (Mead & Hunt, MBK Engineers, and Kleinfelder 2006).

The levee constructed as part of the Flood Protection Project was designed and constructed in accordance with all applicable U.S. Army Corps of Engineers Engineering Manuals and has been reviewed by FEMA. Geotechnical investigations and hydraulic analysis were performed to provide a basis for the design. The flood control facility design was prepared by the City's engineering team and stamped by the primary designer Mead & Hunt. Design considerations included the post- Proposed-Project channel hydraulics and stability. The flood control facilities are operated and maintained by the City in accordance with an operation and maintenance manual approved by FEMA, and in accordance with U.S. Army Corps of Engineers standards. This includes requirements for annual inspections and patrols during flood events. Specifically, levee maintenance consists of bi-annual (spring & fall) levee side mowing and levee embankment inspection prior to the rainy season, immediately following a high-water event, and at intervals not exceeding three months (City of St. Helena 2012). The purpose of the inspections are to verify that no unusual settlement or loss of material is occurring, that there are no areas of seepage or boils, that no animal burrows are encroaching upon the levee section, that toe drainage ditches are flowing properly, and that access roads are properly maintained and are graded to drain. Measure A, the local ½ cent flood protection sales tax, has established a fund dedicated to funding future maintenance.



SOURCE: Bing Maps 2019, FEMA 2012

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0 250 500 Feet

FIGURE 3.9-2

FEMA Flood Hazard Zones

Hunter Subdivision Project

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In addition, the same existing measures implemented to respond to flood emergencies within the region would continue to be used and would serve to provide residents with the means to avoid personal harm in the event of a catastrophic flood. This includes flood watches, advisories, and warnings from the National Weather Service, reporting by local news outlets, announcements and communications via Integrated Public Alert and Warning System, text alerts, and other means of communication that would be increasingly used in the event of a severe flood threat (Napa County 2013).

The Napa County Office of Emergency Services releases informational brochures and updates regarding flood preparedness throughout the year and prior to the rainy seasons. The County also has an application (NIXLE) for smartphones (android and apple) so residents within the County can download and receive emergency information during extreme weather events. The Napa Valley Regional Rainfall and Stream Monitoring System's website (https://napa.onerain.com/home.php) also has Napa County real-time rainfall and river-stream data available for the public to use during inclement weather. Updates are posted by the Napa County Flood Control and Water Conservation District through a serious of interactive web applications to show river and stream flow, and Napa River Flood Forecasts. During extreme weather, these applications and emergency resources, in addition to emergency broadcasts systems, are designed to give ample warning to residents and business owners of flood hazards and to help them prepare for evacuations.

When a flood hazard is imminent or occurring, the local police get involved in assisting with evacuations as necessary. Table 3.9-1 provides a reference for Napa River's flood stages along with the National Weather Service alerts that the National Weather Service field office releases to partner agencies and the press. The table is meant to illustrate the levels of warning received and the general types of alerts issued or actions taken. For reference, the 2019 flood approached, but did not exceed the moderate flood stage, and the 2005 flood approached, but did not exceed the major flood stage. Because every flood event is different, preparedness and response actions may differ, and are the responsibility of local, county and state offices of emergency management.

Table 3.9-1
Napa River Flood Stages at St. Helena (at Pope Street Bridge)

Flood Category	River Stage[1]	National Weather Service Alerts and/or County OES/Emergency Response Actions	Proposed Project Impact
Action / Monitor Stage	16 feet (207.71 feet amsl)	The Monterey field office of the National Weather Service may issue a Flood Watch-based products to cover Napa Valley regional flood potential at this stage. Advisory products released to the press.	None

Table 3.9-1
Napa River Flood Stages at St. Helena (at Pope Street Bridge)

Flood Category	River Stage[1]	National Weather Service Alerts and/or County OES/Emergency Response Actions	Proposed Project Impact
Minor	18 feet (209.71 feet amsl)	Minor flooding of low-lying agricultural areas along river begins. Low lying rural residential areas immediately adjacent to the river and some secondary roads affected. Voluntary evacuation orders are issued. Mandatory evacuations considered.	None
Moderate	20 feet (211.71 feet amsl)	Moderate flooding of the lower portions of Silverado Trail along the reach. Inundation of low-lying residential areas along the east river bank in the vicinity of Pope Street Bridge. Secondary and many primary roads inundated; most major cross roads inundated and unsafe to pass. Evacuation orders enforced and potentially expanded. Rescue operations initiated if necessary.	None
Major	22 feet (213.71 feet amsl)	Major flooding throughout the upper Napa Valley with many roads adjacent to Napa River inundated, making travel extremely difficult and unsafe. Evacuation, emergency response and rescue operations continue.	None
Catastrophic (100-Year Flood)	24.29 (216 feet amsl)	Places within FEMA SFHAs become inundated.	Residents advised/ordered to evacuate.
200+ Year Flood and/or levee failure	> 24.29 (218 feet amsl)	Evacuation, emergency response and rescue operations continue.	Property flood damage likely.

Sources: Napa County 2013, Napa County FCWCD 2019, NWS 2019.
Note: Elevation in feet (amsl)

The modern design and construction of the levee, along with the City's ongoing inspection and maintenance of the levee paid for through local sales taxes, substantially reduces its potential to fail in a 200-year flood or in the event of an earthquake. Furthermore, in highly unlikely catastrophic situations (< a 0.5% annual chance) where the levee may be overtopped or in a 200+ year flood event, Proposed Project residents would have ample warning to evacuate prior to flooding. Based on a comparison of the base flood elevation to proposed lot pad elevations, flooding of Proposed Project lots would range between 0 and 5 feet in depth, with the deepest flooding occurring on the northern part of the Project site. This level of flooding would leave upper floors or residences available for refuge. Because of this, the risks from a 200+ year flood and/or levee failure are limited to property damage rather than risk of life. As previously indicated, this would be an impact of the pre-existing environment on the Proposed Project rather than the Proposed Project's impact on the environment.

Finally, no portion of the Project site is located within an area that would be subject to flooding due to a dam failure. As shown in the St. Helena 2019 General Plan, Draft Environmental Impact Report (EIR), the northern portion of the Project site is mapped as being within the dam failure hazard zone for the Bell Canyon Dam (City of St. Helena 2018). However, the portion of this dam inundation

zone where the Project site is located is outdated. The dam inundation flood zone is less extensive than the former SFHA as it existed prior to completion of the Flood Protection Project. Therefore, the levee, which was designed to protect against a 200-year flood, would also protect the site against the threat of inundation from failure of the Bell Canyon Dam.

Sea Level Rise, Tsunami Inundation, and Seiche

The Project site is not subject to sea level rise, tsunami inundation and/or seiche wave. The preconditions necessary for a project to be at risk of such hazards is that it be located within a reasonable distance and elevation relative to a coastline (for sea level rise or seiche) or large body of water (for seiche waves). The Project site is located over 200 feet amsl in elevation and not next to a large water body subject to seiche.

Groundwater Resources

Groundwater Basin Status

The Project site is located within the Napa Valley Subbasin (DWR Basin No. 2-002.01, Subbasin) of the Napa-Sonoma Valley Groundwater Basin as designated by the State DWR (DWR 2019a). Napa County further subdivides the Subbasin into groundwater subareas. The Project site is located within the Napa Valley Floor St. Helena subarea (LSCE 2016). In accordance with eight components in the California Water Code Section 10933(b), DWR is required to prioritize[2] all of the groundwater basins across California in order to determine which provisions of the California Sustainable Groundwater Management Act (SGMA) apply to the basins. The latest phase of DWR's basin re-prioritization (completed in December 2019) the Napa Valley Subbasin was changed from a medium to a high priority ranking (DWR 2019a). The increase in priority designation for the Napa Valley Subbasin in 2019 was due primarily to revised projections of future population for the Subbasin, an increased assessment of the total number of wells, and a revised approach to evaluating water quality in the Subbasin compared to the previous prioritization analysis performed in 2014. The change from medium priority to high priority does not affect applicable SGMA requirements for the Napa Valley Subbasin.

An extensive analysis of the groundwater Subbasin associated with compliance with SGMA (discussed further below) examined basin conditions, established sustainability goals, and developed minimum thresholds and measurable objectives necessary to track progress towards those goals. One of the central components of SGMA is the definition of six groundwater sustainability indicators, that if found to be causing significant and unreasonable effects throughout the Subbasin, would indicate that the basin is not being managed sustainably. The

[2] DWR's priority rating is based on estimates of population density, anticipated growth, well density, the amount of irrigated agriculture, the degree to which water demands are met from wells (versus surface water), and the existence of documented impacts (e.g., overdraft) (DWR 2014).

sustainability indicators are (1) chronic lowering of groundwater levels, (2) reduction in groundwater storage, (3) seawater intrusion, (4) degraded water quality, (5) land subsidence, and (6) depletions of interconnected surface water.

Based on an extensive analysis of historical monitoring data on groundwater levels, groundwater in storage, groundwater quality, and interconnections between groundwater and surface water, there have been no basin-wide significant and unreasonable effects with regard to chronic lowering of groundwater levels, reduction in groundwater storage, seawater intrusion, degraded water quality, and land subsidence (LSCE 2016). The basin analysis report found that groundwater levels in the Napa Valley have been stable over the hydrologic base period (1988-2015), and the prior historical period where data are available, with recognition that groundwater levels in some areas have been lower during dry water year types (LSCE 2016). A sustainable yield analysis was conducted which established that the maximum amount of water that can be withdrawn annually from the Subbasin groundwater supply without causing an undesirable result ranges between 17,000 and 20,000 acre-feet per year (AFY) (LSCE 2016). From 1988 through 2018, the cumulative annual storage changes in the Napa Valley Subbasin were 4,388 acre-feet, reflecting a basin in balance and the absence of long-term depletions of groundwater storage within the Subbasin (LSCE 2021). The 2020 annual report updated the total amount in storage of the Napa Valley Subbasin to 196,651 acre-feet which is a decrease from the year prior due to a very dry year; however, the report concluded that the basin continues to be managed sustainably despite the most recent fluctuation (LSCE 2021).

Overall, the groundwater table in the alluvial aquifer of the Subbasin is quite shallow; groundwater elevations in the center of the valley fluctuate seasonally approximately 10 to 25 feet, and near the edge of the valley fluctuate approximately 25 to 35 feet (LCSE 2016). The basin analysis report found that the magnitude of the surface water components, particularly inflows from uplands runoff and surface water outflow as well as groundwater baseflow, demonstrate that large quantities of water move through the Subbasin in most years as compared to the amounts of water pumped from the Subbasin or flowing out of the Subbasin as subsurface outflow (LCSE 2016). As a result, sustainability indicators have been set to provide minimum thresholds and measurable objectives for a number of indicator wells throughout the basin with the purpose of maintaining existing conditions with regard to sustainability of the Subbasin. These groundwater level thresholds are also used as measures to provide protection of other undesirable results defined by SGMA.

Napa County releases annual reports that provide an update on basin conditions and makes recommendations necessary to continue to maintain and improve sustainable management. The most recent annual report finds that most of the groundwater levels in the wells measured have remained above minimum thresholds, however seven wells did record groundwater levels below their minimum thresholds including a well near the Project site (see discussion below).

However, these thresholds are monitored for evidence of chronic declines and not necessarily as an isolated exceedance, as the annual report still determined that the Subbasin has continued to be managed sustainably through 2020 (LSCE 2021).

Local Groundwater Uses and Users

The Project site contains an inactive groundwater well adjacent to proposed Lot 19 in the northern portion of the property identified as Parcel B (see Figure 2-4, Proposed Tentative Map, in Chapter 2, Project Description). This well may have been historically used to provide construction water for the earth moving activities associated with the City's Flood Protection Project and may have been used in the past for agricultural irrigation. The existing condition of the well is considered inactive; however, as it was not being used at the time the Notice of Preparation was released. The Phase I Environmental Site Assessment completed for the Proposed Project noted that the well was inoperable at the time of the site visit (Appendix G).

Table 3.9-2 shows well completion report records available for each township and range section that intersects the Project site, including information on the number and type of wells with records, and their average depth (and range of depths). The well types predominantly consist of domestic and irrigation supply wells but include several municipal/public supply wells. Table 3.9-2 shows that average well depths for domestic wells tend to be shallower than irrigation and municipal supply wells; this tendency exists because agricultural and especially municipal supply wells require higher yields. The locations of well completion reports are shown in Figure 3.9-3, Napa Valley Groundwater Subbasin, although many well records exist which have not yet been mapped by DWR, or only been mapped to the centroid of the township and range section within which the well is located. Furthermore, the existence of a well completion report does not indicate whether or not the well is currently active.

Based on review of the well completion report records, there are numerous domestic and irrigation wells located on the northeastern side of the Napa River, as well to the north and west of the Project site whose locations are not shown in Figure 3.9-3 (DWR 2019b). The primary municipal use of groundwater is for the City, which occurs from two wells on the south side of Stonebridge Park (Stonebridge Complex wells) completed at depths of 410 and 670 feet below ground surface (bgs) (Figure 3.9-3). As opposed to rural residential and agricultural uses, who draw from wells distributed throughout the Subbasin, the groundwater portion of the urban water demand for the City's whole water service area is drawn from the two City wells at the Stonebridge Complex.

Table 3.9-2
Well Completion Report Records on the Project Site and Vicinity

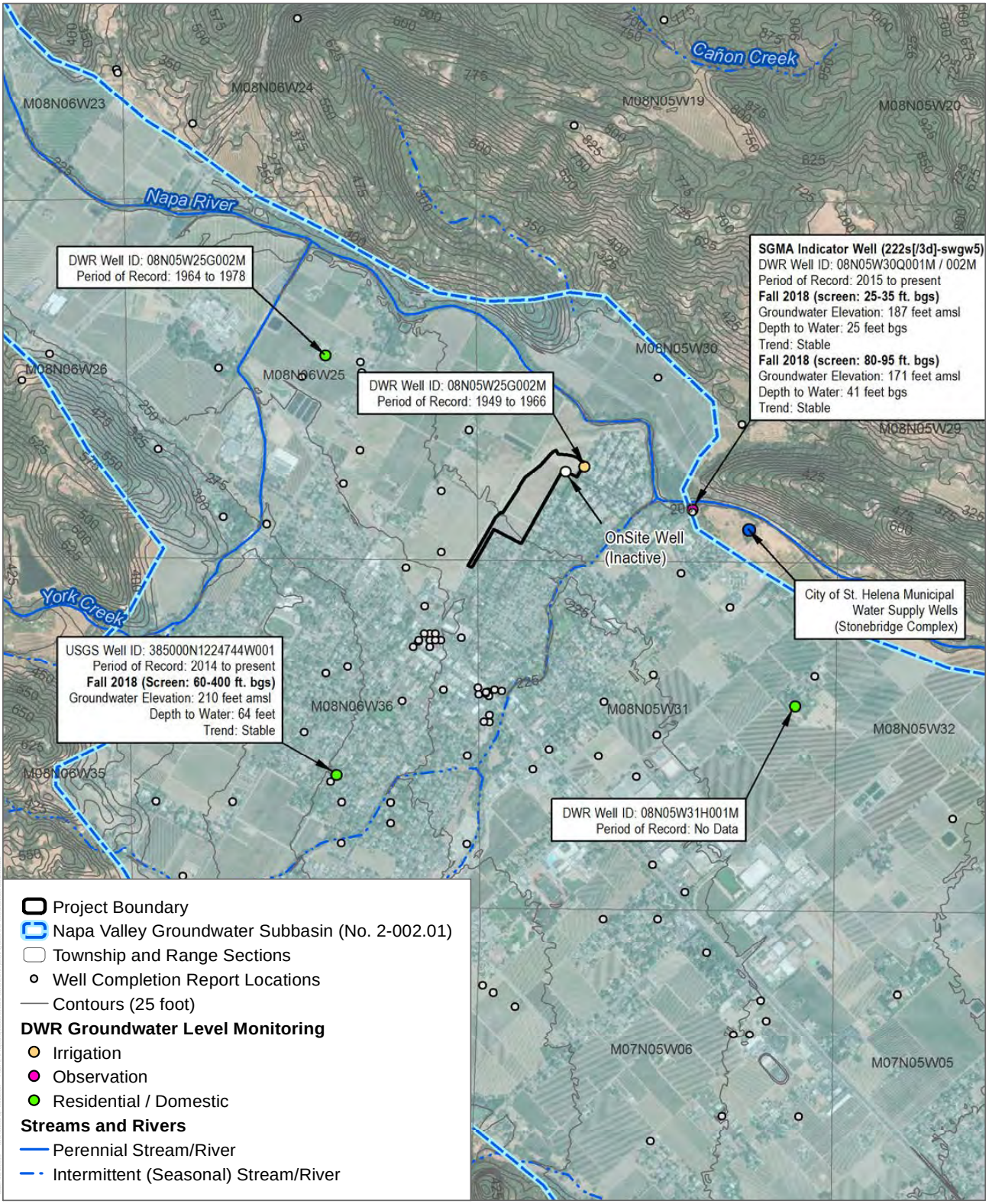
Township & Range Section	Domestic Well Count	Average Well Depth, in Feet (Range)	Production / Irrigation Well Count	Average Well Depth, in Feet (Range)	Municipal / Public Well Count	Average Well Depth, in Feet (Range)	Average Well Yield, in GPM (Range)[1]
T08NR06W25	19	280 (120 – 460)	18	390 (160 – 780)	2	670 (560 – 780)	96 (7- 500)
T08NR05W30	18	351 (100 – 860)	14	376 (247 – 580)	2	360 (285 – 435)	147 (8 – 1,000)
T08NR05W31	12	307 (165 – 450)	23	423 (195 – 820)	5	437 (232 – 600)	68 (10 – 250)
T08NR06W36	26	349 (120 – 780)	34	367 (55 – 610)	0	N/A	39 (2 – 250)

Source: DWR 2019a.
Notes: GPM = gallons per minute
[1] Well yields are only reported for a subset of well completion reports in the database, and all types of wells (i.e., domestic, agricultural and municipal wells). Actual yield depends on well construction details, well use/purpose, and pumping equipment installed at the time of well log submittal.

Local Groundwater Levels

DWR well completion reports and the DWR SGMA data viewer were reviewed for groundwater level information pertaining to the Project site and its vicinity (DWR 2019b-c). Groundwater level monitoring sites are shown in Figure 3.9-3, and includes two locations where groundwater levels are currently monitored, including a dual-completion monitoring well near the Pope Street crossing of the Napa River (Well ID 222s-swgw5 and 223d-swgw5), and a well on the southern side of the City (DWR 2021). Other monitoring sites have historical data or no data. The dual-completion monitoring well is one of the many representative monitoring sites throughout the Subbasin that are used to track compliance with minimum thresholds and measurable objective established under SGMA.

The Project site's proximity to the Napa River means that groundwater levels on-site are likely to be relatively shallow but may seasonally lower during the late summer and fall. Groundwater levels measured in the shallow screen of a dual-completion monitoring well (Napa River at Pope Street) have fluctuated between 18 and 25 feet bgs between 2015 and 2020 (shallow screen). The latest available groundwater level reading in Spring 2020 was 20 feet bgs (192 feet amsl) for the shallow screen and 24 feet bgs (188 feet amsl) for the deep screen (DWR 2021). However, the Fall 2020 groundwater level measurement was 61 feet bgs (156 feet amsl) which is below the threshold of 164 amsl. These groundwater levels reflect seasonal peaks and also indicate that 2020 was a very dry year, but generally the seasonal highs and lows have remained fairly stable throughout the well's period of record (2015 to 2020). Based on the groundwater contour maps prepared for the 2020 annual groundwater report, the direction of groundwater flow in the vicinity of the City is to the east and south, to varying degrees based on the time of year (LSCE 2021).



SOURCE: Bing Maps 2019, USGS 2019 (National Hydrography Dataset), DWR 2019

DUDEK 0 900 1,800 Feet

FIGURE 3.9-3

Napa Valley Groundwater Subbasin

Hunter Subdivision Project

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The Subbasin monitoring well may be within the pumping influence zone of the Stonebridge Complex wells, which supplies the entire City with up to 20% of its water demand in average years, and up to 30% in dry years (City of St. Helena 2018). Between 2006 and 2019, annual groundwater pumping at these two wells has averaged 350 AFY, ranging from a low of 182 acre-feet in 2012 to a high of 526 acre-feet in 2013 (LSCE 2016, 2020). As shown in Figure 3.9-3, the City's Stonebridge Complex is located approximately 0.5 miles southwest of the Proposed Project's on-site well, and approximately 600 feet from the Subbasin monitoring well.

Given the proximity and similar setting, groundwater levels are expected to be similar or possibly shallower beneath the Project site. According to the findings of the well capacity and sustainability report (Appendix L), the existing agricultural well on the site (proposed to be located in Parcel B on the tentative map) was constructed in 1976 to a depth of 410 feet bgs; with a yield of 350 gallons per minute (gpm). The screened portions of the well are from 80 feet bgs to the total depth of the well at 410 feet bgs. Groundwater was first encountered during drilling for the initial installation of the well at a depth of 24 feet bgs (Appendix L). At the time of the recent well capacity and sustainability test for the onsite well, the groundwater level was at 22 feet bgs. It is anticipated this well would be used to irrigate all on-site (public and private) landscape areas, which includes the existing vineyard in the panhandle portion of the site, lawns, and sidewalk planting strips.

Water Quality

Water quality in surface and groundwater bodies is regulated by the SWRCB and RWQCBs. The Project site is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (San Francisco RWQCB), which is responsible for the implementation of state and federal water quality protection statutes, regulations, and policies in the vicinity of the Project site. The San Francisco RWQCB implements the Water Quality Control Plan (Basin Plan), a master policy document for managing water quality in the region (San Francisco RWQCB 2017).

As previously mentioned, runoff from the Project site would be directed to the off-site detention basin adjacent to the Napa River. Therefore, under normal circumstances, runoff from the Proposed Project would either be lost to evaporation or percolate into the underlying groundwater table. Under extreme flood scenarios, surface water would be discharged to the Napa River once the capacity of the City's off-site detention basin is reached. Therefore, the receiving waters for the purpose of water quality consist of both groundwater and the Napa River.

Surface Water Quality

The water quality of the Napa River is highly variable and changes significantly depending on the specific reach of the river, the time of year, and the level of flow existing at any one time.

General water quality indicators (e.g., pH, DO, temperature, specific conductance) within the Napa River generally decline as flows recede in late summer, and reach seasonal lows just before the first rains of the season. On April 6, 2018, the U.S. Environmental Protection Agency (EPA) approved California's 2014–2016 List of Impaired Waters which replaces the previous 2012 California Clean Water Act (CWA) Section 303(d) List as California's current 303(d) List (SWRCB 2019). The Napa River is included on the CWA Section 303(d) list of water quality limited segments due to impairment[3] from nutrients, pathogens, and sedimentation/siltation, further discussed below under "Regulatory Setting" (SWRCB 2019).

Total Maximum Daily Load (TMDL)[4] allocations have been developed for sediment and pathogens, but development of a TMDL for nutrients is in progress. The sediment and pathogen TMDLs has been completed by the San Francisco RWQCB and the TMDLs have been incorporated into the Basin Plan as an amendment (San Francisco Bay RWQCB 2017). The Basin Plan amendment includes water quality targets for pathogen indicators Escherichia coli (E. coli), fecal coliform, and total coliform, as well as density-based (load) limits for these pathogen indicators. The most common sources of pathogens are wastes from warm-blooded animals, including humans, livestock, domestic pets, and wildlife. Different types of land use have different run-off concentrations of nutrients, organic matter, and bacteria. Predominant land uses include agriculture, residential, commercial, industrial, mixed (variety of land uses), transportation, open space, forest, and wetlands; the loadings from agricultural activity are likely the most dominant. The Basin Plan amendment also includes waste load allocations for individual municipal dischargers including on-site sewage disposal systems, sanitary sewer systems, municipal stormwater runoff, grazing lands, and confined animal feeding operations (San Francisco Bay RWQCB 2017).

The San Francisco RWQCB also adopted a Basin Plan amendment incorporating a TMDL for sediment and a Habitat Enhancement Plan for the Napa River. The amendment includes numeric targets for spawning gravel permeability and streambed scour. The TMDL also includes load allocations (for non-point sources) for land areas upstream and downstream of dams, in addition to waste load allocations for urban runoff and wastewater discharges. This Basin Plan amendment was approved in November 2009. The Basin Plan finds that more than half of the sediment loads in the Napa River are from human processes, which include road construction, surface erosion from agricultural lands, and the hydromodification impacts of urban stormwater runoff (San Francisco Bay RWQCB 2017).

[3] Being impaired (also known as "water quality-limited") means that a water body is "not reasonably expected to attain or maintain water quality standards" without additional regulation.

[4] A TMDL specifies the maximum amount of a pollutant a water body can receive and still meet water quality standards.

In addition to the above, the City is subject to the TMDL for diazinon and pesticide-related toxicity applicable to all San Francisco Bay Area urban creeks, which was incorporated as a Basin Plan amendment in 2005 (San Francisco Bay RWQCB 2017). The TMDL imposes toxicity targets for urban creek water and sediment, and a diazinon concentration target for urban creeks. TMDL targets shall be achieved through regulatory programs, education and outreach, and research and monitoring. The TMDL attainment strategy will primarily focus on integrated pest management and the use of less toxic pest control methods. The EPA phased out urban diazinon applications at the end of 2004; however, replacements for diazinon (such as pyrethroids) may now pose potential water quality and sediment concerns.

The adopted TMDLs discussed above contain water quality standards in the form of waste load allocations that quantify the amount of pollutants that may be discharged into an impaired water body from various contributing sources, in addition to water quality objectives for receiving waters. This includes water quality standards for urban runoff (and wastewater discharges) with which the City must comply. One strategy used by local urban runoff management programs to move toward achieving TMDL standards is to identify the sources of TMDL pollutants in urban runoff and then to implement control measure programs for these pollutants.

In the urban parts of the City, potential contaminants of concern could include motor oil and other contaminants from vehicle parking on streets and driveways, as well as pesticides and fertilizers from vineyards and residential landscaping. Stormwater from the Project vicinity that does not percolate into the ground is collected within the City's storm drainage system and ultimately discharged into the Napa River. There are records of the use of agricultural pesticides at the Project site that have been applied to the vineyard. Records obtained from the Napa County Agricultural Commissioner's Office include the use of herbicides, fungicides and miticides (Appendix G). According to the aerial photograph review in Appendix G, the property was the site of an orchard in the 1940s which was removed by 1968. By 1973, vineyard cultivation appears in the southwest part of the site. When used properly in accordance to product labels, pesticides degrade with time and repeated irrigation and are minimally applied only where necessary. Nevertheless, the potential exists for residual contaminants within surface soils to become suspended and carried in stormwater runoff, and those contaminants can affect receiving waters and areas downstream.

Groundwater Quality

The Basin Plan establishes beneficial water uses for groundwater basins within the region. The Napa Valley groundwater subbasin underlies the Project site and is listed in the Basin Plan as providing the beneficial uses of municipal and domestic water supply (MUN), industrial process water supply, industrial service water supply (IND), and agricultural water supply (AG).

Groundwater quality throughout most of the Napa Valley region is generally suitable for most urban and agricultural uses, with only local impairments occurring. The primary constituents of concern are total dissolved solids, nitrate, boron, and organic compounds. The City's groundwater source (Stonebridge Complex wells) is treated to remove iron and manganese and are chlorinated prior to entering the City's distribution system.

The SGMA Basin Analysis Report completed by Napa County provides the following summary of groundwater quality conditions occurring throughout the Subbasin (LSCE 2016):

> Groundwater quality records from representative monitoring sites provide information on important constituents whose concentrations influence the quality of water for irrigation and human consumption. Despite a typical lack of historical groundwater quality records in Napa County, available data suggest that groundwater is generally of good quality throughout most subareas. Poor groundwater quality does, however, exist in the south and the north-central parts of the County. The poor groundwater quality includes concentrations of naturally occurring metals such as arsenic, iron, and manganese that exceed drinking water standards throughout the county. Naturally occurring elevated levels of boron are also prevalent in most subareas. Subareas south of the Napa Valley Floor, such as the Carneros and Napa River Marshes, have poor quality water due to naturally elevated levels of salinity and chloride. The Calistoga Subarea of the Napa Valley Floor also has poor quality water in many wells due to hydrothermal conditions resulting in higher concentrations of metals. Nitrate concentrations are not a concern throughout the county, but tend to be somewhat higher in agricultural areas in the Napa Valley Floor.

Water quality standard exceedances in the Subbasin were limited to the naturally occurring constituent arsenic, with 4 of 26 sites showing maximum concentrations above the arsenic maximum contaminant level of 10 µg/L, including one site within the St. Helena subarea (LSCE 2016). The groundwater quality testing attached to the Proposed Project's on-site well completion report indicated elevated levels of iron and manganese (DWR 1992). The City's two active groundwater wells are treated to maintain Title 22 standards, including chlorination prior to entering the City's distribution system (City of St. Helena 2018). Potable water supply is discussed in more detail in Section 3.13, Utilities and Service Systems.

3.9.3 Regulatory Setting

The regulatory framework related to hydrology and water quality is extensive, because it addresses issues related to the environment (i.e., maintaining high quality waters for water-dependent species and activities), public health (e.g., ensuring adequate drinking water quality),

and public safety (e.g., avoiding flood damage). Impacts pertaining to provision of potable and non-potable water supplies, including applicable regulations, are addressed in Section 3.13, Utilities and Service Systems.

Federal Regulations

Clean Water Act

The CWA (33 USC 1251 et seq.), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Important sections of the act are as follows:

- CWA Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. California is required to establish TMDLs for each pollutant/stressor. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The impairments applicable to the Proposed Project's receiving waters are described in Section 3.9.2 (Water Quality).
- CWA Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity which may result in a discharge to waters of the United States, to obtain certification from the state that the discharge will comply with other provisions of the act. The Project site does contain potentially jurisdictional wetlands, and this issue is addressed in Section 3.4 (Biological Resources).
- CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and the nine RWQCBs, who have several programs that implement individual and general permits related to construction activities, stormwater runoff quality, and various kinds of non-stormwater discharges. The City operated under the Small Municipal Separate Storm Sewer (MS4) Permit from the SWRCB and all projects in the City are required to comply with the MS4 Permit requirement that address stormwater runoff discharges to a water of the United States (i.e., the Napa River and the northern San Francisco Bay).
- CWA Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers and the EPA. The Project site does contain potentially jurisdictional wetlands, as addressed in Section 3.4 (Biological Resources).

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes the EPA, the U.S. Army Corps of Engineers, the Bureau of Reclamation, and the major federal land management agencies such as the U.S. Forest Service and the Bureau of Land Management. At the state level, with the exception of tribal lands, the California EPA and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the CWA in California.

Federal Antidegradation Policy

The federal antidegradation policy is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The National Flood Insurance Act also required the identification of all floodplain areas within the United States, and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing FIRMs that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

State Regulations

Porter-Cologne Water Quality Control Act

The Porter–Cologne Act (codified in the California Water Code, Section 13000 et seq.) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state, which includes isolated wetlands and groundwater in addition to federal waters. It is implemented by the SWRCB and

the nine RWQCBs. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state[5] could cause pollution or nuisance, including impacts to public health and the environment.

The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260 subdivision (a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system that could affect the quality of the waters of the state, to file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same best management practices (BMPs) and pollution control technologies as required by NPDES-derived permits.

Water Quality Control Plan for the San Francisco Bay Basin

The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement Basin Plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The San Francisco Bay RWQCB is responsible for the protection of the beneficial uses of waters draining to the San Francisco Bay, including the Project site. The Water Quality Control Plan for the San Francisco Bay Basin (Region 2) (Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code Sections 13240–13247) (San Francisco Bay RWQCB 2017).

General NPDES Permits and WDRs

To enable efficient permitting under both the CWA and the Porter–Cologne Act, the SWRCB and the RWQCBs run permit programs that group similar types of activities that have similar threats to water quality. These "general permit" programs include the Phase II Small MS4 Permit, the construction general permit, the industrial general permit and other general permits for low-threat discharges. The construction stormwater program, the small MS4 permit program,

[5] "Waters of the state" are defined in the Porter–Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050(e)).

and the general permit for low-threat discharges are administered by the SWRCB, while other general WDRs are administered by the San Francisco Bay RWQCB. Table 3.9-3 lists the water-quality-related permits that would apply to the Proposed Project, each of which is further described below. General WDRs and/or NPDES permits contain effluent limitations that may be stricter than basin-wide water quality objectives, because they regulate specific categories of discharge and are designed to limit the cumulative effects of development over broad areas.

Table 3.9-3
State and Regional Water Quality-Related Permits and Approvals

Program/Activity	Order Number/ NPDES Number	Permit Name	Affected Area
Construction stormwater program	2009-0009-DWQ/ CAS000002, as amended	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)	Statewide
Phase II Small MS4 Program	SWRCB Water Quality Order 2013-0001-DWQ/ CAS000004, as amended	Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (Small MS4 Permit)	All Regulated Small MS4 systems; New Development and Redevelopment Projects within the City of St. Helena.
Temporary/low volume dewatering[1]	SWRCB Water Quality Order 2003-0003-DWQ	Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality	Statewide

Notes: NPDES = National Pollutant Discharge Elimination System; MS4 = municipal separate storm sewer system; WDR = Waste Discharge Requirement
[1] If any dewatering is required.
Source: Appendix H.

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended)

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include and specify water quality BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB. The Proposed

Project applicant must submit a Notice of Intent to the SWRCB to be covered by a NPDES permit and prepare the SWPPP prior to the beginning of construction.

Various levels of soil disturbances associated with Proposed Project construction are anticipated to occur over the majority of the Project site, which is about 17 acres; therefore, the Proposed Project would require coverage under the Construction General Permit.

Phase II Small Municipal Separate Storm Sewer System Permit (SWRCB Order 2013-0001-DWQ, as amended)

As part of Phase II, the SWRCB adopted a statewide General Permit for the Discharge of Storm Water from Small MS4s (Water Quality Order No. 2013-0001-DWQ, General Permit No. CAS000004) (Small MS4 Permit) to provide permit coverage for smaller municipalities, including non-traditional small MS4s such as military bases, public campuses, and prison and hospital complexes. The Small MS4 Permit requires development and redevelopment projects to adhere to the Small MS4 Permit and follow published guidance for compliance.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) is a package of three bills (Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319) that provides local agencies with a framework for managing groundwater basins in a sustainable manner. The SGMA establishes standards for sustainable groundwater management, roles and responsibilities for local agencies that manage groundwater resources, and priorities and timelines to achieve sustainable groundwater management within 20 years of adoption of a Groundwater Sustainability Plan (GSP). Central to the SGMA are the identification of critically over-drafted basins and the prioritization of groundwater basins, establishment of Groundwater Sustainability Agencies (GSAs), and preparation and implementation of GSPs for medium priority, high priority and critically overdrafted basins. GSAs must be formed by June 30, 2017. GSPs must consider all beneficial uses and users of groundwater in the basin, as well as include measurable objectives and interim milestones that ensure basin sustainability. A basin may be managed by a single GSP or multiple coordinated GSPs.

At the state level, DWR has the primary role in the implementation, administration, and oversight of the SGMA, with the SWRCB stepping in should a local agency be found to not be managing groundwater in a sustainable manner. DWR recently approved regulations and guidelines for implementation of the SGMA. Under SGMA, Section 10733.6, a local entity (or entities) can pursue an alternative to a GSP provided that certain sustainability objectives are met. An alternative to a GSP may include “[a]n analysis of basin conditions that demonstrates that the basin has operated within its sustainable yield over a period of at least 10 years” (Section 10733.6(b)(3)). In response to SGMA, Napa County prepared a Basin Analysis Report

for the Napa Valley Subbasin, per the requirements of Water Code Section 10733.6 (b)(3). While the Basin Analysis Report analyzes areas outside the Subbasin to determine how those areas affect recharge and runoff in the Subbasin, the areas outside the Subbasin are not subject to SGMA. The Basin Analysis Report (LSCE 2016c) was submitted to DWR on December 16, 2016 in compliance with SGMA. On November 13, 2019, DWR issued a final determination to not approve the Basin Analysis Report.

Basins in which the submitted alternative was not approved by the DWR must comply with the same planning deadlines applicable to other high- and medium-priority basins under SGMA. GSAs in these basins must submit a GSP by January 31, 2022. Following DWR's decision to not approve the Basin Analysis Report, the Napa County Board of Supervisors acted on December 17, 2019 to become a GSA for the Napa Valley Subbasin and declare their intent to develop a GSP for the Subbasin by January 31, 2022.

Local Regulations

City of St. Helena 1993 General Plan

The City's 1993 General Plan Public Health and Safety Element and Public Facilities Element has the following guiding policies that apply to flood hazards and storm drainage/flooding.

Flood Hazards

Policy 8.6.1: Prohibit the introduction of intensive urban development into designated Flood Hazard Areas.

Policy 8.6.3: Prohibit the construction of structures or flood barriers which would unnaturally divert flood waters or would increase flood hazards in other areas.

Policy 8.6.4: Require a grading permit for any filling, grading, or dredging that may increase potential for flood damage.

Policy 8.6.7: Encourage the use of Flood Hazard Areas within new development areas for open space and recreation uses, including parks and greenbelts.

Policy 8.6.8: Ensure that any new development that is allowed within the floodplain is constructed so that the lowest floor elevation is at least one foot above the l00-year flood level.

Storm Drainage/Flooding

Policy 9.4.1: New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.

Policy 9.4.2: If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.

Policy 9.4.3: Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

Policy 9.4.4: Grading and earth filling within the designated l00-year floodway should not be permitted except for public streets or bridges.

Policy 9.4.5: Encroachments into the 100-year floodway should not result in any increase in flood levels during the occurrence of the base flood discharge.

Policy 9.4.6: Standards for subdivisions should include the following:

a. All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.
b. All final subdivision plans will provide the elevation of proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by a registered civil engineer or surveyor and provided to the floodplain administrator.
c. All subdivision proposals shall be consistent with the need to minimize flood damage.
d. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
e. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The City's 2019 General Plan Public Health and Safety Element and Public Facilities Element has the following guiding policies that apply to flood hazards and storm drainage/flooding.

Flood Hazards/Drainage

Policy PS5.1: Minimize the risk to people, property and the environment caused by flooding hazards. Site new development to minimize potential damage from a 100-year flood.

Continue to require that any new development is constructed FEMA standards. Prohibit the siting of uses within Flood Hazard Areas inconsistent with FEMA standards that could result in health and safety hazards, including those due to the release of chemicals or other substances as a result of inundation or erosion. Ensure that any new flood protection projects comply with federal and State standards.

Policy PS5.6: Coordinate with the Napa County Flood Control and Water Conservation District and other responsible agencies to maintain protocols and funding for the regular inspection and maintenance of flood control facilities in the city, including levees, floodwalls, floodplain terracing, stormwater detention ponds, and pumping facilities.

Policy PF3.1: Ensure that new developments provide adequate drainage improvements and detention to mitigate flooding from increased stormwater runoff attributable to the development.

Policy PF3.C: Consistent with Municipal Code Section 16.32.170, continue to prohibit the creation of new residential lots that will be subject to periodic inundation from floodwaters. New development proposals on existing lots of record must identify flood hazard areas and mitigate all impacts to base flood levels and potential flood damage from grading filling and construction through proper drainage, construction, and location of utilities, in accordance with FEMA requirements.

Policy PF3.E: At the time of development review, require that post-project runoff be limited to pre-project peak flow rates for the five-year and ten-year storms as a condition of approval (See also Climate Change Element, Topic Area 4).

Groundwater

Policy PF1.D: The City of St. Helena should not draw or sell any groundwater beyond that currently allowed until a safe yield of the groundwater system has been identified through a study of the North Main Basin Aquifer by a qualified hydro geologist.

Policy PF1.E: Permit no new development relying on groundwater unless and until it is determined that the incremental production of ground water to support the development will not adversely impact the water production capability of the aquifer supporting the City wells.

Policy PF1.F Track the drilling of new private wells in and around St. Helena and, if so recommended by the qualified hydrologist hired by the City's water system, request that the County impose a moratorium on new well drilling if needed to protect the production capability of the City wells.

St. Helena Municipal Code

The City's Municipal Code, "Public Services," includes Chapter 13.32, which contains the City's Stormwater and Runoff Pollution Control Ordinance. This ordinance empowers the City's Public Works Department to enforce stormwater pollution regulations, including:

- Prohibiting illicit discharges to the stormwater conveyance system;
- Establishing minimum requirements for stormwater management, including source control requirements, to prevent and reduce pollution;
- Establishing requirements for development project site design to reduce stormwater pollution and erosion;
- Establishing requirements for the management of stormwater flows from development projects, both to prevent erosion and to protect and enhance existing water-dependent habitats; and
- Establishing standards for the use of off-site facilities for stormwater management to supplement on-site practices at new development sites.

Title 15, Buildings and Construction, includes Chapter 15.52, Flood Damage Protection. This chapter contains the City's flood damage control provisions. It includes standards for permitting and construction within established flood hazard zones, and gives the City Engineer the authority to administer, implement, and enforce floodplain management regulations through the review and approval of development applications. Chapter 15.52 specifies that all "new construction and substantial improvement of any residential structure shall have the lowest floor, including basement in AE, AH and Al -A30 Zones, elevated to 18 inches above the base flood elevation."

Title 16, "Subdivisions," includes Chapter 16.32, Design Standards and Improvements includes Section 16.32.070, Drainage, which requires stormwater runoff from subdivisions to be collected and conveyed by an approved storm drainage system. The storm drainage system shall be designed by a registered civil engineer for ultimate development of the watershed and shall be capable of collecting and conveying runoff generated by the ten-year flood. The system shall provide for the protection of abutting and off-site properties that may be adversely affected by any increase in runoff attributed to the development; off-site storm drain improvements may be required to satisfy this requirement. In addition, retention ponds, drainage swales and/or check dams may be required to reduce off-site peak storm flow generated by projects to the historic flow.

Title 17, Zoning, includes Section 17.88.030, Subdivisions, which requires that all subdivision proposals and other proposed new developments be reviewed by the City engineer to assure that (1) all such proposals are consistent with the need to minimize flood damage; (2) all public utilities and facilities, such as sewer, gas, electrical and water systems are located, elevated,

and constructed to minimize or eliminate flood damage; and (3) adequate drainage is provided so as to reduce exposure to flood hazards.

Section 17.88.050, FEMA Requirement, which requires that new construction or replacement of existing construction be in conformance with the standards and regulations of the FEMA.

City Stormwater Management Standards

The City has developed stormwater management standards that apply to discretionary and ministerial projects submitting an application for a use permit, building permit, and/or grading permit. The standards include both a construction and post-construction phase review and permitting process implemented by the City's Public Works Department. If a project is subject to construction-phase requirements, the applicant must prepare an Erosion Control Plan for sites of less than 1 acre and a SWPPP for sites of 1 acre or more. The plans must depict BMPs that will be implemented during construction to eliminate or minimize the discharge of pollutants.

The City's Public Works Department conducts site inspections to evaluate the effectiveness of the construction-phase BMPs using the following performance standards:

- No measurable increase of pollution (including but not limited to sediment, concrete and stucco, automotive fluids, hazardous materials, and pathogens) in runoff from the site;
- No slope erosion; and
- Water velocity moving off-site must not be greater than pre-construction levels.

If a project is subject to post-construction requirements, the applicant must submit a Stormwater Control Plan to the Public Works Department. The Stormwater Control Plan must demonstrate compliance with the Bay Area Stormwater Management Agencies Association Post-Construction Manual. This Stormwater Control Plan must illustrate how the project is implementing low-impact development principles and providing for long-term BMP maintenance.

3.9.4 Impacts

Methods of Analysis

Impacts with respect to hydrology and water quality are assessed by comparing conditions expected to occur associated with development of the site relative to the existing environmental setting described above. Post-Proposed-Project hydrology is assessed using the hydrology report prepared for the Proposed Project by the applicant's consultant, included as Appendix H, as well as preliminary Proposed Project plans (e.g., grading plan, erosion control notes, and utility plan) and a review of the Proposed Project's water demand and compliance with the City's water neutrality ordinance (Appendix J, Water Neutral Report). In addition, a well capacity and

sustainability assessment was performed on the agricultural well at the Project site which included a 24-hour well pump test consistent with industry standards. The findings of the well capacity and sustainability assessment were independently reviewed by an independent California Licensed Engineering Geologist, whose peer review was documented in a letter report dated September 9, 2021 (Appendix L). In this case, the only discretionary approvals the Proposed Project applicant is requesting at this time is approval of a Tentative Subdivision Map. Future approvals, including Design Review and a Use Permit required to construct attached multifamily units, would be required prior to any development of the site.

The analysis considers impacts on hydrology, water quality, flooding and groundwater resources in the context of broader issues and concerns affecting the region. The study area for surface water hydrology is the Napa River - Upper St. Helena Reach subwatershed, which is part of the large Napa River watershed, and the study area for groundwater resources is the Napa Valley Groundwater Subbasin. Actions required to implement the City's general plan policies related to hydrology and water quality, as enforced through the Municipal Code and the development approval process, are considered as components of the Proposed Project in the evaluation of impacts.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create of contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - Impede or redirect flood flows.

- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain elements of the significance criteria above are not applicable and therefore, are not considered potential impacts. These criteria elements are addressed briefly below and are not discussed further in this document.

Alteration of a Stream or River

The Proposed Project would not alter the course of a stream or river because none are encompassed by the Proposed Project boundary. The Proposed Project would not substantially alter the general pattern and/or direction of stormwater runoff because it does not propose substantial modifications to topography (the site is and would remain nearly level), and because runoff would continue to be directed to the north and northeast. Storm runoff from the site would be collected by a series of catch basins in the streets and conveyed to the City's off-site detention basin through underground storm drain lines. Therefore, Impact 3.9-3 (below) addresses the potential for alteration of existing drainage patterns through the increases in the rate or volume of runoff from impervious surfaces, but not through modification of the course of a stream or river. This issue (third significance threshold listed above) is not further addressed.

Tsunami or Seiche

Furthermore, the preconditions necessary for a project to be at risk of hazards due to a tsunami, or seiche require a reasonable distance and elevation relative to a coastline (for sea level rise or seiche) or large body of water (for seiche waves). The Project site is located over 200 feet amsl in elevation and is not next to a large water body subject to seiche. Therefore, there be no impact (or risk) associated with a tsunami or seiche and this issue (fourth significance threshold listed above) is not further addressed.

Impacts and Mitigation Measures

3.9-1: Would the Proposed Project violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality? This impact would be less than significant.

Construction

Development of the Project site would involve up to 16.9 acres of soil disturbance over the course of Proposed Project construction. During this time, the most intensive soil disturbance would occur during site preparation and earthmoving activities associated with grading, installation of underground utilities, foundation and building pad construction, and road and streetscape construction. During this period, soil erosion may result in discharges of sediment-laden stormwater runoff into nearby receiving waters. As discussed in the setting (and shown in Figure 3.9-1), the Project site drains to an existing City-owned detention basin that was constructed as part of the City's Flood Protection Project. Therefore, during construction, the detention basin would be the most immediate storm runoff destination during construction. However, the detention basin has a low-flow outlet, meaning that runoff from the construction site could eventually enter the Napa River.

The primary potential pollutant associated with construction activity is sediment (i.e., high turbidity) generated from site preparation and grading activities. Since the Napa River is listed under CWQ Section 303(d) as impaired for sedimentation/siltation, it has an increased sensitivity to impacts associated with turbid runoff. In addition to sediment, other pollutants associated with construction activity could include heavy metals, oil/grease, fuels, trash and other pollutants from accidental spills or releases of refuse, paints, solvents, sanitary wastes, and concrete curing compounds. Furthermore, as a portion of the site has been historically used as a vineyard and before that an orchard, there is the possibility that soils could contain residual agricultural pesticides or elevated nutrient levels. However, the potential for residual pesticides to remain on-site is low because pesticides are required to demonstrate a lack of persistence in the environment considerably beyond their intended period of use in order to obtain EPA approval. Furthermore, when pesticides are used properly and in accordance with label specifications, potential impacts on the surrounding environment and receiving waters (surface water and groundwater) are minimized. Historically, pesticides degrade with time as repeated rainy seasons flush soils and further dilute residual concentrations. When compared to agricultural land uses, which can include occasional ripping, plowing, and replanting and use of unpaved roads, which continuously leave bare soils exposed to storm runoff, residential land uses have a lower impact with regard to dispersion of fertilizers and/or pesticides into the environment.

Without adequate precautions, construction activities could generate pollutants and/or mobilize sediment such that it contributes to water quality degradation of receiving waters and/or violates Basin Plan objectives. However, compliance with the Construction General Permit and the City's Stormwater and Runoff Pollution Control Ordinance (Chapter 13.32) would require implementation of a SWPPP to address potential construction-related impacts on water quality. The SWPPP must specify the location, type, and maintenance requirements for BMPs necessary to prevent stormwater runoff from carrying construction-related pollutants into the

Napa River and/or the underlying groundwater basin. BMPs must be implemented to address potential release of fuels, oil, and/or lubricants from construction vehicles and equipment (e.g., drip pans, secondary containment, washing stations); release of sediment from material stockpiles and other construction-related excavations (e.g., sediment barriers, soil binders); and other construction-related activities with the potential to adversely affect water quality. The SWPPP must also include a construction site monitoring program that identifies specific requirements for dry weather visual observations of pollutants at all discharge locations, and as appropriate (depending on the Risk Level), sampling of the site effluent and receiving waters. The number, type, location, and maintenance requirements of BMPs to be implemented as part of the SWPPP depend on site-specific risk factors such as soil erosivity, construction season/duration, and receiving water sensitivity.

SWPPPs must be developed and implemented by a Construction General Permit Qualified SWPPP Developer (QSD)/Qualified SWPPP Practitioner (QSP). The QSD/QSP is tasked with determining the receiving water risks (including beneficial uses and CWA Section 303d impairments), monitoring site activities that could pose risks to water quality, and developing a comprehensive strategy to control construction-related pollutant loads in site runoff. Based on the Proposed Project characteristics and the setting, the SWPPP would be required to meet risk level II or III requirements as defined in the Construction General Permit. Minimum standard BMPs include erosion and sediment controls; site management/ housekeeping/waste management; management of non-stormwater discharges; run-on and runoff controls; and BMP inspection, maintenance, and repair activities. A rain event action plan must also be prepared by the QSD/QSP to outline the procedures to prepare the construction site for rain events and minimize the potential release of construction-related contaminants. It is at the discretion of the QDS/QSP to use as many BMPs as available which would successfully protect on- and off-site resources from erosion, sedimentation, and pollution.

The following list includes examples of treatment control BMPs commonly employed during construction; although these would vary based on the nature of construction activities, the characteristics of the site, and the existing receiving waters impairments (these features would appear as notes on any final design plans):

- Silt fences installed along limits of work and/or the construction site
- Stockpile containment (e.g., visqueen, fiber rolls, gravel bags)
- Exposed soil stabilization structures (e.g., fiber matrix on slopes and construction access stabilization mechanisms)
- Street sweeping
- Tire washes for equipment

- Runoff control devices (e.g., drainage swales, gravel bag barriers/chevrons, velocity check dams) and slope protection.
- Drainage system inlet protection
- Wind erosion (dust) controls
- Tracking controls
- Prevention of fluid leaks (inspections and drip pans) from vehicles
- Dewatering operations best practices
- Materials pollution management
- Proper waste management
- Regular inspections and maintenance of BMPs

The standard requirements contained in a SWPPP are sufficient to address a project's potential to violate water quality standards or waste discharge requirements. Implementation of SWRCB and San Francisco Bay RWQCB requirements (CWA NPDES Program and Porter–Cologne Water Quality Control Act WDRs) are enforced through the City's Stormwater and Runoff Pollution Control Ordinance (Chapter 13.32). In addition to stormwater runoff, construction activities can generate fugitive dust, which if not properly controlled, can be deposited in nearby waters. Note that this potential impact is addressed in Section 3.3, Air Quality; actions to mitigate adverse effects on air quality would likewise mitigate potential adverse effects on water quality from atmospheric deposition.

The construction-related impact of the Proposed Project on water quality would be **less than significant**, because compliance with existing permitting requirements and conditions of approval are sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives, and prevent adverse effects on beneficial uses.

Operation

Implementation of the Proposed Project would include the development of impervious surfaces, including roadways and driveways, and structures (dwellings) which would impede water infiltration and contribute to increased water runoff rates. These increased water runoff rates could gather potential pollutants such as heavy metals, nutrients from lawn fertilization, oil/grease and fuels from areas where vehicles are parked, and other household trash and debris. Stormwater runoff would have the potential to pollute nearby surface waters if storm drain infrastructure and buffers would not be used.

Constituents found in urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, the land use of a site, as well as vehicle traffic and percent of impervious surface. In the Napa Valley, there is a natural weather pattern of a long dry period generally from May to October. During this seasonal dry period, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase drippings, spills, and atmospheric fallout accumulate on roadways, driveways, and parking lots within the urban watershed. Precipitation during the early portion of the wet season (which typically spans from November to April) washes these pollutants into the stormwater runoff, which can result in elevated pollutant concentrations in the initial wet weather runoff (first flush).

The Proposed Project would be subject to the most recent standards and performance criteria contained in the Small MS4 Permit (described in Section 3.9.3, Regulatory Setting). The City is subject to this permit because it makes discharges to the Napa River from its municipal storm drain system. The Small MS4 Permit requires development and redevelopment projects to adhere to the Small MS4 Permit and follow published guidance for compliance. These include the following:

- Site Design Measures: Site design measures requires early assessment and evaluation of how site conditions, such as soils, vegetation, and flow paths will influence the placement of buildings and paved surfaces. The evaluation is used to meet the goals of capturing and treating runoff and maximizing opportunities to mimic natural hydrology. Options for site design measures include preserving trees, buffering natural water features, and using green roofs or porous pavement.
- Source Control Measures: Source control measures seek to avoid introduction of water quality pollution/degradation altogether. Source control strategies include things like covering refuse/trash areas, properly managing outdoor storage of equipment/materials, minimizing use of pesticides and fertilizers in landscaping, using sumps or special area drains to send non-stormwater discharges to the sewer, ensuring regular grounds maintenance, etc.
- Treatment Control Measures: Treatment control measures retain, treat and/or infiltrate the site runoff produced under normal circumstances, controlling both the quality and quantity of stormwater released to the City's conveyance system or directly to receiving waters. In most situations, this means implementing structural BMPs (e.g., infiltration, bioretention and/or rainfall harvest and re-use) to treat the volume and rate of runoff produced by 85th percentile storm (i.e., design capture volume).
- Operation and Maintenance Requirement: The Small MS4 Permit requires that maintenance agreements stay in place with each property (executed and then recorded with the County Clerk Recorder) to ensure permanent treatment control measures

developed on site are properly maintained and/or repaired in accordance with the stormwater quality control plan.

Overall, the Small MS4 Permit requires new development and redevelopment to adopt a low-impact development strategy, which minimizes hydromodification[6] impacts known to have adverse impacts on receiving waters. The City implements the Small MS4 Permit by requiring developers seeking approval of tentative subdivision maps to comply with MS4 Permit standards and the guidance and criteria in the Bay Area Stormwater Management Agencies Post Construction Manual. Although specific design features have yet to be finalized for the Proposed Project, all of the items above must be included in a Stormwater Control Plan to be submitted to the City as a condition of Proposed Project approval, as described in in the Regulatory Setting section above. The Stormwater Control Plan, to be developed and submitted by the Proposed Project applicant for final Proposed Project approval, must illustrate how the Proposed Project is implementing low-impact development principles and providing for long-term BMP maintenance.

The Proposed Project's grading plan includes all the elements necessary to demonstrate it can successfully comply with MS4 Permit requirements. Based on the findings in Appendix H, the City's detention basin is adequately sized to hold the increase in runoff that would be generated by the Proposed Project (further discussed in Impact 3.9-3). It is expected that the detention basin would be used and/or modified, as necessary, to comply with the water quality design capture volume required under the MS4 Permit, the details of which must be included in the Proposed Project's Stormwater Control Plan. Furthermore, water quality features such as downspouts to landscaped swales; vegetated swales; hydrodynamic oil, water and solid separators; private street sweeping; labeled storm drains ("drains to river") and homeowner educational materials on stormwater pollution prevention are listed on the grading plan as BMPs to be implemented to prevent storm runoff of poor quality from entering the Napa River or seeping into the underlying groundwater table.

Impacts associated with Proposed Project construction and operation on water quality would be **less than significant**, because existing permitting requirements and conditions of approval (i.e., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation, meet water quality standards and Basin Plan objectives, and prevent adverse effects on beneficial uses.

[6] Hydromodification is a primary contributor to problems related to excessive sediment and altered steam flow dynamics (e.g., flow volumes and velocities), primarily due to impervious surfaces, mass grading, and/or poor road designs (both urban and rural/unpaved).

Mitigation Measures

None required.

3.9-2: Would the Proposed Project decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin? This impact would be less than significant.

As discussed in detail under the environmental setting (Groundwater Resources), the County works with local jurisdictions including the City to sustainably manage the Napa Valley Groundwater Subbasin in compliance with SGMA. In its most recent assessment of conditions, the County, through its technical consultant, has determined that the Subbasin is not exhibiting significant and unreasonable impacts with regard to the applicable sustainability indicators defined by SGMA, including lowering of groundwater levels, depletion of groundwater in storage, degradation of groundwater quality, and depletions of interconnected surface waters (LSCE 2021). In its most recent annual report, the Subbasin was found to continue to exhibit stable groundwater levels, even despite a very dry 2020 water year, as it has historically, and has continued to be operated within the sustainable yield of the Subbasin (of between 17,000 and 20,000 AFY) (LSCE 2021). The long term (1988–2020) annual change in storage for the Subbasin is a decrease of 8,945 AF, following the very dry conditions of 2020, but still within the ranges that are generally experienced over the long term (LSCE 2021). Annual storage changes have commonly fluctuated between positive and negative values dating back to 1988; however, the median change is a positive increase of 1,784 AF, indicating that groundwater demands are not resulting in depletion of the aquifer (LCSE 2021).

Potential Proposed-Project-related impacts on groundwater depends on the component of its total water demand that would come from on-site or off-site groundwater wells. Based on the Proposed Project applicant's Water Neutral Report (Appendix J) the Proposed Project is expected to require 37.04 AFY to supply its total water demand (including both domestic and landscape irrigation, see also Section 3.13, Utilities, Table 3.13-10). Out of this total, it is estimated that up to 17.16 AFY (5,592,210 million gallons) would be supplied by the on-site groundwater well (shown in Figure 3.9-3) to provide for irrigation of all public and private landscaping (including lawns and planter strips between the proposed streets and sidewalks) as well as an existing vineyard in the panhandle portion of the site that is slated to remain. The Proposed Project's landscape irrigation demand was determined by RHA and Spatial Design Group (see Appendix J) using the City's Model Water Efficient Landscape Ordinance. The analysis uses an annual reference evapotranspiration (ETo) of 44.1 inches established for the City. Actual landscape water use associated with the Proposed Project may be lower but cannot exceed this amount under the City's model landscape ordinance. The remainder of the

Proposed Project's water demand (i.e., 19.88 AFY) would be served by the City's municipal/potable water supply.

Therefore, the groundwater demand associated with the Proposed Project would come from a combination of the onsite well (located on Parcel B – see Figure 2-4 in Chapter 2, Project Description) and the City's Stonebridge Complex wells (shown in Figure 3.9-3). As discussed in detail in Section 3.13 (Utilities and Service Systems), the City's municipal water supply system relies on groundwater for, on average, up to 20% of its total supplies (with the remainder coming from a variety of surface water sources). The City relies on its groundwater well to serve as a buffer during drought years, when less surface water is available. It has stated that up to 30% of the City's demand may be served by groundwater, if necessary, in below normal, dry, and critically dry years. Therefore, it is assumed that between 18% and 30% of the Proposed Project's domestic water demand could come from the City's Stonebridge Complex wells. This amounts to 3.98 AFY of Proposed Project demand from the City's groundwater wells during average years, and up to 5.96 AFY during critically dry years.

The distinction between City water and the on-site well water is important, because the Proposed Project would be required to implement the City's water neutrality policy (incorporated by reference in Chapter 13.12 [Water Use Efficiency and New Development] of the City's Municipal Code), in which the Proposed Project must offset the full amount of its City water demand through any combination of on-site water conservation measures, or payment of a fee to be used for implementation of conservation measures for the City's existing housing stock (such as toilet retrofits or other City approved conservation measures). Because the City's municipal connections are served by the same combination of water supply sources, including groundwater, this offset would translate to eliminating the Proposed Project's impact on the City's municipal groundwater wells. Table 3.9-4 shows the Proposed Project's demand for City groundwater. Because there may be a delayed effect due to the timing to complete the Proposed Project's agreed upon offset measures, this impact analysis assumes a (highly unlikely) scenario that the Proposed Project would result in an increase in demand of 3.98 AFY from the City's groundwater well in an average year.

The Stonebridge Complex wells have produced on average about 350 AFY since 2006, ranging from a low of 182 acre-feet in 2012 to a high of 526 acre-feet in 2013 (LSCE 2016, 2020). The wells have a combined capacity of approximately 595 gallons per minute, which is equivalent to 960 AFY assuming constant pumping. The average municipal groundwater demand of the Proposed Project (3.98 AFY) represents just 1.1% of the groundwater typically pumped from the municipal supply wells. In addition, according to the groundwater basin assessment report, groundwater pumping is a relatively small outflow component compared to surface water stormflows and groundwater baseflow discharged to the Napa River (LSCE 2016). Therefore, the basin groundwater budget is dominated much more by precipitation than it is by

groundwater pumping and the proposed groundwater pumping by the project would be expected to have a negligible effect on flows in the Napa River (LSCE 2016).

Table 3.9-4
Project Demand from City Groundwater Wells During Average and Critically Dry Years

Year	Percent City Demand Served by Groundwater	Proposed Project Demand for City Groundwater[1]
Average	18%	3.09 AFY
Critically Dry	30%	5.15 AFY

Source: Appendix J.
Note:
1 Calculated by multiplying the percent (as a fraction) of City groundwater demand per year type by the Proposed Project's total estimated water demand of 19.88 AFY.

Furthermore, the City's average groundwater use represents less than 37% of the wells' combined capacity. Groundwater levels from a dual completion monitoring well located about 600 feet away (SGMA indicator well 222s[/3d]-swgw5, shown in Figure 3.9-3) have been measured on a continuous basis since December 2014. Despite the City's pumping pattern during this time frame (which includes during drought years), along with the agricultural and domestic pumping that occurs in the vicinity, the groundwater level trend in the monitoring well is stable (LCSE 2021). Marked declines of the groundwater table to a level of up to approximately 30 feet bgs are observed in the summer and fall, but the groundwater table returns to its previous level of approximately 22 bgs by early spring (LSCE 2021).

As discussed in detail in the environmental setting (Groundwater Resources), the dual completion monitoring well is one of the Subbasin's representative monitoring sites established for measuring whether sustainability goals are being met. The minimum threshold that would indicate a significant and unreasonable lowering of groundwater levels, reduction in groundwater storage, and/or streamflow depletion for the indicator well is 32 feet bgs (equates to 185 feet above mean sea level (amsl)) for the shallow screened well and 53 bgs (164 feet amsl) for the deeper screened well (LSCE 2016). In fall 2019 (when groundwater levels are typically at their lowest), the measured groundwater levels at the indicator well were 29 feet bgs (188 feet amsl) and 46 bgs (171 feet amsl) for the shallow screen and deep screen, respectively (DWR 2020). By Spring 2020, the shallow well had risen to 20.4 feet bgs or 196.6 amsl and the deeper well to approximately 36 feet bgs or 181 amsl (LSCE 2021). Despite heavy pumping to sustain the area's municipal and agricultural water demands, these levels remain above minimum thresholds set to indicate significant and unreasonable impacts with regard to groundwater sustainability under SGMA. Given the aforementioned factors, a 0.9% increase in the City's groundwater demand associated with the Proposed Project would not have a measurable impact on the groundwater levels in the vicinity of the Stonebridge Complex wells.

This would likewise be the case for the Proposed Project's demand of 17.16 AFY from the on-site well. This water demand comes out to an average pumping rate of 10.6 gpm compared to the well yields of vicinity wells that range from 39 to 147 gpm. The on-site well, proposed to be located on Parcel B of the proposed subdivision, would easily be capable of supplying this amount based on the well's yield (as reported by the Project applicant) of 350 gpm. Although the well is currently inoperable and would need to be repaired so it is operational, this is also consistent with regional well yields. The recent well capacity and sustainability assessment performed on the agricultural well on the Project site confirmed an ability of the existing well to meet the proposed average pumping rate of 10.6 gpm (Appendix L). In the 24-hour pump test, a pumping rate of 40 gpm was employed and only one foot of drawdown was measured in the well which stayed consistent throughout the pumping period (Appendix L). The immediate recovery of this relatively small drawdown upon cessation of pumping was further evidence of high aquifer transmissivity (i.e., an ability of a water bearing unit to transmit water flow) and relatively abundant groundwater.

As shown in Table 3.9-2, there are a number of municipal and irrigation wells in the vicinity of the Project site, and average well yields far exceed the anticipated demand for the Proposed Project (note minimum well yields listed are for domestic wells constructed for low yield). The aquifer in general is known to be a productive alluvial aquifer, and therefore, there would be sufficient yield available to supply the Project's well water landscape irrigation demand as also demonstrated by the findings of the site specific well pump test conducted on the existing agricultural well on the Project site. The proposed rate of pumping is relatively low and the resulting radius of influence would be highly localized, and greatly overshadowed by the radius of influence associated with the much higher producing agricultural and municipal supply wells in the surrounding vicinity. The existing surrounding levels of groundwater pumping has not produced undesirable results under SGMA (LSCE 2021) and both regional and local groundwater levels have remained stable; therefore, the potential impact of using the on-site well as proposed would be less than significant.

A review of the existing well indicates that the well is screened from 80 feet bgs to a total depth of 410 feet bgs with a 20-foot seal at the surface. Therefore, the well would draw from the deeper volcanic aquifer, below the Napa Valley alluvium which is considered hydraulicly connected to the Napa River (Appendix L). Therefore, the proposed pumping from this well is not likely to have any direct effect on surface flow in the Napa River. In addition, as stated above, the Subbasin as a whole is being managed sustainably, with a long-term median increase in groundwater storage of 1,784 AFY, therefore the localized impacts on groundwater levels and effects on flows in the Napa River would be minimal, thus the Proposed Project's overall impacts on groundwater resources would be **less than significant**.

Mitigation Measures

None required.

3.9-3: Would the Proposed Project substantially alter the existing drainage pattern of the site or area through the addition of impervious surfaces resulting in erosion or siltation on- or off-site; increasing the rate or amount of surface runoff resulting in flooding on- or off-site; contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide polluted runoff; or impede or redirect flood flows? This impact would be less than significant.

Alterations to drainage patterns would be limited to increases in the rate and volume of storm water runoff associated with impervious surfaces. According to Appendix H, the Proposed Project would result in the addition of 10.91 acres of impervious surface, which is equivalent to an impervious surface coverage of 58%. Increases in the rate and volume of storm water runoff can be associated with exceedance of local storm drain capacity, increases in on- or off-site flooding, and/or hydromodification impacts to receiving waters, which include increase bank erosion or contribution of site-related pollutants. Because the Proposed Project would not alter the course of a stream or river and is not located within the SFHA of the Napa River, it would not impede or redirect flood flows.

In addition, the Project site would be subject to flooding only in a highly unlikely, catastrophic scenario. Because the Proposed Project consists of residences (as opposed to industry or businesses that store appreciable quantities of hazardous materials and/or wastes), the risk of releasing pollutants during such flooding would be low. The residences could have small quantities of household hazardous wastes, and such wastes could be released in a catastrophic flood scenario. However, in the context of such flooding, the release of such waste would not result in measurable increases in pollutant loads carried by the river during such a flood event, and would be dwarfed by the effects caused within the entire watershed.

Potential impacts associated with increases in the rate and/or volume of runoff produced by the Proposed Project are addressed below.

Substantial Erosion or Siltation On- or Off-Site

The off-site City detention basin has been designed with adequate capacity to capture and treat increases in the rate and volume of stormwater runoff associated with development in this area of the City, including development of the Project site with impervious surfaces. Per an agreement with the City and the Comprehensive Flood Protection Project's Interior Drainage Analysis Final Report for the Miller Property/Hunter Property/Hunt Avenue, it was determined that development of the Flood Protection Project's detention basin would account for future

development of the Hunter property (Project site) up to 70% impervious surface area (Appendix H). The Proposed Project is estimated to be developed at approximately 58% impervious surface; therefore, allowing the Project site's increased runoff to be contained within the City's detention basin without the need to expand the basin or further development of facilities.

As discussed under Impact 3.9-1, the Proposed Project would be subject to the most recent standards and performance criteria contained in the Small MS4 Permit because it would be required to prepare and submit for City approval a Stormwater Control Plan that complies with the Bay Area Stormwater Management Agencies Post Construction Manual. It is expected that the City's detention basin would be used and/or modified as necessary to comply with the water quality design capture volume required under the MS4 Permit, the details of which must be included in the Proposed Project's Stormwater Control Plan. Furthermore, water quality features such as downspouts to landscaped swales; vegetated swales; hydrodynamic oil, water and solid separators; private street sweeping; labeled storm drains ("drains to river") and homeowner educational materials on stormwater pollution prevention are listed on the grading plan as BMPs to be implemented to prevent storm runoff of poor quality from entering the Napa River or seeping into the underlying groundwater table.

The operation-related impact of the Proposed Project on water quality would be **less than significant**, because compliance with existing permitting requirements and conditions of approval (i.e., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation (including erosion and siltation).

Increases in On- or Off-Site Flooding

As previously discussed, the City-owned off-site detention basin has been designed to store the increase in storm water runoff generated from the Project site during a 100-year storm event. During major flood events, the levee culvert gate is closed, routing stormwater into the detention basin. This avoids contributing to flows within the Napa River. As water fills the basin, the pump station is activated and water is pumped from the basin into the Napa River. However, by the time that occurs, the detention basin would have already captured the increase in flows associated with impervious surfaces on the Project site. For this reason, the impact of the Proposed Project to both on- or off-site flooding would be **less than significant.**

Stormwater Drainage System Capacity

The Proposed Project would construct storm drains or as required, improve existing storm drains to ensure adequate capacity is available to carry runoff produced by a 10-year storm event. Based on the Proposed Project's utility plan, on-site storm flows from single-family residences would be conveyed to the off-site detention basin via underground storm drain lines varying in diameter from 15 to 30 inches. Storm runoff from the Project site east of the proposed

Starr Avenue extension (multifamily housing) would be collected by 15-inch storm drains and connected to the City's existing 36-inch storm drain and would drain into the adjacent detention basin. Title 16 of the City's Municipal Code requires a new stormwater drainage system be designed by a registered civil engineer for ultimate development of the watershed, and to convey runoff generated by the 10-year flood. Per Title 16, the stormwater drainage system must also be designed to provide for the protection of abutting and off-site properties, and off-site storm drain improvements may be required to satisfy this requirement. Street curbs would be designed to adequately collect and convey the runoff produced by a 100-year storm. As indicated above, the existing off-site detention basin was designed to accommodate runoff from the Project site of up to 70% impervious surface area.

Because compliance with the City's Municipal Code and improvement standards associated with approval of tentative subdivision maps, and because the off-site detention basin was designed with adequate capacity, the Proposed Project would have a **less-than-significant impact** related to exceedance of stormwater system capacity.

Mitigation Measures

None required.

3.9-4: Would the Proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? This impact would be less than significant.

As discussed under Impact 3.9-1, the Proposed Project would comply with applicable regulations and permits designed to comply with the Water Quality Control Plan for the San Francisco Bay Region. The SWPPP and Stormwater Control Plan to be developed and implemented in compliance with the City's Municipal Code would be effective at meeting water quality objectives of the Basin Plan. As discussed under Impact 3.8-2, the County is currently achieving sustainable groundwater management under an alternative GSP submittal (Basin Analysis Report). For the reasons discussed therein, the groundwater demand of the Proposed Project would not have an appreciable impact on meeting minimum thresholds established for the Napa Valley Subbasin under SGMA. Therefore, the impact of the Proposed Project on water quality and groundwater management plans would be **less than significant**.

Mitigation Measures

None required.

3.9.5 Cumulative Impacts

The cumulative context for the analysis of potential water quality impacts related to surface water is the Upper St. Helena Reach subwatershed (shown in Figure 3.9-1). This is because stormwater discharges originating from this area could combine with those of the Proposed Project to result in an increase in non-point source pollution discharging into the Napa River upstream of Sulphur Creek. Such increases could result from a combination of construction activities, greater use intensity, increased coverage of impervious surfaces and/or increased use of routine household cleaners and landscape chemicals. New development and/or redevelopment projects in these locations have the potential to generate impacts related to the violation of water quality standards, Basin Plan water quality objectives, and/or TMDLs established for the Napa River.

For groundwater resources, the cumulative context is the Napa Valley Groundwater Subbasin (Subbasin) (shown in Figure 3.9-3). Development of past, present and reasonably foreseeable projects within this area that results in an increase in groundwater demand could result in impacts related to depletion of the underlying aquifer, regional lowering of the groundwater table level, or depletions of interconnected surface waters.

As the Proposed Project does not have impacts with regard to flooding (since the potential impact is eliminated through use of the off-site detention basin), it would not contribute to any cumulative flooding impacts in the subwatershed.

3.9.5: Would the Proposed Project cumulatively degrade surface or groundwater quality? The Project's contribution would not be considerable.

State and regional regulations described in Section 3.9.3 (Regulatory Setting) would reduce the rate of runoff and filter out pollutants in the same or similar manner as described in Impact 3.9-1. Construction activities are required to comply with the SWRCB statewide NPDES stormwater permit program, the Porter-Cologne Act's requirements for site-specific waste discharge, as well as local agency public works construction standards. In addition, the City's 1993 General Plan policies, 2019 General Plan policies, and existing City regulations would ensure protection of water quality, improve stormwater management, and reduce stormwater pollution. Increased impervious surface area as a result of the Proposed Project and other development projects in the watershed would be mitigated through application of the Small MS4 Permit, which requires the capture and treatment of stormwater runoff for the 85th percentile storm event. Areas within the cumulative context that are outside the jurisdictional boundary of the City would implement similar measures because Napa County requires development and redevelopment projects to implement the same standards discussed under Impact 3.9-1 (i.e., SWPPP and MS4 Permit standards).

Based on development of past, present and reasonably foreseeable projects in the Upper St. Helena Reach subwatershed this is an existing potentially significant cumulative impact.

Due to the residential nature of the Proposed Project and compliance with mandatory existing state and local requirements to ensure protection of water quality in the subwatershed the Proposed Project's contribution to this potentially significant cumulative impact is less than considerable resulting in a **less-than-significant cumulative impact**.

Mitigation Measures

None required.

3.9-6: Would the Proposed Project cumulatively decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded? The Project's contribution would not be considerable.

As discussed under Impact 3.9-2, Napa County monitors the groundwater basin and has established minimum thresholds and measurable objectives for the Subbasin, which includes a representative monitoring site near the Pope Street Bridge crossing of the Napa River. The Basin Analysis Report prepared for the Subbasin, indicates that groundwater conditions in the Subbasin are currently meeting sustainability goals established per SGMA and the Subbasin has operated within its sustainable yield over a period of more than 20 years. The Report includes projects and management actions to ensure sustainability targets are met through the planning and implementation horizon of the City's 2019 General Plan (2040 and beyond) (LSCE 2016). The City's 2019 General Plan EIR notes that from 2011 through 2015, groundwater drawn from the Subbasin accounted for about 18% of the City's total water supply (City of St. Helena 2018). In addition, due to stable groundwater levels observed during recent drought conditions (from 2012 through 2015) it indicates recent rates of groundwater pumping have not exceeded the sustainable yield of the subbasin (City of St. Helena 2018). As noted above under Impact 3.9-2, the Proposed Project's increase in water demand that would be supplied by groundwater wells would amount to a 0.9% increase which would not have a measurable impact on the groundwater levels in the vicinity of the Stonebridge Complex wells.

Future development in the City is required to comply with existing regulations that would ensure overall infiltration into the aquifer would remain robust, including requiring low-impact development projects be included to capture and infiltrate stormwater runoff, consistent with Bay Area Stormwater Management Agencies Association Manual, City Municipal Code, and required compliance with the NPDES permit, MS4 requirements, and/or General Waste Discharge Requirements. The 2019 General Plan includes policies PF1.E and PF1.F that require tracking new private wells to protect groundwater production. The 2019 General Plan

does not identify a significant cumulative groundwater impact. However, the Napa County General Plan Update EIR (SCH #2005102088), notes increased demand on groundwater supplies associated with increased development in the County (including cities) could lead to groundwater decline and overdraft contributing to a significant cumulative impact on groundwater resources (Napa County 2007).

The City has implemented actions to ensure the groundwater Subbasin continues to operate within its sustainable yield. The City's 2011 Water Neutral Policy for Development requires all new development to be water-neutral, through a combination of on-site water conservation measures, off-site retrofitting and use of well water, as allowed. Future development in the City is not expected to result in an increase in total water demand because new development is required to offset new demand with water conservation retrofits of existing facilities, or in-lieu payments to the City to carry out any retrofit projects. In addition, as addressed under Impact 3.9-2, the on-site agricultural well is expected to yield 350 gpm (as reported by the Project applicant) and demonstrated an ability to pump at a rate of 40 gpm over a 24-hour period with negligible drawdown, which is far more capacity than the 10.6 gpm the Proposed Project would require for on-site irrigation. Based on the findings of the well capacity and sustainability test, this rate of pumping would have a highly localized radius of influence, if any, , and would be greatly overshadowed by the radius of influence associated with the agricultural and municipal supply wells in the surrounding vicinity. Therefore, given Napa County's active management of the Subbasin under SGMA, available information, and the City's implementation of a water neutral development policy, the Proposed Project's contribution to a cumulative impact with regard to groundwater is not considerable resulting in a **less-than-significant contribution.**

Mitigation Measures

None required.

3.9.6 References

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3.10 LAND USE

3.10.1 Introduction

This section describes existing and planned land uses within and adjacent to the proposed Hunter Subdivision Project (Proposed Project) site within the City of St. Helena (City), identifies land use designations, and zoning, and analyzes consistency of the Proposed Project with the City's 1993 General Plan goals and policies and the City's Municipal Code, Title 17 Zoning.

The City has since adopted an update to the 1993 General Plan; the 2019 General Plan (known as the "General Plan Update 2040," a General Plan with a planning horizon of 2040) was adopted in May 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this Environmental Impact Report (EIR) uses the 1993 General Plan as the applicable general plan for the purposes of evaluating consistency of the Proposed Project with the City's General Plan policies in effect when the application was deemed complete by the City. Nonetheless, this EIR also evaluates consistency with the City's adopted 2019 General Plan for informational and consistency purposes.

California Environmental Quality Act (CEQA) Guidelines Section 15125(d) provides that the environmental setting of an EIR must discuss "any inconsistencies between the proposed project and applicable general plans and regional plans." Potential inconsistencies between the Proposed Project and the City's 1993 General Plan, and the Zoning Ordinance are discussed in this section in addition to a review of the City's 2019 General Plan. Technical sections included in this Draft EIR also evaluate and analyze any potential physical/environmental effects and potential incompatibilities with the 1993 General Plan that may be considered in the determination of physical environmental impacts.

Comments received in response to the Notice of Preparation related to land use included concerns about consistency with the underlying land use designation and zoning, and potential conflicts with the City's 1993 General Plan. All of these issues are addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information for this section was primarily obtained from the City of St. Helena 1993 General Plan (City of St. Helena 1993), City of St. Helena 2019 General Plan (City of St. Helena 2019), City of St. Helena Municipal Code, and other miscellaneous Proposed Project information.

3.10.2 Environmental Setting

The following provides an overview of the existing land use designation, zoning and land uses on the Project site as well as the surrounding land use designations and zoning.

Existing Site

The Project site (Assessor's Parcel Number is 009-030-057) is located in the northeast portion of the City, at the eastern terminus of Adams Street and the west/north[1] terminus of Starr Avenue, three blocks east of downtown and State Route 29, and generally south/west of the Napa River. The Project site has historically been used for agriculture and contained an orchard that was removed in the 1960s. In the early 1970s a small vineyard was planted on approximately 7-acres of the Project site. In the mid-2000s the site was altered by the addition of fill material primarily associated with the construction of the St. Helena Comprehensive Flood Protection Project (Flood Protection Project) along the Napa River, located to the north and northeast of the Project site.

The Project site is presently undeveloped with the exception of a small vineyard under active cultivation located in the southwestern portion of the site, near the terminus of both Adams Street and Starr Avenue. The site is generally level and does not contain any streams or waterways. Trees are located along the edge of the southern/southeastern boundary of the site, including parallel to the Vineyard Valley Mobile Home Park. Based on the Proposed Project's grading plan, the elevation across the Proposed Project's development footprint ranges from approximately 230 feet above mean sea level on its southern edge to approximately 212 feet above mean sea level on its northern edge. The portion of the site planned for the extension of Adams Street ranges from 243 feet to 230 feet above mean sea level. An existing well is located near the southeastern edge of the Project site.

Surrounding Land Uses

Adjacent land uses include single-family and multi-family residential development to the south and southeast, including the Vineyard Valley Mobile Home Park, Hunt's Grove Apartments, and single-family residences along Starr Avenue (see Figure 2-3 in Chapter 2, Project Description). Office uses are located immediately adjacent to the site's westernmost edge at the terminus of Adams Street. Single-family residences along Monte Vista Avenue and Hunt Avenue back up to the site. Undeveloped land currently under cultivation or fallow is located to the north and northwest. A single-family residence along with an accessory dwelling unit and barn is currently under construction just north/west of the site. A gravel maintenance road/public trail borders the site along the north/northwest and a city storm water detention basin borders the site to the south/southeast. A drainage ditch is located along the southwestern edge of the property. Starr Avenue and Adams Street essentially stub into the Project site.

[1] The site is oriented on an axis that runs generally on a diagonal from southwest to northeast. Directions in relation to the site are therefore in many cases not directly "north" or "'west" are shown as a combination of directions.

The open space areas located north and east of the site are part of the City's Flood Protection Project. The Napa River is located approximately 540 feet north and northeast of the Project site.

Land uses surrounding the Project site are currently designated High Density Residential (HDR) and Medium Density Residential (MDR) adjacent to the south and southeast; Open Space to the north and along the western Proposed Project boundary, and Agriculture farther west in the City's 2019 General Plan. In the 1993 General Plan, the Open Space parcel to the north and west of the Project site was designated as MDR rather than Open Space.

City of St. Helena 1975 General Plan Land Use Designation

The project site was designated for high density residential development in the 1975 St. Helena General Plan. Densities envisioned in the 1975 General Plan were 4-6 units per acre for single family homes and up to 16 units per acre for multi-family dwellings.

That land use policy was revised with the adoption of the updated 1993 General Plan (discussed below).

City of St. Helena 1993 General Plan Land Use Designations

The Project site is designated as MDR in the City's 1993 General Plan. According to the 1993 General Plan, "[t]he MDR designation provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. Residential densities shall be in the range of 5.1 to 12.0 dwelling units per gross acre (du/acre). The MDR designation is the predominant residential designation, occurring throughout large areas of the City. The wide distribution of this designation is intended to maintain a development pattern in newly developing areas that is consistent with historic development patterns" (City of St. Helena 1993).

City of St. Helena 2019 General Plan ("General Plan Update 2040")

As previously mentioned, the City adopted the 2019 General Plan, known as the "General Plan Update 2040," in May 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. For informational purposes, the City's 2019 General Plan designates the Project site for MDR, the same as the 1993 General Plan (City of St. Helena 2019, Figure 2.1). However, the allowable density is up to 16.0 dwelling units per acre.

Existing Zoning

The City of St. Helena's Zoning Code (Title 17) specifies building setback, building height, building density, and site coverage to ensure that the public's health, welfare, and safety would be protected and that development occurs in a planned, logical fashion. The Project site is currently zoned Medium Density Residential (MR), which allows a residential density of between 5.1 to 16.0 dwelling units per acre. The MR district is consistent with the MDR General Plan designation. The MR district provides for single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses, as well as attached duplex and triplex units, condominiums, and townhouses, and similar uses with a use permit.

The City's General Plan Housing Element Update 2015–2023 was revised and last updated in May 2015. The City's 2015-2023 Housing Element identifies the site as vacant and underutilized (City of St. Helena 2015b, p.133, Table 43).

3.10.3 Regulatory Setting

There are no federal or state land use requirements applicable to the Proposed Project.

Regional Regulations

Plan Bay Area 2040

Plan Bay Area 2040 (Plan), adopted in 2017, is a state-mandated, integrated long-range transportation and land use plan. The region adopted its previous plan — Plan Bay Area — in July 2013. As the Bay Area's first regional transportation plan to include a Sustainable Communities Strategy (SCS) as required by Senate Bill (SB) 375, the original Plan Bay Area (2013) charted a course for reducing per-capita greenhouse gas emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods near transit. In the Bay Area, the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting a SCS that integrates transportation, land use and housing to meet greenhouse gas reduction targets set by the California Air Resources Board. Plan Bay Area 2040 projects household and employment growth in the Bay Area over the next 24 years, provides a roadmap for accommodating expected growth, and connects it all to a transportation investment strategy that strives to move the Bay Area toward key regional goals for the environment, economy and social equity.

SB 375 was adopted with the goal of reducing greenhouse gas emissions from cars and light trucks. SB 375 will make it easier for communities to build housing and provide transportation choices. The SCS is a plan to meet the region's greenhouse gas emissions reduction target, while taking into account regional housing needs, transportation demands, and protection of

resource and farm lands based on the best forecast of likely land use patterns provided in coordination with ABAG's partner agencies.

Local Regulations

City of St. Helena 1993 General Plan

As noted in the General Plan, "growth continues to be one of, if not the primary issue facing St. Helena according to input from the community. Since the early 1970s when the City experienced a dramatic increase in growth pressures, the community has strongly supported a policy of deliberate slow growth in order to protect the fragile charm and beauty of the City, to ensure that natural resources such as water supply and prime agricultural land are not lost or overused, and to ensure that adequate public services such as schools and sewers can be provided. In addition to regulating the rate of growth, the City will also control where growth can occur by establishing an Urban Service Area." To address the desire to manage growth the City developed an Urban Service Area, which discourages urban sprawl by containing urban development within the designated Urban Service Area. The Urban Service Area is surrounded by agriculturally designated land and includes 663 acres designated for residential uses to accommodate projected growth, while maintaining a rational and compact development pattern at buildout (City of St. Helena 1993). The Project site is within the Urban Limit Line, which runs along the westerly edge of the Project site, separating it from the agricultural lands to the west and north.

The following goals and policies from the 1993 General Plan applicable to the Proposed Project are listed below. A consistency analysis for all the policies listed below is included in the impact section.

Growth Management

Policy 2.6.1: New development should be required to occur in a logical and orderly manner within well-defined boundaries, and be consistent with the ability to provide urban services.

Policy 2.6.2: Urban development shall be allowed to occur only within the Urban Service Area during the time frame of the General Plan.

Policy 2.6.3: Urban services such as sewer, water, and storm drainage will only be extended to development within the Urban Service Area. Exceptions will be permitted when undue hardship can be demonstrated, and proposed improvements are not found to be growth inducing.

Policy 2.6.4: Permit infill development and higher densities within currently developed areas wherever possible to minimize and postpone the need for expansion of the Urban Service Area.

Implementing Policy 2.6.6: Limit the amount of land designated for urban uses to those areas that can reasonably be predicted to be developed over the life of the plan. Areas not projected for urban development within the life of the plan shall be designated for agricultural or other non-urban uses.

Residential Growth Management

Policy 2.6.9: Limit the approval of new residential development to a maximum rate of 17 dwelling units per year.

Policy 2.6.10: Maintain a cap on residential development of 2,850 total dwelling units citywide by the year 2010. The total number of dwelling units shall not be construed as a goal, but shall be an absolute maximum allowable number.

Residential

Policy 2.6.14: Encourage a mix of housing types and price ranges to allow choice for current and future generations of St. Helenans.

Policy 2.6.15: Encourage new residential development in all density ranges that is consistent with scale and character' of the older residential districts of the City, particularly the neighborhoods west of Main Street

Policy 2.6.16: Encourage the development of higher density housing in areas near the center of town and close to recreation and services.

Policy 2.6.17: Minimize situations where new residential development will block public view of surrounding vineyards

Policy 2.6.18: Minimize large lot development (one dwelling unit per acre or less), except where this scale of development would not threaten retention of vineyards, inefficiently utilize land, or physically separate the community from the surrounding vineyards

Policy 2.6.19: Permit higher density housing in single family neighborhoods as long as the development character of the single family area is maintained (i.e., lot widths, orientation to street, building heights, etc.).

Policy 2.6.20: Encourage the subdivision and development of larger parcels (3 acres or more) as "planned unit developments" to ensure a more comprehensive and creative approach to planning the development as a single unit.

The “planned unit development” approach provides developers with greater design flexibility while ensuring the City adequate design review. The intent is to create developments that complement existing community character. The City will favor planned unit developments that provide generous amounts of open space, covered parking, the separation of pedestrian and vehicle traffic, and on larger tracts, a variety of housing types: single-family detached, duplex, and multi-family dwellings, in one and two-story structures.

Policy 2.6.21: Require new residential projects to be designed to facilitate non automobile modes of travel (i.e., walking, biking, transit, etc.).

St. Helena 2019 General Plan (“General Plan Update 2040”)

The City recently adopted an update to its 1993 General Plan in May 2019. Although the updated general plan policies will not be considered for this Proposed Project as discussed previously, the relevant policies are provided solely for information given the City has an updated general plan and are not evaluated for consistency with the Proposed Project. The Appellate Court has ruled in *Chaparral Greens v. City of Chula Vista* that “applicable” plan within the meaning of CEQA Guidelines, Section 15125(d) is a plan that has already been adopted and thus legally applies to the project; draft plans need not be evaluated.

In the 2019 General Plan one of the primary goals of the City is to contain development and preserve agricultural lands in and adjacent to the City, similar to the goal of the 1993 General Plan. In lieu of defining an Urban Services Area, the 2019 General Plan updates the City’s Urban Limit Line and designates Urban Reserve Areas. The Urban Limit Line denotes the limit of where urban development is permitted within the incorporated area of the City. The intent is to discourage urban sprawl by containing urban development within designated areas. There are a handful of areas designated Urban Reserve Areas, which can be considered for development after land within the Urban Limit Line are developed and if additional land is needed. Notably, the 2019 General Plan retains the medium density residential designation for the site and does not change the Urban Limit Line relative to the Project site.

The relevant goals and policies of the 2019 General Plan Land Use and Growth Management Element are listed below. As can be seen below, many policies are similar to or the same as the policies contained in the 1993 General Plan.

Manage Growth and Maintain Community Character.

St. Helena is committed to preserving its existing community character, maintaining agricultural lands, managing growth and the impacts of tourism, and ensuring that adequate infrastructure and facilities are provided.

Promote High-Quality and Sustainable Development.

St. Helena is dedicated to a high standard of quality, economic viability and ecological sustainability with respect to the design, planning, and construction of new and renovated public and private facilities.

Growth Management

Policy LU1.1: Require new development to occur within well-defined boundaries and be consistent with the ability to provide urban services. New development should mitigate infrastructure impacts by using sustainable, best management practices in green building and stormwater management and paying its share of development impact fees, while minimizing impacts on sewer, water, energy, and natural resources.

Policy LU1.2: Allow urban development to occur only within the Urban Limit Line. Consider an exception for on-site employee housing on Agricultural lands. Urban services, such as sewer, water, and storm drainage, will only be extended to development within the Urban Limit Line.

Policy LU1.3: Support agricultural and low-intensity uses beyond the Urban Limit Line.

Policy LU1.4: In order to minimize and postpone the need for expansion of the Urban Limit Line, encourage infill development within currently developed areas.

Policy LU1.5: Require new development to provide adequate infrastructure and urban services, including compliance with the policies and implementing actions affecting new development as set forth in the Public Facilities and Services Element.

Policy LU1.7: Continue to limit the approval of market rate residential development to the maximum allowed under the Growth Management System. Regulated affordable units and second units are exempt from this limitation.

Implementing Action LU1.A: Continue to allow the construction of second units – also known as accessory dwelling units – and consider allowing the division of single-family homes into two or more units under appropriate circumstances, in order to increase

residential density and housing availability without requiring an extension of the Urban Limit Line.

Residential Neighborhoods

Policy LU2.1: Promote a mix of housing types and price ranges that are consistent with the Housing Element RHNA categories of housing affordability.

Policy LU2.2: Encourage new residential development that is consistent in design, size, color, and floor area ratio (FAR) with the older residences in the neighborhood.

Policy LU2.3: Protect residential neighborhood views of surrounding vineyards and mountains.

Policy LU2.4: Encourage the subdivision and/or development of larger parcels as Planned Unit Developments to ensure a more comprehensive and creative approach to planning the development as a single unit. This does not prohibit use of Planned Unit Developments on parcels less than three acres.

Policy LU2.5: Encourage the development of higher density housing in areas near the center of the city and close to recreation and services, such as transit, retail, and public facilities.

Policy LU2.6: Allow residential density at the higher end of the permitted range for single family development within Medium and High Density Residential Land Use designations as long as the development character of the single family area is maintained, including lot widths, orientation to street, building heights, onsite parking, traffic, and noise, among other considerations.

Policy LU2.7: Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.

City of St. Helena Housing Element Update 2015–2023 Goals, Policies, and 8-Year Action Plan

The purpose of the Housing Element is to establish a comprehensive plan to address housing needs in the City over the eight-year planning period between January 31, 2015 and January 31, 2023. Every jurisdiction in the state is required to submit a Housing Element to ensure the housing needs of all residents are being met. The Housing Element establishes the community goals, and policies surrounding the development, rehabilitation, and preservation of housing units to meet the needs of City residents (present and future). The City's Housing Element was adopted in May 2015.

Applicable goals and supporting policies from the Housing Element are as follows:

- **Goal 1 - A Diversity of Housing to Meet Local Needs:** Facilitate development of a variety of housing types to meet the full range of housing needs in our community, with particular emphasis on housing for our local workforce, people with special housing needs, and people with extremely low, very low, low and moderate incomes.
- **Policy HE1.3:** Encourage the development of affordable housing and remove development constraints as feasible.
- **Goal 2 - Efficient Land Use and High Quality Neighborhoods**: Make efficient use of land within the Urban Limit Line to protect agricultural lands, promoting compact, well-designed developments that 'fit in' with existing neighborhoods and contribute to the overall livability of our community. Encourage a balance of housing types throughout the entire community.
- **Policy HE2.1:** Encourage higher density development where appropriate.
- **Policy HE2.2:** Ensure that higher density housing opportunity sites are not lost to lower density uses.
- **Policy HE2.4:** Promote second unit production.
- **Policy HE2.6:** Promote a balance of types of housing throughout the whole community.

St. Helena Municipal Code –Title 17 Zoning

The City of St. Helena Municipal Code, Title 17 Zoning is designed to protect and promote the public health, safety, and general welfare of the citizens of St. Helena and provides the purpose, permitted and conditional uses, and any special district provisions for the City's various zoning districts.

Excerpts from applicable sections from the Title 17 of the City's Municipal Code are included below.

Chapter 17.40 Medium Density Residential District

Section 17.40.010 Purpose

The MR district is established for consistency with the medium density residential general plan designation. The district provides for single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses. Residential densities shall not be less than 5.1 dwelling units per acre nor more than 16 dwelling units per acre (Ord. 07-5 § 2 (part): Ord. 05-4 § 1 (part): prior code § 27.50).

Section 17.40.030 Conditional Uses

The following uses require approval of a use permit as regulated by Chapter 17.168:

A. New construction of one single-family dwelling on parcels where the minimum density is two units or greater, pursuant to Section 17.40.060;

B. New attached duplex or triplex units or conversion of an existing single-family dwelling to duplex or triplex, compatible with the design and architecture of the neighborhood and consistent with the density and floor area ratio of the district;

Chapter 17.116 Accessory Building, Structures, Dwelling and Uses

Section 17.116.030 Accessory Dwelling Units

The purpose of this section is to allow and regulate accessory dwelling units (ADUs) and junior accessory dwelling units (JADUs) in compliance with California Government Code Sections 65852.2 and 65852.22, which allows development of ADUs within land zoned for single-family residential. The City also allows ADUs on land zoned for multifamily dwelling residential use. This section establishes the parameters for development including size, height, setbacks, parking requirements, fees and use of ADUs.

Chapter 17.146 Housing Trust Fund, Housing Impact Fee, and Inclusionary/In-lieu Fee Requirements

Section 17.146.050 Residential Development Project—Inclusionary/in-lieu Fee Requirements

A. Inclusionary Requirement. At least twenty percent (20%) of all new dwelling units in a residential development project shall be affordable units, which shall be constructed and completed not later than the related market rate units. For fractions of affordable units, including fractions resulting from construction of less than five dwelling units, the developer may elect, at his or her option, to construct the next higher whole number of affordable units, perform an alternative equivalent action which has received the approval of the city council pursuant to subsection B, or pay the housing in-lieu fee specified in subsection E for such fraction.

B. Alternative Equivalent Proposal.

   1. A developer of any residential project may propose to meet the requirements of subsection A with an alternative equivalent action, subject to the review and approval of the city council. Proposals for alternative equivalent actions may include, but are not limited to, dedication of vacant land, the construction of affordable units on another site, or acquisition and enforcement of required rental/sales price restrictions on existing standard dwelling units consistent with this section. Any proposal shall

show how the alternative action will further affordable housing opportunities in the city to an equal or greater extent than compliance with the express requirements of subsection A or payment of the appropriate in-lieu housing fee.

2. Alternative equivalent action proposals for single-family and multifamily residential developments shall be considered on a case-by-case basis by the city council, and may be approved at the city council's sole discretion, if the city council determines that such alternative will further affordable housing opportunities in the city to an equal or greater extent than compliance with the express requirements of subsection A.

C. In-Lieu Housing Fee. A developer of four or fewer residential dwelling units which are the whole of a residential development project may meet the requirements of subsection A through payment of an in-lieu fee.

A developer of any other residential project may propose to meet the requirements of subsection A through payment of an in-lieu fee by showing good cause that it is not feasible to construct the required units. A written request shall be submitted with the developer's application for a discretionary approval or building permit, whichever comes first. The request shall include: a statement identifying all overriding conditions that prevent the developer from meeting the requirement to construct the affordable units; sufficient independent data, including appropriate financial information, to support the developer's claim that it is not feasible to construct the required affordable units; and a detailed analysis of why the concessions and incentives identified in subsection F cannot mitigate the conditions that are preventing the developer from constructing the affordable units. The housing director shall review all such requests and prepare a recommendation for the city council. Such requests shall be considered on a case-by-case basis by the city council, and may be approved if the council determines that there are overriding conditions which prevent the developer of a multifamily residential project from meeting the requirement to construct affordable units, and that payment of the in-lieu fee will further affordable housing opportunities to an equal or greater extent.

I. Basic Requirements for Owner-Occupied and Rental Affordable Units. Affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction to market rate units in the same residential project. Subject to the approval of the planning commission, square footage of affordable units and interior features in affordable units need not be the same as or equivalent to those in market rate units in the same residential project, so long as they are of good quality and are consistent with contemporary standards for new housing. Affordable units shall be dispersed throughout the residential project, or, subject to the approval of the planning commission, may be clustered within the residential project when this furthers affordable housing opportunities.

Chapter 17.152 Residential Growth Management System

The City's Residential Growth Management System is no longer enforceable because the state passed Senate Bill 330 (see Government Code Section 66300), otherwise known as the Housing Crisis Act of 2019. Government Code Section 66300 includes language that prevents cities from "establishing or implementing any provision that . . . [a]cts as a cap on the number of housing units that can be approved or constructed either annually or for some other period" (Section 66300(b)(1)(D)(ii) [emphasis added]). Therefore, the City can no longer implement a restriction on the number of residential units that can be constructed and this ordinance is no longer enforceable.

3.10.4 Impacts

Methods of Analysis

Section 15125(d) of the CEQA Guidelines, requires than an EIR shall discuss any inconsistencies with applicable general plans, specific plans, and regional plans as part of the environmental setting. Applicable land use plans considered in this analysis include the City's 1993 General Plan, 2015–2023 Housing Element, Zoning Ordinance (Title 17), and ABAG's Metropolitan Transportation Plan/SCS.

The consistency analysis with the 1993 General Plan focuses on potentially significant environmental impacts that would result from a conflict with a policy adopted for the purpose of avoiding or mitigating an environmental effect. Under state law, a development project cannot be approved if it is inconsistent with the General Plan. Ultimately, it is within the City's decision makers' purview to decide if the Proposed Project is consistent with the General Plan. Because policies in a general plan reflect a range of competing interests, the City's decision makers are allowed to weigh and balance the plan's policies when applying them, and have broad discretion to construe its policies in light of the plan's purposes. As previously discussed, a policy consistency analysis with the 2019 General Plan is not included. Even so, generally, the policies in the 2019 General Plan are very similar to the policies contained in the 1993 General Plan. For informational purposes and a brief overview of policies that differ from the 1993 General Plan will be provided.

The Proposed Project's consistency with applicable ordinances are discussed in this section and in other technical sections of this Draft EIR. This section also considers any inconsistencies with ABAG's Metropolitan Transportation Plan/SCS, a regional land use and transportation plan. The analyses of consistency with other planning documents (e.g., regional air quality plans) are provided in the applicable technical sections in Chapter 3 of this Draft EIR.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Physically divide an established community.
- Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Physically Divide Established Community

The Project site is undeveloped and generally surrounded by development on the south, southeast and southwest with undeveloped land generally located to the northwest and northeast. The Proposed Project is a Tentative Subdivision Map to develop the site with a residential subdivision consistent with the existing neighborhoods generally located to the southwest and southeast of the site. Due to the Proposed Project's location, development of the Proposed Project would not physically divide an established community because there is no development northwest or northeast of the site. The Proposed Project would, instead, provide a continuation of the existing neighborhood with development of a new residential area. Development of the Project site would not divide an established community (first threshold criteria); therefore, this issue is not further addressed below.

Impacts and Mitigation Measures

3.10-1: Would the Proposed Project conflict with the City's 1993 General Plan policies or other regulations adopted for the purpose of avoiding or mitigating an environmental effect? This impact would be less than significant.

City of St. Helena 1993 General Plan

The Proposed Project includes approval of a Tentative Subdivision Map to develop a vacant site with residential uses consistent with the underlying land use designation and zoning that would provide a diversity of housing choices, including single family residences, ADUs, and attached multifamily units. Currently the site is designated as MDR in the City's 1993 General Plan and

the Proposed Project is not requesting a General Plan Amendment to redesignate the existing land use designation.

General Plan Guiding policies 2.6.1 through 2.6.4 support infill development within the City's Urban Service Area and growth in existing urbanized areas where City services are in place to support new development. Policy 2.6.4 encourages infill development and higher densities to minimize the need to expand the City's Urban Services Area. Implementing policy 2.6.6 limits land designed for urban uses to areas that can reasonably be predicted to be developed. Areas not slated for urban development shall be designated for non-urban uses. The Project site is located within the City's Urban Limit Line and Urban Services Area within a few blocks of downtown St. Helena adjacent to existing residential uses and infrastructure where City services are available. The site has been designated and zoned for residential development for over 25 years and has access to City services.

Policies 2.6.9 and 2.6.10 and the City's Residential Growth Management System (Municipal Code Chapter 17.152) limit the City's approval of residential units and imposes a cap on the total number of residential units to 2,850 Citywide by 2010. These policies were included in the General Plan to slow growth in order to ensure that the diverse housing needs of the community are met, development of new housing occurs in designated areas, and to ensure adequate public facilities and services are available to support new residential development. Due to passage of SB 330 otherwise known as the Housing Crisis Act of 2019, the City's Residential Growth Management System that limits residential development is no longer enforceable so consistency with these policies would not apply to this Proposed Project.

Policies 2.6.14 through 2.6.21 are focused on residential development and encourage a mix of housing types, densities and price ranges consistent with the scale and character of existing neighborhoods; encourage higher density in single family neighborhoods keeping the same development character; minimize large lot development and encourage "planned unit developments" to complement existing community character; minimize blocking views of surrounding vineyards; and encourage new residential projects to facilitate alternative transportation modes. The Proposed Project applicant is only requesting approval of a Tentative Subdivision Map at this time. Therefore, no design details are included as part of this Proposed Project. The Proposed Project applicant would require additional subsequent approvals from the City including design review, site development plan and a use permit (to construct attached multifamily units in the MDR district) in order to engage in any construction of new residences.

The Tentative Subdivision Map includes 51 single-family lots and a 3.4-acre parcel to include 25 attached multifamily units, reflecting a mix of housing types. In addition, 11 of the 51 single-family lots would include an ADU. Therefore, the Proposed Project's proposed density would be 5.1

dwelling units/acre, assuming a total of 87 units. (Section 17.116.030 of the Zoning Ordinance does allow ADUs to exceed maximum density provided there is only one ADU per parcel).

The Proposed Project provides sidewalks on all interior roads to encourage walking and bike access throughout the Project site. The existing vineyard on the Project site occupies approximately 6.8 acres and would be removed with the exception of a small portion of the vineyard (approximately 1 acre) that would remain located in the southwestern "panhandle" portion of the site. Currently there are no views of other existing vineyards in the existing agricultural lands to the north, northeast and northwest that could be blocked by residential development (see also Section 3.1 for a discussion of visual impacts and related policies).

The Proposed Project would not conflict with the City's 1993 General Plan policies related to environmental protection and would not result in a significant environmental effect related to land use plan consistency. The impact is **less than significant.**

2019 General Plan ("General Plan Update 2040")

As noted previously, the Proposed Project is not required to demonstrate consistency with the City's adopted 2019 General Plan Update because it was not adopted when the Proposed Project application was filed and deemed complete in 2011. In general, the 2019 General Plan goals and policies are very similar to the goals and policies included in the 1993 General Plan. The notable differences include that the 2019 General Plan eliminates the Urban Service Area and updates the Urban Limit Line, and designates Urban Reserve Areas (which can only be considered for development if there is no developable land within the Urban Limit Line). The 2019 General Plan Update also supports agricultural and low-intensity uses beyond the Urban Limit Line (Policy LU1.3), and allows an exception for on-site employee housing to be developed on agricultural lands outside of the Urban Limit Line (Policy LU1.2**)**. Overall, the intent of the policies to discourage urban sprawl by containing urban development within the Urban Limit Line and designated areas is consistent with the policy direction provided in the 1993 General Plan. The Proposed Project is consistent with the intent of the 2019 General Plan land use policies to discourage sprawl and to develop areas within the Urban Limit Line.

Housing Element Update 2015-2023 Goals, Policies, and Eight-Year Action Plan

The City's Housing Element includes goals and policies that address the need for the City to provide a diversity of housing and to use land efficiently in creating livable neighborhoods. The Proposed Project includes a mix of single-family residences and ADUs as well as 25 multifamily affordable units, designated for Very Low-income (5 units) and the Moderate-income category (20 units). The inclusion of a mix of housing units meets the intent of Goal 1 and policies HE1.3, HE2.4, and HE2.6 which encourages the development of a variety of housing in the City, including affordable units and second, or accessory units.

The Project site is located within the City's Urban Limit Line and as discussed above, has been designated for residential development for over 25 years, since 1993. The Project site is included in the vacant land inventory in the Housing Element. The site is located adjacent to residential development to the south, southwest and east and is adjacent to the limit of the City's Urban Limit Line. To ensure the protection of agricultural lands to the north, northeast/northwest, the City has zoned the Project site for MDR which allows a higher density. This encourages more compact development in order to limit encroaching into lands farther away from existing infrastructure and services. Given its location adjacent to existing development, the Project site is served by existing infrastructure including roads, water, sewer, and storm drain and is within a short walk of downtown St. Helena and the City Library. These factors contribute to meeting the intent of policies HE2.1 and HE2.2, which encourage higher density housing to protect agricultural lands and to encourage a balance of housing types (Goal 2). Overall, the Proposed Project is consistent with the City's Housing Element and the impact is **less than significant.**

City of St. Helena Zoning Ordinance

A zoning designation applied to the Project site must be consistent with the General Plan and the anticipated uses of the site. The proposed land uses and density of the Proposed Project is consistent with the 1993 General Plan (and 2019 General Plan) MDR land use designation and MR zoning.

Chapter 17.152 of the Zoning Ordinance implements the City's Residential Growth Management System, intended to regulate residential growth of the City to approximately 2% per year. As stated previously this imposes a cap on the total number of residential units to 2,850 Citywide by 2010 (included as Implementing Policy 2.6.11 of the 1993 General Plan). However, the City's Residential Growth Management System is no longer enforceable due to the passage of SB 330 (see Gov't Code Section 66300) otherwise known as the Housing Crisis Act of 2019. This act prevents cities from establishing or implementing any provision that imposes a limit on the number of housing units that can be approved or constructed annually or for some other period. Therefore, as the City can no longer implement a restriction on the number of residential units that can be constructed, the Proposed Project does not have to be consistent with this chapter of the Zoning Ordinance.

The Tentative Subdivision Map includes a 3.4-acre lot (Lot 52) designated for 25 multifamily affordable housing units and also proposes to develop 11 ADUs consistent with Section 17.116.030 of the Zoning Ordinance. The City would enter into an Affordable Housing Agreement in conjunction with the approval of the Tentative Subdivision Map. The Tentative Subdivision Map and the Proposed Project's Affordable Housing Agreement must be consistent with the City's Housing Trust Fund, Housing Impact Fee, and Inclusionary/In-lieu Fee

Requirements (Chapter 17.146). Under Section 17.146.050(g)(2), if "the developer is required to build four or more units of affordable housing, the number of affordable units which are required to be constructed in very low, low or moderate units shall be determined by the ratio of units needed in each of those categories in order to satisfy the City's fair share housing goals." Per the City's Regional Housing Needs Allocation, the Proposed Project's multifamily rental units should be rented to 25% very low-income households, 17% low income households, and 21% moderate income households. The Proposed Project is proposing moderate and very low-income restricted units, with no units designated for low income single-family houses as required by the City's inclusionary housing requirements. Additionally, Section 17.146.050(I) states that affordable units should be comparable in number of bedrooms with an exterior appearance consistent with a project's market rate housing and be dispersed throughout a project site. As proposed, the ADUs would not have a comparable number of bedrooms to the market rate units, and the 25 multifamily affordable housing units would be located on a single 3.4-acre parcel (Lot 52) with 11 ADUs scattered throughout the other 51 single-family lots. Because these units are not comparable to the proposed single-family units in number of bedrooms and are not dispersed throughout the site the Proposed Project would be required either develop an alternative equivalent proposal or pay an in-lieu fee, both of which require approval by the City Council.

As indicated previously, the Proposed Project applicant is only requesting approval of a Tentative Subdivision Map at this time. The map is consistent with the development standards of the MR zoning district. Note that only the lot configuration of the proposed subdivision can be assessed at this time; individual structures must comply with the MR development standards, including setbacks, height and lot coverage, at the time those applications are submitted. In addition, as noted in Chapter 2, Project Description, the Proposed Project would also be subject to the City's design review process. Future construction of the attached multifamily units would require approval of a conditional use permit.

If the Proposed Project is approved, additional discretionary and ministerial approvals would be required including design review and a conditional use permit for the multifamily housing. This would require the Proposed Project applicant to demonstrate compliance with specifics of the Zoning Ordinance as well as the City's Municipal Code. Because the approvals the applicant is requesting at this time are consistent with the City's Zoning Ordinance the impact is **less than significant.**

Plan Bay Area 2040

The Plan Bay Area 2040 is the Regional Transportation Plan and SCS for the nine-county San Francisco Bay Area, which includes Napa County. The Plan assumes development of the Project site with residential uses, consistent with the City's 1993 (and 2040 General Plan) land use designation, and due to its location near downtown, it is consistent with the goal of SB 375 to reduce greenhouse gas emissions from cars and light trucks by developing new uses near

existing infrastructure and alternative transportation choices. The Proposed Project as proposed is consistent with the Plan Bay Area 2040 and the impact is **less than significant.**

Mitigation Measures

None required.

3.10.5 Cumulative Impacts

The land use analysis in an EIR does not typically include a discussion of cumulative impacts because the consistency analysis for applicable land use goals and policies is not an additive effect.

3.10.6 References

Association of Bay Area Governments. 2017. Plan Bay Area 2040 Draft Environmental Impact Report. April 2017.

City of St. Helena. 1993. City of St. Helena 1993 General Plan. September 28, 1993.

City of St. Helena. 2019. City of St. Helena General Plan Update 2040. May 2019.

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3.11 NOISE AND VIBRATION

3.11.1 Introduction

This section presents potential noise and vibration impacts of the proposed Hunter Subdivision Project (Proposed Project), which includes the environmental setting and existing ambient noise conditions, regulatory framework, potential short-term and long-term noise and vibration impacts, and proposed measures to mitigate any identified significant impacts.

A total of four comments were received that raised concerns regarding noise and vibration in response to the Notice of Preparation. Two of the comments stated that noise associated with the Proposed Project was a concern; one comment indicated that construction noise needed to be evaluated; the final comment pointed out the presence of a senior residential development in the vicinity of the Project site, and as such it was important to maintain peace and quiet in the area. Concerns regarding noise are addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information contained in this section is based on the proposed tentative map, the Federal Highway Administration (FHWA) Roadway Construction Noise Model and the FHWA Traffic Noise Model (TNM 2.5) used to estimate Proposed Project noise emissions, the California Department of Transportation's Technical Noise Supplement to the Traffic Noise Analysis Protocol (Caltrans 2013), and Federal Transit Authority (FTA) Transit Noise And Vibration Impact Assessment (FTA 2006). The analysis is based on noise and vibration modeling, which can be found in Appendix I. Other sources consulted are listed in Section 3.11.6, References.

3.11.2 Environmental Setting

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz. The normal frequency range of hearing for most people extends from about 20 to 20,000 hertz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (EPA 1973). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. To evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL and other terminology used to describe noise is provided in Table 3.11-1.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of the sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Table 3.11-1
Definitions of Acoustical Terminology

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of two like quantities
Sound Pressure Level (SPL)	10 times the logarithm to the base 10 of the ratio between the square of the sound to the square of the reference sound pressure of 20 μPascals. Sound pressure level is the quantity that is directly measured by a sound level meter and expressed in dB.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 hertz and 20,000 hertz.
A-Weighted Sound Level (dBA)	SPL in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de- emphasizes low and high frequency components of frequency components of sound in a manner similar to the frequency response of the human ear and correlates well with subjective response to sound. All sound levels in this report are A-weighted.
Noise	Unwanted sound.
Equivalent Sound Level (Leq)	The average A-weighted sound level during the measurement period. For this CEQA evaluation, Leq refers to a one-hour period unless otherwise stated.
Lmax, Lmin	The maximum and minimum A-weighted sound level during the measurement period.
L01, L10, L50, L90	The A-weighted sound levels that are exceeded l%, l0%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level (Ldn)	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured during the night between l0 pm and 7 am.
Community Noise Equivalent Level (CNEL)	The average A-weighted sound level during a 24-hour day, obtained after addition of S decibels in the evening from 7 p.m. to l0 p.m. and after addition of l0 decibels to sound levels during the night between l0 p.m. and 7 a.m.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Impulsive Noise	Noise loud enough to disrupt normal activities and usually lasting less than one second.

Source: St. Helena General Plan 1993.

Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. The response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration. It is also common for ground-borne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the

perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

When evaluating human response, ground-borne vibration is usually expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels defined as:

$$L_v = 20 \log \left(\frac{v_{rms}}{v_{ref}} \right)$$

Where v_{rms} is the RMS vibration velocity amplitude in inches/second and v_{ref} is the decibel reference of 1x10-6 inches/second.

To avoid confusion with sound decibels, the abbreviation VdB is used for vibration decibels. The vibration threshold of perception for most people is around 65 VdB (which is equivalent to 0.0018 inches per second RMS). Vibration levels in the 70 to 75 VdB range are often noticeable, but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable (FTA 2006).

Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass, expressed as inches per second). Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving and soil compacting, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used. A conservative maximum vibration level standard is 0.2 inches per second PPV for the prevention of structural damage to typical residential buildings (Caltrans 2013).

Existing Noise Conditions

Project Site Noise Levels

The Project site is currently vacant land with a small vineyard area. The area surrounding the Project site is a mix of agricultural, residential, commercial offices, and open space. Residential properties are located adjacent to the south, southeast, and east of the Proposed Project, as well as approximately 500 feet to the west; the closest existing residences (including mobile homes) are located at distances from 20 feet to 65 feet from the property boundaries. A new single-family residence is currently under construction just west of the Project site. Commercial offices are located at the terminus of Adams Street (approximately 650 feet to the south) and a

preschool is located along Adams Street to the south of the offices (approximately 950 feet to the south of the Proposed Project boundary).

The ambient or existing noise environment is described on the basis of 24-hour measurements completed in the vicinity of the Project site. Existing noise levels were measured at the Project site boundaries in order to establish baseline noise conditions against which to compare Proposed Project operational noise levels, as shown in Figure 3.11-1, Noise Measurement Locations. A total of three 24-hour noise measurements were performed, one apiece on the southern, western, and northern property boundaries. Sound-level measurements were performed using SoftdB Piccolo 3 Models (ANSI Type II). American National Standards Institute (ANSI) Type II sound-level meters have sufficient accuracy to be used for environmental noise evaluation. The sound-level meters were calibrated before and after the 24-hours measurements using a Larson Davis Model CAL150 calibrator.

Table 3.11-2 summarizes the dates and start/stop times for each 24-hour measurement, as well as the calculated 24-hour weighted average noise level (CNEL). See Appendix I for data tables for each of the 24-hour measurement periods and the calculation of CNEL from the recorded hourly average values.

Table 3.11-2
Existing Ambient Noise Measurement Results

Location	Dates	Start Time	Stop Time	CNEL (dBA)
Southeast Property Boundary	10/16/2018 to 10/17/2018	11 AM	11 AM	48
Western Property Boundary				50
Northeast Property Boundary				52

Source: Dudek 2018.

Existing noise levels on site, and immediately adjacent to neighboring residential land uses, are well within the City's exterior noise exposure limit of 60 dBA CNEL for residential land uses (Refer to Section 3.11.3 – Local).

3.11.3 Regulatory Setting

Federal

Federal Highway Administration Standards

Code of Federal Regulations (CFR) Title 23, Part 772 sets procedures for the abatement of highway traffic noise and construction noise. Title 23 is implemented by the Federal Department of Transportation FHWA. The purpose of this regulation is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply

noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the Department of Transportation FHWA Noise Standards. Title 23 establishes a 67 dBA L_{eq}(h) standard applicable to federal highway projects for evaluating impacts to land uses including residences, recreational uses, hotels, hospitals, and libraries (23 CFR Chapter 1, Part 772, Section 772.19).

Federal Transit Administration and Federal Railroad Administration Standards

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2006) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration have published guidelines for assessing the impacts of ground-borne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches per second perturbation projection vector (PPV).

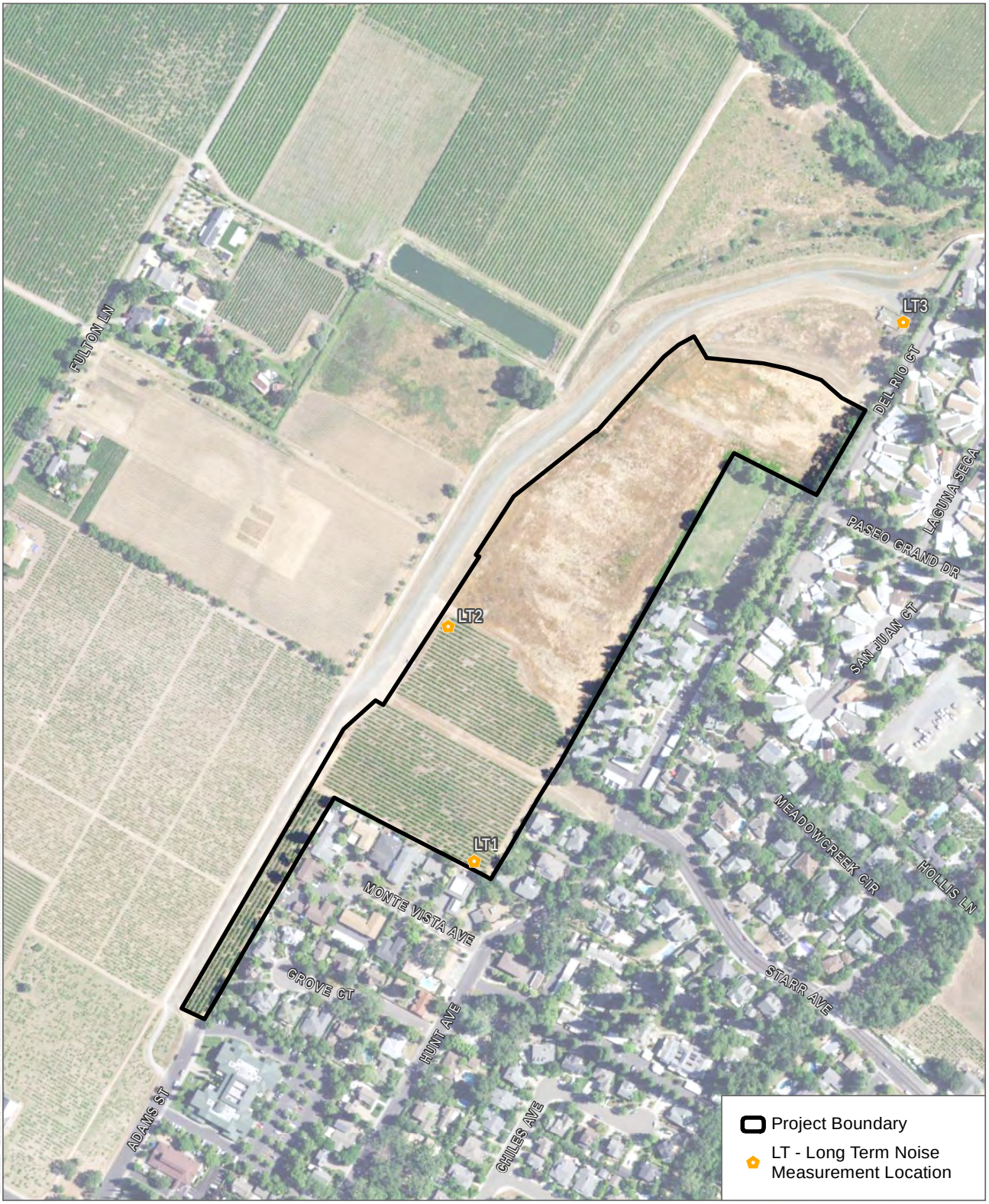
State

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located in an area with CNEL (or L_{dn}) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35).



SOURCE: Digital Globe 2017, Napa County 2015

DUDEK 0 160 320 Feet

FIGURE 3.11-1

Noise Measurement Locations

Hunter Subdivision Project

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Local

City of St. Helena 1993 General Plan

The Public Health and Safety Element of the City of St. Helena 1993 General Plan (City of St. Helena 1993) provides guiding and implementing policies regarding noise management, including the following:

> **Policy 8.3.1:** Maintain a city-wide noise environment that balances various City objectives while minimizing the impact of highway, railroad, and industrial noise on the public, while recognizing the agricultural basis of the community.
>
> **Policy 8.3.2**: Discourage noise-sensitive land uses from locating in areas with inappropriate or high noise levels based on the land use compatibility guidelines, interior noise level criteria, and the noise contour maps.
>
> **Policy 8.3.3**: Require new residential developments to implement noise mitigation measures when built in close proximity to noise sources such as Highway 29, the railroad tracks, and the Harold Smith & Sons gravel quarry. These developments should consider the resulting exterior as well as interior noise environment.
>
> **Implementing Policy 8.3.5:** Continue to consider the environmental impact of transportation-related noise and other noise sources in the review and approval of subdivision plans and requests for changes in the zoning ordinance.
>
> **Implementing Policy 8.3.6**: Adopt the Title 24 interior noise level standard of 45 dBA, Ldn in all habitable rooms for all dwelling units. Adopt a maximum allowable noise level standard of 60 dBA Ldn for residential exterior activity areas such as patios, back yards or recreational areas.
>
> I**mplementing Policy 8.3.11**: Require construction operations to use noise suppression devices and techniques and limit noisy construction activities to the least noise sensitive times (8 am to 5 pm, Monday through Friday).

The Public Health and Safety Element also prescribes recommended maximum exterior noise exposure levels for each land use, as presented in Table 3.11-3.

Table 3.11-3
Noise/Land Use Compatibility Guidelines

Land Use Category	Completely Compatible [a]	Tentatively Compatible [b]	Normally Incompatible [c]	Completely Incompatible [d]
Residential	< 55	55 to 60	60 to 75	75 >
Commercial/Office	< 65	65 to 75	75 to 80	80 >
Industrial/Agriculture	< 70	70 to 80	80 to 85	85 >
School/Library/Hospital	< 65	65 to 70	70 to 80	80 >
Playground, Park	< 67	67 to 70	70 to 75	75 >

Notes:

[a] Completely Compatible: the noise exposure is such that both the indoor and outdoor environments are pleasant, as long as noise sources do not cause the ambient noise to increase more than 5 dBA, and in the absence of intrusive and intermittent noise.

[b] Tentatively Compatible: the noise exposure is great enough to be of concern, but common building construction practices will make the living indoor environment acceptable, even for sleeping quarters, and the outdoor environment will be reasonably pleasant for recreation and play.

[c] Normally Incompatible: the noise exposure is so severe that unusual and costly building construction is necessary to ensure some tranquility inside one's home, and barriers must be erected between the site and prominent noise sources to make the outdoor environment tolerable.

[d] Completely Incompatible: the noise exposure at the site is so severe that construction costs to make the indoor living environment acceptable would be prohibitive and the outdoor environment would still be intolerable.

Source: 1993 St. Helena General Plan.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Public Health and Safety Element of the City of St. Helena 2019 General Plan (City of St. Helena 2019) provides guiding and implementing policies regarding noise management, including the following:

> **Policy PS2.1:** Preserve the current low levels of noise in St. Helena to maintain the City's rural atmosphere.
>
> **Policy PS2.2**: Maintain a citywide environment that balances various City objectives while minimizing the impact of highway, railroad, and industrial noise. The City should manage both indoor and outdoor noise levels to protect health and safety. A combination of noise standards and existing noise levels should be used to determine impacts and mitigation measures.
>
> **Policy PS2.3**: Minimize potential noise impact conflicts between land uses by regulating incompatible land uses. Encourage noise-generating uses to reduce their impacts while promoting land use patterns that avoid conflicts. Employ compatibility guidelines, interior noise level criteria, the City's noise standards, and noise contour maps to determine the compatibility of land uses.

Policy PS2.4: Require a reduction and/or control of the use of machinery, mechanical systems and other noise-making equipment and sources in and near residential areas where the noise impacts would be considered intrusive to adjacent residential property, unless consistent with the right-to-farm.

Policy PS2.5: An increase in average noise levels of 5 dBA or greater is considered to be significant and to constitute a noise impact by the noise source in question for the purpose of environmental analyses.

The Public Health and Safety Element also prescribes the same recommended maximum exterior noise exposure levels for each land use, as previously presented in Table 3.11-3.

St. Helena Municipal Code

The St. Helena Municipal Code, Chapter 8.24 of Title 8, the Health and Safety Code, specifies unnecessary noise which can be heard outside of any building by attaching any noise-producing attachment to any vehicle; or blowing or ringing any horn, whistle or bell; by operating a loudspeaker, public address system or sound amplification system; or by making any other loud or unusual noise which disturbs the peace of any other person would violate the ordinance unless permitted by the Chief of Police. Similarly, noise generated by commercial activities between the hours of 10.00 p.m. and 7:00 a.m. that can be heard at the property line of any parcel is prohibited, unless permitted by the Chief of Police.

Construction activities are limited to the hours between 8:00 a.m. and 5:00 p.m. Monday through Saturday. Construction is not allowed on Sundays and holidays (federal and local) if noise can be heard at the property line of any parcel of real property within the city limits. Delivery of materials/equipment and cleaning and servicing of machines/ equipment are limited to between 7:00 a.m. and 6:00 p.m.

3.11.4 Impacts and Mitigation Measures

Methods of Analysis

The analysis of existing and future noise environments is based on observations, noise level measurements, and computer modeling (model output data is included in Appendix I). Existing noise levels were monitored at selected on-site and off-site locations using ANSI Type II sound level meters for general environmental noise measurement instrumentation. Traffic noise modeling involved the calculation of existing and future traffic noise levels along roadway sections where the Proposed Project would contribute additional vehicle trips, as provided in the Proposed Project's traffic report (Appendix K), using the FHWA model. Vibration from transportation sources was not

evaluated in detail because it is not common for vibration from motor vehicles traveling on paved roads to cause disturbance or substantial annoyance in these areas.

Construction Noise and Vibration

Construction noise levels were determined using the FHWA's Roadway Construction Noise Model. For construction noise, this analysis assumed that compliance with conditions specified in the City's Noise Ordinance. Specifically, limiting construction to the hours of 8 a.m. to 5 p.m., Monday through Saturday, and prohibit construction activities on Sunday and holidays. For construction vibration, this analysis uses the FTA thresholds for structural damage (vibration-peak-particle velocities greater than 0.2 inches per second) and FTA's threshold for human annoyance within residences (80 VdB at residences where people normally sleep, for infrequent events).

For the purposes of noise modeling, it was conservatively assumed that construction of the Proposed Project would occur over a period of approximately 6 years. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Proposed Project applicant and CalEEMod-generated default values. Complete detailed construction assumptions are included in Appendix I. Implementation of the Proposed Project would include construction of 87 residential units including 51 single-family residences, 11 accessory dwelling units, and 25 multi-family units.

As described in Chapter 2, Project Description, the Proposed Project would grade an approximately 17-acre site. Some soil export would be required to balance the site. Soil balance would occur within each subset area and hauling would not be required between subset areas. Balancing activities are anticipated to be performed through the use of off-road construction equipment (e.g., excavators, graders, dozers, and scrapers). The construction equipment mix used for estimating the construction noise emissions of the Proposed Project is shown in Table 3.11-4. Notably, because detailed specific information regarding the construction equipment fleet is unknown at the time of analysis, the analysis is based on the default construction equipment fleet provided by CalEEMod.

Table 3.11-4
Construction Equipment List by Phase

Construction Phase	Equipment	Quantity
Site Preparation	Rubber Tired Dozers	3
	Tractors/Loaders/Backhoes	4
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2

Table 3.11-4
Construction Equipment List by Phase

Construction Phase	Equipment	Quantity
	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Source: See Appendix I for details.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Generation of excessive groundborne vibration or groundborne noise levels.
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Noise Significance Criteria Applicable to the Proposed Project

Based on the City's 1993 General Plan Public Safety Element and Municipal Code (Chapter 8.24), as well as standards adopted by other agencies that are customarily applied to the assessment of short-term noise generation, the Proposed Project would have a significant impact on noise if it would result in:

- Construction, between the hours 8:00 a.m. and 5:00 p.m. Monday through Saturday, construction noise levels greater than 90 dBA Leq at any vicinity residence (FTA 2006). Also, any noise generating construction activities occurring between 5:00 p.m. and 8 a.m. weekdays and Saturdays, or any time on Sundays or holidays (St. Helena 1993).

- Construction, the exposure of existing structures in the Proposed Project vicinity to vibration levels exceeding 0.2 inches per second PPV, or exposure of residents to vibration levels of 80 VdB in residences where people normally sleep, for infrequent events (FTA 2006).
- Proposed Project operation, generation of noise in excess of 60 dBA Ldn at the property line for any existing residential properties in the Proposed Project vicinity (St. Helena 1993).
- Proposed Project operation, an increase of 3 dBA CNEL or more in existing roadway traffic noise levels, as a result of the addition of Proposed Project generated traffic on vicinity roadways (Caltrans 2013).

Threshold Criteria not Applicable to the Proposed Project

Due to the location and characteristics of the Proposed Project, certain significance criteria are not applicable and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

Airports/Airport Land Use Plan

The Project site is not located within two miles of an airport, the closest airport is Angwin-Parrett Field airport approximately 4.5 miles north-northeast of the Project site. Therefore, future residents would not be exposed to elevated noise levels from aircraft operation and airport noise issues (last significance threshold listed above) are not addressed further in the analysis.

Impacts and Mitigation Measures

3.11-1: Would the Proposed Project result in a temporary (short-term) increase in construction noise levels that would cause a substantial increase in ambient noise levels and exceed City standards? This impact would be potentially significant.

Construction of the Proposed Project would generate noise that could expose nearby receptors (residences) to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. Noise from construction equipment generally exhibits point source acoustical characteristics. A point source sound is attenuated (or reduced) at a rate of 6 dB per doubling of distance from the source for “hard site” conditions and at 7.5 dB per doubling of distance for “soft site” conditions. These rules apply to the propagation of sound waves with no obstacles between source and receivers, such as topography (ridges or berms) or structures. The range of maximum noise levels for various types of construction equipment is provided in Table 3.11-

5. Typical operating cycles may involve two minutes of full power, followed by 3 or 4 minutes at lower levels.

Table 3.11-5
Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dB) - 50 feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

Source: FTA 2006.

Whereas Table 3.11-5 shows the noise level of individual pieces of equipment, the noise levels shown in Table 3.11-6 take into account operation of multiple pieces of construction equipment simultaneously, and lists the typical overall noise levels that would be expected for each phase of construction. These noise levels are based on surveys conducted by the United States Environmental Protection Agency in 1971. In the time since 1971, regulations have been enforced to improve noise generated by certain types of construction equipment to meet worker noise exposure standards. Also, because of stringent air quality emissions standards, newer, cleaner, and quieter heavy equipment is used on most construction projects in California. Thus, construction phase noise levels indicated in Table 11.3-6 represent “worst-case” conditions. As the table shows, the highest noise levels are expected to occur during the grading/excavation and building construction phases of construction.

Table 3.11-6
Outdoor Construction Noise Levels by Phase

Construction Phase	Adjacent Residence at 20 Feet (dBA L_{eq})	Adjacent Mobile Home Park at 65 Feet (dBA L_{eq})	Acoustic Center at 97 Feet (dBA L_{eq})
Site Preparation	92	82	79
Grading/Excavation	95	85	81
Building Construction	94	84	80
Paving	89	79	75
Finishing	82	71	68

Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.
Source: Roadway Construction Noise Model, see Appendix I.

As shown in Table 3.11-6, construction-related noise levels could reach up to 95 dBA L_{eq} at residential property lines to the east of the Project site. The City exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific limited daytime hours. The City's Health and Safety Code (Chapter 8.24 of Title 8, the Health and Safety Code) requires noise generating construction activities (including demolition, excavation, and building construction), be restricted to the hours between 8:00 a.m. and 5:00 p.m., Monday through Saturday, and prohibited on Sunday and holidays (City of St. Helena Chapter 8.24). This ensures that sensitive receptors are not disturbed by early morning or late night activities. However, the City's 1993 General Plan includes Implementing Policy 8.3.11, which states "Require construction operations to use noise suppression devices and techniques and limit noisy construction activities to the least noise sensitive times (8 a.m. to 5 p.m., Monday through Friday)." Due to the proximity of residences to the Project site and the potential for construction noise to be an annoyance, as well as the closest adjacent offsite residence potentially being exposed to levels exceeding 90 dBA L_{eq} for the first three construction phases and thus greater than the FTA guidance threshold, the impact is considered **potentially significant.**

Mitigation Measures

Mitigation Measure NOI-1 would substantially lessen construction noise upon adjacent residences by requiring administrative controls, engineering controls, and/or installation of sound abatement. Installation of an effectively placed storage container or a temporary plywood or blanket barrier on a portion of the site boundary that blocks line-of-sight between the source(s) of noise emission and the receptor of concern (e.g., residence) would be expected to provide a minimum of 3-5 dBA of noise reduction. By way of examples, doubling the distance of an operating generator from a receptor would be expected to yield a 6 dB reduction in noise. Proper engine mufflers installed on construction equipment helps ensure that source sound emission levels are further reduced. Implementation of Mitigation Measure NOI-1 would help minimize construction noise impacts to less than significant.

NOI-1: The Project applicant or its contractors shall implement the following for onsite noise control and sound abatement means that, in aggregate, would yield sufficient construction noise reduction during the site preparation, grading/excavation and building construction phases of the Project to ensure compliance with the FTA-based guidance standard of 90 dBA hourly Leq at or beyond the property lines of the nearest residences, as noted.

Administrative Controls – At all times during site preparation and construction:

- Comply with Chapter 8.24 of the Municipal Code with respect to allowable construction periods,
- Minimize idling time of onsite equipment, and
- Either locate onsite stationary construction equipment (such as generators or air compressors) as far from adjacent residential property boundaries as is feasible, or place this equipment inside an approved noise-attenuating casing (e.g., sound-attenuated air intakes and heat vents, exhaust mufflers, etc.), or place this equipment indoors.

Engineering Controls – All mobile and stationary construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order; and

Install Sound Abatement – During site preparation and construction which involves the operation of more than two pieces of heavy equipment (dozer, backhoe, front-end loader, crane, tractor, etc.) for at least one hour and when operating within 25 feet of the exterior of a residence (either offsite or onsite), do the following:

- Erect a temporary barrier (i.e., plywood sheet) or install sound blankets (or comparable temporary solid barriers) on the Project's construction fencing, or
- Locate sound path intervening containers or trailers onsite to block direct line-of-sight between residences and the operating heavy equipment.

3.11-2: Would the Proposed Project expose existing residential areas to excessive vibration due to project construction? This impact would be less than significant.

During site clearing, grading and construction activities for the Proposed Project groundborne vibration would be produced by heavy-duty construction equipment. The most important

equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 3.11-7.

Table 3.11-7
Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)	Approximate Ground Vibration Level 25 feet (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Drill Rig / Auger	0.089	58
Jackhammer	0.035	87
Small Bulldozer	0.003	79

Source: FTA 2006.

As shown in Table 3.11-7, use of heavy equipment (e.g., large bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The City's 1993 General Plan Public Safety Element and Municipal Code (Chapter 8.24) requires limiting the exposure of existing residences to vibration levels exceeding 0.2 inches per second PPV, or exposure of residents to vibration levels of 80 VdB in residences where people normally sleep. The nearest residences to the Project site would be approximately 50 feet from ground disturbance from structural foundations and could experience vibration levels of 0.04 inches per second PPV. Vibration levels at these receptors would not exceed the FTA building damage threshold of 0.2 inches per second PPV. A large bulldozer has a vibration level of 87 VdB measured at 25 feet, at the nearest residences (50 feet) this level would be attenuated to approximately 78 VdB, which is less than the FTA's threshold of 80 VdB. Vibration between 70 and 80 VdB could be noticeable but is generally not considered annoying or destructive. As such, construction-related vibration associated with the Proposed Project would result in a **less-than-significant impact.**

Mitigation Measures

None required.

3.11-3: Would the Proposed Project generate a substantial temporary or permanent operational increase in noise that would exceed City standards? The impact would be less than significant.

Stationary Sources

Operational noise sources for residential areas typically include heating, ventilation, and air conditioning (HVAC) equipment and landscape maintenance activities. Landscape maintenance activities involve short-term noise generation events that do not typically have the potential to

increase the ambient noise levels when referring to the 24-hour L_{dn} metric (which is referenced in the City's Public Safety Element policies). These activities would also not be dissimilar in intensity or character from landscape maintenance activities occurring at the adjacent existing residential properties. Typical HVAC units for residences have sound levels not greater than 67 dBA L_{eq} at 1 meter (Lennox 2017). At 20 feet (the closest residences to the Proposed Project boundary), these levels would be reduced to approximately 51 dBA $L_{eq.}$ Even if the HVAC equipment were to run continuously over a 24-hour period, the resulting noise level at the closest residence would be 57 dBA. Thus, operational noise levels from the proposed residences would be expected to remain below 60 dBA L_{dn} at existing adjacent residences, resulting in a **less-than-significant impact.**

Mobile Sources

The primary noise-related affect the Proposed Project could have in areas off-site is an increase in traffic, which is the main source of noise in most urban areas. Proposed-Project-related traffic noise levels were examined along roadways where the Proposed Project would principally contribute vehicle trips. Trip volume calculations, including traffic volumes along Main Street, Adams Street, Railroad Avenue, Library Lane, Starr Avenue, Hunt Avenue, Paseo Grande Drive and Silverado Trail are included in Appendix I.

Acoustical calculations using standard noise modeling equations adapted from the FHWA noise prediction model were performed for the following traffic scenarios: Existing (conditions), Existing Plus Project, Cumulative, and Cumulative Plus Project.

The modeling calculations take into account the posted vehicle speed, average daily traffic volumes for each scenario, and the estimated vehicle mix (i.e., automobiles, medium and heavy trucks). The model assumed "pavement" propagation conditions, or a hard site surface. Noise levels are indicated at 50 feet from the centerline of the road, consistent with the methodology used for the St. Helena 2019 General Plan Update Draft Environmental Impact Report (St. Helena 2018). Noise levels at greater distances from the roadway centerline would be lower due to attenuation provided by increased distance from the noise source. Generally, noise from heavily traveled roadways would experience a decrease of approximately 3 dB for every doubling of distance from the roadway. The noise model does not take into account the sound-attenuating effect of intervening structures, barriers, vegetation, or topography. Therefore, the noise levels predicted by the model are conservative with respect to potential exterior exposure levels at noise-sensitive uses located along these roadways.

Future increases in traffic noise levels, with and without the Proposed Project, are provided in Table 3.11-8.

Table 3.11-8
Proposed-Project-Related Traffic Noise Levels

Roadway Segment	Existing dBA CNEL	Exist + Project dBA CNEL	Cumulative dBA CNEL	Cumulative + Project dBA CNEL	Maximum Increase (dB)
Main Street North/West of Adams	65.2	65.3	65.6	65.6	0.1
Main Street South/East of Adams	65.0	65.1	65.7	65.8	0.1
Adams Street North of Railroad	63.8	63.8	64.1	64.1	< 0.1
Railroad Avenue Adams to Hunt	64.2	64.4	64.4	64.6	0.2
Library Lane East of Adams	49.1	49.4	49.2	49.5	0.3
Starr Avenue Hunt to Pope	59.7	60.0	61.3	61.5	0.3
Hunt Avenue North of Railroad	59.6	59.8	61.2	61.4	0.2
Paseo Grande Drive East of Hunt	62.3	62.5	63.3	63.4	0.3
Silverado Trail South of Mountain	70.6	70.7	71.5	71.6	0.1

Source: Appendix I.

Proposed-Project-related traffic noise increases along roadways where the Proposed Project would contribute trips would in all cases be less than 1 dBA, as shown in Table 3.11-8. Such increases would therefore be well below the 3 dB perceptible increase threshold. The Proposed Project would also increase the roadway noise level by less than 3 dB in the cumulative scenario. As with project-specific increases, traffic noise levels would increase less than 3 dB CNEL on all roadways, when comparing existing noise levels to those from cumulative plus the Proposed Project. Therefore, the Proposed Project would have a **less-than-significant impact** due to an increase in off-site roadway traffic noise levels.

Mitigation Measures

None required.

3.11.5 Cumulative Impacts

The cumulative context for traffic noise is the traffic volume increases resulting from the Proposed Project along with buildout of the 1993 General Plan, and the anticipated increase in traffic volumes along local roadways. The traffic analysis assumed a cumulative context of

transportation impacts resulting from the Proposed Project along with buildout of the 2019 General Plan.

Non-transportation noise sources (e.g., those associated with Proposed Project operation, which for residential properties include HVAC equipment and landscape maintenance activities) and construction noise impacts are typically project-specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). These noise sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

Construction activities associated with proposed or future development within the area would contribute to cumulative noise levels, but in a geographically limited and temporary manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

3.11-4: Would the proposed project, in addition to cumulative development in the City, increase noise that exceeds the City's noise standards? The Project's contribution would not be considerable.

The analysis of off-site Proposed-Project-related traffic noise levels included an evaluation of traffic volumes and resulting roadway traffic noise levels from buildout of the City. The evaluation concluded that roadway traffic levels would not reach significant levels when compared against existing roadway traffic noise levels. Therefore, the Proposed Project's contribution to existing cumulative noise would not be considerable resulting in a **less-than-significant cumulative impact.**

Mitigation Measures

None required.

3.11.6 References

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3.12 PUBLIC SERVICES AND RECREATION

3.12.1 Introduction

This section describes the existing public services (fire and police protection, schools, and libraries) and recreational resources in the City of St. Helena (City) and discusses applicable federal, state, and regional regulations pertaining to the provision of public services and recreational facilities to support implementation of the proposed Hunter Subdivision Project (Proposed Project). This section evaluates the potential effects of increased demand for public services and recreational facilities associated with development of the Proposed Project.

Comments received in response to the Notice of Preparation included concerns regarding overcrowding of local schools, heightened demand for police and fire services, impacts to the City's volunteer fire department, increase in costs for City services that could be passed onto local residents, increase in use of parks, and impacts to the maintenance road/pedestrian trail along the north/northwest boundary of the Project site. All of these concerns are addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

Sources referenced to prepare this section includes information provided in Chapter 2, Project Description and from the individual service providers. Other sources consulted are listed in Section 3.12.6, References.

3.12.2 Environmental Setting

This section describes the existing conditions in the Project area and identifies the public services and recreational resources and facilities that could be affected by the Proposed Project.

Fire Protection

The Project site would receive fire protection services from the St. Helena Fire Department (SHFD). The SHFD provides fire protection services for the City, including fire suppression and prevention, education, emergency medical and rescue services, and response to hazardous materials incidents. The SHFD has one station located at 1480 Main Street, approximately 0.2 miles southwest of the Project site. This station is equipped with three fire engines, one water tender, two brush engines and one combination engine and ladder truck (Capponi pers. comm. 2018, updated by A. Vidler 2021). The SHFD also has a satellite fire station located at 1025 Dowdell Lane, approximately 0.85 miles southwest of the Project site.

The SHFD is served by three full-time staff members and 24 paid-call staff, including two fire chiefs, two fire marshals, one administrative assistant/fire inspector, and two full-time firefighters (Capponi pers. comm. 2018; City of St. Helena 2018a; updated by A. Vidler 2021). All

firefighters are trained to the First Responder level and eight are certified Emergency Medical Technicians (Capponi pers. comm. 2018, updated by A. Vidler 2021). The SHFD is equipped with two Type 1 engines, one Type 3 engine, two Type 6 brush vehicles, one command vehicle, two utility vehicles, one water tender, one Type 1 truck, and one medium-duty complement rescue trailer (City of St. Helena 2018b, updated by A. Vidler 2021).

When a call is received the SHFD is dispatched along with the ambulance company. The SHFD strives to maintain a maximum fire response time of 8 minutes or less from dispatch to time of arrival within the city limits (City of St. Helena 2018b). On receiving a call, the department responds to each call with all available paid-call firefighters. On average, 10 firefighters are dispatched in response to a call. The response time to the Project site under current conditions is approximately 3 minutes during the 70-hour coverage period, which occurs between 7 a.m. to 5 p.m. Monday through Sunday, and 5–6 minutes during all other times (Capponi pers. comm. 2018, 2019; updated by A. Vidler 2021). In 2020, the SHFD responded to 855 calls for service, the majority of which were emergency medical calls (City of St. Helena 2018a, updated by A. Vidler 2021). The department responded to approximately 69% of all calls in less than seven minutes during 2017 (City of St. Helena 2018b).

The SHFD is a member of the Napa County mutual aid automatic aid agreement, which requires all fire departments in the County to respond to a call for service as requested or required. Napa County Station 26, located in the City, and Napa County Station 12, located in the City of Yountville, provide automatic aid to all residential and commercial structure fires in the City (City of St. Helena 2018b).

The SHFD routinely reviews development applications and provides conditions of approval to address requirements for fire sprinklers, emergency access, and other fire-related concerns (City of St. Helena 2018b).

Police Protection

Police services for the Project site would be provided by the St. Helena Police Department (SHPD), located at 1480 Main Street approximately 0.2 miles from the site. The SHPD serves the City with 13 sworn police officers, 5 full-time dispatchers, one community service officer, and six police volunteers. Equipment maintained by the SHPD includes four patrol cars, one K9 unit, one Community Service Officer vehicle, one administrative vehicle, one training vehicle, and one dual purpose motorcycle. The SHPD provides 24-hour security patrol for the entire City, with one sergeant and two officers assigned to each patrol watch for the day and night shifts. The department currently has a police officer to resident ratio of 10 officers per 7,000 residents, or 1 officer to 700 residents. The department’s on-duty average is 2 officers per 7,000 residents, or one officer per 3,500 residents (Hartley pers. comm. 2021). The department strives to maintain a staffing ratio of approximately two sworn police staff for every 1,000 residents (City of

St. Helena 2018b). The SHPD also strives to maintain an average non-emergency call response time of less than 8 minutes and average emergency response time of 5-minutes or less. The SHPD has an average response time goal for all Priority One calls of three minutes or less. The department had an average response time for Priority One calls of 2 minutes and 20 seconds in 2020. The response time to the Project site under current conditions is less than 3 minutes from the SHPD headquarters. However, according to the department, response times may vary depending on the location of the on-duty patrol unit (Hartley pers. comm. 2021).

In addition to calls within the City, the SHPD participates in separate mutual aid agreements with California Highway Patrol, the Calistoga Police Department, and the County of Napa.

Schools

The Project site is located within the St. Helena Unified School District (SHUSD). The SHUSD had an enrollment of approximately 1,192 students from kindergarten through twelfth grade during the 2017-2018 school year (City of St. Helena 2018b). SHUSD operates one primary school, one elementary school, one middle school, and one high school. Students from two nearby elementary districts also attend the district's schools (City of St. Helena 2018c). The total capacity for all schools within the SHUSD is 1,776 (California Department of Education Data Reporting Office 2018).

The SHUSD Facility Master Plan (2010) was reviewed to determine projected SHUSD enrollment. With a general trend in declining enrollment in recent years, the district expects adequate capacity in the near term, and generally into the future (City of St. Helena 2018b). Student capacity in the 2016–2017 school year enrollment, and projected 2017–2018, 2018–2019, and 2019–2020 enrollment for SHUSD schools is shown in Table 3.12-1.

Table 3.12-1
SHUSD Enrollment and Capacity Data

School	Grades Served	Total Capacity	2016-2017 Enrollment	Projected 2017-2018 Enrollment	Projected 2018-2019 Enrollment	Projected 2019-2020 Enrollment
St. Helena Primary School	K-2nd Grade	284	238	250	252	255
St. Helena Elementary School	3rd-5th Grade	379	230	239	242	238
Robert Louis Stevenson Middle School	6th-8th Grade	387	261	278	265	264
St. Helena High School	9th-12th Grade	726	469	438	441	439
	Total	1,776	1,199	1,205	1,200	1,196

Source: California Department of Education Data Reporting Office 2018, SHUSD 2010.

Libraries

The City operates one public library, the George and Elsie Wood Public Library, located approximately 0.1 miles northwest of the Project site at 1492 Library Lane. The library currently contains over 75,000 books, DVDs, books on CD, CDs, newspapers, magazines, microfilm and other media (City of St. Helena 2018d). The library also includes the Napa Valley Wine Library, which encompasses approximately 3,500 titles and over 6,000 items. Furthermore, the Robert Louis Stevenson Museum is also located within the library (City of St. Helena 2018d).

The City's library has 6 full-time employees staffing the library 6 days a week, and 7 part-time employees. The library opens at 10:00 a.m. on Monday through Thursday and closes at 6:00 p.m. on Monday, 7:00 p.m. on Tuesday and Wednesday, and 9:00 p.m. on Thursday. The library is open from 2:00 p.m. until 6:00 p.m. on Friday and Saturday and is closed on Sunday. The library currently serves approximately 42 people per hour on average. No formal plans have been made for development of new library facilities (Kreiden, pers. comm. 2018).

Recreation

The City's Parks and Recreation Department oversees the development and operation of parks and recreational facilities within the City. There are eleven active parks and four trails within the City limits, which include a variety of recreational facilities, including tennis courts, softball fields, bocce courts, playgrounds, fitness courses, and picnic facilities. In addition, the Parks and Recreation Department provides a variety of recreational programs, including youth and adult sports programs, community classes and events, youth and teen programs, after-school and educational programs, summer camps, and special events. Maintenance of City recreational facilities is provided by the Parks Division of the Public Works Department (City of St. Helena 1993, 2018e). Table 3.12-2, below, lists the City's active parks, park acreage, and amenities/facilities available in each park.

Table 3.12-2
City of St. Helena Recreational Facilities

Recreational Facility	Type	Acreage	Amenities
Baldwin Park (1591 Spring St.)	Mini	0.76	Grassy Area, Pathway, Picnic Tables
Crane Park (360 Crane Avenue)	Community	11.27	Baseball field, Bocce Ball Courts (lighted), Horseshoe Pits, Picnic Area, Picnic Tables, Playground Equipment, Restrooms, Tennis Courts (lighted), Volleyball Court (lighted)
Jacob Meily Park (Pope St.)	Neighborhood	5.42	Parking, Paved Walking Trail, Picnic Area, Picnic Tables, Restrooms, Grass Area
Lewis Station (1100 Church St.)	Mini	0.13	Picnic Tables, Restrooms

Table 3.12-2
City of St. Helena Recreational Facilities

Recreational Facility	Type	Acreage	Amenities
Lyman Park (1498 Main Street)	Mini	0.89	Grass Area, Historic Gazebo, Playground Equipment
Mary Fryer Park (1300 Mitchell Dr.)	Mini	0.84	Picnic Tables, Playground Equipment
Mennen Park (1600 Voorhees Circle)	Mini	0.17	Grass Area, Pathway
St. Helena Skate Park (360 Crane Avenue)	Mini	0.41	Skate Park
Stephen C. McCullagh Park (1758 Crinella Drive)	Mini	0.14	Sandbox, Climbing Rock and Rope Structures, Benches, Play Area
Stone Bridge Park (Pope St.)	Mini	0.75	Grass Area
Wappo Park (201 Pope St.)	Neighborhood	6.65	Dog Park, Pathway, Picnic Tables
	Total	27.43	

Source: City of St. Helena 2018b.

The closest parks to the Project site include Lyman Park, Jacob Meily Park, and Lewis Station, all located approximately 0.3 miles from the site. Lyman Park is an approximately 0.9-acre park that contains a picnic area, turf areas, a children's play area and a historic gazebo (City of St. Helena 2018f).

- Jacob Meily Park is an approximately five-acre neighborhood park that includes a turf area, picnic tables, a playground, and a paved walking trail along Sulphur Creek (City of St. Helena 2018g).
- Lewis Station is a pocket-park, measuring 0.13 acres, which contains two picnic tables and benches (City of St. Helena 2018h).
- Stone Bridge Park and Wappo Park are both located approximately 0.4 miles south of the Project site. Stone Bridge Park consists of approximately 0.75 acres of turf/grass and benches, and Wappo Park is a newly constructed neighborhood park that contains passive recreation facilities such as a loop trail, two picnic areas, and a dog park (City of St. Helena 2018i,j).

Additionally, an approximately 0.6 miles pedestrian path/trail is located parallel to the gravel maintenance road located adjacent to the northern boundary of the Project site. The maintenance road is not a City recreation trail but is used informally as a trail by local residents. An open space parcel owned by the City is located adjacent to the project site to the north/east.

3.12.3 Regulatory Setting

Federal Regulations

There are no federal regulations regarding the provision of local services or recreational facilities.

State Regulations

The following state regulations pertaining to public services and recreational facilities would apply to the Proposed Project. There are no state regulations pertaining to law enforcement services.

Fire Protection

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

Building, Fire and Residential Code

The State Fire Marshal's Building, Fire and Residential Code went into effect on January 1, 2011. The 2010 California Building Standards Code includes the requirement that all new one- and two-family dwellings and townhouses include residential fire sprinklers for all residences constructed after January 1, 2011. Fire sprinkler systems are also required in office buildings and multi-family dwellings (i.e. apartments).

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), and fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical

services. The standards include guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) offers fire protection services for State Responsibility Areas and local jurisdictions with contracts with CAL FIRE. State Responsibility Areas are located along the western and eastern boundaries of the City within the unincorporated area of Napa County (CALFIRE 2007). CAL FIRE also aids local fire departments by providing wildfire abatement services for their jurisdictions through mutual and automatic aid agreements. CAL FIRE also endorses state-legislated fire safety standards, supports fuel management efforts, and implements fire-safety inspections to further its objectives. CAL FIRE is responsible by law for responding to uncontrolled fire that has the capability for destruction of life, property, or natural resources.

Parks and Recreation

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public schools.

Schools

California Education Code

The California Code of Regulations (CCR), Title 5, Education Code governs all aspects of education within the state. The California Education Code authorizes the California Department of Education to develop site selection standards for school districts which require districts to select a site that conforms to certain net acreage requirements established in the California Department of Education's 2000 School Site Analysis and Development guidebook. The guide includes the assumption that the land purchased for school sites will be in a ratio of approximately 2:1 between the developed grounds and the building area. If the "availability of land is scarce and real estate prices are exorbitant," the site size may be reduced. California Department of Education policy states that if a school site is less than the recommended acreage required, the district shall

demonstrate how the students will be provided an adequate educational program, including physical education, as described in the district's adopted course of study.

Senate Bill 50

Senate Bill (SB) 50 (Chapter 407, Statutes of 1998), known as the Leroy F. Greene School Facilities Act of 1998, created the School Facility Program where eligible school districts may obtain state bond funds. The new state program was funded with bond revenue from Proposition 1A, a $9.2 billion state bond initiative approved by voters in November of 1998. State funding requires matching local funds that generally come from developer fees. The passage of SB 50 eliminated the ability of cities and counties to require full mitigation of school impacts and replaced it with the ability for school districts to assess fees directly to offset the costs associated with increasing school capacity as a result of new development. SB 50 amended Government Code Section 5699(a) to state that payment of SB 50 fees would be the exclusive method of considering and mitigating impacts on school facilities that may result from a project.

Local Regulations

The following local/regional regulations pertaining to public services and recreation would apply to the Proposed Project.

City of St. Helena 1993 General Plan

The Public Health and Safety Element, Public Facilities and Services Element, and Parks and Recreation Element of the City of St. Helena 1993 General Plan provide guiding and implementing policies regarding public services and recreation facilities, including the following. The General Plan does not contain any policies that address law enforcement.

Public Health and Safety Element - Implementing Policies

Policy 8.5.6: Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.

Policy 8.5.7: Ensure that all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.

Public Facilities and Services Element – Guiding Policies

Policy 9.6.3: Support and cooperate with the St. Helena Unified School District in its efforts to ensure adequate financing for new school facilities. To this end, the City shall cooperate with the School District in the collection of school facility development fees

from new residential and non-residential development, and will work with the District to identify, establish, and implement additional measures that may be necessary to adequately finance school facilities in the city.

Parks and Recreation Element – Guiding and Implementing Policies

Policy 10.3.5: Encourage developers to provide open space and recreational facilities as part of new residential developments. The City may consider density bonuses for the inclusion of significant public recreational facilities in new development.

Policy 10.3.6: Assess park development fees on all new commercial, industrial, and residential development sufficient to fund City-wide park improvements.

Implementing Policy 10.3.9: Adopt 5 acres of developed parkland per 1,000 residents as the goal for citywide park acquisition and development.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Public Health and Safety Element, Public Facilities and Services Element, and Parks and Recreation Element of the City of St. Helena 2019 General Plan provide the following policies regarding public services and recreation facilities, including the following:

Public Health and Safety Element

Policy PS4.6: Ensure that all streets and roads are adequate in terms of width, turning radius, and grade in order to facilitate access by City firefighting apparatus, and to provide alternative emergency routes of ingress and egress.

Policy PS4.D: Require all new development to meet the minimum fire flow rates specified by the City's Fire Code.

Public Facilities and Services Element

Policy PF5.4: Require that the approval of residential, commercial, or industrial development be contingent upon the mitigation of the impact of such development on the St. Helena Unified School District's ability to serve school-age children.

Policy PF5.7: Set a goal of a maximum fire department response time of 8 minutes within the St. Helena city limits.

Policy PF5.8: Set a staffing ratio of 2 police officers per 1,000 population and for priority one calls, an average police department response time of 3 minutes or less.

Parks and Recreation Element

Policy PR1.1: Retain the park standard from the 1993 General Plan of 5.0 acres of parkland per 1,000 residents, while striving for the nationally recommended standard of 10.5 acres per 1,000 residents.

Policy PR1.4: Require park land dedications or civic improvement fees on all new residential, commercial, and industrial developments to meet the standard of 5.0 acres of parks per 1,000 residents.

St. Helena Municipal Code

Chapter 3.32, Development Impact Fees, of the City's Municipal Code, specifies that, in order for the City to implement the goals and objectives of the City's General Plan and to mitigate impacts from new development within the City, the City requires development impact fees to finance public improvement projects related to civic improvement projects, public safety, sewer projects, water projects, traffic mitigation, parks and storm drainage. Development fees for public safety, civic improvement projects, and parks are provided below.

Public Safety Impact Fee

Chapter 3.32, Section 3.32.050 addresses public safety impact fees. Public safety impact fees are used to fund the acquisition, construction, and reconstruction of facilities and equipment and other capital purposes needed for the City's fire and police departments. The impact fee is one dollar four cents ($1.04) per square foot for all new development projects.

Civic Improvement Fee

Civic improvement fees (Section 3.32.060) are used to fund the acquisition, construction, and reconstruction of City hall, the St. Helena library, community facilities, and equipment and other capital purposes needed for civic services. The impact fee is one dollar ninety-five cents ($1.95) per square foot for all new residential development projects.

Park and Recreation Impact Fee

Park and recreational impact fees (Section 3.32.065) are used to fund the acquisition, construction, and reconstruction of playgrounds, community facilities, recreation facilities and equipment and other capital purposes needed for park and recreation services. The impact fee is twelve dollars eighteen cents ($12.18) per square foot for all new medium and higher density (multi-family) residential development.

Fire Protection Systems

Chapter 15.36 Section 15.36.060 of the City's Municipal Code adopts the requirements of the California Fire Code, with amendments. Requirements for fire protection systems for new development within the city is included. The Ordinance requires that approved automatic sprinkler systems be installed in new buildings and structures, including accessory buildings intended for use as a dwelling unit. Furthermore, the Ordinance gives the Fire Code Official authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to the issuance of a building permit.

3.12.4 Impacts

Methods of Analysis

The impact analysis evaluates the ability of the SHPD, SHFD, SHUSD, St. Helena Parks and Recreation Department, and the George and Elsie Wood Public Library to serve the Proposed Project through a qualitative review of Proposed Project characteristics, such as location, size, and current demand. The analysis also addresses whether the Proposed Project would require the need to add more staff or construct additional facilities to accommodate an increase in demand.

In order to assess whether the Proposed Project would have impacts related to the provision of public services and recreational facilities, the analysis below incorporates estimates for population growth generated by the Project. In order to determine demand for public services and recreation facilities, the number of proposed residential units was multiplied by the current demand factors contained in the City's Development Impact Fee Study Report (City of St. Helena 2013).

The Proposed Project would construct 51 single-family residences, 25 attached residential units, and 11 accessory dwelling units (ADU) within the 16.9-acre Project site.

The City uses a persons per household factor of 2.45 people per unit for medium/higher density residential land uses for purposes of calculating public safety, civic improvement, and park and recreation facilities demands (City of St. Helena 2013). Using this factor, the Proposed Project would conservatively generate 213 residents, including the ADUs. It is unlikely the 11 ADU's would accommodate more than one or two people; therefore, the population estimate of 213 is a conservative assumption for the purposes of evaluating Project impacts.

Table 3.12-3 considers the increase in demand for primary, elementary, middle and high schools generated by the Proposed Project. Student generation rates were derived from the

SHUSD Facility Master Plan, which outlines expected growth in demand for school facilities associated with projected development and plans how to fund and respond to such growth.

Table 3.12-3
Projected Proposed Project Student Generation

Grades	Residential Units	Student Generation Rate (per total number of units)	Students Generated
K-2	87	0.058	5
3-5	87	0.080	7
6-8	87	0.088	8
9-12	87	0.088	8
		Total	28

Note: For a conservative assumption a total of 87 residential units (including the 11 ADUs) is assumed. The likelihood of all 11 ADUs including school-age children is very low.
Source: SHUSD 2010.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act Guidelines, a significant impact would occur if the Proposed Project would do any of the following:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire protection.
  - Police protection.
  - Schools.
  - Other public facilities.
- Increase the use of existing neighborhood parks or other recreational services such that a substantial physical deterioration of the facility would occur or require the construction or expansion of facilities that could have a physical adverse effect on the environment.

While important to the quality of life in the Project area, impacts to schools from increased development do not necessarily result in physical environmental impacts. In *Goleta Union School District v. Regents of the University of California* (2d Dist. 1995) (37 Cal. App. 4th 1025, 1032, 1995), the Court of Appeal found that "[c]lassroom overcrowding, per se, does not constitute a significant effect on the environment." A General Plan may have policies relating to

public service levels in general or schools in particular. If a development project overwhelms the school district's capacity and quality of service, it could be inconsistent with the General Plan. Neither the City of St. Helena 1993 General Plan nor the 2019 General Plan have a specific policy related to school service levels. The Proposed Project applicant would pay the required school impact fees to the SHUSD.

Impacts and Mitigation Measures

3.12-1: Would the Proposed Project increase demand for public services requiring the need to construct new facilities, or expand existing facilities, the construction of which could cause significant environmental impacts? This impact would be less than significant.

Fire Protection

The Project site is currently undeveloped and requires minimal service from the SHFD. Development of the site with residential uses would result in increased demand for City fire protection services and facilities. Development of the site with residential uses is consistent with existing surrounding development that includes residential and office uses located to the south and southeast of the Project site and is consistent with the underlying land use designation and zoning. The Project site would be served by the City's fire department located at 1480 Main Street, approximately 0.2 miles from the Project site. As described above, the Proposed Project is expected to increase the City's population by approximately 213 residents. This population increase is within the projected population for proposed growth in the City's 1993 General Plan which assumed a residential density of up to 12.0 dwelling units per acre,[1] which would allow a maximum of 203 dwelling units and up to 497 residents, was assumed. Nevertheless, the Proposed Project would increase demand for fire protection services.

By increasing the population, development of the Project site would increase the demand for fire protection and emergency services, including additional staffing and vehicles, but would not necessitate the construction of a new facility or expansion of an existing facility. The SHFD measures adequate service by response time and not by the number or ratio of firefighters per population.

Fire protection services are funded through various City tax revenues. Development of the Proposed Project would generate revenue to finance the expansion of additional operational services. Furthermore, the Proposed Project applicant would pay required impact fees pursuant to the City's Public Safety Impact Fee, which funds the acquisition, construction, and

[1] The MR zoning permits a maximum density of 16.0 dwelling units per acre. This would permit a maximum of 270 residential units and 661 residents.

reconstruction of facilities and equipment and other capital purposes needed for the City's fire department. These fees are based on a proportionate share of the cost of new development for facilities and equipment serving the City. Therefore, because the City's existing facilities and equipment are planned to serve future development, public safety impact fees are largely intended to recoup a project's proportionate share of the depreciated replacement cost of existing facilities and equipment.

The Proposed Project would comply with Chapter 15.36 of the City's Municipal Code and the 2010 State Building Code, which requires installation of approved automatic sprinkler systems in all single-family and multi-family buildings. Furthermore, the Proposed Project would be consistent with 1993 General Plan Policy 8.5.6 and 2019 General Plan Policy PS4.D, which require new development to meet the minimum fire flow rates specified by the City's Fire Code, and 1993 General Plan Policy 8.5.7 and 2019 General Plan Policy PS4.6, which require all streets and roads to be adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress. The site plan would be subject to plan review by the SHFD to ensure proper access for fire and emergency response is provided and required fire suppression features are included. The Proposed Project includes two access points as well as a separate Emergency Vehicle Access.

The increased demand for fire protection services associated with the Proposed Project would be offset by payment of required taxes and fees that would help fund ongoing service and new facilities; therefore, the Proposed Project would have a **less-than-significant impact** on the provision of fire protection services and would not require the construction of new, or expansion of existing fire facilities.

Police Protection

The Project site is undeveloped and requires minimal law enforcement services from the SHPD at present. Police services for the Project site would be provided from the SHPD's station located at 1480 Main Street, approximately 0.2 miles from the site. The 1993 General Plan does not include any policies that address law enforcement, but the 2019 General Plan does include Policy PF5.8 to set a staffing ratio of 2 police officers per 1,000 residents and to have an average police department response time of 3 minutes or less for priority one calls. The SHPD currently has a police officer to resident ratio of approximately 2.0 sworn officers per 3,500 residents. The Proposed Project would increase demand for law enforcement services by conservatively adding approximately 213 residents to the City's population, requiring one officer. The addition of one officer would not require the construction of new, or the expansion of existing, police facilities because adequate space is available in the SHPD Facility. This would be consistent with the staffing ratio required by Policy PF5.8 and would also improve police department response times due to the larger officer-to-resident ratio.

The City's law enforcement operational services are funded through various City tax revenues. Development of the Proposed Project would generate property tax and sales tax revenue to finance hiring new officers and the expansion of additional services when needed. In addition, the Proposed Project applicant would pay required impact fees pursuant to the City's Public Safety Impact Fee, which funds the acquisition, construction, and reconstruction of facilities and equipment and other capital purposes needed for the City's police department. The increased demand for police protection services associated with the Proposed Project would be offset by payment of required taxes and fees that would help fund ongoing service and new facilities; therefore, the Proposed Project would have a **less-than-significant impact** on the provision of police protection services and would not require the construction of new, or expansion of existing police facilities.

Schools

The SHUSD Facility Master Plan, adopted in July 2010, identifies future plans for new school facilities in the district in order to plan for the anticipated increase in demand for school facilities expected from 2010 through 2020. The projections for future enrollment and student generation are based on historical school enrollment data and trends of enrollment per grade level, district specific birth data, student migration, and land use trends and policies governing residential development (SHUSD 2010). The predicted enrollment is then compared with existing school capacities to determine the need for additional school facilities.

As shown in Table 3.12-3, the Proposed Project would conservatively generate a total of 28 students, based on the assumption that 87 (this includes 11 ADUs) residential units would be constructed and that historical enrollment trends remain relevant. Of these students, five elementary school students would attend St. Helena Primary School (K–2), seven students would attend St. Helena Elementary School (3–5), eight students would attend Robert Louis Stevenson Middle School (6–8), and eight students would attend St. Helena High School (9–12). This is a conservative estimate because it is unlikely that all 11 ADUs would include families with school-age children. As shown in Table 3.12-1, St. Helena Primary School has an estimated remaining capacity of 29 students, St. Helena Elementary School has an estimated remaining capacity of 141 students, Robert Louis Stevenson Middle School has an estimated remaining capacity of 123 students, and St. Helena High School has an estimated remaining capacity of 287 students, when accounting for the projected 2019–2020 enrollment. Therefore, the addition of school-age students generated by the Proposed Project would not exceed the capacity of schools within the SHUSD, and existing schools are estimated to have more than sufficient capacity for projected enrollment through 2025. Under SB 50, payment of required school impact fees is deemed complete and full mitigation for impacts to school facilities. The impact would be considered **less than significant**.

Other Public Facilities

As discussed previously, the Proposed Project would conservatively add 213 residents to the City's population. This would increase demand for existing public facilities within the City, including the George and Elsie Wood Public Library and City Hall. Payment of the City's civic improvement fee, as required by the City's Municipal Code Chapter 3.32, would ensure that the Proposed Project would offset impacts related to other public facilities, including the library, community facilities, and equipment and other capital purposes needed for civic services. These impact fees were calculated to ensure new development would pay their proportionate share of the cost of existing and future capital assets required to serve the City. This would ensure that the Proposed Project would have a **less-than-significant impact** on other public facilities.

Mitigation Measures

None required.

3.12-2: Would the Proposed Project increase the use of existing neighborhood parks or other recreational services such that a substantial physical deterioration of the facility would occur, or require the construction or expansion of facilities that could have a physical adverse effect on the environment? This impact would be less than significant.

The Proposed Project proposes to construct 87 residential units (including 11 ADUs). Using the average persons per household of 2.45, as stated in the City's Development Impact Fee Study Report (City of St. Helena 2013), the Proposed Project would conservatively generate 213 residents. As described in Section 3.12.3, the City's General Plan requires 5 acres of developed parkland per 1,000 residents. This standard ensures that recreational services are provided equally to all residents and that the quality of existing facilities can be maintained. The Proposed Project does not provide any on-site parks or recreational facilities. The City currently contains 27.43 acres of total parkland and has a population of 6,196 (City of St. Helena 2018d, U.S. Census Bureau 2018). On the basis of the 2018 population of 6,196 residents and park acreage of 27.43, the City's parkland to resident ratio is 4.43 acres per 1,000 residents. Assuming the addition of 213 new residents to the City, the City would have a ratio of 4.28 acres of parkland per 1,000 residents. This falls short of the City's parkland goal of 5 acres of parkland per 1,000 residents, which included as Implementing Policy 10.3.9 in the 1993 General Plan and Policy PR1.1 in the 2019 General Plan. Policy PR1.1 also states a goal to reach the nationally recommended standard of 10.5 acres of parkland per 1,000 residents, although this is not a requirement.

Parks within the vicinity of the Proposed Project include Lyman Park, Jacob Meily Park, and Lewis Station, which are all located approximately 0.3 miles from the Project site. These parks have adequate facilities, including picnic and turf areas, children's playgrounds, and a walking

trail, to support Proposed Project residents. The maintenance road adjacent to the northern boundary of the Project site is not a part of the Proposed Project, nor is it a City trail. There is an existing City trail located in the northside of the maintenance road. A small portion of the maintenance road would be paved to accommodate construction of the Adams Street extension, but sidewalks would be provided along the extension of Adams Street to provide a safe connection to the remainder of the maintenance road and the pedestrian trail, which would remain unaltered by the Proposed Project.

Park and recreational impact fees are imposed upon all residential development within the City. These impact fees are used to cover the cost of land acquisition and park improvements and are based on added population per unit, then converted into a cost per square foot for each type of residential development. The Proposed Project applicant would pay the required park fees to be used by the City to purchase land to construct new parks or upgrade existing recreation facilities. This would ensure that increased use of existing neighborhood parks due to the Proposed Project residents would not cause substantial physical deterioration and would account for construction and expansion of facilities to accommodate the increase in population associated with the Proposed Project.

Payment of the City's park and recreational impact fees as stipulated in the City's Municipal Code Chapter 3.32, consistent with the Quimby Act, would ensure that the Proposed Project would have a **less-than-significant impact** related to recreational facilities.

Mitigation Measures

None required.

3.12.5 Cumulative Impacts

This cumulative impact analysis does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the Proposed Project. The cumulative context includes projected buildout under the City's 1993 General Plan and other approved projects in the City. While the Proposed Project is required to be evaluated under the 1993 General Plan, any changes relative to the 2019 General Plan are also evaluated for informational purposes.

The geographic scope for the cumulative analysis for the provision of fire and police protection services, parks and recreation and other public services is the City limits which corresponds to the various provider district boundaries. The geographic scope for schools would be the SHUSD district boundary.

3.12-3: Would the Proposed Project contribute to a cumulative increase in demand for public services, schools, and recreation facilities? The Project's contribution would not be considerable.

Development of the Proposed Project would contribute to a cumulative increase in demand for public services and parks and recreational facilities. New fire and police personnel and facilities as well new schools and parks and recreation facilities may be required for 1993 General Plan buildout conditions. This could result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. However, future development within the City would be required to comply with policies set forth in the City's 1993 General Plan and pay applicable development impact fees as specified in Chapter 3.32, Development Impact Fees, of the City's Municipal Code.

The City recently updated its General Plan in 2019, and the Draft Environmental Impact Report prepared for the 2019 General Plan notes that the SHFD and the SHPD does not anticipate the need to increase staffing levels or construct any new facilities in order to provide service for future population growth. The projected addition of residents and employees by 2040 (including development of the Project site) would likely increase the demand for emergency fire and police response and preventive services; however, the increase is modest and not expected to create a need for new or expanded fire or police protection facilities and impacts were determined to be less than significant. Therefore, the Proposed Project's contribution would not be considerable.

The 2019 General Plan notes that the projected addition of residents and employees by 2040 (including development of the Project site) would likely increase the need for more parks and recreation facilities; however, the impact was determined to be less than significant. As discussed above, the Proposed Project would comply with all applicable City goals and policies and pay applicable fees. The Proposed Project's incremental contribution to the cumulative increase in demand is considered less than significant. Thus, the Proposed Project would not have a considerable contribution to a significant cumulative impact and the Proposed Project's contribution is less than significant resulting in a **less-than-significant cumulative impact**.

Mitigation Measures

None required.

3.12.6 References

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3.13 UTILITIES AND SERVICE SYSTEMS

3.13.1 Introduction

This section describes the utilities and service systems that would serve the proposed Hunter Subdivision Project (Proposed Project), specifically water supply, wastewater conveyance and treatment, storm drainage infrastructure, and solid waste disposal and identifies feasible mitigation measures to address impacts.

Comments received in response to the Notice of Preparation included concerns regarding increased water consumption, stormwater drainage capacity, existing sewer infrastructure, water conservation measures, cumulative impacts to water resources, and impacts of on-site groundwater pumping to City of St. Helena (City) groundwater supply wells. Please see Section 3.9, Hydrology and Water Quality for more information pertaining to capacity of the City's stormwater infrastructure and water quality impacts associated with stormwater discharge. The remaining issues are addressed in this section. A copy of the Notice of Preparation and comments received is included in Appendix A.

This section incorporates information from the following sources: Preliminary Water Calculations Technical Memorandum, included in Appendix J; City of St. Helena Storm Drainage Master Plan (City of St. Helena 2000); City of St. Helena Sewer System Management Plan (City of St. Helena 2014); and City of St. Helena Water Supply Plan (City of St. Helena 2010). Other documentation used in this analysis includes the City of St. Helena 1993 General Plan, City of St. Helena 2019 General Plan[1], and the City of St. Helena 2019 General Plan Draft Environmental Impact Report (EIR). Other sources consulted are listed in Section 3.13.6, References.

3.13.2 Environmental Setting

This section describes the existing conditions in the Project area and also identifies the public utilities and services that could be affected by future development of the Project site with residential uses.

Existing Site

The Project site is predominantly undeveloped, with the exception of approximately 40% of the site, which is under cultivation with a vineyard. There is an existing agricultural well in the southeastern end of the Project site (proposed to be located in Parcel B of the subdivision) that has been used historically to supply irrigation water to the site but is currently inoperable. This well is proposed to remain in a production capacity to supply irrigation water to meet the outdoor

[1] The 2019 General Plan is also known as the "General Plan Update 2040," but is referred to here by its adoption date.

landscaping demands of the Proposed Project, reducing the water demands on the existing City water supplies and delivery system.

The Project site gradually slopes to the east, with existing elevations ranging from approximately 243 feet above mean sea level in the western portion of the site, to approximately 214 feet above mean sea level in the eastern portion of the site. An existing 10-foot-wide public water line easement containing an active 12-inch water line bisects the north/northeast portion of the site. The easement is proposed to be abandoned as part of the Project and the water line relocated. The Project site is currently undeveloped and not served by City utilities.

Water

This section describes the existing and past water supplies and water demands within the City of St. Helena. Projected water demand for the City is also discussed. The baseline to establish the "existing conditions" is based on when the Notice of Preparation was released for the Project, which was in March 2018 (CEQA Guidelines Section 15125(a)). The existing conditions constitute the "baseline condition" against which project-related impacts are compared. Since 2018, the City's water supply conditions have changed due to a variety of factors; therefore, updated information regarding water supply and availability of water to serve the City is also provided.

City of St. Helena Water Supply

The Project site is located within the City's water service area and is requesting to receive potable water service from the City to meet the Proposed Project's estimated potable water demands associated with development of residential uses. The Project site is currently undeveloped with the exception of a small vineyard in the "panhandle" portion of the site with a larger vineyard located in the southwestern portion of the site. It is assumed these vineyards have previously been irrigated by the on-site well, which constitutes the only water use on site at present. However, since the well is currently inoperable it is not clear if the vineyard is receiving irrigation.

The City receives potable water from three sources: Bell Canyon Reservoir, the Stonebridge Well Complex, and contract water from the City of Napa. Additionally, the City uses the City-owned Lower Reservoir and a groundwater well located near the Napa River as sources of non-potable water (City of St. Helena 2018). Recycled water is not currently a source of water supply in the City. The following details each of the anticipated sources of water for the Proposed Project. Table 3.13-1 provides the contribution of groundwater and surface water to the City's historical water supplies and has been updated through 2020.

Table 3.13-1
City of St. Helena Potable Water Deliveries by Source

Year	Bell Canyon Reservoir	City of Napa Contract	Stonebridge Wells	Total
Supply (acre-feet)				
2013	927	555	400	1,882
2014	865	607	374	1,847
2015	739	523	308	1,570
2016	643	581	241	1,465
2017	736	588	270	1,594
2018	840	623	327	1,790
2019	836	612	240	1,688
2020	702	625	302	1,629
			Average	1,637

Source: City of St. Helena, 2021.

Bell Canyon Reservoir

The City holds water rights permits issued by the State Water Resources Control Board (SWRCB) for storage and diversion of water at the Bell Canyon Reservoir. These rights are detailed in permits 9157 and 14810 issued in 1952 and 1965 respectively (City of St. Helena 2010). As detailed in the City's 2019 General Plan EIR, the City has requested that the SWRCB allow the permits to become a licensed water right (City of St. Helena 2018). These water rights permits have not yet been converted to licenses.

Bell Creek, as impounded in Bell Canyon Reservoir, has served as the City's major water supply source for over 50 years. Bell Canyon Reservoir encompasses approximately 3,647 acres and has a storage capacity of 2,400 acre-feet. Average historical yield from the reservoir is approximately 1,800 acre-feet per year, and sustainable yield ranges from approximately 500 acre-feet in critically dry years to approximately 1,100 acre-feet in wet years (City of St. Helena 2018).

In total, the City is authorized to divert and store 3,800 acre-feet from Bell Canyon Reservoir each year, and directly divert 1 cubic foot per second between November 15 and April 15 (150 days) of each year. Of the City's total authorized amount, 2,000 acre-feet can only be diverted and stored between November 15 and April 15 of each year (City of St. Helena 2010). Table 3.13-2 provides quarterly storage data for the Bell Canyon Reservoir for 2018 through March 2020.

Table 3.13-2
Bell Canyon Reservoir Storage

Date[1]	Storage (acre-feet)
March 2020	1,670.888
January 2020	1,716.734
September 2019	1,708.644

Table 3.13-2
Bell Canyon Reservoir Storage

Date[1]	Storage (acre-feet)
June 2019	2,155.966
March 2019	2,383.69
January 2019	1,514.139
December 2018	1,453.859
September 2018	1,708.644
June 2018	2,155.966
March 2018	1,388.627
January 2018	1,328.850

Sources: City of St. Helena 2018, 2019a, 2019b, and 2020.
Note:
1 Data as recorded on the 1st of each month.

In recent years, the annual yield from Bell Canyon Reservoir has declined significantly due to required water releases into the Napa River to support fish habitat and also from drought conditions. Because of this, water from the City of Napa has become an increasingly large portion of the total water supply (City of St. Helena 2018).

City of Napa Contract

The City of Napa's surface water supplies are obtained from three water sources: State Water Project (SWP) water delivered via the North Bay Aqueduct, Lake Hennessey, and Lake Milliken. On November 8, 2011, the City approved a revised agreement with the City of Napa detailing the availability of treated water supplies from the City of Napa. Under the modified agreement, the City will receive a guaranteed delivery of 600 acre-feet annually from the City of Napa and deliveries are no longer subject to conditions of the City of Napa's water supplies, like the shortage provision that is tied to shortages imposed by the State Water Project on Napa County's state contract – even in drought conditions (City of St. Helena 2011). The City is obligated to pay for 600 acre-feet whether or not the City actually uses the 600 acre-feet. Additionally, the City may request up to 200 acre-feet of additional water supply and the City of Napa will deliver the requested quantity of water if it possesses enough water supply to fulfill the request. The City of Napa has the right to supply this additional water from its own existing supplies or to transport the water on behalf of the City for water purchased by the City from another supplier (City of St. Helena 2011). The initial term of this contract expires on December 31, 2035. As shown in Table 3.13-3, the City of Napa's water supply is expected to be about 31,778 acre-feet during normal years, 17,468 acre-feet during multiple-dry year periods, and about 10,267 acre-feet during single-dry years, according to the 2015 Urban Water Management Plan which is currently being updated (City of Napa 2017). As of 2021 due to the drought conditions water supplies from the City of Napa have been reduced (pers. comm. Wanger 2021).

Table 3.13-3
City of Napa Water Supply

Source	Normal-Year	Multiple-Dry Years	Single-Dry Year
Supply (acre-feet)			
Lake Hennessey	17,500	10,417	5,000
Milliken Reservoir	700	700	400
State Water Project	13,578	6,351	4,867
Total	31,778	17,468	10,267

Source: City of Napa 2017.

Lake Hennessey and Milliken Reservoir are two surface water reservoirs located along tributaries of the Napa River. SWP water is supplied through the North Bay Aqueduct as per an agreement with the Napa County Flood Control and Water Conservation District (NCFCWCD), the SWP contract administrator for several municipalities in Napa County. The City of Napa's three existing water sources and the normal (average) year quantities available through 2035 are discussed below.

Lake Hennessey

Lake Hennessey, a reservoir located 13 miles north of the City of Napa with an approximate storage capacity of 31,000 acre-feet, is the primary local water source for the City of Napa system. The City of Napa obtains water rights to divert and store up to 30,500 acre-feet per year through a permit with the SWRCB Division of Water Rights. Lake Hennessey has an annual average inflow of 19,962 acre-feet, which is much lower than its storage capacity (City of Napa 2017). Water from Lake Hennessy is treated at the Hennessey Water Treatment Plant in Napa County. Table 3.13-4, below, provides information about Lake Hennessey's tributary watershed area, average annual inflow, total storage capacity, normal-year yield, multiple-dry years yield, and critical single-dry year yield. In addition, current storage volume as of June 2021 is also provided.

Table 3.13-4
Lake Hennessey Statistics

Tributary Watershed Area	35,000 acres
Average Annual Inflow	19,692 acre-feet (AF)
Total Storage Capacity (Maximum Yield)	31,000 AF
Normal-Year Yield	17,500 AF
Multiple-Dry Years Yield	10,417 AF
Single-Dry Year Yield	5,000 AF
Current (6/23/21) Storage Volume	19,776 AF

Source: City of Napa 2017 and City of Napa 2021.

Milliken Reservoir

Milliken Reservoir, located approximately five miles northeast of the City of Napa, serves as a seasonal water supply source during the summer months. The City of Napa has a license with the SWRCB that authorizes it to divert and store up to 2,350 acre-feet of water per year for beneficial use. The reservoir has an approximate storage capacity of 1,390 acre-feet and an annual average inflow of 3,656 acre-feet (City of Napa 2017). Water from Milliken Reservoir is treated at the Milliken Water Treatment Plant in Napa County. Table 3.13-5, below, provides information including Milliken Reservoir's normal-year yield, multiple-dry years yield, and critical single-dry year yield. In addition, current storage volume as of January 2021 (most recent data available) is also provided.

Table 3.13-5
Milliken Reservoir Statistics

Tributary Watershed Area	6,000 acres
Average Annual Inflow	3,656 acre-feet (AF)
Total Storage Capacity (Maximum Yield)	1,390 AF
Normal-Year Yield	700 AF
Multiple-Dry Years Yield	700 AF
Single-Dry Year Yield	400 AF
Current (1/28/2021) Storage Volume	1,131 AF

Source: City of Napa 2017 and City of Napa 2021a.

State Water Project

Starting in 1966, the City has sub-contracted with NCFCWCD for imported surface water from the SWP. The SWP diverts water from the Sacramento-San Joaquin Delta at the Barker Slough Pumping Plant east of the City of Vacaville. This water is then conveyed approximately 21 miles through the North Bay Aqueduct to Cordelia Forebay to serve contractors in Napa and Solano counties. The water is treated at the Edward I. Barwick Jamieson Canyon Water Treatment Plant, in the City of Napa. The majority of this water supply is for SWP entitlements for the City of Napa and the City of Calistoga. This water is also supplied to the City of American Canyon. The City of Napa was originally granted gradually increasing annual allotments, known as "Table A" entitlements, of SWP water in its original 1966 agreement with NCFCWCD. These allotments reached a maximum of 12,500 acre-feet by 1990. However, the agreement was modified in 1982 to reduce the City's short-term entitlement but increase its final overall entitlement to 18,800 acre-feet by 2021. In 2009, the contract was amended to accelerate the entitlement schedule, and the City of Napa was granted its full 2021 entitlement of 18,800 beginning in 2010. Additionally, in 2000, the City of Napa obtained an additional 1,000 acre-feet per year of SWP water in a transfer agreement between NCFCWCD and the Kern County Water Agency. In 2006, the City of Napa purchased the City of St. Helena's 1,000 acre-feet Kern County Water Agency entitlement.

Furthermore, in 2009, the City signed a water transfer agreement with the Town of Yountville, obtaining Yountville's total SWP Table A entitlement of 1,100 acre-feet per year, along with its North Bay Aqueduct conveyance capacity. Therefore, combined, the City of Napa has a total entitlement to 21,900 acre-feet of water per year. However, actual deliveries are determined by the Department of Water Resources depending on each year's hydrologic conditions. The full entitlement amount would typically only be available during very wet years. The Department of Water Resources estimates that 62% of SWP contractors' entitlements would be available for deliver in a normal year, 29% would be available during a multi-dry year period, and 11% would be available during a single-dry year (City of Napa 2017). The current SWP contract is due to expire in 2035 with an extension to 2085 anticipated. Table 3.13-6 lists SWP estimated delivery amounts during normal, multiple-dry, and critical single-dry years.

Table 3.13-6
SWP Reliability Assumptions

Water Year Type	Projected SWP Delivery (percent of Table A entitlement)	Advanced Table A entitlement (acre-feet)	Total SWP Deliveries (acre-feet)
Normal Year	62%	-	13,578
Multiple-Dry Years	5%	3,772	6,351
Single-Dry Year	29%	-	4,867

Source: City of Napa 2017.
Note:
[1] 100% Table A entitlement is 21,900 acre-feet

Groundwater

The groundwater basin applicable to the Project site is the Napa-Sonoma Valley Basin, which is further divided into the Napa Valley Subbasin, which contains about 209,619 acre-feet of water on average. This large basin is further divided into the St. Helena Subarea, which lies under the City (Napa County 2018). Groundwater levels within the northern portion of the St. Helena Subarea remain relatively stable but exhibit greater seasonal declines of about 20 feet elsewhere in the subarea; however, lower groundwater levels have been observed in 2020 due to a relatively dry year as discussed in Section 3.9 Hydrology and Water Quality (Napa County 2017 and DWR 2021). The City owns and operates two active groundwater wells, collectively known as the Stonebridge Well Complex, located 410 and 670 feet below the surface that have a combined capacity of approximately 595 gallons per minute. These wells have the potential to provide 960 acre-feet of potable water per year if both could be operated continuously. The wells derive their water source from the Sonoma Volcanic aquifer. Being the most flexible source in the system, groundwater functions as a buffer to balance system flows based on availability of water in Bell Canyon and flow rates being delivered by the City of Napa. The City currently restricts the use of groundwater from these wells with the goal of limiting extraction to 450 AF per year for long term

sustainability. There is an existing well on the Project site that is presently not in operation (see Section 3.9, Hydrology and Water Quality for more information on groundwater resources).

City of St. Helena Safe Yield Water Supply

The City's total water supply is dependent on annual rainfall. Therefore, the City uses various sources to ensure sustainable yields. Safe yield thresholds developed by the City's Safe Yield Committee (no longer active) are summarized in Table 3.13-7, below.

Table 3.13-7
City of St. Helena Safe Yields

Source	Normal Water Year (Annual Safe Yield) (acre-feet)	Dry Year (Phase 2 Water Emergency) (acre-feet)	Critical Year (Phase 3 Water Emergency) (acre-feet)
Bell Canyon Reservoir	1,000	600	500
Stonebridge Well Complex[1]	350	514	471
City of Napa	600	600	600
Total	1,950	1,714	1,571

Source: City of St. Helena 2018.

[1] In an agreement with the environmental advocacy group Water Audit California, the City is monitoring water levels with a goal of limiting extraction to 450 AF per year on average (Napa Valley Register, 2021)

Due to the ongoing drought the City Council declared a Phase II water emergency on October 27, 2020, which went into effect on November 1, 2020. The amount of water allocated to commercial and residential uses is limited under this water emergency. Residential users are limited to 65 gallons per person per day. Single-family residences will receive an additional 2,500 gallons per month from April through October for landscape irrigation. No new water connections are allowed to be permitted during a Phase II water emergency. The director of public works is providing reports to the City Council and will recommend lifting the water emergency once adequate water supplies are available. A project may proceed through entitlement process during a water emergency, however if a building permit is issued and the City is in a water emergency, no water connection would be provided until the termination of the water emergency.

Water Treatment and Distribution

Water treatment services are provided by the City of St. Helena Water Treatment Division. Water from the Bell Canyon Reservoir is treated by three licensed water treatment operators at the Louis Stralla Water Treatment Plant (WTP), located on Crystal Springs Road in the northeastern part of the City (City of St. Helena 2015a, 2019a). The Louis Stralla WTP has a capacity of 4.3 million gallons per day (MGD). However, there are flow limitations in the inlet piping which restricts use of the plant to less than its capacity (City of St. Helena 2016). The Louis Stralla WTP typically treats 3.5 MGD due to these flow limitations (City of St. Helena 2018). The two groundwater wells that the City uses as a water source include a filtration facility, comprised of filtration tanks, chlorination

facilities, and a backwash return system (City of St. Helena 2016). Water from the City of Napa is received at the City of St. Helena's Rutherford Pump Station (City of St. Helena 2018).

Water distribution within the City is managed by the Utilities Division of the City's Public Work's Department. The Utilities Division reads water meters and conducts fire hydrant maintenance and water leak repairs and provides customer service (City of St. Helena 2019a). The City's treated water is distributed through six storage tanks, four pump stations, pumps, and a network of distribution pipelines (City of St. Helena 2016). In 2015, the City provided water service to approximately 2,312 connections (City of St. Helena 2018).

Projected Water Demand and Supply

The City of St. Helena's 2010 Water Supply Plan (Water Supply Plan[2]) includes an analysis of current and future water demands within the City. The water use habits of existing customers, land use plans providing data for expected growth, and laws and regulations that affect future water use were used to calculate future water demands. Water conservation measures were not considered in future demand calculations.

The Water Supply Plan includes projected water demands for two potential 1993 General Plan buildout scenarios, the Likely Buildout Scenario and the Full Buildout Scenario. Under the Likely Buildout Scenario, the City has the potential to construct 379 more residential dwelling units until buildout of the 1993 General Plan is reached in 2030. Under this scenario, the projected number of dwelling units was limited by the City's Growth Ordinance and not by the 1993 General Plan Land Use. However, due to a recent change in state law (Senate Bill [SB] 330) the City is no longer limiting residential development. In addition, this scenario accounts for the construction of over 277,000 square feet of commercial, retail, and institutional floor space. Under the Full Buildout Scenario, the City has the potential to construct 891 more residential dwelling units until buildout is reached in 2030. This scenario also includes adding slightly more than 338,000 square feet of commercial, retail, and institutional floor space during the term of the 1993 General Plan (City of St. Helena 2010). As noted throughout this EIR, the City adopted the 2019 General Plan in May 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR will also evaluate the City's adopted 2019 General Plan for informational and consistency purposes. Under the City's 2019 General Plan, it was also assumed that the allowed number of new residential units would be limited to 9 units per year, or a total of 72 units over the eight-year term of the Housing Element (2015 to 2023). As stated previously, the City is no longer allowed to limit residential development due to the passage of SB 330. The 2019 General Plan EIR determined there would

[2] The 2010 Water Supply Plan is the most recent document available; however, an Integrated Utility Master Plan is in the process of being prepared at the time of preparation of this document.

be no expected increase in water demand since new developers would be required to comply with the City's Water Neutral Policy for Development (see Section 3.9, Hydrology and Water Quality) and offset all new water demands with water conservation retrofits or in-lieu payments for the City to undertake such retrofits (City of St. Helena 2018).

Table 3.13-8 shows details for projected water supplies and demand in the City under the 2010 Water Supply Plan Likely Buildout Scenario and the Full Buildout Scenario.

Table 3.13-8
City of St. Helena Projected Water Supply and Demand

Buildout Scenario		Wet Year (40% exceedance) No WSE	Normal Year (60% exceedance) No WSE	Below Normal Year (82% exceedance) Phase II WSE	Dry Year (90% exceedance) Phase IV WSE	Critical Dry Year (100% exceedence) Phase V WSE
Annual Water Demand (acre-feet)/year						
Likely Buildout Scenario	Demand	2,350	2,350	2,115	1,674	1,321
	Supply	2,375	2,250	2,286	1,714	1,286
	Surplus (Deficit)	25	(100)	171	40	(35)
Full Buildout Scenario	Demand	2,600	2,600	2,340	1,966	1,499
	Supply	2,375	2,250	2,286	1,714	1,286
	Surplus (Deficit)	(225)	(350)	(54)	(252)	(213)

Source: City of St. Helena 2010.
Note: WSE = Water Shortage Emergency

As shown in Table 3.13-8, water supplies under both the Likely Buildout Scenario and the Full Buildout Scenario would not be sufficient to meet demands during all scenarios. The 2010 Water Supply Plan estimates that the City would likely face water supply shortages after 2020, but before 2030 under current operations (City of St. Helena 2010). Therefore, the City must consider what combination of water conservation measures, acquiring additional surface water from the City of Napa, and groundwater use can be used to meet future demands. The 2010 Water Supply Plan estimated that 495 acre-feet of metered potable water demand could be saved if water conservation measures were implemented. Recommended water conservation actions included (City of St. Helena 2010):

- Hiring a Water Conservation Coordinator
- Modifying and adopting a water rate structure that will ensure adequate program funding while encouraging water conservation by accounting for reduced water consumption in the base water rate and increasing high tier rates

- Increasing groundwater production reliability and winter pumping capacity

In 2010, the City's Safe Yield Committee was commissioned to analyze the reliability of the City's water supplies into the future. The Safe Yield Committee found that the long-term safe yield of the City's water supply is 1,950 acre-feet per year, which consists of 600 acre-feet from the City of Napa contract, a conservative 900 acre-feet from Bell Canyon reservoir, and an average use of 450 acre-feet from groundwater. As shown in Table 3.13-1, recent water usage (or deliveries as the table identifies) in the City is well below the 1,950 acre-feet target, with water usage ranging from 1,882 (2013) to 1,465 acre-feet (2016) over the last eight years. To reduce future water demand within the City, the City established a water-neutral policy, requiring future development to completely offset its water use. Future water demands estimated in the City's Water Supply Plan do not consider water conservation measures. Considering the current downward water usage trend due to water conservation measures and that future demands are required to offset their projected use, future water demand is not expected to exceed the existing policy limit of 1,950 acre-feet annual use set by the Safe Yield Committee (City of St. Helena 2011).

Wastewater

The City's Public Works Department provides wastewater collection and treatment services to the city. Wastewater in the city is collected and distributed through an over 22-mile system of 4-inch to 24-inch pipes and trunk lines and treated at the City's wastewater treatment plant (WWTP) (City of St. Helena 2014). The City currently provides sewer service to approximately 1,726 connections, of which approximately 75% are residential (City of St. Helena 2018). The WWTP, located at 1 Chaix/Thomann Lane in the southeastern portion of the city, currently has a permitted dry weather treatment capacity of 0.5 MGD. The WWTP has a permitted wet flow capacity of 2.8 MGD and treats 0.36 MGD of average wet weather flow. In 2020, approximately 0.384 MGD of wastewater was treated in the City on average. The plant provides secondary treatment for domestic and commercial wastewater from the City through a series of five ponds. Plant treatment processes include Type I and Type 2 Advanced Integrated Pond Systems, a comminuter (solids grinder), chlorine disinfection, and dechlorination. During dry weather conditions, the WWTP disposes effluent by spray irrigation onto a 90-acre grass field, and during wet weather, when irrigation fields are saturated, treated effluent is discharged into the Napa River in accordance with National Pollutant Discharge Elimination System (NPDES) permit No. CA0038016 (SFB RWQCB 2016). In 2020, the WWTP discharged approximately 54 million gallons of reclaimed water for irrigation and 13 million gallons into the Napa River (pers. comm. Erin Sanders, City of St. Helena 2021).

In 2016, the City received a cease and desist order from the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region. The cease and desist order was received because the WWTP did not have the ability to implement advanced secondary treatment of waters discharged into the Napa River, a requirement imposed by the NPDES permit reissued to the

WWTP in 2016. As the plant is currently designed only to provide secondary treatment, in order to meet the RWQCB's requirements, the plant would be required to undergo modifications to achieve advanced secondary treatment. The RWQCB establishes a time schedule of no more than five years for the WWTP to undergo the necessary improvements. At this time, the City has produced a Final Feasibility Study that evaluates options to come into compliance with the reissued NPDES permit (SFB RWQCB 2016). The study details two alternatives, Alternative 1, which involves converting the WWTP's Pond 4 to constructed wetlands that would provide additional treatment through a series of physical, chemical, and biological mechanisms, and Alternative 2, which involves implementation of trickling filters for secondary treatment. Alternative 2 was ultimately recommended for further examination and detailed design in a Facility Master Plan (City of St. Helena 2016). The City has recently completed plans for modifying and upgrading the WWTP to a Title 22 Tertiary Treatment Plant identified as Alternative 2, and work on upgrading the plant is anticipated to begin sometime in Summer 2021 to be completed by late summer 2022. The City is also pursuing a recycled water distribution system for landscape irrigation. It is not known if the City has funding to implement this project.

The 2015 Facilities Evaluation for the WWTP concluded that the total WWTP capacity was sufficient when operated under design conditions. The average dry weather flow treated in 2014 was 0.36 MGD, the average annual flow treated in 2014 was 0.47 MGD, and the highest daily flow treated was 1.03 MGD during wet weather. The 2015 Facilities Evaluation indicated that as the service area population was growing only slightly and per capita wastewater flows are declining due to conservation measure, the existing WWTP capacity is sufficient in the short-term. The report projected that the 2030 average dry weather flows into the WWTP would be approximately 0.50 MGD. However, the report indicated that the capacity should be increased to 0.65 MGD by 2030 to account for uncertainty (City of St. Helena 2016). As of 2020, the average dry weather flow treated was 0.36 MGD, the average annual flow treated was 0.38 MGD, and the highest daily flow treated was 1.05 MGD during wet weather (pers. comm. Sanders. 2021).

Stormwater Drainage

The direction of stormwater flow in the city is generally from the mountain ranges to the west to the Napa River at the City's eastern boundary. This drainage is largely collected by creeks that flow into the Napa River, including York Creek and Sulphur Creek. The City's stormwater drainage system, which consists of a variety of inlet structures and collection systems, discharges into these creeks or directly into the Napa River. Drainage is collected through a system of gravity flow pipes, ditches, channels, and creeks. The City's storm drainage pipes range from 4 to 60 inches in diameter (City of St. Helena 2000). The City's Public Works Department maintains drain inlets and drain manholes. Several of the storm drainage facilities are located within sidewalks or other public rights-of-way.

At present, stormwater moves as sheet flow across the Project site. The Project site does not contain any existing storm drain infrastructure. Section 3.9, Hydrology and Water Quality evaluates capacity of the City's stormwater infrastructure and water quality impacts associated with stormwater discharge.

Solid Waste

Upper Valley Disposal & Recycling (UVD) provides solid waste services to residents and businesses within the city. UVD provides weekly residential and commercial refuse and recycling pickup and disposal throughout upper Napa County. UVD also offers a Business Food Compost Program for commercial food collection (UVD 2019). In addition, UVD provides a variety of waste reduction programs, including municipal solid waste, nonhazardous materials, mixed recycling and yard waste recycling. A single-stream recycling program accommodates a wide array of wastes including plastic, glass, steel, tin, aluminum, and most types of paper and cardboard. The agency also conducts public education to teach residents and businesses about composting and its recycling and electronic waste disposal programs (City of St. Helena 2010). As of 2016, approximately 69% of collected waste was diverted from landfills by UVD (City of St. Helena 2018).

Solid waste generated within the city is disposed of at the Clover Flat Landfill, an approximately 79-acre Class III landfill site located at 4380 Silverado Trail Road, north of the city (CalRecycle 2019). The Clover Flat Landfill has a maximum permitted throughput of 600 tons per day and total permitted site capacity of 4.9 million cubic yards. The landfill receives approximately 150-175 tons per day of solid waste on average and has an estimated remaining capacity of 2.62 million cubic yards. The facility has an estimated closure date of 2047 (CalRecycle 2018). The landfill accepts nonhazardous solid waste and inert waste; hazardous wastes, liquid wastes, sewage sludge, or infectious wastes are not accepted at this facility. The landfill accepts food waste for composting and transfer, along with mixed loads of construction and demolition materials for recycling (CFL Inc. 2018).

3.13.3 Regulatory Setting

Federal Regulations

The following federal regulations pertaining to utilities and service systems would apply to the Proposed Project.

Water

Federal Water Pollution Control Act

The Federal Water Pollution Control Act (33 USC 1251 et seq.), otherwise known as the Clean Water Act (CWA), sets forth national goals that waters shall be "fishable, swimmable" waters (CWA Section 101 (a)(2)). To enforce the goals of the CWA, the U.S. Environmental Protection Agency (EPA) established the NPDES program. NPDES is a national program for regulating and administering permits for discharges to receiving waters, including non-point sources. Under Section 1251 (b) of the CWA, Congress and the U.S. EPA must recognize and preserve the primary responsibilities and rights of states concerning the reduction of pollution in water resources.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes the U.S. EPA, the U.S. Army Corps of Engineers, the Bureau of Reclamation, and the major federal land management agencies such as the U.S. Forest Service and the Bureau of Land Management. At the state level, with the exception of tribal lands, the California EPA and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the CWA in California.

Safe Drinking Water Act

The Safe Drinking Water Act of 1974 gave the U.S. EPA the authority to set standards for contaminants in drinking water supplies. The U.S. EPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Title 22 of the California Administrative Code establishes Department of Public Health and SWRQCB implementing authority and stipulates state drinking water quality and monitoring standards.

Wastewater

National Pollution Discharge Elimination System Permit

Discharge of treated wastewater to surface water(s) of the United States, including wetlands, requires a NPDES permit. In California, the RWQCBs administer the issuance of these federal permits. Obtaining an NPDES permit requires preparation of detailed information, including characterization of wastewater sources, treatment processes, and effluent quality. Whether or not a permit may be issued, the conditions of a permit are subject to many factors such as basin plan water quality objectives, impaired water body status of the receiving water, historical flow rates of the receiving water, effluent quality and flow, the air quality State Implementation Plan, the California Toxics Rule, and established total maximum daily loading rates for various pollutants. These factors are highly specific to the potential discharge point. Obtaining an NPDES permit is

generally considered difficult in inland areas and may not be possible in sensitive areas. The City is within the jurisdiction of the San Francisco RWQCB and has a current NPDES permit No. CA0038016 (SFB RWQCB 2016).

Federal and State Clean Water Act

The Porter–Cologne Water Quality Control Act gives the ultimate authority over California water rights and water quality policy to the SWRCB. The Porter–Cologne Act also established nine RWQCBs to ensure that water quality on local/regional levels is maintained. The Project site is under the jurisdiction of the Central Valley RWQCB.

Stormwater

Clean Water Act

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality (33 USC 1251 et seq.). The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The CWA establishes basic guidelines for regulating discharges of both point and non-point sources[3] of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. See Section 3.9, Hydrology and Water Quality, for more information.

Federal Antidegradation Policy

The federal antidegradation policy (40 CFR Section 131.12) of the federal CWA is designed to protect water quality and water resources. The policy requires states to develop statewide antidegradation policies and identify methods for implementing them. State antidegradation policies and implementation measures must include the following provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. State permitting actions must be consistent with the federal

[3] Point source discharges are those emanating from a pipe or discrete location/process, such as an industrial process or wastewater discharge. Non-point source pollutants are those that originate from numerous diffuse sources and land uses, and which can accumulate in stormwater runoff or in groundwater.

Antidegradation Policy. See Section 3.9, Hydrology and Water Quality, for a detailed discussion of federal stormwater regulations.

Solid Waste

Resource Conservation and Recovery Act, Subtitle D

Code of Federal Regulations, Volume 40, Part 258 (Resource Conservation and Recovery Act, Subtitle D) states criteria for the location, operation, design, monitoring, and closure of municipal solid waste landfills. The code requires states to conduct their own permitting program for landfills that follow this criteria.

State

Water

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (Porter–Cologne) gives the ultimate authority over California water rights and water quality policy to the California SWRCB. Porter–Cologne also established nine RWQCBs to ensure that water quality on local/regional levels is maintained. The city is under the jurisdiction of the San Francisco RWQCB.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610–10656). The act requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet per year shall prepare and adopt an Urban Water Management Plan. The City does not meet the population requirements for preparation of an Urban Water Management Plan.

Drinking Water Quality

It is the responsibility of the SWRCB and the Department of Public Health to implement the Federal Safe Drinking Water Act, as well as California statutes and regulations related to drinking water. The SWRCB inspects and provides regulatory oversights to public water systems within California, to ensure their compliance. The San Francisco RWQCB protects the beneficial uses, including municipal drinking water supply, of state waters in the San Francisco Bay area.

In accordance with Title 22 of the California Code of Regulations, public water system operators regularly monitor their drinking water sources for microbiological, chemical, radiological, and aesthetic contaminants to ensure that they do not exceed the primary maximum contaminant

levels. The amount of contaminants in drinking water needs to be disclosed to the public annually, by the water supplier, in a consumer confidence report. It is the responsibility of the water supplier to produce and distribute the report and the responsibility of the U.S. EPA to prepare annual summary reports of water system compliance.

Senate Bill X7-7

On November 10, 2009, Governor Arnold Schwarzenegger signed SB X7-7, which requires each urban water supplier to select one of four methods for achieving water conservation targets for 2020. This bill establishes a statewide goal of achieving a 20% reduction in urban per capita water use by 2020 for urban retail water suppliers. The City and its customers have been and continue to implement conservation measures that are moving the City toward desired statewide reductions. On-going statewide, regional, and City efforts, combined with natural attrition and replacement of water fixtures and appliances with more water efficient units will continue to decrease future water demand for future customers.

California Green Building Standards Code

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CalGreen) that requires the installation of water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. CalGreen was incorporated as Part 11 into Title 24 of the California Code of Regulations (CCR). CalGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. All development projects must satisfy the indoor water use infrastructure standards necessary to meet CalGreen.

CalGreen requires residential and nonresidential water efficiency and conservation measures for new buildings and structures that will reduce the overall potable water use inside the building by 20%. The 20% water savings can be achieved in one of the following ways: (1) installation of plumbing fixtures and fittings that meet the 20% reduced flow rate specified in CalGreen, or (2) by demonstrating a 20% reduction in water use from the building “water use baseline.”

California Model Water Efficient Landscape Ordinance and County Ordinance

In 2006, the California Legislature enacted, and the Governor signed, the Water Conservation in Landscaping Act, which required the Department of Water Resources to update the Model Water Efficient Landscape Ordinance (MWELO). On September 10, 2009, the Office of Administrative Law approved the updated MWELO, which required that a retail water supplier and county adopt the provisions of the MWELO by January 1, 2010, or enact its own provisions equal to or more restrictive than the MWELO provisions. The County of Napa adopted the MWELO as its ordinance so all water use calculations have been following the MWELO steps. The City also has a

landscaping ordinance, which issues landscaping approval after reviewing project-specific landscaping plans. The City ordinance follows the MWELO calculation methods.

California Water Code Section 525

California Water Code Section 525 requires water purveyors to install meters on all new service connections after January 1, 1992. As a result, homes constructed after January 1, 1992 all have water meters installed. California Water Code Section 527 requires water purveyors to charge for water based upon the actual volume of water delivered if a meter has been installed.

Wastewater

General Waste Discharge Requirements for Sanitary Sewer Systems

The General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems were adopted by the SWRCB in May 2006. These WDRs require local jurisdictions to develop a Sewer System Management Plan (SSMP) that addresses the necessary operation and emergency response plans to reduce sanitary sewer overflows. The WDRs require that the local jurisdiction approve the SSMP.

Stormwater

General NPDES Permits and WDRs

To enable efficient permitting under both the CWA and the Porter–Cologne Act, the SWRCB and the RWQCBs run permit programs that group similar types of activities that have similar threats to water quality. These "general permit" programs include the Phase II Small Municipal Separate Storm Sewer System (MS4)[4] Permit, the construction general permit, and other general permits for low-threat discharges. The Construction Stormwater Program and the Small MS4 Permit are administered by the SWRCB, while other general WDRs are administered by the Central Valley RWQCB. Point source discharges or other activities that threaten water quality that are not covered under a general permit must seek individual NPDES permits and/or WDRs, depending on the type, location and destination of the discharge. For these types of discharges, the initial step in the process is to submit a "Report of Waste Discharge" to the San Francisco RWQCB, who then determines the appropriate permitting pathway. See Section 3.9, Hydrology and Water Quality, for more information.

[4] A small MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that serve populations of fewer than 100,000 persons.

California Sustainable Groundwater Act

The Sustainable Groundwater Management Act is a package of three bills (Assembly Bill [AB] 1739, SB 1168, and SB 1319) that provides local agencies with a framework for managing groundwater basins in a sustainable manner. The Sustainable Groundwater Management Act establishes minimum standards for sustainable groundwater management, roles and responsibilities for local agencies that manage groundwater resources, as well as priorities and timelines to achieve sustainable groundwater management within 20 years of adoption of a Groundwater Sustainability Plan. Central to the Sustainable Groundwater Management Act is the identification of critically over-drafted basins and the prioritization of groundwater basins, the establishment of Groundwater Sustainability Agencies, and the preparation and implementation of Groundwater Sustainability Plans for medium priority, high priority, and critically over drafted basins. Groundwater Sustainability Agencies must be formed by June 30, 2017; and Groundwater Sustainability Plans must consider all beneficial uses and users of groundwater in the basin, as well as include measurable objectives and interim milestones that ensure basin sustainability. A basin may be managed by a single Groundwater Sustainability Plan or multiple coordinated Groundwater Sustainability Plans. See Section 3.9, Hydrology and Water Quality, for more information.

Solid Waste

California Integrated Waste Management Act—AB 939

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. They must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to $10,000–per-day fines. The City of St. Helena participates in the Upper Valley Waste Management Agency to achieve compliance with AB 939.

Mandatory Commercial Recycling – AB 341

AB 341 was adopted as part of the AB 32 Scoping Plan by the Air Resources Board pursuant to the California Global Warming Solutions Act on January 17, 2012. The regulation requires businesses that generate 4 cubic yards or more of commercial solid waste per week and multifamily residential dwellings of five units or more to arrange for recycling services. The measure focuses on increasing commercial waste diversion to reduce greenhouse gas emissions.

Mandatory Commercial Organics Recycling – AB 1826

AB 1826 was enacted in October 2014 in order to divert commercial organic waste from landfills. The measure requires businesses and multifamily residential dwellings of five or more units to recycle organic waste on and after April 1, 2016 depending on how much solid waste they generate per week. The law includes phasing of requirements over time to ensure that the minimum threshold of organic waste generation by businesses decreases gradually.

Local

City of St. Helena 1993 General Plan

The Public Facilities and Services Element of the St. Helena 1993 General Plan provides guiding policies regarding utilities and service systems, including the following:

> **Policy 9.2.1:** Approval of new development shall be contingent upon the ability of the City to provide water without exceeding the safe annual yield of its water supply system.
>
> **Policy 9.2.3:** Adopt and implement water conservation measures as a means of extending the capabilities of the City's water supply.
>
> **Policy 9.3.1:** Provide adequate sewage treatment capacity at the City treatment plant to meet the needs of population growth permitted under the City's Growth Management System.
>
> **Policy 9.3.3:** Require extension of City sewer to areas with limited sewerage capacity prior to approval of future growth in these areas.
>
> **Policy 9.4.1:** New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.
>
> **Policy 9.4.2:** If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.
>
> **Policy 9.4.3:** Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

City of St. Helena 2019 General Plan ("General Plan Update 2040")

The Public Facilities and Services Element of the St. Helena 2019 General Plan provides guiding policies regarding utilities and service systems, including the following:

Policy PF1.1: Require that the approval of new development be contingent upon the ability of the City to provide water without exceeding the safe annual yield of its water supply system.

Policy PF1.2: Adopt and implement equitable water conservation measures for both residential and non-residential users so that the City can supply water within the safe yield of its water system.

Policy PF2.1: Ensure adequate sewage treatment capacity at the City treatment plant to meet the needs of population growth, taking into account the City's Growth Management System, the Regional Housing Needs Allocation, and the needs of non-residential users.

Policy PF3.1: Ensure that new developments provide adequate drainage improvements and detention to mitigate flooding from increased stormwater runoff attributable to the development.

City of St. Helena Municipal Code

St. Helena Water Conservation and Emergency Shortage Ordinances

The City has ordinances addressing water supply availability and water shortage contingencies including Chapter 13.12, Water Use and Efficiency of the Municipal Code requiring new developments to "completely offset its water requirement" by identifying residential or non-residential properties eligible for retrofitting with water efficient hardware and verifying that the required number of retrofits have been completed prior to the issuance of a certificate of occupancy. Section 13.04.220 of the Municipal Code also addresses water shortage emergency conditions.

Water Use and Efficiency and New Development Municipal Code Section 13.12.030

Chapter 13.12 of the Municipal Code Section 13.12.030 requires new development projects within the City to be water-neutral from the City-delivered water system. Prior to construction, any project is required to offset its water demand by providing for the implementation of conservation measures for existing households. The City's Municipal Code requires that this be demonstrated through a quantitative water analysis of the Proposed Project and can be achieved through any combination of on-site water conservation measures and/or off-site retrofitting and/or using well water. The quantitative water analysis must include a calculation of the baseline existing water demand, the proposed water demand, a comparison of the two and the proposed retrofits to achieve a zero water use increase from the proposed development. Specifically, new development shall completely offset its water requirement by installing city-approved ultra-low flush (ULF) toilets and associated water efficient hardware in a sufficient number of existing homes or nonresidential properties. Therefore, under this section, residential projects are required to complete toilet retrofits

or other City approved conservation measures to offset water use. This effectively locks City water demand at its current levels with the only minor climate related fluctuations. If the city council determines that retrofitting of existing residential or nonresidential buildings is impractical or constitutes an unusual hardship on an applicant, it may authorize the payment to the city of an in-lieu retrofit fee. The in-lieu fee shall be the equivalent of the cost of retrofitting a sufficient number of existing homes with the ULF toilets and other required water-saving devices. The City will administer a rebate program to retrofit existing homes using the fees collected or may use the fees for another water use efficiency purpose as approved by the city council. The Proposed Project applicant completed a Water Neutral Report included in Appendix J.

Developer Impact Fees Municipal Code Section 3.32.020

Pursuant to Chapter 3.32 of the Municipal Code Section 3.32.020, the City collects development impact fees on new development or conversions within the city to pay for public improvements related to civic improvement projects, public safety, sewer projects, water projects, traffic mitigation, and storm drainage.

Municipal Code Chapter 13.32

Chapter 13.32, Stormwater and Runoff Pollution Control of the City's Municipal Code contains the City's Stormwater and Runoff Pollution Control Ordinance. This ordinance empowers the City's Public Works Department to enforce stormwater pollution regulations, including:

- Prohibiting illicit discharges to the stormwater conveyance system;
- Establishing minimum requirements for stormwater management, including source control requirements, to prevent and reduce pollution;
- Establishing requirements for development project site design to reduce stormwater pollution and erosion;
- Establishing requirements for the management of stormwater flows from development projects, both to prevent erosion and to protect and enhance existing water-dependent habitats; and
- Establishing standards for the use of off-site facilities for stormwater management to supplement on-site practices at new development sites.

Title 16, Subdivisions, includes Chapter 16.32, Design Standards and Improvements, including Section 16.32.070, Drainage, which requires stormwater runoff from subdivisions to be collected and conveyed by an approved storm drainage system. The storm drainage system shall be designed by a registered civil engineer for ultimate development of the watershed and shall be capable of collecting and conveying runoff generated by the 10-year flood. The system shall

provide for the protection of abutting and off-site properties that may be adversely affected by any increase in runoff attributed to the development; off-site storm drain improvements may be required to satisfy this requirement. In addition, retention ponds, drainage swales and/or check dams may be required to reduce off-site peak storm flow generated by projects to the historic flow.

City of St. Helena Sewer System Management Plan

The City's SSMP was developed originally in 2006 to comply with requirements of a 2005 Order from the San Francisco RWQCB. Since then, the SSMP has been revised several times to comply with Provision D.13 of State Water Board Water Quality Order (WQO) 2006-0003 Sanitary Sewer System WDRs and the associated Monitoring Reporting Program. The SSMP was last updated in May 2016, and includes the City's sewer system management goals, operation and maintenance program, design and performance provisions, overflow emergency response plan, fat, oils, and grease control program, system evaluation and capacity assurance plan, and monitoring, measurement and program modifications.

City of St. Helena Storm Drainage Master Plan

The City's Storm Drainage Master Plan (Plan) was prepared in September 2000 to analyze the existing storm drain system within the city and to develop a long-term plan for improving the City's drainage facilities. The plan evaluates the capacity of the storm drain system to support existing development and identifies necessary improvements for future development. Preliminary cost estimates for recommended storm drainage improvements are also included to assist the City in establishing a capital improvements financing program and to confirm development impact fees. The City is in the process of completing a comprehensive update to the Plan and anticipates adoption sometime in Summer or Fall 2021.

Basin Analysis Report for the Napa Valley Groundwater Subbasin

Napa County submitted the Final Alternative Groundwater Sustainability Plan/Basin Analysis Report to the California Department of Water Resources on December 16, 2016, to meet the requirements of the 2014 Sustainable Groundwater Management Act. The report provides an analysis of the Napa Valley Subbasin, including the St. Helena Subarea, and includes groundwater management considerations and data.

City of St. Helena Source Reduction and Recycling Element

The City adopted a Source Reduction and Recycling Element to meet the requirements outlined in AB 939. The Source Reduction and Recycling Element sets forth goals that direct the City toward the solid waste diversion requirement and reduce the City's solid waste impact. The City of St. Helena participates in the Upper Valley Waste Management Agency to achieve compliance with AB 939.

3.13.4 Impacts

Methods of Analysis

The impact analysis considers the Proposed Project's effect on the demand for water supply, wastewater infrastructure and treatment, adequacy of stormwater infrastructure, and capacity of the landfill provider to attain solid waste reduction goals and compares this to the thresholds of significance listed below. The analysis considers whether existing utilities and service systems have adequate capacity and infrastructure to serve the demand generated by the Proposed Project and whether the Proposed Project would necessitate modifications to existing facilities or construction of new facilities to accommodate the increase in demand. Proposed Project demands for water, wastewater and solid waste are quantified below.

Water

Residential water demand factors are broken into two categories: single-family and multifamily. The dwelling unit demands for the 51 single-family units reflect detached homes located on an average lot of 8,330 square-feet, with individual landscaping, hardscapes, pools, and other anticipated outdoor features. Typically, single-family residences have a higher number of people per house than multi-family housing units and a larger landscaped area on a per person basis. The 25 multifamily units share common landscaped areas and have minimal or no individual landscape demand. Multifamily residences typically have a lower average number of people per unit than a single-family unit. These factors result in lower dwelling unit water demand for multi-family residential units. The Proposed Project also includes 11 accessory dwelling units (ADUs) that are treated as multifamily units for the purposes of quantifying demand. The residential unit demand factors described below reflect two distinct uses: indoor use and outdoor use.

A Water Neutral Report (Appendix J) was prepared for the Proposed Project to demonstrate compliance with the City's Water Neutral Policy. The water analysis calculates the estimated water demand of Proposed Project operation and potential water off-set measures. Indoor water usage factors used in the analysis are based on water usage from water fixtures and appliances in relation to the number of occupants as defined by the City's Water Neutral Policy. See Appendix J for a breakdown of water demand factors used to calculate total Proposed Project water demands. Note that the ADUs are not identified separately in the preliminary water calculation. However, the water demand for single family residences assumes eight persons per home, based on the City's demand factor of four bedrooms and two persons per bedroom. This assumes a higher persons per household for the purposes of calculating water demand, as compared to the City's persons per household of 2.45 to determine a project's population (City of St. Helena 2015b). Given the size of the ADUs, one to two persons would be a typical occupancy. Therefore, the residential indoor water demand calculations could accommodate an above-average size household and an occupied ADU.

Residential lots with ADUs would not have additional outdoor water demand (and may have less outdoor water demand, as the area occupied by the ADU might otherwise be landscaped).

The Proposed Project's water demand is provided below in Table 3.13-9. The Proposed Project is estimated to have a total water demand of 37.04 acre-feet per year at completion, including 17.16 acre-feet for outdoor landscaping. The impact analysis for available water supply is based on a comparison of these water demand numbers to the listed thresholds of significance. Table 3.13-10 provides a more detailed breakdown of the indoor water demand

Table 3.13-9
Proposed Project Water Demands (acre-feet per year)

Water Sources	Indoor Water Demand[1]	Outdoor Water Demand	Total Demand
Municipal Water	19.88	0	19.88
On-Site Groundwater Well	0	17.16	17.16
Total Water Demand (acre-feet)	19.88	17.16	37.04

Source: Appendix J.
Note:
1 Existing water meters in the City do not separately track indoor and outdoor residential water use.

Table 3.13-10
Proposed Project Breakdown of Water Demand

Fixture	Flow Rate gal/min or gal/flush	Flow Duration (min., flush, load)	Daily Uses per Occupant	Number of Occupants1	Gallons per Day	Acre-feet Per Year
Showerheads	2	8	1	508	8,128	9.10
Sink Faucets	1.5	0.25	3	508	572	0.64
Kitchen Faucet	1.5	4	1	508	3,048	3.41
Toilet	1.3	1	3	508	1,981	2.22
Clothes Washer	19.7	1	0.37	508	3,703	4.15
Dish Washer	6.3	1	0.1	508	320	0.36
				Total Water Demand	17,752	19.88

Source: Appendix J.
Note:
1 For the purposes of determining the Proposed Project's water demand, the City's demand factor is based on the number of bedrooms and persons per bedroom, which differs from the City's persons per household (PPH) to determine the number of residents a residential project would generate, which is 2.45 PPH.

Wastewater

Projected wastewater generation for the Proposed Project is based on indoor water demand calculations included in the Water Neutral Report (Appendix J) prepared for the Proposed Project. The impact analysis for available wastewater capacity is based on a comparison of this wastewater generation calculation to the listed thresholds of significance. As shown in Table 3.13-10, the

Proposed Project would result in an indoor water use of approximately 19.88 acre-feet per year during operation. This translates to a wastewater generation rate of 19.88 acre-feet per year, or 0.018 MGD (Appendix J).

Solid Waste

The impact analysis for solid waste was based on a comparison of projected solid waste demand to the listed thresholds of significance. Table 3.13-11 displays the projected solid waste demand associated with Proposed Project operation. The solid waste generation rates used for Proposed Project operation are based on default generation rates used by CalEEMod, which uses CalRecycle data. The solid waste generation rates used for Proposed Project construction are based on U.S. EPA's 2003 report Estimating 2003 Building-Related Construction and Demolition Materials Amounts. To determine the approximate amount of construction debris the square footage of development was conservatively estimated to be 733,000 square feet, with 584,000 square feet for single-family lots and ADUs and 149,000 square feet for attached housing. Using the solid waste generation rate of 0.0022 tons per square feet, the Proposed Project is estimated to produce 1,445.4 tons of construction debris (U.S. EPA 2003).

To determine the amount of solid waste generated during Proposed Project operation, generation rates provided by CalRecyle were used and include the following:

Single Family Residential = 0.0033 tons/day/dwelling unit

Multifamily Residential = 0.0013 tons/day/dwelling unit

The projected amount of solid waste generated by Proposed Project operation is 0.2251 tons per day of residential solid waste or 82 tons per year, shown in Table 3.13-11. The City encourages contractors to use recycling and/or reuse (diversion) measures to reduce the amount of construction waste and other materials sent to landfills.

Table 3.13-11
Proposed Project Projected Waste Generation

Land Use	Number of Units	Generation Rate	Waste Disposed (tons per day)
Single Family	51	0.0033	0.1683
ADU	11	0.0013	0.0143
Multifamily/Attached	25	0.0013	0.0325
		Total	0.2251

Source: CalRecycle 2018.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act Guidelines, considerations for whether a significant impact may occur include whether the Proposed Project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impacts and Mitigation Measures

3.13-1: Would the Proposed Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities? This impact is less than significant.

The Proposed Project would require new water, sewer, storm drain, electric power, natural gas, and telecommunications infrastructure on site to serve the proposed residential development designed in compliance with City specifications. The Project site is currently not served by City utilities. The Proposed Project's on-site water, sewer, and storm drain lines are proposed to be located within the street/driveway rights-of-way within the Project site. The City's water and wastewater treatment and conveyance facilities, stormwater drainage facilities, and electric power, natural gas, and telecommunication facilities are expected to have the capacity to accommodate the demands of the Proposed Project, as discussed below.

Water Treatment

An existing 10-foot wide public water line easement containing an active 12-inch water line bisects the north/northeast portion of the Project site. This easement is proposed to be abandoned as part of the Project and the water line relocated.

The Proposed Project is proposing a looped 8-inch water main within Streets A and B that would connect to the existing water main at two locations. A new 8-inch water main is also proposed within the extension of Adams Street to connect to the existing water main at the southwest end of the Project site. An existing well is located near the southeastern end of the Project site that is proposed to be maintained in place (in proposed Lot 19) and used to provide non-potable irrigation of exterior public landscaping areas. The Proposed Project would be designed not to exceed 0.4 acre-feet/year/dwelling unit of water based on the installation of increasingly efficient and lower-water-using fixtures and appliances and irrigation systems.

The Proposed Project's demand for treated water would be supported by the City's existing water treatment and delivery infrastructure, as well as necessary improvements. As shown in Table 3.13-9, the Proposed Project is expected to generate a water demand of approximately 37.04 acre-feet per year at build out. As described in the Setting section above, the Louis Stralla WTP, which treats water that is sourced from the Bell Canyon Reservoir, typically treats 3.5 MGD (3,920 acre-feet per year) and has a capacity of 4.3 MGD (4,817 acre-feet per year) (City of St. Helena 2018). The Proposed Project's water demand would represent a minimal percentage of the treatment capacity of the Louis Stralla WTP. In addition, the Proposed Project would be served by water from the City of Napa and the City's groundwater wells, which have treatment facilities of their own. As noted in the setting section, under a contract with the City of Napa the City receives 600 acre-feet annually and may request up to 200 acre-feet of additional water supply if the City of Napa has water supplies available. Furthermore, the City's groundwater would only account for a minimal amount of water use on the Project site, as the City currently limits the use of groundwater from the City's wells in an agreement with the Water Audit.

Therefore, water treatment facilities would be able to adequately serve the potable water demand of the Proposed Project and the Proposed Project would not exceed the capacity of these facilities. The Proposed Project would be served by a variety of available water supply sources, and the Proposed Project's landscape irrigation demand would be offset through water conservation measures and use of the on-site well (see Appendix J). Pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to water projects. The Proposed Project applicant would pay these fees, which would help offset any increased demands on the City's water system. Therefore, the Proposed Project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects. This impact would be **less than significant**.

Wastewater Treatment

Wastewater flows from the western portion of the Proposed Project are proposed to drain into an existing public manhole at the corner of Starr and Hunt Avenue via new 8-inch sewer pipes. The area

east of Starr Avenue, lower in elevation, is proposed to drain east through the Project site via new 8-inch sewer pipes, through Lot 21 within a public easement and into an existing public manhole on the adjacent parcel in the Vineyard Valley Mobile Home Park. The Proposed Project would install 8-inch sewer lines within all roadways to service the proposed residences. All sewer mains are sized to accommodate Proposed Project flows, per City standards, and designed at slopes to provide required self-cleaning velocities. Sewer laterals would be installed per City specifications.

The Proposed Project would increase the amount of wastewater requiring treatment at the City's WWTP. The Proposed Project is expected to generate approximately 0.018 MGD of wastewater during operation. The Proposed Project would not exceed the City's current permitted dry weather capacity of 0.5 MGD when combined with the average flow of 0.384 that is treated at the WWTP. Furthermore, pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to sewer projects. The Proposed Project applicant would pay these fees, which would help offset any increased demands on the City's sewer system. Therefore, the Proposed Project would not result in or require the relocation or construction of wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be **less than significant**.

Stormwater Drainage

The Proposed Project would connect to the City's stormwater drainage system. The Project site drains to an existing City-owned detention basin that was constructed as part of the City's Flood Protection Project. New storm drain lines would be installed in Streets A, B, and C, and Adams Street. The southwesterly portion of the site is proposed to drain via gutter flow and proposed storm drain pipes and discharge into the existing Starr Avenue storm drain at several different locations. The remainder of the Proposed Project is proposed to drain to the northeast via gutter flow and storm drain pipes and discharge into the City's existing detention basin. The City requires that all storm drain pipes be sized to accommodate a 10-year storm within the pipe and 100-year storm within the street section.

The Proposed Project would result in an increase in stormwater runoff by converting predominantly undeveloped land to roadways, driveways, and residences, thereby increasing impervious coverage on the Project site. The Proposed Project would result in the addition of 10.91 acres of impervious surface, which is equivalent to an impervious surface coverage of 58%. The Proposed Project would be required to comply with the Bay Area Stormwater Management Agencies Association (BASMAA) requirements designed to prohibit non-stormwater discharges to storm drains and require use of Best Management Practices (BMPs) to minimize the amount of pollutants in runoff in accordance with the City's Phase II Stormwater NPDES Permit for small MS4s. The NPDES Permit includes a provision (Provision E.12) that mandates municipalities to require specified features and facilities (i.e., vegetated swales, LID features) to control pollutant sources,

control runoff volumes, rates, and durations, and to treat runoff before discharge from the site be included in development plans as conditions of issuing approvals and permits (BASMAA 2019). The Project is also designed to construct storm drains or as required, improve existing storm drains so that they have adequate capacity to carry the runoff produced by a 10-year storm. On-site storm flows from the single-family residential portion would be conveyed to the City's detention basin via underground storm drain lines varying in diameter from 15 to 30 inches. Storm runoff from the Project area east of the proposed Starr Avenue extension would be collected by 15-inch storm drains connected to the City's existing 36-inch storm drain. Stormwater flows would then be directed to the City's detention basin. Title 16 of the City's Municipal Code requires a new stormwater drainage system be designed by a registered civil engineer for ultimate development of the watershed, and to convey runoff generated by a 10-year flood event. Per Title 16, the stormwater drainage system must also be designed to provide for the protection of abutting and off-site properties, and off-site storm drain improvements may be required to satisfy this requirement. Street curbs would be designed to adequately collect and convey the runoff produced by a 100-year storm event. As indicated above, the City's detention basin was designed to accommodate stormwater runoff assuming 70% of the Project site would be developed with impervious surfaces (i.e., roads, sidewalks, homes).

Pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to stormwater drainage projects. The Proposed Project applicant would pay these fees, which would help offset any increased demands on the City's stormwater drainage system. Therefore, the Proposed Project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities; this impact would be **less than significant.**

Electric Power, Natural Gas, or Telecommunications Facilities

The Proposed Project would be served by Marin Clean Energy for electricity service and Pacific Gas & Electric Company for natural gas service. Telecommunications services are offered by various service providers within the City. The Project site is located in a developed area of the City, surrounded by commercial, office and residential uses to the west and south. Electric power, natural gas, and telecommunications services all exist adjacent to the Project site and the Proposed Project would tie into these services. The Proposed Project would not require the construction of new or relocation of electric power, natural gas, or telecommunications facilities. On-site electrical, natural gas and telecommunications connections would all be installed subsurface, no overhead facilities would be provided. Therefore, impacts would be **less than significant.**

Mitigation Measures

None required.

3.13-2: Would sufficient water supplies be available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years? This impact would be less than significant.

On March 22, 2011, the City Council adopted the definition of "Safe Yield" as proposed by the Safe Water Yield Committee.[5] The Safe Yield Committee found that the long-term safe yield of the City's water supply is 1,950 acre-feet per year, which consists of 600 acre-feet from the City of Napa contract, a conservative 900 acre-feet from Bell Canyon reservoir, and an average use of 450 acre-feet from groundwater. As shown in Table 3.13-1, recent water usage in the City is well below the 1,950 acre-feet target, with water usage ranging from ranging from 1,882 (2013) to 1,465 acre-feet (2016) and averaging 1,637 acre-feet over the last eight years. To reduce future water demand within the City, the City established a water-neutral policy, requiring future development to completely offset its post-construction water use. As discussed in the setting section, the City is currently under a Phase II water emergency that limits the amount of water for all commercial and residential uses and does not allow approval of new water connections. At this time, it is uncertain when the restrictions will be lifted. The analysis assumes adequate water supplies would be available, but it is under the purview of the City Council to make that determination. The 1993 General Plan Policy 9.2.1 requires approval of new development be contingent upon the ability of the City to provide water without exceeding the safe annual yield of its water supply system.

All new development in the state is required to comply with CalGreen that requires the installation of water-efficient indoor infrastructure to conserve water. In addition to CalGreen, all landscape irrigation is required to comply with the water requirements set forth in the MWELO, which the City has codified in the Municipal Code. Lastly, water meters would be installed for each single-family and multifamily unit.

The Proposed Project's estimated indoor water demand is 19.88 acre-feet per year at completion during normal water years (see Table 3.13-10). The Proposed Project's landscape irrigation demand would account for 17.16 acre-feet per year. Assuming the Proposed Project's entire water demand of 37.04 acre-feet per year, adding it to the highest water demand in recent years of 1,882 results in 1,919 acre-feet, below the Safe Yield of 1,950. In addition, the Proposed Project must comply with the City's water neutrality policy. In order to comply with this policy, a Water Neutral Report (Appendix J) was prepared for the Proposed Project, which estimates proposed water demand and quantifies water off-set mitigations. The report shows that the 37.04 acre-feet per year of water that would be used during Proposed Project operation would be completely offset through a combination of using the on-site water well for irrigation needs and implementation of water conserving measures, which are detailed in Appendix J. To comply with the City's water neutrality policy, the Proposed Project applicant is required to off-set the Proposed Project's water

[5] The March 2011 report is the most current version available.

demand as a condition of approval. To comply with this requirement the Proposed Project applicant would be required to provide in-lieu funds consistent with Municipal Code Section 13.12.030, which permits payment of in-lieu fees equivalent to the cost of retrofitting a sufficient number of existing homes with ULF toilets, funding water meter replacements (smart meter upgrade), old pipeline replacement, and other City-approved projects. The City would use the in-lieu fees to retrofit existing homes or for another water use efficiency purpose as approved by the City Council.

The existing on-site agricultural well is proposed to be used to provide non-potable supplies to the separately plumbed landscape irrigation systems throughout the Project site to irrigate public and private landscaping. Historically, this well has been used to serve the irrigation needs of the vineyard located on the property but is currently inoperable. The Proposed Project's landscape water demand is estimated at 17.16 acre-feet per year, which is within the capacity of the on-site well (groundwater impacts are further discussed in Section 3.9 Hydrology). In addition, the Proposed Project would be required to comply with the MWEL Ordinance.

The City has been well below the Safe Yield of 1,950 acre-feet per year in recent years with adequate water supplies through the use of the three different water supply sources. The City has adequate water to serve the demands of the Proposed Project. In addition, as a condition of approval, the Proposed Project applicant would pay the required fees to offset the Proposed Project's water demand in addition to implementing mandated water conserving measures. Therefore, sufficient water supplies are available to serve the Proposed Project and the impact would be **less than significant**.

Mitigation Measures

None required.

3.13-3: Would adequate wastewater treatment capacity be available to serve the Proposed Project's increase in demand in addition to the provider's existing commitments? This impact would be less than significant.

The City's WWTP would provide wastewater treatment service to the Project site. The City's WWTP operates under a NPDES permit and is permitted to discharge up to 0.5 MGD during dry weather and up to 2.8 MGD during wet weather of treated effluent (City of St. Helena 2016). The Proposed Project is expected to generate an average of 0.018 MGD of wastewater. As the WWTP currently treats an average flow of 0.384 MGD, the additional 0.018 MGD combined with the current average flow of 0.384 MGD would not exceed the plant's permitted allowable average dry weather flow effluent limit of 0.5 MGD, as specified under its NPDES permit (City of St. Helena 2016). The 2015 Facilities Evaluation for the WWTP concluded that the total WWTP capacity was sufficient when operated under design conditions. The 2015 Facilities Evaluation indicated that as

the service area population was growing only slightly and per capita wastewater flows are declining due to conservation measures, the existing WWTP capacity is sufficient in the short-term. The report projected that the 2030 average dry weather flows into the WWTP would be approximately 0.50 MGD. However, the report indicated that the capacity should be increased to 0.65 MGD by 2030 to account for uncertainty (City of St. Helena 2016). The San Francisco RWQCB specifies that water treatment facilities must follow conditions under their NPDES permit. The City has been notified by the RWQCB that treatment plant upgrades and an amended permit are required as part of a cease and desist order. The capacity issues of the plant are a function of nutrient load (intensity of effluent) and dry weather flow (amount of effluent). The RWQCB has not requested that there be a moratorium on new connections to the treatment plant.

Wastewater generated by the Proposed Project is not expected to be comprised of any new or substantially different chemical constituents than those that are typically present in these types of residential projects and are not expected to be of concern regarding permitted effluent limitations for chemical parameters. Because adequate capacity is available at the WWTP to serve the Proposed Project, this is considered a **less-than-significant impact**.

Mitigation Measures

None required.

3.13-4: Would the proposed project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? This impact would be less than significant.

Construction

The Proposed Project would increase solid waste generation in the City during construction. Using the solid waste generation rate of 0.0022 tons per square feet, it is estimated that during Proposed Project construction approximately 1,612.6 tons of solid waste would require disposal. The City encourages recycling of construction debris to the extent feasible. In addition, the 2016 CALGreen Tier 1 mandatory measures require preparation of a Construction Waste Management Plan that documents the diversion of materials as required by CALGreen and at least 65% of nonhazardous construction waste would be required to be recycled or salvaged. Assuming a 6-year buildout, the amount of construction-related solid waste would be approximately 201.6 tons per year (0.55 tons per day) at maximum. The Clover Flat Landfill has a maximum permitted throughput of 600 tons per day. As the landfill receives approximately 150–175 tons per day of solid waste on average, this allows for a remaining capacity of approximately 425 tons of solid waste per day. Therefore, the Proposed Project's construction waste, conservatively assuming none would be diverted or recycled, would contribute less than 0.1% of the landfill's remaining permitted capacity per day. As this is a minimal contribution, the Clover Flat Landfill would have adequate landfill capacity for the

Proposed Project's construction debris and the Proposed Project would not impair the attainment of solid waste goals resulting in a **less-than-significant impact.**

Operation

In addition to construction waste, the Proposed Project would generate about 0.225 tons per day of solid waste during operation, as shown in Table 3.13-11. As described above, the Clover Flat Landfill has a maximum permitted throughput of 600 tons per day and a total permitted site capacity of 4.9 million cubic yards. The amount of solid waste generated during Proposed Project operation would be 0.04% of the average unused daily capacity of the Clover Flat landfill, and therefore would not exceed the capacity of the landfill. UVD provides solid waste services to residents and businesses within the City and diverted approximately 69% of collected waste from landfills in 2016 (City of St. Helena 2018). The amount of solid waste generated during Proposed Project operation would not cause the maximum permitted use capacity of the Clover Flat landfill to be exceeded. The Proposed Project would comply with the City's Source Reduction and Recycling Element solid waste diversion requirement and the California AB 939 solid waste diversion requirements. The Clover Flat Landfill provides mandated commercial recycling processing services, production of organic feedstocks for composting, and renewable energy generation. The Proposed Project would be required to comply with all applicable local and state solid waste diversion, minimization and recycling regulations. Therefore, the Proposed Project's solid waste demands would not exceed the capacity of the Clover Flat landfill or impair the attainment of solid waste reduction goals and the impact is **less than significant.**

Mitigation Measures

None required.

3.13-5: Would the Proposed Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? This impact would be less than significant.

The Proposed Project would be required to comply with federal, state, and local statutes and regulations related to solid waste during Proposed Project construction and operation. Solid waste collection would be provided by UVD and disposal and recycling would be provided at the Clover Flat Landfill. The volume and type of solid waste generated during construction and operation of the Proposed Project would be consistent with this type of residential development. As described previously, the Proposed Project would comply with the City's Source Reduction and Recycling Element solid waste diversion requirement, which addresses the solid waste reduction requirements set forth in AB 939, and the 2016 CalGreen Tier 1 mandatory measures. The Proposed Project would be required to comply with all applicable federal, state, and local statutes and regulations related to solid waste, and impacts would be **less than significant.**

Mitigation Measures

None required.

3.13.5 Cumulative Impacts

The cumulative analysis for impacts to public utilities is based on buildout of development identified in the City's 1993 General Plan. The geographic scope of the cumulative impact analysis for public utilities includes the service areas for the Louis Stralla WTP, the City's WWTP, UVD, and the Clover Flat Landfill. While the Proposed Project is required to be evaluated under the 1993 General Plan, any changes relative to the 2019 General Plan are also evaluated for informational purposes. Both the 1993 General Plan EIR and the 2019 General Plan EIR determined that cumulative impacts associated with buildout of the City related to utilities would be less than significant.

3.13-6: The Proposed Project would contribute to an increase in demand for water supply, wastewater treatment, stormwater and solid waste. The Project's contribution would not be considerable.

Past, present and probable future projects within the City are anticipated to increase demands on treated water supplies and infrastructure, wastewater treatment needs, stormwater drainage facilities and solid waste disposal, which could affect the capacity of existing facilities that serve the City and potentially necessitate improvements or expansion of these facilities which could result in environmental impacts.

Water Supply

The City's 2010 Water Supply Plan includes an analysis of current and future water demands within the city under two potential 1993 General Plan buildout scenarios, the Likely Buildout Scenario and the Full Buildout Scenario. As described in Section 3.13.2 and shown in Table 3.13-8, the City would not have sufficient water supplies available to meet demands during all scenarios. In order to analyze the reliability of the City's water supplies into the future, the City's Safe Yield Committee produced a report that calculated the long-term safe yield of the City's water supplies. The Safe Yield Committee found that the long-term safe yield of the City's water supply is 1,950 acre-feet per year, which consists of 600 acre-feet from the City of Napa contract, a conservative 900 acre-feet from Bell Canyon reservoir, and an average use of 450 acre-feet from groundwater. Over the last eight years, the City's water use was less than the 1,950 acre-feet target, averaging 1,637 acre-feet per year and never getting higher than 1,882 acre-feet in a single year. The Water Supply Plan estimated that 495 acre-feet of metered potable water demand could be saved if water conservation measures were implemented, such as hiring a Water Conservation Coordinator, modifying and adopting a water rate structure with a reduced base water rate and increasing high tier rates, and increasing groundwater production reliability and winter pumping

capacity. In order to ensure that the City's future water demand is met by its supplies, the City established a water-neutral policy, which requires all new development to completely offset its water use. With the implementation of this water-neutral policy and other water conservation measures in the City, the City has determined that future water demand is not expected to exceed the 1,950 acre-feet annual use policy limit set by the Safe Yield Committee (City of St. Helena 2011). As discussed in Impact 3.13-2, the Proposed Project would comply with the City's water-neutral policy by completing offsetting its water use from the City through the use of water conservation measures and the on-site well for landscape irrigation. Additionally, future development in the City would be required to pay for public improvements related to water projects. The Proposed Project applicant would pay these fees. Because Project impacts on a project specific level would be fully offset and future projects would also be required to fully offset their impacts, there would be no incremental cumulatively significant impacts to water supply. Therefore, the Proposed Project would not contribute to a significant cumulative impact to future water supplies and infrastructure within the City, and impacts would not be considerable resulting in a **less-than-significant cumulative contribution**.

Wastewater

As discussed previously, the City's Public Works Department provides wastewater collection and treatment services to the City, and wastewater is treated at the City's WWTP. The Proposed Project would increase wastewater generation in the City by producing approximately 0.018 MGD at buildout. The WWTP currently has a permitted dry weather treatment capacity of 0.5 MGD and a permitted wet flow capacity of 2.8 MGD. Approximately 0.384 MGD of wastewater was treated on average in 2015. The 2015 Facilities Evaluation for the WWTP concluded that the total WWTP capacity was sufficient when operated under design conditions. The 2015 Facilities Evaluation indicated that as the service area population was growing only slightly and per capita wastewater flows are declining due to conservation measures, the existing WWTP capacity is sufficient in the short-term. However, the report concluded that the capacity of the WWTP would need to be increased to 0.65 MGD by 2030 (City of St. Helena 2016). Therefore, expansion of the WWTP may be necessary to accommodate future wastewater treatment demands. All future projects in the City that would be required to pay for public improvements to the City's sewer system, including the WWTP. In the case that expansion occurs, potential environmental impacts may include ground disturbance impacts, noise impacts, water and air quality impacts and impacts to cultural and natural resources. Any impacts tied to the WWTP's daily operation would not differ substantially from current operational conditions. The WWTP would still be required to follow applicable state, federal, and local water quality regulations. This includes standards set forth by the RWQCB, designed to ensure water quality impacts and impacts to aquatic resources remain minimal. Additionally, future development in the City would be required to pay for public improvements related to water projects. The Proposed Project applicant would contribute a minimal portion of the WWTP's current wastewater treatment capacity and would pay public improvement fees. The

Proposed Project would not contribute to a significant cumulative impact to future water supplies and infrastructure within the City, and impacts would not be considerable resulting in a **less-than-significant cumulative contribution.**

Stormwater

The Proposed Project would connect to the City's existing storm drain infrastructure and would discharge stormwater into the existing Starr Avenue storm drain at several different locations. The rest of the Project site would drain to the northeast via gutter flow and storm drain pipes and discharge into the City's existing detention basin. The detention basin is designed to accept flows associated with future development within the City and has been sized to accommodate runoff resulting from development of the Project site (see Section 3.9 Hydrology for additional information on drainage).

The Proposed Project's contribution of stormwater would not contribute to a cumulatively considerable impact on stormwater and drainage facilities within the City. Therefore, the Proposed Project's contribution would not be considerable resulting in a **less-than-significant cumulative contribution**.

Solid Waste

The Proposed Project, along with other future development would be served by the Clover Flat Landfill for solid waste sorting and disposal and be served by UVD for solid waste collection and disposal. UVD provides weekly residential and commercial refuse and recycling pickup and disposal throughout upper Napa County. As of 2016, approximately 69% of collected waste was diverted from landfills by UVD (City of St. Helena 2018). The 2019 General Plan EIR determined that future development of the City through 2040 would contribute to the total capacity of the Clover Flat Landfill resulting in a significant cumulative impact on the landfill.

The Clover Flat Landfill has enough capacity to remain open until 2047. As described under Impact 3.13-4, the Proposed Project would generate approximately 0.55 tons per day during the 6-year construction period, which is less than 0.1% of the landfill's average unused daily capacity, and 0.225 tons per day of solid waste during operation, which is 0.04% of the average unused daily capacity of the Clover Flat Landfill. This would not result in a substantial reduction of the landfill's capacity or lifetime. In combination with other anticipated projects served by the landfill, these increases would be a very minimal input to the cumulative contribution to solid waste facilities. The Proposed Project would also comply with all applicable local, state, and federal solid waste regulations to minimize the contribution of solid waste to the landfill. Due to the small amount of solid waste anticipated to be generated by the Proposed Project, the Proposed Project's contribution to the cumulative impact would not be considerable resulting in a **less-than-significant cumulative contribution.**

Mitigation Measures

None required.

3.13.6 References

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3.14 TRANSPORTATION AND CIRCULATION

3.14.1 Introduction

The transportation and circulation section discusses existing and buildout transportation and circulation conditions associated with implementation of the proposed Hunter Subdivision Project (Proposed Project). The analysis includes consideration of vehicle-miles traveled (VMT), potential impacts to transit, bicycle, and pedestrians due to conflicts with existing plans or policies, hazards due to a design feature, and inadequate emergency access. In addition, an evaluation of construction impacts is also included.

Comments received in response to the Notice of Preparation included concerns regarding an increase in neighborhood traffic and the potential for traffic to use the Project site to avoid Main Street, potential lack of parking supply, safety issues for pedestrians and bicyclists, intersection improvements, potential road closures and impacts to emergency access due to the wine train passing through the City, and potential traffic impacts due to the limitations posed by the Pope Street bridge. In December 2018, the California Environmental Quality Act (CEQA) Guidelines were updated to remove evaluation of the delay that vehicles experience at intersections and on roadway segments, which is often measured using a level of service (LOS) metric. Therefore, the operational aspects of the Proposed Project that contribute to delay and congestion on local roadways is no longer considered an environmental impact under CEQA. These concerns are discussed in the Proposed Project's Traffic Impact Study (TIS) in relation to consistency with General Plan policies (see Appendix K). A copy of the Notice of Preparation and comments received is included in Appendix A.

The transportation analysis below uses the VMT metric to assess transportation impacts, per CEQA Section 15064.3(b). The TIS includes a LOS analysis for General Plan consistency and is included in Appendix K. Other sources cited are included under Section 3.14.6, References.

3.14.2 Environmental Setting

Existing environmental settings relevant to transportation and circulation are described below. These include descriptions of the roadway network, pedestrian, bicycle, and transit networks. Figure 3.14-1 illustrates the roadway system near the Proposed Project study area. Figure 3.14-2 illustrates the General Plan Roadway System for the City of St. Helena (City).

Roadway System

Characteristics of the existing street system are described below. Regional access to the Project site is provided by Main Street (SR 29), which has connections to State Route (SR 128) to/from the east, Interstate 80 (I-80) to/from the south, and Spring Mountain Road to/from the west. The Project site is located without access to roadways; however, Adams Street and Starr

Avenue would be extended to service the site. Primary access to the Project site would be provided via the eastern extension of Adams Street as well as the northern extension of Starr Avenue. Street classification data is derived from the Circulation Element of the St. Helena 2019 General Plan[1] (City of St. Helena 2019). As shown on Figure 3.14-1, the primary access points to the Project site is provided via Adams Street or Starr Avenue. The existing traffic controls and geometrics at the study area intersections are shown in Figure 3.14-2.

Main Street (SR 29) is generally a two-lane, undivided regional collector that runs north-south within the study area. There is parallel parking on both sides of the street, and two-way-left-turn-lanes between Dowdell Lane and Madrona Avenue. Main Street serves as the main thoroughfare for the City and the downtown area. The posted speed limit is 25 miles per hour (MPH), and while bicycle lanes are not provided, sidewalks exist on both sides of the street.

Silverado Trail is generally a two-lane, undivided rural throughway that runs north-south within the study area. The road is partially located in Napa County and is one of the roadways used as an alternative route due to traffic congestion along Main Street. The posted speed limit is 50 MPH, and there is Class II bicycle lanes provided, however there is no pedestrian facilities or parking permitted.

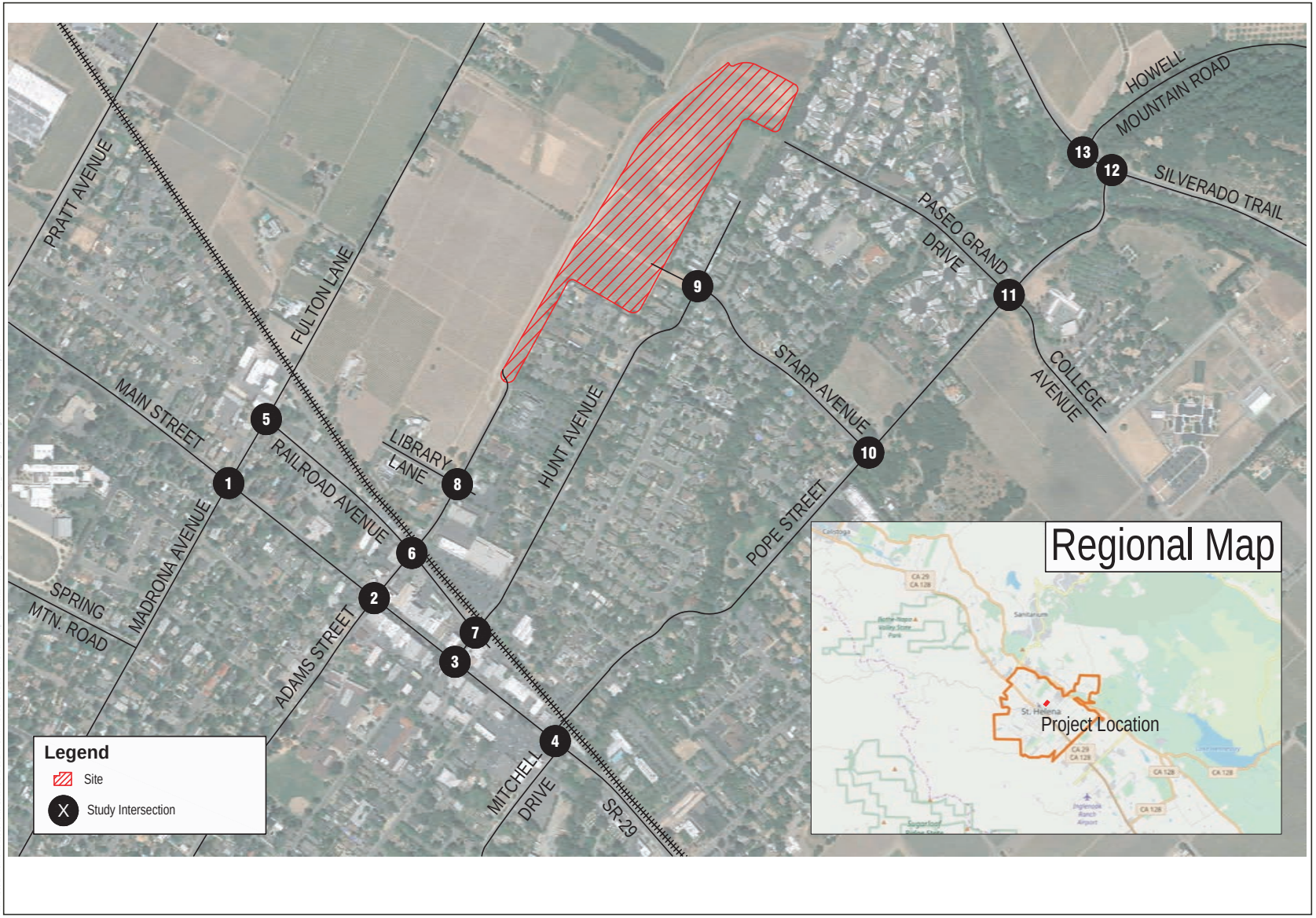
Starr Avenue is a two-lane, undivided residential street that runs north-south within the study area. The roadway dead ends at Hunt Avenue and at Pope Street and serves mainly the residential neighborhood. The posted speed limit is 25 MPH, there are Class II bicycle lanes provided, which are striped and demarcated areas of roadway that clearly separate bicyclists from motorists. Sidewalks are provided on both sides of the street and parking is available along most sections of the road.

Railroad Avenue is a two-lane, undivided downtown/mixed-use street oriented north-south that runs parallel to the railroad tracks within the study area. The roadway dead ends at Fulton Lane and south of Hunt Avenue and serves mainly the industrial and commercial uses in the downtown area. The posted speed limit is 25 MPH, and there are no bicycle lanes provided, however there are sidewalks and parking provided along most sections of the road.

Pope Street is a two-lane, undivided downtown/mixed-use street that runs east-west within the study area. The road bisects the railroad and provides a connection between Main Street and Silverado Trail, via the historic Pope Street Bridge over the Napa River.

Pope Street also serves the residential neighborhoods on the east side of the City. The posted speed limit is 25 MPH, and there are Class II bicycle lanes from Paseo Grand Drive to Church Street and Class III bicycle routes, which are areas of roadway meant to be shared equally between bicyclists and motorists. Sidewalks and parking are provided along some sections of the roadway.

[1] The 2019 St Helena General Plan is also known as the “St Helena General Plan Update 2040,” but is referred to in this EIR by the year of its adoption.



SOURCE: Google Maps,05/2017; Open Street Map, 01/2018

DUDEK

FIGURE 3.14-1

Project SIte Location and Study Area

Hunter Subdivision Project

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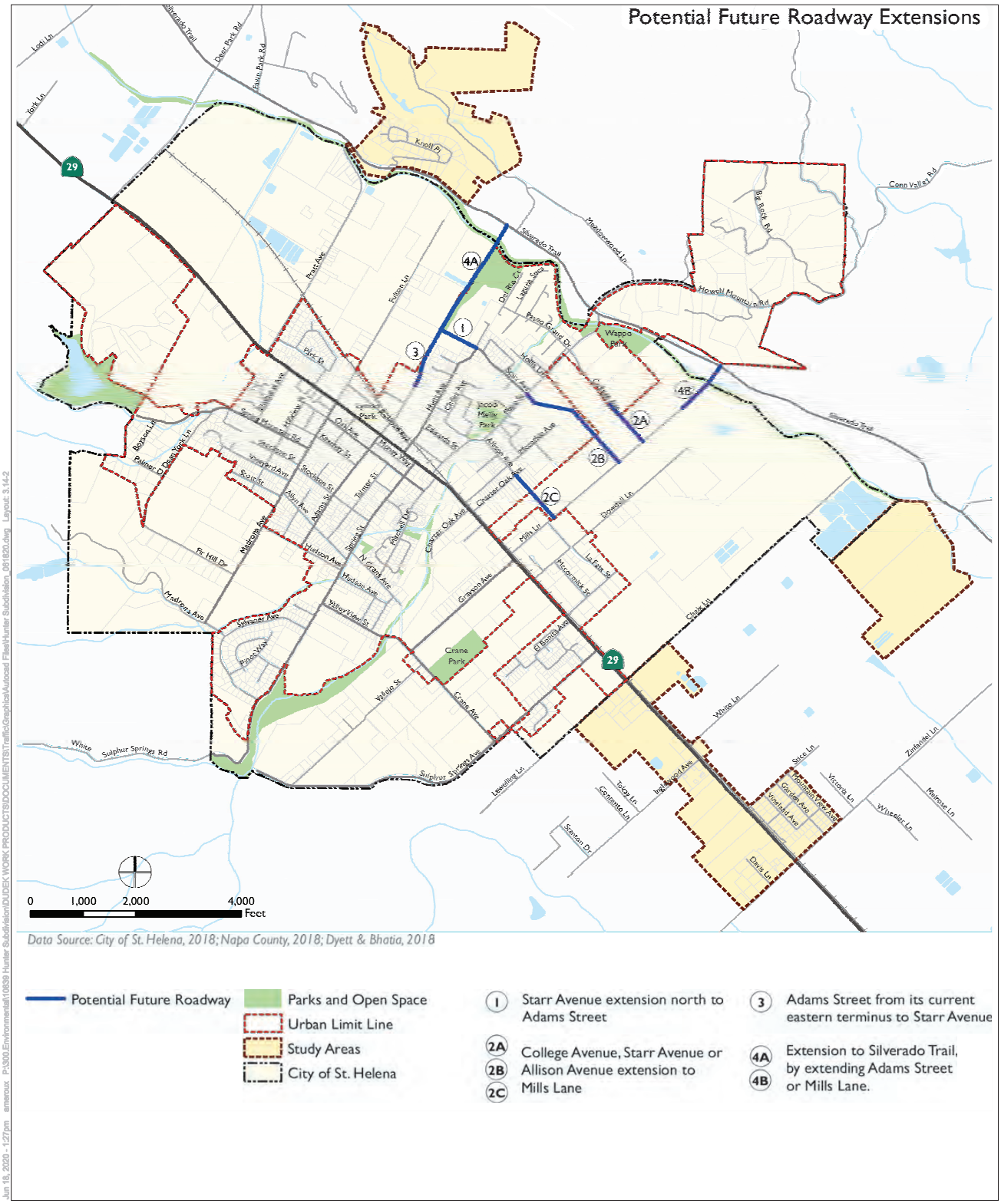

SOURCE: St. Helena General Plan Update 2040

DUDEK NOT TO SCALE

FIGURE 3.14-2

General Plan Future Roadway Network

Hunter Subdivision Project

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Adams Street is a two-lane, undivided downtown/mixed-use street that runs east-west within the study area. The roadway is one of the main downtown streets and bisects the railroad tracks to provide access to the residential areas west of Main Street. The posted speed limit is 25 MPH, and there are no bicycle lanes provided, however there are sidewalks on both sides of the street and parking is available along most sections of the road.

Hunt Avenue is a two-lane, undivided residential street that runs east-west within the study area. The road begins at Main Street and bisects the railroad tracks to provide access to the residential areas west of Main Street to where the road dead ends. The posted speed limit is 25 MPH, and there are Class III bicycle facilities provided, however sidewalks and parking are limited along sections of the street.

Fulton Lane/Madrona Avenue is a two-lane, open space/rural street that runs east-west within the study area. The roadway provides access to residential neighborhoods and to Spring Mountain Road. Parking is provided on most sections of the roadway, except for east of the railroad tracks along Fulton Lane. The posted speed limit is 25 MPH, and while bicycle lanes are not provided, sidewalks exist on both sides of the street

Howell Mountain Road is a two-lane, open space/rural street that runs east-west within the study area. The roadway provides a connection to Silverado Trail and a connection to wineries and residences east of the City limits. The posted speed limit is 35 MPH, and no bicycle, parking or pedestrian facilities are available.

Pedestrian Facilities

The Napa Countywide Pedestrian Plan, released August 2016, provides an inventory of existing and proposed pedestrian facilities in the City. More recently, the St. Helena 2019 General Plan also provides a detailed map of existing facilities, including an inventory of curbs, and areas that are missing adequate pedestrian facilities. The pedestrian infrastructure within the study area depends largely on the types of land uses, as agricultural or open space uses generally lack pedestrian amenities, as seen in segments of Adams Street near the edge of the Project site boundary. Around the perimeter of developed land along Starr Avenue and Hunt Avenue, the study area generally contains sidewalks, lighting, landscaping, signage, and Americans with Disabilities Act (ADA)-compliant curb ramps. Railroad crossings are generally in good condition to allow safe crossings for pedestrians. Near the Project site, Adams Street and Starr Avenue would be extended to provide vehicle, bicycle and pedestrian access to the site. Sidewalks would be provided along both sides of the street allowing safe pedestrian access to the site. The Proposed Project would facilitate accessibility to the downtown St. Helena corridor by way of existing sidewalks that would provide access to several neighborhood services such as Main Street, retail and grocery stores, and the St. Helena Public Library. Figure 3.14-3 is from the St.

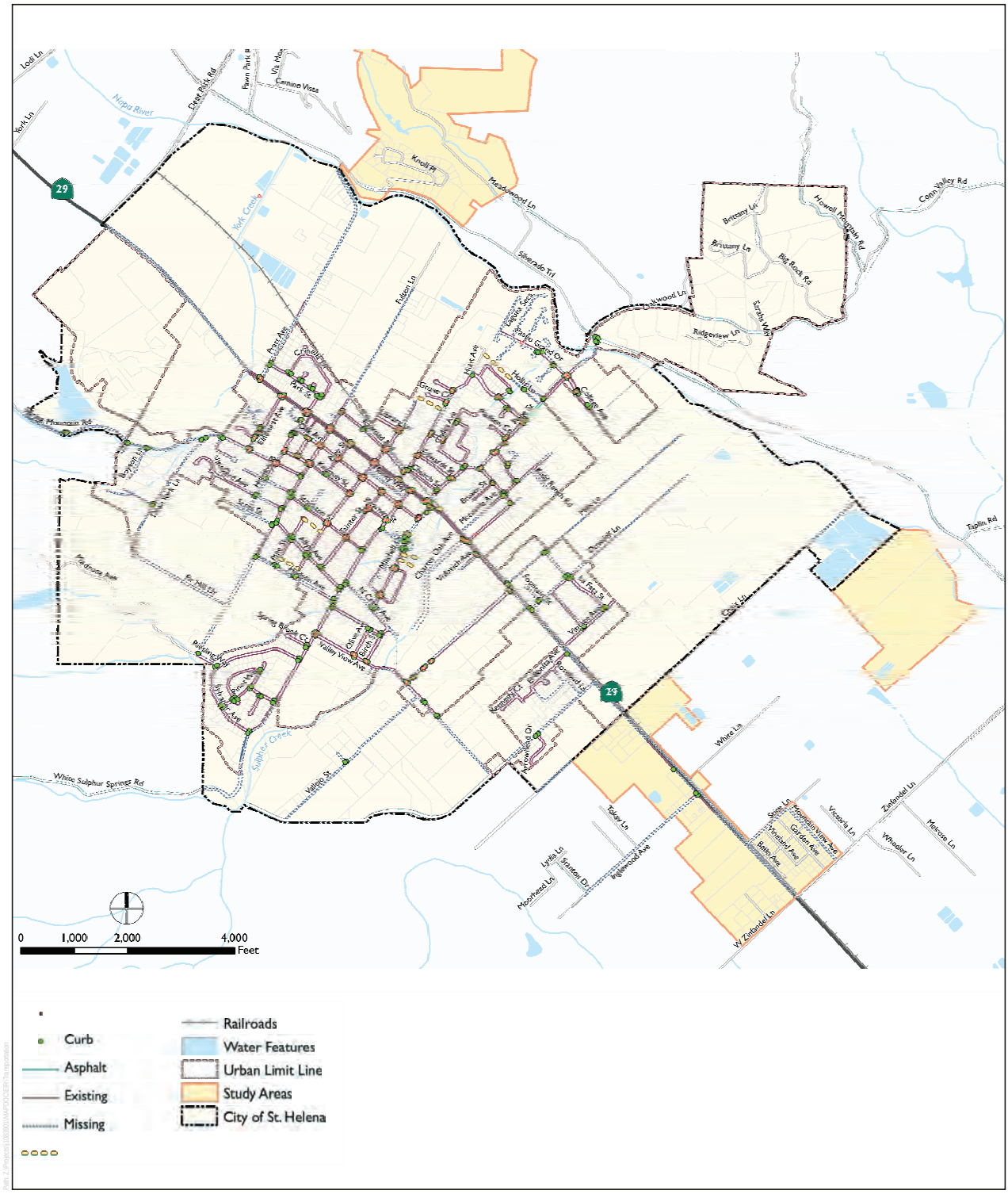
Helena 2019 General Plan and illustrates the Existing Pedestrian Facilities in the vicinity of the Proposed Project.

Bicycle Facilities

Class I bikeways, also known as bike paths or shared-use paths, are facilities with an exclusive right-of-way for bicyclists and pedestrians, separated from roadways. The Proposed Project is not proposing any Class I bike paths. Class II bicycle lanes, which are striped and demarcated areas of a roadway that separate bicyclists from motorists, are available along the entirety of Starr Avenue and Silverado Trail and the majority of Pope Street from Railroad Avenue to Paseo Grand Drive-College Avenue. Class III bicycle routes are shared roadways where vehicles and bicyclists equally share the road, but do not contain a striped bike lane. Class III bicycle routes are provided along Hunt Avenue and portions of Pope Street, east of Railroad Avenue and west of Paseo Grand Drive-College Avenue, towards the approach to the Pope Street Bridge. Along the Proposed Project access, Starr Avenue connects the site to the larger City bicycle network via Pope Street or Hunt Avenue. The Napa Countywide Bicycle Plan presents a 25-year vision for building a complete bicycling system for the community. It provides goals, objectives and policies to guide the ongoing evolution of that system. Several improvements were identified such as Class III bicycle routes along Main Street and Class II bicycle lanes along Adams Street. The Napa Valley Transportation Authority (NVTA) adopted the Countywide Bicycle Plan in October 2019, but the City has not yet adopted the plan. As part of the St. Helena 2019 General Plan, a detailed bicycle network is presented, both for existing facilities, and for the proposed 2040 bicycle facility network. Figure 3.14-4 illustrates the Proposed Bicycle Network in the vicinity of the Project site, as referenced from the St. Helena 2019 General Plan.

Transit System

The NVTA manages Vine Transit, which provides transit service in the greater Napa County region and most closely serves the Project study area and site. The St. Helena Shuttle, Vine Route 10, and Vine Route 29 all provide differing levels of frequency and connectivity to transit riders within the study area.



SOURCE: City of St. Helena 2019, NVTA 2019, Dyett & Bhatia 2019

FIGURE 3.14-3

Existing Pedestrian Facilities

Hunter Subdivision Project

DUDEK

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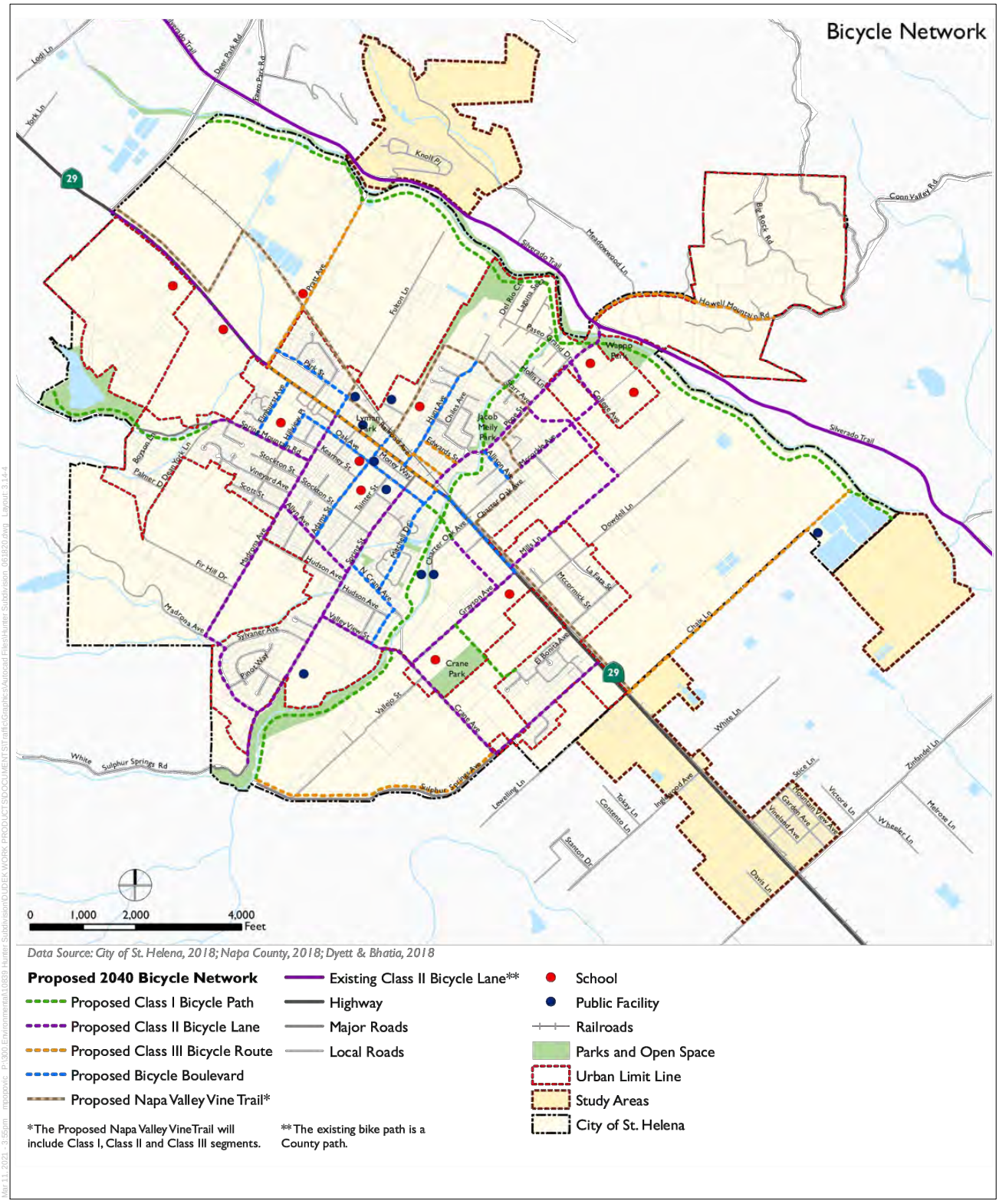

SOURCE: St. Helena General Plan Update 2040

DUDEK NOT TO SCALE

FIGURE 3.14-4
Proposed Bicycle Network
Hunter Subdivision Project

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The St. Helena Shuttle route operates every weekday for one morning and one afternoon on a fixed route starting at 7:50 a.m. and then again, at 3:15 p.m., circulating throughout the city and stopping directly adjacent to the Project site at the intersection of Starr Avenue/Hunt Avenue. The shuttle provides access to several schools in the city as well as an east-west connection through the city. Outside of the fixed route, the shuttle operates as an on-demand, door-to-door service within much of the city limits Monday to Thursday from 7:45 a.m. to 6:00 p.m. with extended hours Friday until 11:00 p.m. Weekend service is also provided with service on Saturdays from 10:00 a.m. to 11:00 p.m., and on Sundays from 12:00 p.m. to 7:00 p.m. Service is not provided on major holidays.

Vine Route 10 is a regional transit route that connects the cities of Calistoga and Napa, with stops within the study area along Main Street at Adams Street and at Pope Street/Mitchell Drive. Weekday service generally occurs every 45 minutes starting at 6:15 a.m. and ending at 10:45 p.m. Weekend service is provided every hour and is truncated during the morning and night periods. Service is not provided on weekends or major holidays.

Vine Route 29 connects Calistoga southward towards the greater Napa County residential core, connecting to the Vallejo Ferry and finally the El Cerrito BART station. The nearest stop within the study area is the St. Helena Post Office located on Main Street. Service is primarily provided twice during the morning and afternoon periods starting at 5:22 a.m. and ending at 6:35 p.m. Service is not provided on weekends or major holidays.

The Napa Valley Wine Train also passes through the city; however, it is mainly used as a tourist attraction and not for commuting purposes. Stops are limited and occur on an irregular basis in the city. The Wine Train's proximity to Main Street can result in increased congestion and vehicle queueing, as well as the potential to impede emergency access across Adams Street and Hunt Avenue. The Wine Train blocks egress and ingress at Adams Street and Hunt Avenue for up to two minutes at a time departing and arriving, therefore these crossings will be closed or delayed for a maximum of eight minutes per day. The Wine Train is mandated to keep all grade crossings clear; therefore, the limited speed in the area is what constitutes the delay described above.

Pope Street Bridge

The Pope Street Bridge is a narrow two-lane historic bridge that spans the Napa River and connects the City with Silverado Trail, a regional roadway that provides north-south access through Napa County. Silverado Trail also serves as an alternative route to Main Street/SR 29. The Pope Street Bridge is largely unimproved, and is constructed of stone, creating narrow lanes and reduced speed for motorists. This also creates a situation where bicyclists share the road with vehicles, creating potential areas of conflict. Operationally, the Pope Street Bridge allows for one lane of westbound traffic, creating conflicts between vehicles turning onto Pope Street versus vehicles turning onto Silverado Trail. Collisions between these conflict points were

analyzed in depth in the following sections. Additionally, emergency access can be impeded due to congestion along the bridge, creating difficulty for services to be provided to areas along Silverado Trail.

3.14.3 Regulatory Setting

Federal Regulations

There are no federal traffic and circulation regulations, plans, and policies that are applicable to the Proposed Project.

State Regulations

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts from LOS and automobile delay to one that promotes the reduction of greenhouse gas (GHG) emissions, the development of multimodal transportation networks, and a diversity of land uses for transit priority areas. Under the new transportation guidelines, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA and the Guidelines have been updated to include VMT as the most appropriate measure of transportation impacts. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. The OPR's regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines were required to be implemented statewide on July 1, 2020. The City has not yet adopted VMT specific guidelines and significance criteria for transportation impact analysis. However, the City, along with other cities in the Napa County, are currently following OPR's CEQA VMT requirements. Therefore, this assessment uses the statewide guidelines for the Proposed Project's VMT analysis.

California Department of Transportation

As the owner and operator of the State Highway System, the State of California Department of Transportation (Caltrans) implements established state planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact state highway facilities. Pursuant to Section 21092.4 of the Public Resources Code (PRC), for projects of statewide, regional, or area-wide significance, the lead agency shall consult with transportation

planning agencies and public agencies that have transportation facilities which could be affected by a project.

In anticipation of SB 743 implementation, Caltrans released the Draft Transportation Impact Study Guide (TISG) in February 2020, replacing the 2002 Guide for the Preparation of Traffic Impact Studies. Per the 2020 TISG, consistent with SB 743, Caltrans' primary review focus is now VMT, replacing LOS as the metric used to evaluate traffic impacts in CEQA transportation analyses. Caltrans recommends use of OPR's recommended thresholds for land use projects and recommends following the guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018).

In addition to VMT, the 2020 TISG states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the State Highway System and connections with the State Highway System. Caltrans also notes that a future update of the TISG will include the basis for requesting transportation impact analysis not based on VMT and define elements to be included in non-VMT analysis. At the time of this study, this update has not been released; however, the TIS provided in Appendix K includes LOS analysis of three intersections along Main Street (SR 29) near the Project site.

Regional Regulations

Plan Bay Area 2040

Plan Bay Area 2040 (Plan), adopted in 2017, is a state-mandated, integrated long-range transportation and land use plan. The region adopted its previous plan — Plan Bay Area — in July 2013. As the Bay Area's first regional transportation plan to include a Sustainable Communities Strategy (SCS) as required by SB 375, the original Plan Bay Area (2013) charted a course for reducing per-capita greenhouse gas emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods near transit. The Plan projects household and employment growth in the Bay Area over the next 24 years, provides a roadmap for accommodating expected growth, and connects it all to a transportation investment strategy that strives to move the Bay Area toward key regional goals for the environment, economy and social equity.

Applicable goals from the Plan include:

> **Goal 8:** Reduce adverse health impacts associated with air quality, road safety, and physical inactivity by 10%.
>
> **Goal 8:** Increase by 20% the share of jobs accessible within 30 minutes by auto or within 45 minutes by transit in congested conditions.

Goal 11: Increase non-auto mode share by 10%.

Goal 13: Reduce per-rider transit delay due to aged infrastructure by 100%.

Napa County General Plan

The Napa County General Plan, adopted in June 2008, serves as a broad framework for planning the future of Napa County. The General Plan provides transportation policies aimed at addressing congestion, safety, and accessibility, emphasizing alternatives to the private automobile and limited road improvements. Because the Proposed Project contributes traffic to roadways under the County's jurisdiction, the following policies from the Transportation Element area provided.

Policy CIR-6: The County's roadway improvements should minimize disruption to residential neighborhoods, communities, and agriculture.

Policy CIR-7: Roadway improvements shall be designed to conform to existing landforms and shall include landscaping and/or other treatments to ensure that aesthetics and rural character are preserved.

Policy CIR-13: The County seeks to provide a roadway system that maintains current roadway capacities in most locations and is both safe and efficient in terms of providing local access. The following list of improvements, illustrated as the County's ultimate road network in Figure CIR-1, has been supported by policy makers within the County and all five incorporated cities/town, and will be implemented over time by the County and other agencies to the extent that improvements continue to enjoy political support and funding becomes available:

- Construct safety and flow improvements to SR 29 between Oakville and St. Helena.
- Develop and implement methods to divert traffic from downtown St. Helena and Calistoga to reduce congestion and improve intra-county traffic flow.
- Install safety improvements on rural roads and highways throughout the county including but not limited to new signals, bike lanes, bikeways, shoulder widening, softening sharp curves, etc.
- Consider roundabouts as effective alternatives to stop signals or signal controlled intersections, where appropriate.

Policy CIR-17: Where traffic signals are within ¼ mile of each other, work with the agencies who have jurisdiction to synchronize the signals in order to reduce delay, improve traffic flow, and reduce energy consumption and air pollutant emissions.

Policy CIR-21: The County shall support provision of alternate (parallel) routes for local residents to avoid traffic congestion on major thoroughfares.

Objective CIR-3: The County shall work with Caltrans and other agencies to construct or designate approximately 40 miles of additional bicycle lanes in Napa County by 2030, consistent with priorities identified in the Napa Countywide Bicycle Master Plan.

Policy CIR-36: The needs of pedestrians and bicyclists shall be routinely considered and, where possible, accommodated in all roadway construction and renovation projects.

Napa Valley Transportation Authority: Vision 2040 Moving Napa Forward

The Vision 2040: Moving Napa Forward is a long-range transportation plan for Napa County, adopted in 2015. The plan establishes policy and spending priorities for the County's transportation system over the next 25 years (through the year 2040). Objectives applicable to the Proposed Project are provided.

Selected Objectives:

2.1: Design roadways and other transportation facilities to enhance coexistence of users of all modes.

2.5: Prioritize projects that expand travel options for cyclists and pedestrians as well as those projects that improve operation and safety for vehicles, pedestrians, and cyclists.

5.5: Prioritize projects that expand travel options for cyclists and pedestrians as well as those projects that improve operation and safety for vehicles, pedestrians, and cyclists.

Napa Countywide Bicycle Plan

The Napa Countywide Bicycle Plan presents a 25-year vision for building a complete bicycling system for the community. It provides goals, objectives and policies to guide the ongoing evolution of that system. The current plan was adopted in 2012 and a draft plan was released for review in February 2019. The NVTA adopted the Countywide Bicycle Plan in October 2019, but the City has not yet adopted the plan although the City did participate in the development of the plan.

Objective 2.0 Design:

Policy 2.1: Utilize Chapter 1000, "Bikeways Planning and Design," of the California Highway Design Manual, the California Manual of Uniform Traffic Control Devices, and the American Association of State Highway Transportation Officials (AASHTO) Guide for

the Development of Bicycle Facilities, as well as evolving “best practices” for the development of bicycle facilities.

Policy 2.2: Consistent with Assembly Bill 1581 (Fuller) and Caltrans Policy Directive 09-06, assure that all approaches to signalized intersections include bicycle detection devices that are operational and properly marked.

Policy 2.3: Provide consistent enhanced crossing features at uncontrolled intersections with Class I trails.

Policy 2.4: Where standard Class II bike lanes are infeasible under current conditions, consider innovative approaches to safely accommodate bicycles. (Approaches may include but are not limited to: striped edge lines, signs, shared lane markings, “road diets,” eliminating parking, etc.)

Policy 2.5: Install way-finding signage, markers, and stencils on off-street paths, on-street bikeways, local Class III routes, and State Routes to improve way finding for bicyclists, assist emergency personnel, and heighten motorists’ awareness.

Policy 2.6: Improve safety and access for bicyclists at all at-grade railroad crossings by providing appropriate enhancements such as proper track structure, safe crossing angles, track fillers, lighting, and adequate warning and guidance information among other features.

Objective 5.0 Safety and Security:

Policy 5.2: Focus on improving safety at intersections by using or installing routine pedestrian signal cycles; pedestrian push buttons; high-visibility crosswalk markings; appropriate warning and directional signs; and reassurance or directional markings for bicyclists such as shared lane markings, skip lines, etc.; and through the use of focused education.

Policy 5.3: Focus on improving safety at railroad crossings by providing safe track crossing angles for bicyclists, using concrete panels and flange way fillers to avoid surface irregularities, and through the use of quad crossing gates and warning signs.

Objective 9.0 Maintenance:

Policy 9.5: Maintain geometry, pavement surface condition, debris removal, markings, and signage on Class II and Class III bikeways to the same standards and condition as the adjacent motor vehicle lanes.

Local Regulations

City of St. Helena 1993 General Plan

The Transportation Element of the St. Helena 1993 General Plan provides guiding policies regarding transportation that are applicable to the Proposed Project, including the following:

General Plan Street System

Policy 5.3.2: Add the following streets to the existing system:

- Adams Street from its current eastern terminus to Silverado Trail
- McCorkle Avenue from Mariposa Lane to the extension of Starr Avenue
- Oak Avenue from Mitchell Drive to Grayson Avenue
- Library Lane from its current terminus to Fulton Lane
- An unnamed new street located east of Edwards Street connecting Hunt Avenue and Pope Street
- Starr Avenue from the extension of Adams Street to the Urban Limit Line

Policy 5.3.3: Preserve rights-of-way for future collector streets within the planning area of the City as follows:

- Starr Avenue from Pratt Avenue to Adams Street and from the Urban Limit Line to Dowdell Lane
- Mills Lane from SR 29 to Starr Avenue, including a potential realignment with Grayson Avenue at SR 29
- Oak Avenue from Vidovich Avenue to Grayson Avenue

The City recognizes that development may or may not proceed along the lines envisioned in this plan, and that some areas not currently identified for potential development may in fact precede those that are so designated. The intent of the right-of-way preservation designation is to clearly define the interest of the City in maintaining the option for extending its collector street system into these areas. Special setback areas shall be established along collector streets to allow for future widening.

Roadway Improvement Standards

Policy 5.5.2: Local streets in newly developing areas should be laid out in a manner consistent with the grid system currently in place in the older portions of St Helena and

in conformance with adopted City standards. Care should be taken to insure that these grids contain enough discontinuity to discourage their use by non-local traffic. Local streets should have a paved width of 36 feet with a ten-foot wide area adjacent to curb for sidewalk and landscaping.

Pedestrian Routes and Bikeways

Policy 5.8.1: All new development on collector streets shall provide sidewalks or walkways to be located with the City's right-of-way for the collector street. Further, unless exempted or deferred by the City Council, all residential developments shall provide sidewalks on all local streets within the development

It is a goal of the City that it continues to remain at a size where the majority of development is within a 10 minute walk of downtown. Sidewalks or walkways will reinforce the pedestrian orientation of the City.

Improvements and Phasing

Policy 5.10.1: All new collector streets shown in the Circulation Diagram shall be constructed as development occurs along the proposed streets. The exception to this policy is that the City Council may require additional construction to reinforce system continuity.

Policy 5.10.2: The City desires that the Adams Street extension to Silverado Trail be completed in an expeditious manner; the City will work with potential developers to acquire the needed combination of public and private financing required to implement this project.

Policy 5.10.3: The City shall collect Traffic Mitigation Fees to assist in financing improvements to the citywide circulation system.

St. Helena 2019 General Plan ("General Plan Update 2040")

The Circulation Element of the St. Helena 2019 General Plan provides the framework for a comprehensive and multimodal transportation network along with standards and guiding principles for implementation of transportation improvements. While the City's 1993 General Plan would still apply to the Proposed Project because this General Plan was in effect when the Proposed Project application was deemed complete in September 2011, the following objectives and policies from the City's 2019 General Plan are provided for informational purposes.

Goals

(b) Provide a complete bicycle and pedestrian network between residential areas, downtown, recreational open space areas, and other major activity centers identified by the City.

(h) Provide a safe, efficient, and well-maintained circulation system that supports safe and efficient travel for all modes and users.

Relevant policies and implementing actions include:

Balanced and Multimodal System

Policy CR1.1: Promote a connected street and bicycle and pedestrian network within the city to provide better internal automobile, bicycle, and pedestrian connections for residents.

- **Action CR1.C**: Evaluate the following new connections to promote increased bicycle, pedestrian, and non-automobile-based transportation, consistent with the requirement for the preparation of a "Special Study" as described in the Circulation Element. Where feasible, preserve existing rights-of-way.
    - Starr Avenue extension north to Adams Street
    - Consider three options for a connection to Mills Lane: a) Starr Avenue extension to Mills Lane; b) College Avenue extension to Mills Lane; or c) Allison Avenue extension to Mills Lane
    - Adams Street from its current eastern terminus to Starr Avenue
    - Consider two options to connect downtown St. Helena to Silverado Trail: a) Adams Street extension to Silverado Trail; b) Mills Lane extension to Silverado Trail

Policy CR1.4: Develop and use, in addition to intersection level of service standards, performance measures that consider all road users to determine transportation impacts of new development.

Policy CR1.5: Avoid mitigation measures that negatively impact the walking and bicycling environment and encourage driving.

Policy CR1.11: Establish a multimodal transportation impact fee program as part of the City's existing transportation impact fee, to finance and implement project mitigations that help achieve the City's traffic reduction goals. As part of the multimodal transportation impact fee program, require new development to analyze travel demand and finance and construct all required off-site circulation improvements, including

proposed road extensions, necessary to mitigate impacts to reduce the severity of cumulative transportation impacts to all modes of travel.

Comprehensive Pedestrian and Bicycle Network

Policy CR2.2: Promote walking and bicycling as safe and convenient modes of transportation.

Policy CR2.4: Preserve and enhance pedestrian connectivity and safety throughout St. Helena.

Policy CR2.6: Encourage walking and bicycling trips to St. Helena schools.

Sustainable Mobility Practices

Policy CR3.2: Support the implementation of NVTA goals to reduce/restrain growth of automobile vehicle miles traveled (VMT).

Policy CR3.3: Shift travel from single-occupancy vehicles to other modes so that by 2040, 45 percent of work trips by St. Helena residents and workers are by carpool, transit, walking or bicycling.

Safe and Well-Maintained Circulation System

Policy CR4.2: Ensure safety on residential neighborhood streets to promote walking and bicycling and preserve neighborhood livability.

Policy CR4.3: Continue efforts to calm traffic and minimize traffic volumes and speeds in residential areas.

Improvements and Phasing

Policy CR6.2: Require concurrent infrastructure development for any new development projects that have impacts on the circulation system, including streets, paths, trails, sidewalks, and public transit.

Policy CR6.3: Consider requiring dedications and mitigations in addition to traffic mitigation fees for any development that occurs adjacent to proposed streets corridors in order to reinforce circulation system continuity. Traffic mitigation fees are necessary to mitigate existing traffic congestion and congestion caused by new development. Consider revising fee schedules to fund needed vehicular, bike, and pedestrian improvements in order to

appropriately mitigate impacts. The fee schedule must be based on an established "nexus" between new development and the planned improvements.

The Public Health, Safety, and Noise Element of the 2019 General Plan includes the following policy related to circulation:

> **Policy PS4.6:** Ensure that all streets and roads are adequate in terms of width, turning radius, and grade in order to facilitate access by City firefighting apparatus, and to provide alternative emergency routes of ingress and egress.

City of St. Helena Municipal Code

The City's Municipal Code, Chapter 12, Streets, Sidewalks and Public Places, Chapter 16, Subdivisions and Chapter 17, Zoning, include requirements applicable to the Proposed Project. Section 12.12.050 states that projects are required to prepare a temporary traffic control plan for construction activities, to be approved by the City's traffic engineer. Section 16.32.060 states the requirements for subdivisions in creating adequate circulation and standards to preserve the public health, safety and welfare. Section 17.124.030 provides the minimum number of parking spaces required for residential projects. Section 3.32.100 states the components of the City's traffic mitigation impact fee program and the role the City's impact fee study plays in establishing the costs associated with new development.

Chapter 10.36 defines the City's truck traffic routes that apply to heavy trucks associated with construction activities and chapter 8.24, Noise, sets forth days and times when construction-related noise is allowable and construction activities can occur in the city.

3.14.4 Impacts

Methods of Analysis

This section describes the analysis techniques, assumptions, and results used to identify potential impacts of the Proposed Project on the City's transportation and circulation system. As stated in Chapter 2, Project Description, the Proposed Project is only requesting approval of a Tentative Subdivision Map at this time to subdivide the Project site into 51 single-family lots with 11 of the 51 lots developed with an ADU and a 3.4-acre lot designated for 25 multifamily units. Subsequent discretionary approvals would be required in order to commence site clearing, grading and construction.

Vehicles Miles Traveled

As described in Section 3.14.2, OPR prepared a comprehensive update to the CEQA Guidelines in 2017 that were approved by the California Natural Resources Agency in

December 2018, requiring that lead agencies use VMT for analyzing transportation impacts. CEQA Section 15064.3 of the Guidelines, states compliance will be required beginning July 1, 2020 and that “generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts” and define VMT as “the amount and distance of automobile travel attributable to a project.” It should be noted that “automobile” refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT). Other relevant considerations may include the effects of a project on transit and non-motorized traveled.

As mentioned above, the City has not adopted methodologies for performing VMT analysis per SB 743. Therefore, the following VMT assessment has been prepared consistent with OPR’s December 2018 Technical Advisory (2018), the NVTA regional travel demand model (Solano-Napa Activity Based Model – SNABM), and discussions with City staff.

The following outlines the primary methods used to conduct the VMT analysis:

1. Determine whether the project can be screened out from further VMT analysis and presumed to have a less-than-significant impact by comparing the project features to screening criteria presented in the OPR Technical Advisory.
2. If the project is not screened out, determine the VMT per capita (for residential projects) using the VMT Screening Maps from the SNABM travel demand and forecasting model available at https://arcg.is/1nea4W.
3. Compare the project results to the applicable or most appropriate threshold as directed by the City. For the Proposed Project, the VMT/capita is compared to the Citywide average to determine if the Proposed Project would have a potentially significant impact.

Screening for Land Use Projects

To provide guidance on how to conduct a VMT analysis, OPR released *Updates to Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory). The Technical Advisory suggests that agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing. While OPR’s Technical Advisory is not binding on public agencies, CEQA allows lead agencies to “consider thresholds of significance... recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence” (CEQA Guidelines, Section 15064.7, subd. (c)).

- *Screening Threshold for Small Projects (110 daily trips or less):* Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan,

projects that generate or attract fewer than 110 trips per day[2] generally may be assumed to cause a less-than significant transportation impact. Based on Proposed Project's trip generation shown in Table 3.14-1, more than 110 trips per day would be generated; therefore, it would not screen out using the small project criteria.

- *Map Based Screening for Residential and Office Projects*: Residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Per the Technical Advisory, maps created with VMT data, from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis. The Proposed Project's VMT per capita would exceed the Citywide average VMT per capita, and therefore the Proposed Project would have a potentially significant impact.
- *Presumption of Less-than-Significant Impact Near Transit Stations*: The Project site is not located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor. Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop[3] or an existing stop along a high quality transit corridor[4] would have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project would still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:
    - Has a Floor Area Ratio (FAR) of less than 0.75;

[2] CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

[3] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

[4] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

From review of pre-COVID frequency of transit services provided by Vine Transit Route 10, Vine Route 29 and St. Helena Shuttle near the Project site, the Proposed Project is not located near a major transit stop or high-quality transit corridor. Therefore, the presumption of less-than-significant VMT impact near a transit station would not apply.

- *Presumption of Less-than-Significant Impact for Affordable Residential Development*: The Technical Advisory notes that adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT.[5,6] In areas where the existing jobs housing match is closer to optimal, low income housing nevertheless generates less VMT than market- rate housing.[7,8] Therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less-than-significant impact for a 100% affordable residential development (or the residential component of a mixed-use development) in infill locations. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units. The Proposed Project includes 25 multifamily units designated to meet affordable housing requirements which would account for 28.73% affordable housing; however, this would not meet the Technical Advisory's recommended screening criteria of 100% affordable housing. Therefore, presumption of a less-than-significant VMT impact for affordable residential development is not applicable.

[5] Karner and Benner (2016) The convergence of social equity and environmental sustainability: Jobs housing fit and commute distance ("[P]olicies that advance a more equitable distribution of jobs and housing by linking the affordability of locally available housing with local wage levels are likely to be associated with reduced commuting distances").

[6] Karner and Benner (2015) Low-wage jobs-housing fit: identifying locations of affordable housing shortages, available at https://regionalchange.ucdavis.edu/sites/g/files/dgvnsk986/files/inline-files/Urban%20Geography%20benner%20karner.pdf.

[7] Chapple et al. (2017) Developing a New Methodology for Analyzing Potential Displacement**,** available at https://www.arb.ca.gov/research/apr/past/13-310.pdf.

[8] CAPCOA (2010) Quantifying Greenhouse Gas Mitigation Measures**,** pp. 176-178, available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/capcoa-quantifying-greenhouse-gas-mitigation-measures.pdf.

Therefore, the exceptions listed above are not applicable to the Proposed Project.

As outlined above, the Proposed Project does not meet the screening criteria identified in the Technical Advisory. Therefore, an assessment of the Proposed Project's VMT impact under base year conditions has been provided using available significance thresholds and guidance from OPR and the Technical Advisory.

Methodology for VMT Estimation

For residential projects, such as the Proposed Project, the Technical Advisory indicates that "tour- and trip-based approaches offer the best methods for assessing VMT from residential/office projects and for comparing those assessment to VMT thresholds." Tour-based assessments are recommended, when available, as they typically capture a more comprehensive representation of travel behavior; however, when tour-based tools or data are not available, the Technical Advisory indicates that "…trip-based assessment of VMT can serve as a reasonable proxy."

The recent update to the NSABM model is an activity-based model (i.e., tour-based) that provides VMT estimates for traffic analysis zones (TAZ) as well as the VMT average for cities within the Napa County. Therefore, the average VMT/capita at the TAZ level within which the Proposed Project is located was used for comparing the VMT thresholds for the City. The VMT maps available for Napa County from NSABM were used to determine the VMT/capita in the TAZ in which the Proposed Project is located.[9]

Project Trip Generation

Trip generation estimates for the Proposed Project were calculated based upon trip rates provided in the Institute of Transportation Engineers' Trip Generation, 10th Edition (ITE 2017). Average trip generation rates represent weighted averages from studies conducted throughout the United States and Canada since 1980 that surveyed the identified use.[10] For example, "single-family detached housing," which has the highest trip generation rate per dwelling unit of all residential uses, specifically identifies all detached homes on individual lots, with a typical site being a suburban subdivision.

Trip rates for accessory dwelling units (ADUs) are not widely available, and if they are, the rates are unreliable due to the limited (low) number of studies provided. Therefore, in order to

[9] The VMT map is available on following link: https://www.arcgis.com/home/webmap/viewer.html?webmap=765f96cb16d34c8486eaf995012e14ec&extent=-122.554,37.9494,-121.5659,38.6993

[10] Single-Family and multifamily land uses are based on surveys and weighted averages. Rates are not based on a specified number of bedrooms or vehicles per household.

conservatively estimate traffic generated from those uses, the ITE multifamily housing rate was used for the ADU rate. Since the ITE multifamily housing rate was used for the proposed ADUs, the ITE single family detached housing rate was used for the proposed multifamily units which assumes that these units may generate more traffic than the proposed ADUs. This would provide for conservative daily and peak hour trip generation estimates of the Proposed Project. The calculation of Proposed Project trip generation estimates for weekdays and Saturday are shown in Tables 3.14-1 and 3.14-2, respectively.

As shown in Table 3.14-1, during a weekday the Proposed Project would generate 798 daily trips, 62 AM peak hour trips (16 inbound and 46 outbound), and 82 PM peak hour trips (52 inbound and 30 outbound).

Table 3.14-1
Weekday Proposed Project Trip Generation

Trip Generation Rates[1]								
			AM Peak Hour			PM Peak Hour		
Land Use	*Daily Trip Rate*	*Unit*	*% In*	*% Out*	*Total*	*% In*	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.44	DU	0.19	0.56	0.74	0.62	0.37	0.99
Multifamily Housing (Low-Rise) (ITE Code 220)	7.32	DU	0.11	0.35	0.46	0.35	0.21	0.56

Trip Generation									
				AM Peak Hour			PM Peak Hour		
Land Use	*Total No. of Units*	*Unit*	*Daily*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Single-Family Detached Housing	51	DU	481	10	28	38	32	19	51
Accessory Dwelling Units	11	DU	81	1	4	5	4	2	6
Multifamily Housing[2]	25	DU	236	5	14	19	16	9	25
Total Trip Generation			798	16	46	62	52	30	82

Notes:
1 Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.
2 Reflects use of a single-family home to provide a conservative estimate.
Source: ITE 2017; Dudek 2020.

As shown in Table 3.14-2, during a Saturday the Proposed Project would generate 815 daily trips, and 80 peak hour trips (40 inbound and 40 outbound).

Table 3.14-2
Saturday Proposed Project Trip Generation

Trip Generation Rates[1]					
			Peak Hour		
Land Use	*Saturday Trip Rate*	*Unit*	*% In*	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.54	DU	0.47	0.47	0.93
Multifamily Housing (Low-Rise) (ITE Code 220)	8.14	DU	0.35	0.35	0.70

Trip Generation						
				Peak Hour		
Land Use	*Total No. of Units*	*Unit*	*Daily*	*In*	*Out*	*Total*
Single-Family Detached Housing	51	DU	487	24	24	48
Accessory Dwelling Units	11	DU	90	4	4	8
Multifamily Housing[2]	25	DU	239	12	12	24
Total Trip Generation			815	40	40	80

Notes:
[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.
[2] Reflects use of a single-family home to provide a conservative estimate.
Source: ITE 2017; Dudek 2020.

Proposed Project Trip Distribution and Assignment

Proposed Project trips were distributed to the study area intersections using the existing travel patterns and logical commute routes for Proposed-Project-related traffic. Project trips were assigned to the study area intersections by applying the Proposed Project trip generation estimates to the trip distribution percentages at each study area intersection. Single-family units and ADUs were distributed and assigned together, as shown on Figure 3.14-5, while multifamily housing was distributed and assigned separately, as shown on Figure 3.14-6. The total Proposed Project trip assignment is shown in Figure 3.14-7. The Proposed Project's trip distribution and assignment for Saturday includes all uses combined and is shown on Figure 3.14-8.

Planned Pedestrian and Bicycle Facility Improvements

The pedestrian infrastructure within the study area would remain largely unaffected by the Proposed Project. As Starr Avenue is extended northward and Adams Street extended eastward, additional sidewalks connecting the Proposed Project to the surrounding area would provide pedestrian access to the surrounding residential community. Additionally, the NVTA has plans for the Vine Trail, a network of bicycle and pedestrian paths that will eventually connect all Napa County communities, with construction in the City anticipated to begin as early as 2021. The Vine Trail, as tentatively proposed, would proceed through sections of the Project site by way of Adams Street and Starr Avenue.

Transit System

The NVTA has published a report, *Vision 2040 Moving Napa Forward Transportation Plan*, which outlines policies to improve system safety of all users, serve the transportation needs of all users regardless of age, income or ability, and to improve overall reliability of the transit system. As the shift from one-car trips to multi-modal and active transportation uses increases, the plan would require collaboration with the City and other jurisdictions to modify service as needed to serve the community. The plan would also promote the Vine Trail as an active transportation use, and along with the 2019 General Plan's "Complete Streets" approach, improve overall connectivity, ease of access, and safety for all members of the community.

The Wine Train is not expected to increase frequency or add stops within the city, and additional commuter or freight train traffic is not expected to occur by 2040.

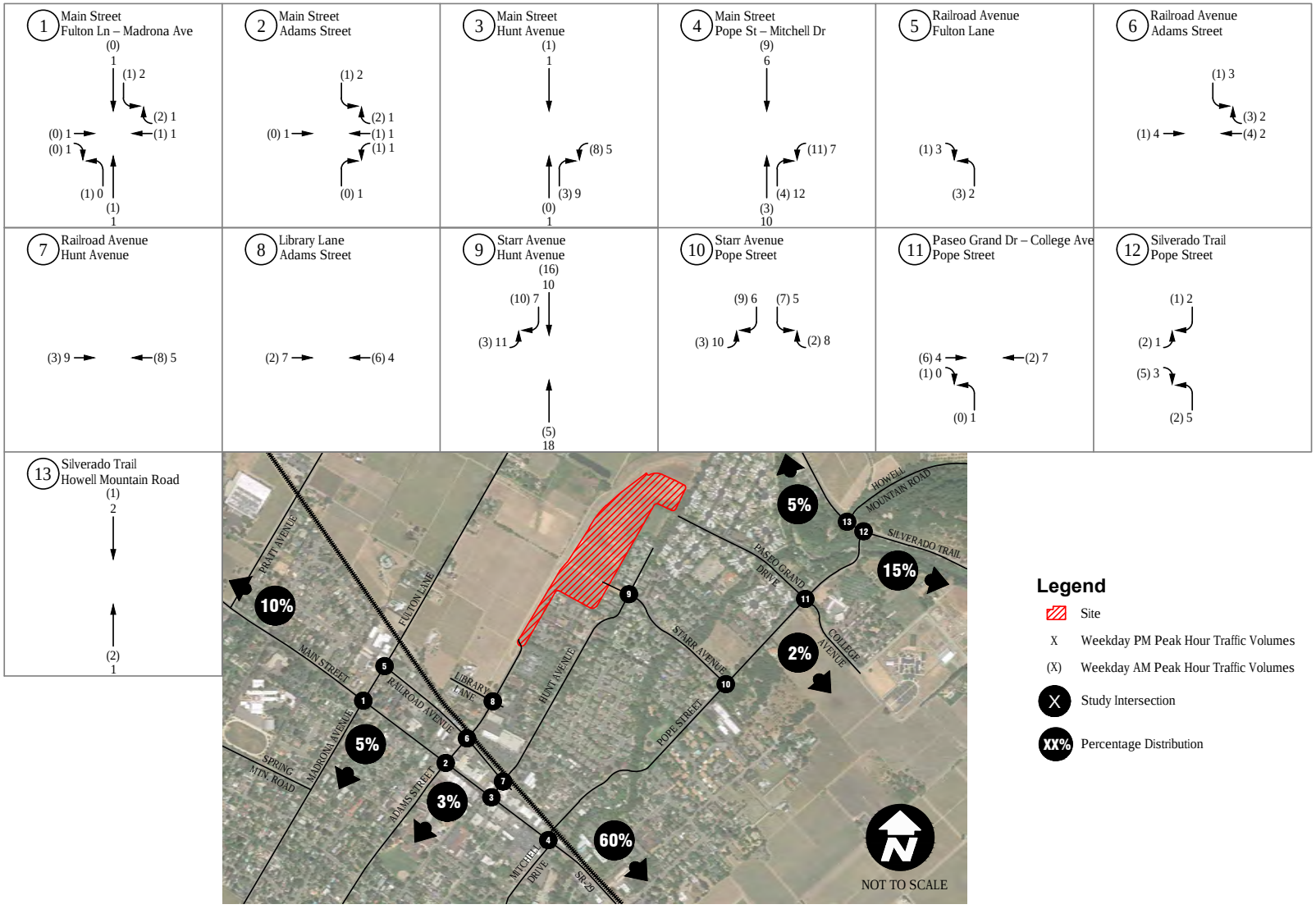
Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

VMT CEQA Analysis

The updated State CEQA Guidelines do not establish a significance threshold for evaluating VMT impacts; however, OPR's Technical Advisory recommends a threshold of significance for residential, office and other land uses. While the recommended threshold for per capita or per employee for residential or office projects, respectively, is 15% below that of existing development, lead agencies can use more location-specific information to develop their own specific threshold for other project/land use types.



SOURCE: Google Maps 2017

FIGURE 3.14-5

Project Trip Distribution & Assignment - Single Family & Accessory Dwelling Units

Hunter Subdivision Project

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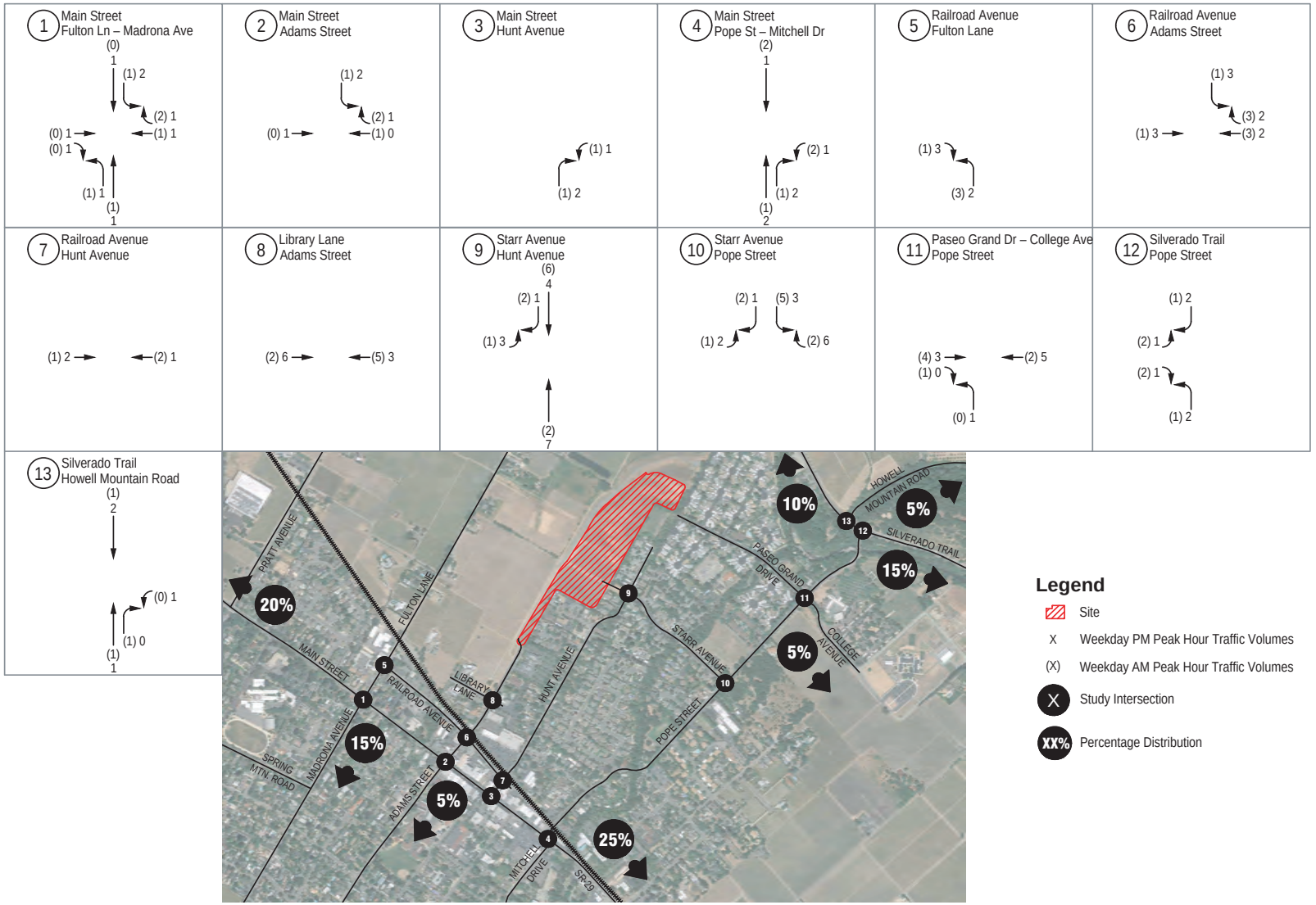

SOURCE: Google Maps,05/2017

FIGURE 3.14-6

Project Trip Distribution & Assignment - Multi-Family Housing

Hunter Subdivision Project

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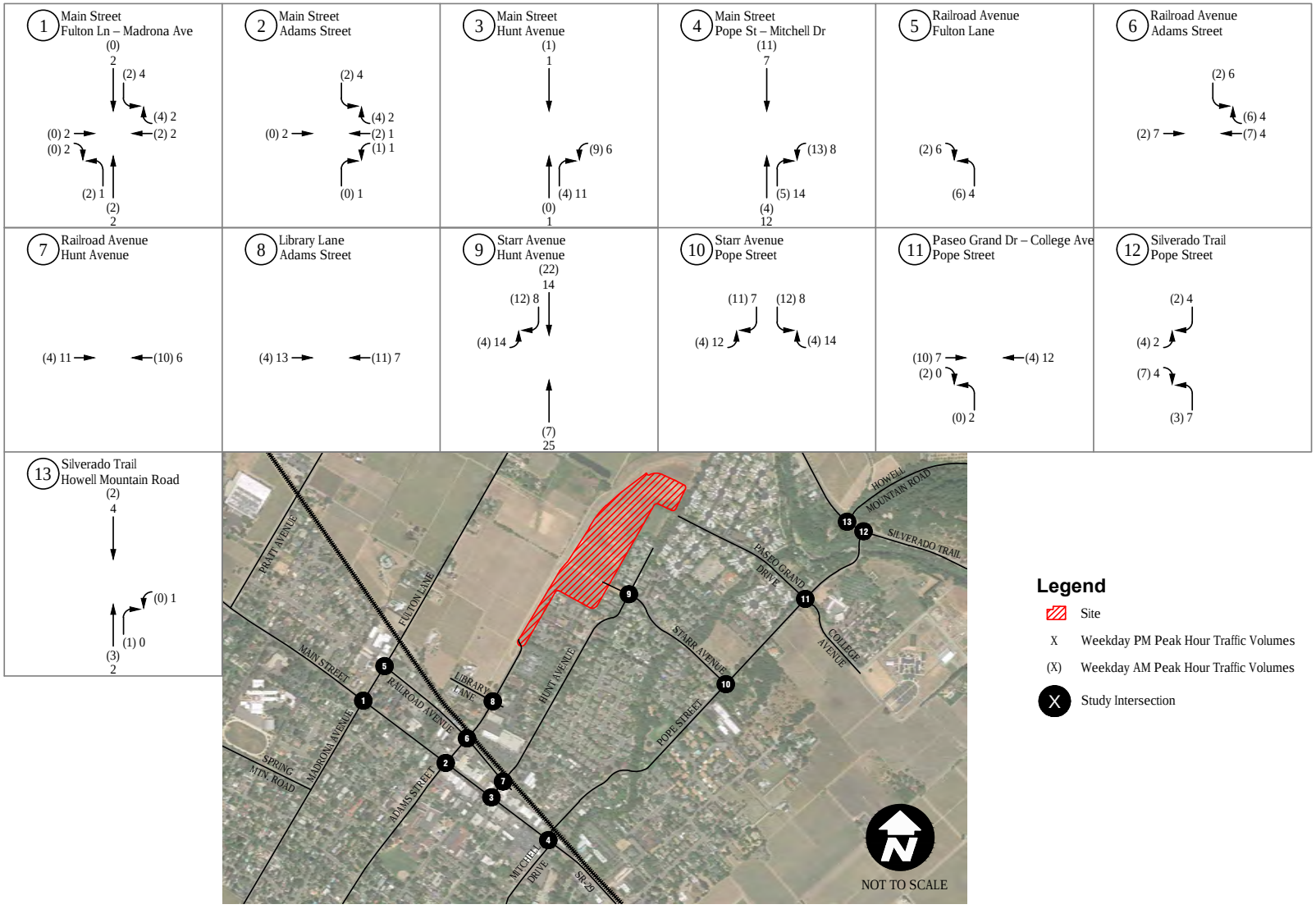

SOURCE: Google Maps 2017

FIGURE 3.14-7

Project Trip Distribution & Assignment - Total (All Uses)

Hunter Subdivision Project

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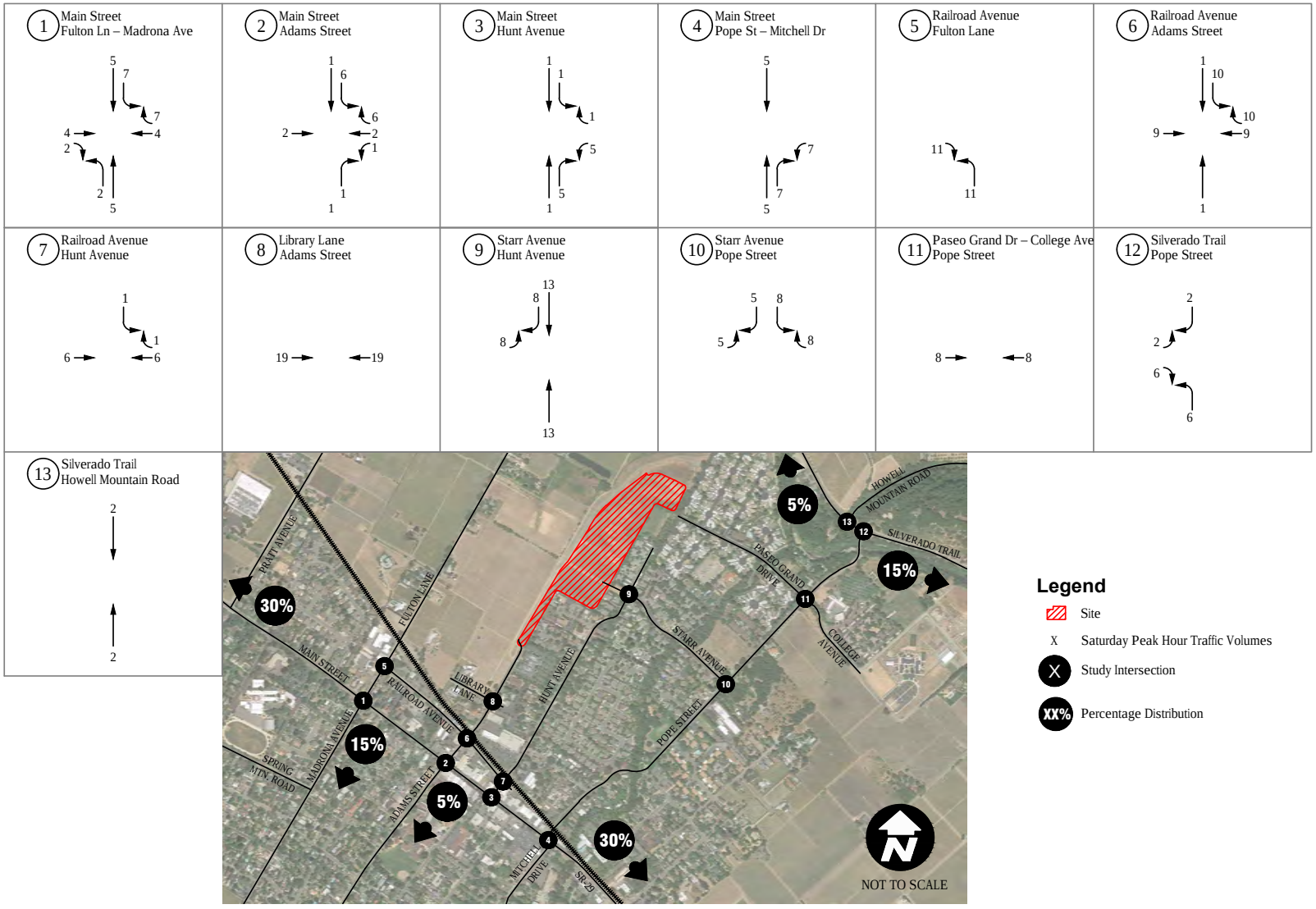

SOURCE: Google Maps 2017

FIGURE 3.14-8

Project Trip Distribution & Assignment - Saturday (All Uses)

Hunter Subdivision Project

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Since the City has not yet adopted VMT significance thresholds, the following significance threshold for residential projects provided in the OPR's Technical Advisory has been used for the Proposed Project:

- Residential: Exceed a level of 15% below existing VMT per capita, which may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the adopted SCS for that city and should be consistent with the SCS. The VMT analysis for the Proposed Project uses the Citywide VMT per capita as the significance threshold.

Impacts and Mitigation Measures

3.14-1: Would the Proposed Project conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? This impact would be less than significant.

As shown in the overview of applicable plans and policies under Section 3.14.3, the Proposed Project would be consistent with applicable plans, city ordinances or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

As noted in the TIS (Appendix K), the Proposed Project would exceed the City's General Plan consistency criteria for evaluating LOS. However, as indicated above, under the current CEQA Guidelines, LOS, or vehicle delay, is no longer considered an environmental impact under CEQA, and VMT has been adopted as the most appropriate measure of transportation impacts. Improvement measures to address potential inconsistencies with General Plan policies are provided in the Proposed Project's TIS.

In addition, the TIS also addresses Policy CR1.1 and Action CR1.C included in the City's 2019 General Plan, and acts as the "Special Study" required to evaluate the new pedestrian and bicycle networks on the extension of Starr Avenue, north to Adams Street; and, the extension of Adams Street, east to Starr Avenue. A summary of the analysis of the Starr Avenue and Adams Street extensions are summarized below.

Transit, Pedestrian, and Bicycle

The NVTA manages Vine Transit, which provides transit service in the greater Napa County region and serves the Project site. The St. Helena Shuttle, Vine Route 10, and Vine Route 29 all provide differing levels of frequency and connectivity to transit riders. Access to these transit stops are a few blocks from the Project site and sidewalks are available to ensure safe pedestrian access. No transit stops would be included within the Project site.

In developed areas to the south/southeast sidewalks are present. As part of the Proposed Project, Adams Street and Starr Avenue would be extended to provide vehicle, bicycle and pedestrian access to the site, consistent with the 1993 General Plan Policy 5.8.1 and Policy CR1.1 from the City's 2019 General Plan. Sidewalks would be provided along both sides of the street allowing safe pedestrian access to the site from adjacent areas. Sidewalks are also available connecting the Project site to downtown St. Helena.

Class II bicycle lanes are available along the entirety of Starr Avenue and Silverado Trail and the majority of Pope Street from Railroad Avenue to Paseo Grand Drive-College Avenue. Class III bicycle routes are provided along Hunt Avenue and portions of Pope Street, east of Railroad Avenue and west of Paseo Grand Drive-College Avenue, towards the approach to the Pope Street Bridge. The extension of Starr Avenue and Adams Street would provide Class III bicycle access to the site and on roadways throughout the site.

The Project site would facilitate accessibility to downtown St. Helena by way of existing sidewalks that would provide access to several neighborhood services such as Main Street, retail and grocery stores, and the City's Public Library. As shown on the Bicycle Network of the City's 2019 General Plan, Napa Valley Vine Trail is proposed along Adams Street from Railroad Avenue to Starr Avenue and continues along Starr Avenue to Pope Street. The proposed Napa Valley Vine Trail would include Class I, Class II and Class III bicycle network segments.

The Proposed Project supports the NVTA's and Vine Transit's initiatives to foster local accessibility and adequate transit facilities for City residents. The Proposed Project would provide adequate sidewalks and bicycle amenities and would not conflict with any plans or policies supporting either the development of these facilities or the use of these facilities. The Proposed Project does conflict with any plans or policies that address transit, pedestrian and bicyclist facilities; therefore, impacts are **less than significant.**

Mitigation Measures

None required.

3.14-2: Would the Proposed Project conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)? This impact would be potentially significant.

CEQA Guidelines Section 15064.3(b), focuses on newly adopted VMT criteria for determining the significance of transportation impacts.

As mentioned above, the Proposed Project is requesting approval of a Tentative Subdivision Map to subdivide the Project site into 51 single-family lots with 11 of the 51 lots developed with an ADU and a 3.4-acre lot designated for 25 multifamily units. As directed by the City, the average VMT/capita at the TAZ level was used for comparing the Proposed Project's VMT

relative to the Citywide VMT. The VMT maps available for Napa County from NSABM were used to determine the VMT/capita in the TAZ in which the Proposed Project is located.

Figure 3.14-9, VMT Screening Map, illustrates the VMT/capita estimate that was used in screening the Proposed Project. As shown in Figure 3.14-9, the Proposed Project is located is SNABM Zone 199. The VMT per capita of this zone is 11.37 per capita. The Proposed Project's VMT (Project TAZ VMT of 11.37) was compared with the City's 2015 baseline VMT per capita from the NSABM model (11.34 VMT per capita). As mentioned above, the City is using OPR's criteria indicating that a residential project that exceeds a level of 15% below existing VMT per capita would have a potentially significant transportation impact. As shown in the Table 3.14-3, the TAZ within which the Proposed Project is located has an existing VMT per capita of 11.37 which is above the Citywide VMT per capita of 11.34, as well as above the Citywide VMT per capita of 9.64. Therefore, the Proposed Project would exceed OPR's significance threshold of 15% less than the existing VMT resulting in a potentially significant impact.

Table 3.14-3
Proposed Project VMT Summary

Boundary/Threshold	VMT per capita
SNABM Zone 199 (Proposed Project TAZ)1	11.37
St. Helena (City)1	11.34
15% below Citywide Threshold2	9.64
Proposed Project TAZ VMT Above Threshold (greater than Citywide Threshold of 9.64)	Yes
Proposed Project VMT % Above Threshold3	15.2%

Notes:
1 VMT per capita value is from the VMT Tool for NSABM for 2015 Baseline conditions.
2 15% below Citywide VMT threshold of 11.34 = 9.64.
3 Increase calculated as 11.37-9.64 ÷ 11.37 = 0.152 or 15.2%.

Source: Dudek 2021.

Mitigation Measures

To mitigate the Proposed Project's impact related to VMT, the following Transportation Demand Management (TDM) strategies and Proposed Project design features were evaluated to determine feasibility for the Proposed Project. Based on the assessment of the potential TDM strategies it was determined implementation of these strategies would reduce the Proposed Project's VMT nominally (by approximately 2.0%). Therefore, as shown in Table 3.14-3, because the Proposed Project's VMT would be 15.2% higher than the Citywide VMT per capita under existing conditions a reduction of 2.0% would not reduce VMT to below the Citywide threshold of 9.64. Because there are no feasible mitigation measures available to substantially reduce or lessen the impact of the Proposed Project to less than significant, the impact is a **significant and unavoidable impact**.

Land Use Strategies

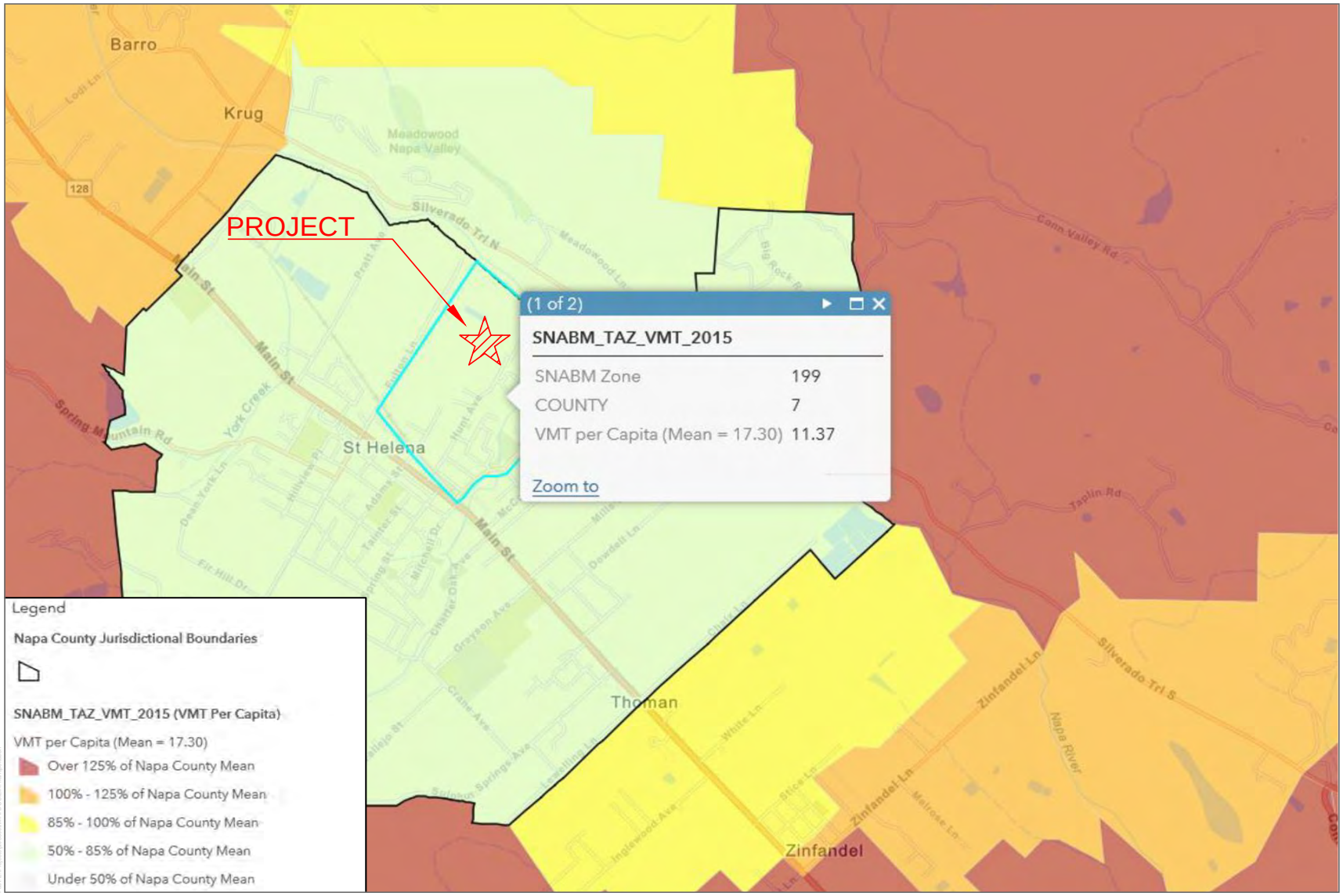
These land use strategies include land use diversity and supporting design features that encourage residents to walk, bike and/or use transit facilities and thereby reduce the total VMT. The Project site would facilitate accessibility to downtown St. Helena (i.e., approximately 0.7 miles from the Project site) by way of existing and new sidewalks that would provide access to downtown St. Helena including several neighborhood services along Main Street, such as retail and grocery stores, and to the St. Helena Public Library (located 0.1 miles from the Project site).

Due to the Proposed Project location, future residents could walk and bicycle to and from the town center. However, because the Proposed Project does not propose a mix of uses (i.e., retail or commercial) most of the Proposed Project's VMT would be to external (off-site) destinations and there would be no internal trip capture. Therefore, because the Proposed Project does not include a mix of uses a VMT reduction cannot be applied for any land use strategy.

Neighborhood /Site Design

- *Pedestrian Network/ Bicyclist Trail Network*

As mentioned under Section 3.14.2 Environmental Setting, pedestrian facilities are located near the Project site and Adams Street and Starr Avenue would be extended as part of the Proposed Project to provide vehicle, bicycle, and pedestrian access to the site. Sidewalks would be provided along both sides of Starr Avenue and Adams Street allowing safe pedestrian access to the site. The Project site would facilitate accessibility to downtown St. Helena by way of existing and proposed sidewalks that would provide access to several neighborhood services such as Main Street, retail and grocery stores, and the City's Public Library. Guidance for VMT reduction strategies is available in the document Quantifying Greenhouse Gas Mitigation Measures, August 2010 from the California Air pollution Control Officers Association (CAPCOA). CAPCOA estimates that for urban and suburban projects, providing a pedestrian network within the Project site that also connects to off-site pedestrian networks would reduce VMT by 2.0%. (CAPCOA SDT-1)



SOURCE: SNABM 2020

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FIGURE 3.14-9
VMT Screening Map
Hunter Subdivision Project

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Class II bicycle lanes are also available along the entirety of Starr Avenue and Silverado Trail and the majority of Pope Street from Railroad Avenue to Paseo Grand Drive-College Avenue. Class III bicycle routes are provided along Hunt Avenue and portions of Pope Street, east of Railroad Avenue and west of Paseo Grand Drive-College Avenue, towards the approach to the Pope Street Bridge. Along the Proposed Project access, Starr Avenue connects the site to the larger City bicycle network via Pope Street or Hunt Avenue. The City's Bicycle Plan was adopted in 2012 as part of the larger Napa County Transportation and Planning Agency's Bicycle Master Plan. The Napa Countywide Bicycle Plan was released in September 2019, however, has not yet been adopted by the City. This plan includes improvements such as Class III bicycle routes along Main Street, Railroad Avenue and Hunt Avenue and Class II bicycle path along Adams Street and Starr Avenue.

As shown on the Bicycle Network in the City's 2019 General Plan, Napa Valley Vine Trail is proposed along Adams Street from Railroad Avenue to Starr Avenue and continues along Starr Avenue to Pope Street. The proposed Napa Valley Vine Trail would include Class I, Class II and Class III bicycle network segments.

With the assumption that appropriate supportive features would be provided, a 2.0% VMT reduction per CAPCOA SDT-1 can be expected and applied to the Proposed Project as a result of connections to the existing and proposed pedestrian and bicyclist facilities.

Because the pedestrian and bicycling features contemplated in this strategy are (1) already part of the Project, (2) are already in existence or planned to be constructed by the City, or (3) are beyond the ability of the Proposed Project to implement, no mitigation to require these features is proposed.

Commute Trip Reduction and Travel Services

- *TDM Strategy Marketing for Residents*

"New resident" information packets could be distributed to all new residents to ensure that they are aware of all alternative transportation mode options available near the Proposed Project. The City could also post this information on the City's website so that this information is always accessible. Per CAPCOA standard TRT-7: Commute Trip Reduction Marketing, a VMT reduction percentage can be estimated for this measure, however based on the Proposed Project's size, it is likely to be less than 0.5%.

Because this measure would have a negligible effect on VMT, it is not proposed as a mitigation measure.

- *Bike-Share/Car-Share and Neighborhood Electric Vehicle Program*

Bike-share, car-share, car-pooling and neighborhood electric vehicle (NEV) programs reduce the need to have a car or second car. CAPCOA associates a VMT reduction with NEV participation and ownership, along with a travel network that accommodates NEV use, including features such as charging facilities, striping, signage, and educational tools (CAPCOA SDT-3). The VMT reductions are based on market penetration levels (i.e., percent of households with access to a NEV) and an average reduction in total VMT per NEV household of 12.7%. Since the number of NEV's per household cannot be estimated at this time and the city does not have an EV ride share program, no VMT reduction was assumed from this strategy.

Because no VMT reduction is projected to result from this strategy, it is not proposed as a mitigation measure.

- *Transit System Improvement Strategies*

  Network Expansion/Service Frequency/Speed Increase

This strategy would include coordination with the local transit operator (NVTA) to extend transit service to the Project site as well as increase service frequency. Increase in frequency by reducing transit headways, especially of the local shuttle service (St. Helena Shuttle), could potentially reduce the Proposed Project's VMT. According to the CAPCOA Report, transit network expansion and increasing transit service frequency results in VMT reductions ranging from 0.1-8.2% and 0.02-2.5%, respectively. Per the City's 2019 General Plan, only 1% of city residents commute by transit. Therefore, transit usage in the city is currently very low and cannot be assumed to provide a significant VMT reduction. Furthermore, the likelihood of an expansion of the transit network or increase in service frequency is not known at this time, therefore no VMT reduction was assumed from this strategy.

Because no VMT reduction is projected to result from this strategy, it is not proposed as a mitigation measure.

3.14-3: Would the Proposed Project increase hazards due to a geometric design feature or incompatible use? This impact would be less than significant.

Due to concerns raised in response to the NOP, the analysis below addresses potential safety hazards associated with Proposed Project access and design, including an overview of accident data. Potential hazards associated with construction activities is also provided.

Proposed Project Access and Circulation

As mentioned previously, the Proposed Project would extend Starr Avenue northward into the Project site, and intersect with Adams Street, which the Proposed Project would also extend eastward from its current terminus. As Starr Avenue is extended northward, it would narrow

from an approximately 75-foot right-of-way (ROW) to a 60-foot ROW with 4-foot-side sidewalks and a 6-foot-wide planter strip on both sides of the street, consistent with City's street standards. This extension, along with Adams Street, would be designed to accommodate emergency service vehicles and maintain accessibility for pedestrians and bicyclists according to City street design standards.

Additional, internal public residential streets within the Project site would be created to accommodate neighborhood circulation and provide on-street parking on both sides of the Starr Avenue and Adams Street extensions (where permitted). These roadways would be designed to be consistent with all applicable City street design criteria and conform to the City's Municipal Code (Section 16.32.060) to ensure that emergency service vehicles can adequately access and circulate within the Project site.

Based on a review of the proposed Tentative Subdivision Map, and field observations of existing on-street conditions around the site on Adams Street and Starr Avenue, there are no visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site.

As Adams Street is extended eastward and Starr Avenue is extended northward to link with Adams Street, the overall roadway geometrics would change. The intersection of Starr Avenue/Hunter Avenue would become a 4-way intersection, and vehicles would be able to access the Project site and unnamed internal roadways (Road A, Road B) within the Project site. The internal roadways would be used by Proposed Project residents, however the potential for Starr Avenue and Adams Street to be used as an alternative to Main Street/ SR 29 could also increase. Motorists could bypass the downtown area by traveling eastbound along Pope Street, northbound along Starr Avenue, westbound along Adams Street, northbound along Railroad Avenue, and finally eastbound along Fulton Lane to connect back to Main Street (the reverse applies for traffic travelling to the south of the region). Currently, motorists travel northbound along Starr Avenue and then westbound along Hunt Avenue before reaching Railroad Avenue. The expected increase in vehicles using these maneuvers would be higher along Adams Street and Starr Avenue, but lower along Hunt Avenue. However, the reopening of the Pratt Avenue connection between Main Street and Silverado Trail, as well as the future extension and connections identified in the 2019 General Plan would eliminate the need for such maneuvers other than under extreme circumstances.

Collision Analysis

A qualitative collision analysis was performed to disclose the collision history in the traffic study area. No incidences were reported near the Project site nor on roads the provide access to the Project site. Five years of collision data, from 2014 to 2018, was obtained from the California

Highway Patrol's (CHP) *Statewide Integrated Traffic Records System* (SWITRS). It is important to note that it may take up to six months for a collision to appear within the database, therefore data for 2018 may be incomplete.[11]

The SWITRS database is a public system that processes and collects data from CHP and other police agencies. The database was queried to select for all collisions occurring within the jurisdiction of the St. Helena Police Department (SHPD) and then narrowed down to the study area intersections that contained collisions resulting in pedestrian or bicyclist injury, as well as collisions occurring at intersections. Most "rear-end" type of collisions were not considered in this analysis since these types of collisions are considered to be by fault of the driver and not because of the intersection or roadway layout, or lack of signalization, as shown in Table 3.14-4. The SWITRS files are included in Appendix K.

Table 3.14-4
Collision Summary (2014-2018)

Nearest Study Intersection	# of Total Collisions	Total # of Injured[1]	Total # of Pedestrians Injured	Total # of Bicyclists Injured	Primary Cause
1. Main Street/Fulton Lane – Madrona Avenue	9	4	1	0	Ran light; improper turn
2. Main Street/Adams Street	4	3	3	0	Left turn/pedestrian crossing conflict
3. Main Street/Hunt Avenue	2	0	0	0	Left turn/pedestrian crossing conflict; improper turn
4. Main Street/Pope Street – Mitchell Drive	5	2	1	0	Unsafe speed
11. Paseo Grand Drive – College Avenue/Pope Street	1	0	0	0	Improper turn
12. Silverado Trail/Pope Street	15	12	0	0	Left turn and right-of-way conflicts
13. Silverado Trail/Howell Mountain Road	4	3	0	0	Improper turn

Notes: SWITRS Database Query conducted March 27, 2019.
[1] Consists of all injured parties (motorists, pedestrians, and bicyclists).
Source: SWITRS 2019.

As shown in Table 3.14-4, the total number of people injured within the 40 reported collisions is 24 people, 5 of which were pedestrians, and no bicyclists. The intersection of Silverado Trail/Pope Street had the highest number of total collisions recorded. These collisions may be

[11] Data from 2019 and 2020 was not available because the website was undergoing maintenance.

attributed to the narrowing of Pope Street at both approaches to the narrow Pope Street Bridge, creating slower moving traffic heading towards a higher speed roadway (Silverado Trail).

The Proposed Project would not increase hazards due to a geometric design feature or incompatible use that would contribute to an increase in collisions or create visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site. The impact is **less than significant.**

Construction

Construction activities presented in this section are based on construction assumptions included in Section 3.3, Air Quality. Construction traffic impacts would be temporary until buildout of the Proposed Project is completed. The build out scenario evaluated in the air quality analysis conservatively assumes buildout in 6 years.

Proposed Project construction activities have the potential to cause temporary traffic impacts on motorists. Traffic impacts from construction would be expected to occur as a result of the following conditions:

- Temporary increases in truck traffic associated with delivery of construction materials.
- Temporary increases in automobile traffic associated with construction workers traveling to and from the Project site.
- Temporary reductions in existing street capacity or on-street parking from temporary lane closures necessary for the construction of roadway improvements, utility relocation or extension, and drainage facilities.
- Temporary blockage of existing vehicle or pedestrian access to other parcels fronting streets.

For the purposes of this EIR, Proposed Project construction is expected to take 6 years, from site clearing and grading of the site to the end of building construction. Construction activity would occur on weekdays and may occasionally occur on Saturday. All heavy trucks would be required to comply with chapter 10.36 of the City's Municipal Code that establishes SR 29/Main Street as the primary truck route for heavy construction vehicles (exceeding a maximum gross limit of ten thousand (10,000) pounds). It is anticipated trucks would access the site using SR 29 connecting to Pope Street and Starr Avenue. All construction activities would be limited to Monday through Saturday from 8:00 AM to 5:00 PM, consistent with chapter 8.24 of the City's Municipal Code that allows construction activities to occur within these days and times.

Of the five construction phases (site preparation, grading, paving, building construction, and architectural coating), the building construction phase would generate the most traffic, related to

the number of construction workers destined to/from the site. For the 6-year buildout, building construction would generally last for seven months with one phase lasting 11 months.

It is estimated that the maximum number of construction personnel per day during the most intense phase (building construction) would be 20 workers. Assuming worst-case, non-carpooling among the workers, there would be a maximum of 40 construction worker trips per day (20 inbound and 20 outbound). The building construction phase would also require delivery of construction materials. It is estimated that an average of five delivery truck trips per weekday would occur, resulting in 10 daily truck trips (5 inbound and 5 outbound).

In general, the hours of construction typically require workers to be on-site before the weekday morning commuter peak period and allow them to leave before the afternoon commuter peak period (outside of the peak morning and evening commute times). Saturday construction activity would occur outside of the typical weekend midday peak period. Therefore, the large majority of construction-related trips would occur outside of the typical weekday commuter per periods and weekend midday peak period.

Parking for construction workers would be provided on-site. Therefore, construction workers and vehicles would not reduce the availability of parking spaces on streets surrounding the Project site. Also, no bus stops would be relocated and no bus lines would be rerouted due to Proposed Project construction.

Construction of the Proposed Project would be largely contained within the Project site and would generally not affect adjacent street access. In addition, any delays from additional construction traffic and/or construction activities at locations other than the streets adjacent to the Project site are not expected to be substantial. Certain construction activities such as roadway improvements and utility relocation or extension could require temporary lane closures, which would in turn temporarily reduce existing street capacity, but such impacts would be short-term in duration and would done through building and/or grading permits with the City.

Based on the temporary nature of traffic generated by construction workers and delivery trucks; the off-peak travel times of the construction workers; and, the requirement to obtain construction permits through the City along with preparation of a temporary traffic control plan for construction activities, to be approved by the City's traffic engineer (Municipal Code Section 12.12.050), construction traffic is not expected to create hazards for roadway travelers, pedestrians, bicyclists, or transit riders. The impacts of construction activity on the overall transportation system are anticipated to be temporary in nature and would cause minimal interruption to the regular operation of, the facilities surrounding the Project site. Impacts on traffic associated with construction (e.g., an intermittent reduction in street and intersection operating capacity) are typically considered short-term adverse impacts, but not significant.

Therefore, Proposed Project construction impacts on the transportation system would be **less than significant**.

Mitigation Measures

None required.

3.14-4: Would the Proposed Project result in inadequate emergency access? This impact would be less than significant.

The St. Helena Fire Department has reviewed the proposed Tentative Subdivision Map and has not identified any issues with inadequate emergency access.

Specifically, the Proposed Project includes two primary access points, Star Avenue and Adams Street as well as a separate emergency vehicle access. In the event of an emergency there would be three avenues that would enable vehicles to enter/exit the Project site. As described in Section 3.12, Public Services, the Proposed Project would be consistent with the 1993 General Plan Policy 8.5.7 and 2019 General Plan Policy PS4.6, which requires all streets and roads be designed with adequate width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.

Once the Tentative Subdivision Map is approved, the Proposed Project's Final Subdivision Map would be subject to additional review by the St. Helena Fire Department to confirm proper access for fire and emergency response is provided and required fire suppression features are included.

Because adequate emergency access is provided the impact is considered **less than significant.**

Note: Wildfire risk and evacuation regulations are discussed in Section 3.8, Hazards and Hazardous Materials, and state the Proposed Project would not conflict with the Napa County Emergency operations Plan and adequate site access is available in the event of a wildfire.

Mitigation Measures

None required.

3.14.5 Cumulative Impacts

OPR's Technical Advisory provides guidance to practitioners regarding VMT analysis under cumulative conditions. Specifically, for projects analyzed using a VMT efficiency metric, the following statement is made: "A project that falls below an efficiency-based threshold that is aligned with the long-term environmental goals and relevant plans would have no cumulative

impacts distinct from the project impact. Accordingly, a finding of less-than-significant project impact would imply a less than significant cumulative impact, and vice versa".

Impacts related to inadequate emergency access and conflicts with transit, bicycle or pedestrian transportation would be identical to the impacts described in the Proposed Project impacts section; and all impacts would be less than significant.

Cumulative impacts are evaluated within the Cumulative plus Proposed Project framework which is based on the Buildout (2040) condition.

3.14-5: Under Cumulative conditions, would the Proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This impact is considered potentially significant.

Based on the guidance provided by OPR and the VMT analysis above, since the Proposed Project would have a per capita VMT impact under the existing/base year, it would also have a **potentially significant cumulative impact** to VMT.

Mitigation Measures

Mitigation measures evaluated under Impact 3.14-3 would also apply under cumulative conditions; however, even with the inclusion of feasible TDM the Proposed Project's cumulative impact cannot be avoided or reduced to a less-than-significant level. No other feasible mitigation measures are available. Therefore, the Proposed Project's cumulative impact would be significant and unavoidable.

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3.15 ENERGY

This section evaluates the potential impacts that the proposed Hunter Subdivision Project (Proposed Project) may have on energy resources. This section presents the environmental and regulatory energy resource setting along with an analysis and discussion of energy resource impacts resulting from implementation of the Proposed Project.

No comments were received that raised concerns regarding energy resources in response to the Notice of Preparation. A copy of the Notice of Preparation and comments received is included in Appendix A.

Information contained in this section is based on Proposed Project plans and the California Emissions Estimator Model (CalEEMod) (used to estimate Proposed Project energy consumption). The analysis and findings are based on the emissions modeling, which can be found in Appendix C. Other sources consulted are listed in Section 3.15.6, References.

3.15.1 Environmental Setting

The environmental setting for the Proposed Project related to electricity, natural gas, and petroleum, including associated service providers, supply sources, and estimated consumption, is discussed as follows. In summary, in 2017 (the latest calendar year for which data is uniformly available for all three types of energy sources), California's estimated annual energy use included the following:

- Approximately 257,268 gigawatt hours of electricity (EIA 2019a)
- Approximately 2,110,829 million cubic feet (EIA 2019b)
- Approximately 16 billion gallons of gasoline (CEC 2018a)

Electricity

Electricity usage in California varies substantially by the types of uses in a building, types of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, and the national average has steadily increased (CEC 2015a).

Two electricity service providers provide service to the City of St. Helena (City) and Napa County. The City joined the Marin Clean Energy (MCE), a community choice aggregation program. According to MCE's 2019 Integrated Resource Plan, approximately 89% of City residents purchase electricity through MCE (MCE 2019). MCE's 2019 peak demand forecast is approximately 1,048 million kilowatts and annual consumption is expected to be approximately 5,275 million kilowatt-

hours (kWh) (MCE 2019). The remaining 11% of customers within the City receive electricity from Pacific Gas & Electric Company (PG&E). PG&E provides electric services to 5.4 million customers, including 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines over a 70,000-square-mile service area that includes Northern California and central California (PG&E 2016). As presented in Table 3.15-1, according to PG&E, customers consumed 82,224 million kWh of electricity in 2017 (CEC 2018a).

Table 3.15-1
Pacific Gas & Electric Company 2017 Electricity Consumption

Sector	Total Electricity (in millions of kWh)
Agricultural and Water Pump	5,049.66
Commercial Buildings	30,446.89
Commercial Other	4,309.58
Industry	10,409.92
Mining and Construction	1,747.35
Residential	29,920.19
Streetlight	340.73
Total Consumption	82,224.32

Note: kWh = kilowatt-hour
Source: CEC 2018a.

PG&E receives electric power from a variety of sources. According to California Public Utilities Commission's (CPUC) 2018 Renewable Portfolio Standard (RPS) Annual Report to the Legislature, 33% of PG&E's power came from eligible renewable energy sources in 2017, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (CPUC 2018). In addition, MCE provides three options to customers including MCE Light Green service, in which 60% of the power mix would be generated by eligible renewable sources and the MCE Deep Green or the MCE Local Sol services, in which 100% of the power mix would come from renewable sources (CEC 2019).

Based on recent energy supply and demand projections in California, statewide annual peak electricity demand is projected to grow an average of 890 megawatts per year for the next decade, or 1.4% annually, and consumption per capita is expected to remain relatively constant at 7,200–7,800 kWh per person (CEC 2015a).

In Napa County, PG&E reported an annual electrical consumption of approximately 1,064 million kWh in 2017, with 685 million kWh for non-residential use and 380 million kWh for residential use (CEC 2018b).

Natural Gas

The CPUC regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from PG&E, Southern California Gas, San Diego Gas & Electric, Southwest Gas, and several smaller natural gas utilities. PG&E provides natural gas service to most of Northern California, including the City. As provided in Table 3.15-2, PG&E customers consumed approximately 4,715 million therms of natural gas, in 2017 (CEC 2018c).

Table 3.15-2
Pacific Gas & Electric Company 2017 Natural Gas Consumption

Sector	Total Natural Gas (in millions of therms)
Agricultural and Water Pump	36.40
Commercial Buildings	864.81
Commercial Other	67.96
Industry	1,701.34
Mining and Construction	170.82
Residential	1,873.36
Total Consumption	4,714.69

Source: CEC 2018c.

Natural gas is used for cooking, space heating, generating electricity, and as an alternative transportation fuel. The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers accounted for approximately 30% of the natural gas delivered by California utilities in 2017. Large consumers, such as electric generators and industrial customers (noncore customers), accounted for approximately 70% of the natural gas delivered by California utilities in 2017 (EIA 2018b).

CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2017).

In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California (CPUC 2017). Natural gas from out-of-state production basins is delivered into California through the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-state natural gas to California are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Southern Trails Pipeline, and Mojave Pipeline. The North Baja–Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers it through California into Mexico. The

Federal Energy Regulatory Commission regulates the transportation of natural gas on interstate pipelines, and CPUC often participates in Federal Energy Regulatory Commission regulatory proceedings to represent the interests of California natural gas consumers (CPUC 2017).

Most of the natural gas transported through interstate pipelines, as well as some California-produced natural gas, is delivered through the PG&E and Southern California Gas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the backbone pipeline system is then delivered into local transmission and distribution pipeline systems or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline system, and some core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the natural gas delivered to California's gas consumers in 2012 (CPUC 2017).

PG&E and Southern California Gas own and operate several natural gas storage fields located in Northern and Southern California. These storage fields and four independently owned storage utilities—Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage—help meet peak-season natural gas demands and allow California natural gas customers to secure natural gas supplies more efficiently (CPUC 2017).

California's regulated utilities do not own any natural gas production facilities. All natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the Federal Energy Regulatory Commission in the mid-1980s and is determined by market forces. However, CPUC decides whether California's utilities have taken reasonable steps to minimize the cost of natural gas purchased on behalf of its core customers (CPUC 2017).

In 2017 (the most recent year for which data is available), PG&E had delivered 39 millions of therms to Napa County, with the majority going to residential uses (21 millions of therms) (CEC 2018d).

Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy efficiency programs, and the availability of alternative renewable energy sources. As previously indicated, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available through existing delivery systems, thereby increasing the availability and reliability of resources.

Petroleum

There are more than 34 million registered vehicles in California, and those vehicles consume an estimated 16 billion gallons of fuel each year (CEC 2020; DMV 2019). Petroleum currently accounts for approximately 92% of California's transportation energy consumption (CEC 2020). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate (CEC 2017). Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state.

3.15.2 Regulatory Setting

Federal, state, and local agencies regulate energy use and consumption through various means and programs. On the federal level, the U.S. Department of Transportation, the U.S. Department of Energy, and the U.S. Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, CPUC and California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant federal, state, and local energy-related regulations are summarized as follows.

Federal Regulations

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors for metropolitan planning organizations to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (discussed above). The act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law. In addition to setting more stringent Corporate Average Fuel Economy standards for motor vehicles, the Energy Independence and Security Act includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation (the RFS) requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2013, 2015). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as "RFS2" and includes the following:

- Expands the RFS program to include diesel, in addition to gasoline
- Increases the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022
- Establishes new categories of renewable fuel, and sets separate volume requirements for each one
- Requires the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces

Additional provisions of the Energy Independence and Security Act address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

State Regulations

The following discussion focuses primarily on those policies, regulations, and laws that directly pertain to energy-related resources. Also refer to Section 3.7, Greenhouse Gas Emissions, which addresses various policies, regulations, and laws targeted to the reduction of GHG emissions that are expected to achieve co-benefits in the form of reduced demand for energy-related resources and enhanced efficiencies in the consumption of energy-related resources.

Warren–Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974. The Warren–Alquist Act was created by the CEC. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.

- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided. The plan also identified policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed as follows). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

Senate Bill (SB) 1078 established the California RPS Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill also required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), and 100 (2018)

SB 107 accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December

31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the 60% RPS in 2030.

Assembly Bill 1007 (2005)

AB 1007 required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with the other state, federal, and local agencies. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focus on increasing energy efficiencies and the use of renewable resources and reducing the consumption of petroleum-based fuels (e.g., gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

Additional information on AB 32 and SB 32 is provided in Section 3.7 of this Environmental Impact Report.

California Building Standards

Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards would further reduce energy used and associated GHG emissions compared to prior standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards would use approximately 53% less energy than those under the 2016 standards (CEC 2018e). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018e).

State Vehicle Standards

In a response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30%.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global warming gases and 75% fewer smog-forming emissions (CARB 2011).

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code, Section 65080, SB 375 requires metropolitan planning organizations to include a sustainable communities strategy in its regional transportation plan. The main focus of the sustainable communities strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also a part of a bigger effort to address other development issues within the general vicinity, including transit and VMT, which influence the consumption of petroleum-based fuels.

Regional Regulations

Association of Bay Area Governments

In July 2017, the Association of Bay Area Governments, the designated metropolitan planning organization for the San Francisco Bay Area region adopted the Plan Bay Area 2040 (ABAG 2017). The Plan Bay Area is a long-range plan for transportation projects within the planning area and focuses on cost-effective operational improvements to preserve the existing and expanded regional transportation system through 2040. The 2017 update to the Plan Bay Area focused on refinement of and addressing implementation challenges to the previous (2010) plan. The Plan Bay Area includes seven goals and 13 performance targets covering three broad areas: the environment, equity, and the economy. The performance targets are evaluated in several areas defined as key concerns, including climate protection, adequate housing, healthy and safe communities, open space and agricultural preservation, equitable access, economic vitality, and transportation system effectiveness.

Local Regulations

City of St. Helena 1993 General Plan

The City of St. Helena 1993 General Plan does not include any relevant policies related to energy conservation.

City of St. Helena 2019 General Plan[1] ("General Plan Update 2040")

The City of St. Helena 2019 General Plan includes policies related to energy conservation. Although the analysis is based on the 1993 General Plan, the following policies are included for informational purposes:

> **Policy CC2.1:** Encourage measures to reduce energy demand through conservation and efficiency.
>
> **Policy CC2.2**: Support local efforts to improve the energy supply by switching from fossil fuels to renewables.

3.15.3 Impacts

Methods of Analysis

Energy calculations from construction and operation of the Proposed Project were calculated using CalEEMod Version 2016.3.2. Details relevant to the modeling assumptions are described below.

Construction

Heavy-duty construction equipment of various types would be used during construction. A spreadsheet-based model consisting of data values presented in Appendix D of CalEEMod's User Guide and specific information provide by PG&E was used to estimate construction equipment usage; results are included in Appendix C of this Environmental Impact Report. Fuel use associated with truck deliveries and worker vehicle trips are also included in this analysis. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 23,666 hours, as summarized in Table 3.15-3, Hours of Operation for Construction Equipment.

Table 3.15-3
Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Site Preparation (2023)	560
Grading (2023)	1,280
Paving (2023)	960
Building Construction (2023-2028)	65,440
Architectural Coating (2023-2028)	672
Total	68,912

Source: See Appendix C for details.

[1] Also known as the "St Helena General Plan Update 2040," the 2019 General Plan is referred to in this EIR by its adoption date.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2020).

Operations

Operational energy calculations were estimated for buildout of the Proposed Project. The first full year of operation was assumed to be 2029, which is based on the completion of all construction activities.

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). The estimation of operational energy estimates (electricity and natural gas) were based on CalEEMod land use defaults and number of dwellings units. CalEEMod uses Residential Appliance Saturation Survey (RASS) datasets to obtain the energy intensities of different end use categories for different building types in different climate zones (CEC 2010).

Petroleum fuel consumption associated with motor vehicles traveling to and from the Project site is a function of VMT as a result of Proposed Project operation. As shown in Appendix C, the annual VMT attributable to the Proposed Project is expected to be approximately 1,605,342 VMT per year. Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO_2 emissions from each land use type to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The default fleet mix in CalEEMod for Napa County assumes that approximately 92.9% of vehicles are from light-duty to medium-duty vehicles and motorcycles were assumed to run on gasoline and the remaining 7.1% of vehicles represent medium-heavy duty to heavy-duty vehicles (delivery vehicles) and buses/recreational vehicles, which were assumed to run on diesel. Because CalEEMod calculates emissions from the transportation sector based on trip generation, the fleet mix assumes a disproportionately high number of medium-duty and heavy-duty trucks and bus trips. For example, of the 900 vehicle trips generated by the Proposed Project per day, the CalEEMod default would assume that approximately 64 trips per day are medium- and heavy-duty truck and bus trips, which is unrealistic for a residential project. Notably, CalEEMod calculates such a high number because the default fleet mix in is based on VMT and not vehicle trips and trucks travel approximately three to four times longer per trip than passenger vehicles.

Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act Guidelines, a significant impact would occur if development of the Proposed Project would do any of the following:

- Result in the wasteful, inefficient or unnecessary consumption of energy resources during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impacts and Mitigation Measures

3.15-1: Would the Proposed Project result in wasteful, inefficient or unnecessary consumption of energy resources during Project construction or operation? This impact would be less than significant.

Construction Energy Use

Electricity

The majority of the energy used during construction would be from petroleum. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and construction trailer(s) by managerial staff during the hours of construction activities. The electricity used for construction activities would be temporary and minimal; therefore, impacts would be **less than significant**.

Natural Gas

The need for natural gas is not anticipated during construction activities. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the following subsection, Petroleum. Any minor amounts of natural gas that may be consumed as a result of Proposed Project construction would be temporary and negligible and would not have an adverse effect; therefore, impacts would be **less than significant**.

Petroleum

Petroleum would be consumed throughout construction of the Proposed Project's infrastructure as well as residences. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and VMT associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities involved in grading and trenching for utilities would rely on diesel fuel. It is assumed construction workers would travel to and from the Project site in gasoline-powered vehicles.

The estimated diesel fuel use from construction equipment is shown in Table 3.15-4, Construction Equipment Diesel Demand.

Table 3.15-4
Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)[a]	kg CO_2/Gallon	Gallons
Site Preparation (2023)	7	16.73	10.21	1,638.13
Grading (2023)	8	26.06	10.21	2,552.46
Paving (2023)	6	20.03	10.21	1,961.49
Building Construction (2023-2028)	53	1,118.13	10.21	109,512.98
Architectural Coating (2023-2028)	6	12.54	10.21	1,400.40
			Total	117,065.46

Notes: CO_2 = carbon dioxide; kg = kilogram; MT = metric ton.
Sources: See Appendix C for details; The Climate Registry 2020.

Fuel consumption from worker and vendor trips was estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled.

Calculations for total worker, vendor, and hauler fuel consumption are provided in Table 3.15-5, Construction Worker Vehicle Gasoline Demand, and Table 3.15-6, Construction Vendor Truck Diesel Demand.

Table 3.15-5
Construction Worker Vehicle Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation (2023)	180	0.55	8.78	62.57
Grading (2023)	400	1.22	8.78	139.04
Paving (2023)	300	0.92	8.78	104.28
Building Construction (2023-2028)	53,900	149.43	8.78	17,019.87
Architectural Coating (2023-2028)	1,232	3.38	8.78	385.34
			Total	17,711.12

Notes: CO_2 = carbon dioxide; kg = kilogram; MT = metric ton.
Sources: See Appendix C for details, The Climate Registry 2020.

Table 3.15-6
Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)[a]	kg CO_2/Gallon[b]	Gallons
Site Preparation (2023)	0	0.00	10.21	0.00
Grading (2023)	40	0.50	10.21	48.60
Paving (2023)	0	0.00	10.21	0.00
Building Construction (2023-2028)	10,780	131.97	10.21	12,925.25
Architectural Coating (2023-2028)	0	0.00	10.21	0.00
			Total	12,973.85

Notes: CO_2 = carbon dioxide; kg = kilogram; MT = metric ton; kV = kilovolt
Sources: See Appendix C for details, The Climate Registry 2020.

As shown in Tables 3.15-3 through 3.15-6, construction activities are estimated to consume approximately 147,750 gallons of petroleum during the construction phase. By comparison, approximately 89 billion gallons of petroleum would be consumed in California over the course of the Proposed Project's construction phase based on the California daily petroleum consumption estimate of approximately 78.6 million gallons per day (EIA 2019c). Thus, the total expected petroleum use from the Proposed Project's construction represents approximately 0.31% of California's consumption of petroleum over the construction duration. Notably, the Proposed Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation: (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Therefore, because the Proposed Project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, Proposed Project construction would not result in wasteful, inefficient, or unnecessary consumption of petroleum and impacts would be **less than significant**.

Operational Energy Use

Electricity

At full build-out, the Proposed Project's operational phase would require electricity for operating the residences. CalEEMod default values for electricity consumption for each land use were applied (CAPCOA 2017). The electricity use for residential buildings is calculated in CalEEMod using energy intensity value (electricity use per square foot per year) assumptions, which were based on the RASS (CEC 2010).

The 2019 Title 24 standards were approved and adopted by the CEC in December 2018. The 2019 standards became effective on January 1, 2020. It was assumed that the Proposed Project would comply with the 2019 standards for the purposes of this evaluation; however, if the Proposed Project is approved whatever adopted standards are in place at the time would take precedence. Per the CEC Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed residential buildings, are 596 gigawatt hours of electricity, 50.4 megawatt of demand, and 0.4.42 million therms of gas, representing reductions from the 2016 Title 24 standard of 4%, 15%, and 5%, respectively.

Operational electricity use for the Proposed Project is presented in Table 3.15-7, Estimated Electrical Demand.

Table 3.15-7
Estimated Electrical Demand – Proposed Project Operation

Land Use Type[1]	Estimated Electrical Demand (kWh per year)
Accessory Dwelling Units	47,675.90
Single-Family Housing	411,955.00
Multifamily Units	126,011.00
Total	585,641.90

Notes:
[1] Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the Proposed Project.
kWh = kilowatt-hour
Source: See Appendix C for details.

As shown in Table 3.15-7, the Proposed Project is estimated to have a total electrical demand of approximately 585,642 kWh per year. By comparison, in 2017, PG&E supplied 82,224 million kWh of electricity to customers while MCE projects approximately 5,275 million kWh of electricity to be consumed (CEC 2018a; MCE 2019). Therefore, the Proposed Project would not result in a wasteful use of energy. Impacts related to operational electricity use would be **less than significant**.

Natural Gas

Natural gas would be directly consumed throughout operation of the Proposed Project, primarily through building heating and fireplace (only natural gas fireplaces are assumed) options for homes. As described above and consistent with electricity use, the Proposed Project's natural gas use was estimated using CalEEMod.

Table 3.15-8, Estimated Natural Gas Demand, shows the estimated natural gas use (therms per year) for Proposed Project operation.

Table 3.15-8
Estimated Natural Gas Demand – Project Operation

Land Use Type[1]	Estimated Natural Gas Demand (therms per year)
Accessory Dwelling Units	1,052.14
Single-Family Housing	13,633.90
Multi-Family Units	4,486.15
Total	19,172.19

Note:
[1] Land use type was taken from the CalEEMod modeling and represents the closest land use to what is in the Proposed Project.
Source: See Appendix C for details.

As presented in Table 3.15-8, the Proposed Project is estimated to use approximately 19,172 therms of natural gas per year. By comparison, in 2017, PG&E supplied 4,715 million therms of natural gas to customers (CEC 2018c). Therefore, natural gas consumption impacts would be **less than significant.**

Petroleum

The majority of fuel consumption resulting from the Proposed Project's operational phase would be attributable to the use of resident, visitor, and delivery motor vehicles traveling to and from the Project site, as well as fuels used for alternative modes of transportation that may be used by residents, visitors, and deliveries.

Calculations for annual mobile-source fuel consumption are provided in Table 3.15-9, Mobile Source Fuel Consumption – Operation.

Table 3.15-9
Mobile Source Fuel Consumption – Proposed Project Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon	Gallons
Gasoline	510.16	8.78	58,104.81
Diesel	39.04	10.21	3,823.75
		Total	61,928.56

Notes: CO_2 = carbon dioxide; kg = kilogram; MT = metric ton.
Sources: See Appendix C for details (mobile source CO_2); The Climate Registry 2020 (kg/CO_2/gallon).

As shown in Table 3.15-8, mobile sources from Proposed Project operation would result in approximately 58,105 gallons of gasoline per year and 3,824 gallons of diesel consumed per year. By comparison, California as a whole consumed approximately 16 billion gallons of petroleum in 2017 (CEC 2018a).

Over the lifetime of the Proposed Project, the fuel efficiency of the vehicles being used by residents and visitors is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the Project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 10% by 2020, and 19% by 2035 for light-duty passenger vehicles in the planning area for the Association of Bay Area Governments. As such, Proposed Project operation is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

In summary, although the Proposed Project would increase petroleum use during operation, the use would be a small fraction of the statewide use and due to efficiency increases, diminish over time. Given these considerations, petroleum consumption associated with the Proposed Project operation would not be considered inefficient or wasteful and impacts would be **less than significant**.

Mitigation Measures

None required.

3.15-2: Would the Proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? This impact would be less than significant.

The Proposed Project is required to meet Title 24 and California Green Building Standards Code (CALGreen) standards to reduce energy demand and increase energy efficiency. According to the CEC, single-family homes built under the 2019 standards would use approximately 7% less energy than those built under the 2016 standards. The 2019 standards would also require the installation of rooftop solar for all new homes under three stories in height. With the inclusion of solar, homes would use approximately 53% less energy compared with the 2016 standards (CEC 2018e). In addition, the 2019 standards would include improvements to residential building's thermal envelope through high performance attics, walls and windows which will reduce energy consumption. Therefore, the Proposed Project would provide opportunities for improved energy efficiency that would support state and local plans for increasing renewable energy efficiency. For the reasons stated, the Proposed Project would not

conflict with or obstruct a state or local plan for renewable energy or energy efficient, and impacts would be **less than significant**.

Mitigation Measures

None required

3.15.4 Cumulative Impacts

The cumulative context for energy resources is development that would be allowed under the City's 1993 General Plan. Potential cumulative impacts on energy would result if the Proposed Project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation.

3.15-3: Would the Proposed Project contribute to an increase in wasteful, inefficient or unnecessary consumption of energy resources during Project construction or operation? The Project's contribution would not be considerable.

Past, present, and future projects within the areas serviced by the energy service providers could cumulatively increase the use of energy resources. Projects that include development of large buildings or other structures that could have the potential to consume energy in an inefficient manner would have the potential to contribute to a cumulative impact. Projects that would mostly include construction, such as transportation infrastructure, could also contribute to a cumulative impact; however, the impact of these projects would be limited because they would typically not involve substantial ongoing energy use. Other development projects within the region would result in incremental increases in long-term energy consumption similar to the Proposed Project through the introduction of new population to the region. Each of these projects, however, would be required to comply with local and state regulations for reducing energy consumption and increasing energy efficiency during operation. Nonetheless, the overall increase in demand for energy resources is a potentially significant cumulative impact.

Similar to the Proposed Project, cumulative projects would be subject to CALGreen or stricter local regulations which provides energy efficiency standards for commercial and residential buildings. CALGreen would implement increasingly stringent energy efficiency standards that would require the Proposed Project and the cumulative projects to minimize the wasteful and inefficient use of energy. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, further reducing the inefficient use of energy. Future development would also be required to meet even more stringent requirements, including the objectives set forth in the AB 32 Scoping Plan (CARB 2017), which would seek to make all

newly constructed residential homes zero net energy consumers by 2020, and all new commercial buildings Zero-Net-Energy consumers by 2030. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects.

In summary, with adherence to the increasingly stringent building and vehicle efficiency standards the Proposed Project would reduce energy consumption and would not contribute to a cumulative impact to the wasteful or inefficient use of energy. As such, the Proposed Project would not result in a cumulatively considerable contribution to a potentially significant cumulative impact and the Proposed Project's contribution is less than considerable resulting in a **less-than-significant cumulative impacts.**

Mitigation Measures

None required

3.15.5 References

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CHAPTER 4
CEQA CONSIDERATIONS

4.0 INTRODUCTION

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the project, (2) significant environmental effects that cannot be avoided if the project is implemented, (3) significant irreversible environmental changes that would result from implementation of the project, (4) growth-inducing impacts of the project, and (5) alternatives to the project (evaluated in Chapter 5, Project Alternatives).

As noted throughout this EIR, the proposed Hunter Subdivision Project (Proposed Project) is requesting approval of a Tentative Subdivision Map. At this time the applicant is not requesting approval of entitlements that would enable development to proceed if the Proposed Project is approved. Subsequent discretionary actions and approvals would be required by the City of St. Helena (City) in order for development to be permitted.

4.1 SIGNIFICANT ENVIRONMENTAL EFFECTS

Chapter ES, Executive Summary, and Sections 3.1 through 3.15 of this Draft EIR provide a comprehensive identification of the Proposed Project's potentially significant environmental effects, including the level of significance both before and after mitigation.

4.2 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the Proposed Project on various aspects of the environment are discussed in detail in the technical sections contained in Chapter 3, Environmental Analysis, of this Draft EIR. There are two significant and unavoidable transportation impacts that cannot be avoided if the Proposed Project is approved as described in Section 3.14, Transportation and Circulation. The remainder of Proposed Project impacts can be mitigated to a less-than-significant level through the adoption of recommended mitigation measures or compliance with existing requirements or laws.

4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL IMPACTS

Section 15126.2 (d) of the CEQA Guidelines requires a discussion of any significant irreversible environmental change that would be caused by a project. Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area);
- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines Section 15126.2(d));
- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the Proposed Project would result in the long-term commitment of resources of the Project site to urban land use. Future development of the Project site would likely result in or contribute to the following irreversible environmental changes:

- Conversion of undeveloped land currently partially used as a vineyard. Approximately 16.9 acres of undeveloped land would be converted to urban uses, thus precluding other alternate land uses in the future.
- Irreversible consumption of energy and natural resources associated with the future use of the site.

Development of the Proposed Project would result in the commitment of the Project site to urban development, thereby precluding other uses for the lifespan of the Proposed Project. Restoration of the site to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

Resources that would be permanently and continually consumed by Proposed Project implementation include water, electricity, natural gas, and fossil fuels. Wood products, asphalt, and concrete would be used in construction along with gas and diesel fuel. With respect to operational activities, compliance with all applicable state and local building codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that resources are conserved to the maximum extent possible. The Proposed Project would

incorporate a number of sustainable practices that reduce the consumption of energy and water. Nonetheless, construction activities related to the Proposed Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline and diesel for automobiles and construction equipment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the Proposed Project. While the Proposed Project would result in the use, transport, storage, and disposal of minor amounts of hazardous materials during Proposed Project construction and operation, as described in Section 3.8, Hazards and Hazardous Materials, all such activities would comply with applicable local, state and federal laws related to the use, storage and transport of hazardous materials, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage. The Proposed Project itself does not include any uniquely hazardous uses that would require any special handling or storage. Further, the Proposed Project does not contain any industrial uses that would use or store acutely hazardous materials.

Implementation of the Proposed Project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts include the use of non-renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products and water resources during construction activities. Operations associated with future uses would also consume natural gas and electricity. These irreversible impacts, which are unavoidable consequences of urban growth, are described in detail in the appropriate sections of this Draft EIR (see Chapter 3).

4.4 GROWTH-INDUCING IMPACTS

As required by Section 15126.2(e) of the CEQA Guidelines, an EIR must discuss ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public

service, the provision of new access to an area, or a change in zoning or General Plan amendment approval), or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion). These circumstances are further described below.

- **Elimination of Obstacles to Growth**: This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity (e.g., constructing new roads or extending public utilities), or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- **Economic Effects**: This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth. Because the Project site is located within the City's Urban Limit Line and existing services are stubbed to the site, elimination of obstacles to growth is not a factor for this Proposed Project.

Removal of Infrastructure Limitations or Provision of Capacity

The elimination of physical obstacles to growth is considered a growth-inducing effect, although not necessarily a significant one.

The physical constraints to growth in the vicinity of the Project site include existing residential development to the south, southwest, west and southeast, which would preclude development immediately to the south, southwest, and southeast of the site, and existing office uses to the west, which would preclude inducing growth to the west of the site. Utility infrastructure is also stubbed to the site so no off-site connections would be required. The connection to existing City

infrastructure to serve the Project site would not induce growth in this area. Due to the location of the Project site within the City's Urban Limit Line and access to utilities, the Proposed Project would not eliminate any constraints that are currently obstacles to growth in this portion of the City that would hasten development of this area.

The City's Residential Growth Management System is no longer enforceable due to the passage of SB 330 (see Gov't Code sec. 66300) otherwise known as the Housing Crisis Act of 2019. This act prevents cities from establishing or implementing any provision that imposes a limit on the number of housing units that can be approved or constructed annually or for some other period. Therefore, the City can no longer limit residential growth to approximately two percent per year (no more than nine building permits for market rate housing could be issued each year), while providing for both market rate and affordable housing units (Municipal Code Chapter 17.152).

Economic Effects

Implementation of the Proposed Project would affect the local economy through the construction of new residences that would require construction workers during the short-term and would encourage people to either relocate or move to the City to take advantage of proximity to local shops, restaurants, and other amenities in nearby downtown.

Additional local employment can be generated through the multiplier effect, as discussed previously in this chapter. The multiplier effect tends to be greater in regions with larger, diverse economies due to a decrease in the requirement to import goods and services from outside the region.

Two different types of additional employment are tracked through the multiplier effect. *Indirect* employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with the Proposed Project. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates *induced* employment. Induced employment follows the economic effect beyond the expenditures of the residents within a project area to include jobs created by the stream of goods and services necessary to support residences within the Project site. When a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered *induced* employment.

For example, when an employee of the Proposed Project goes out to lunch, the person who serves the employee lunch holds a job that is *indirectly* related to the Proposed Project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered *induced* employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees and residents who support the employees of the Proposed Project.

Increased future employment generated by employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the City, Napa County, and beyond.

Impacts of Induced Growth

The growth induced directly and indirectly by the Proposed Project could contribute to the environmental impacts, discussed in Chapter 3, in the City and the County, as well as the greater regional area. Any such environmental effects, however, are too diffuse and speculative to predict or describe with any particularity.

Indirect and induced population growth in the City would further contribute to the loss of open space because it would encourage the conversion of undeveloped land to urban uses for additional housing and infrastructure. However, it is assumed this new growth would occur within areas of the City designated and zoned for development or planned for potential future urban development. The City has designated areas for future development in order to protect areas of active agriculture, also within the incorporated City but outside of the Urban Limit Line. Again, however, the particular open space that might get converted cannot be predicted with any certainty, all such conversions to urban land use would occur within areas planned for growth designated in the City's General Plan. Development of the property to the north of the Project site is outside of the City's Urban Limit Line and would require a general plan amendment and compliance with CEQA to evaluate potential impacts.

In summary, although the Proposed Project can be said to induce growth, the consequences of such growth-inducement are too speculative to meaningfully predict and, furthermore, due to the designation of the Project site for future residential development in the City's 1993 General Plan and 2019 General Plan[1], implementation of the Proposed Project would not be considered growth inducing. Growth-inducing effects are therefore considered **less than significant.**

[1] Also known as the "St Helena General Plan Update 2040," the 2019 is referred to in this EIR by the year of its adoption.

4.5 ENERGY USAGE

Measures intended to reduce unnecessary or inefficient use of resources or energy consumption are incorporated into the Title 24 and CALGreen standards, which the Proposed Project would be required to comply with. Implementation of the Proposed Project would result in the commitment of limited, renewable resources such as lumber and water. In addition, development allowed under both the 1993 General Plan and the 2019 General Plan would irretrievably commit nonrenewable resources for the construction and maintenance of buildings, infrastructure, and roadways. These non-renewable resources include mined materials such as sand, gravel, steel, copper, and other metals. The City recognized that buildout of the General Plan also represents a long-term commitment to the consumption of fossil fuels, natural gas, diesel and gasoline. Increased energy demands would be used for construction, lighting, heating, and cooling of residences, and transportation of people within, to, and from the Project site. The Proposed Project's energy requirements are analyzed in Section 3.15 of this Draft EIR. The analysis determined that the Proposed Project's use of energy resources, including electricity, natural gas, and petroleum, would not be wasteful, inefficient or unnecessary during Proposed Project construction or operation. Please see Section 3.15, Energy, for more information on energy demands of the Proposed Project.

4.6 CUMULATIVE IMPACTS

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the Proposed Project. This assessment involves examining Proposed-Project-related effects on the environment in the context of similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. As indicated in the CEQA Guidelines, the discussion of cumulative impacts need not provide the same level of detail as Proposed-Project-related impacts. The discussion should be guided by "standards of practicality and reasonableness" (CEQA Guidelines, Section 15130(b)). Although project-related impacts can be individually minor, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed (14 CCR Section 15130(a)). Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable probable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Cumulative Context

To ensure an adequate discussion of cumulative impacts is included in an EIR, CEQA allows the lead agency to use either a list of past, present, and probable future projects (including

those projects outside of the control of the lead agency), or projections included in an adopted local, regional, or statewide plan like a general plan (CEQA Guidelines, Section 15130(b)(1)). The general cumulative impact context for evaluating cumulative impacts for the majority of the technical issue areas evaluated in Chapter 3 of this Draft EIR considers buildout of the City's 1993 General Plan because this General Plan was in effect when the Proposed Project application was deemed complete in September 2011, or evaluates the potential loss of resources on a much broader, regional scale. The cumulative impact analyses in this Draft EIR thus do not rely on any list of specific pending, or reasonably foreseeable development proposals in the general vicinity of the Project site or within the City. The City updated the General Plan in 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR also evaluates consistency with the 2019 General Plan for informational purposes and the cumulative analysis will note any changes, if relevant between buildout assumptions under the 1993 General Plan as compared to the 2019 General Plan.

It is important to note that the basis of the cumulative analysis varies by technical area. For example, traffic and traffic-related air emissions and noise analyses assume development that is planned and/or anticipated in the City, as well as the surrounding unincorporated area, because each contributes to traffic on local and regional roadways that is quantifiable. Operational air quality impacts are evaluated against conditions in the City and surrounding areas within the San Francisco Bay Area Air Basin. The technical sections in Chapter 3 evaluate the Proposed Project's cumulative impacts at the end of the impact analysis. The cumulative analysis in each of the technical sections evaluates the Proposed Project's contribution to the cumulative scenario to determine if the Proposed Project's contribution to an existing significant cumulative impact would be considerable resulting in an impact. A description of the cumulative context for each issue area evaluated is included in the cumulative impacts at the end of each technical section of Chapter 3.

CHAPTER 5
PROJECT ALTERNATIVES

5.0 INTRODUCTION

The purpose of the alternatives evaluation in an Environmental Impact Report (EIR), as stated in Section 15126.6(c) of the California Environmental Quality Act (CEQA) Guidelines, is to ensure that "[t]he range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" identified under the proposed project. Pursuant to CEQA Guidelines, Section 15126.6, alternatives to the proposed Hunter Subdivision Project (Proposed Project) are presented in this Draft EIR to provide the public, public agencies and decision makers with a range of possible alternatives to the Proposed Project to consider. The CEQA Guidelines state that an EIR shall describe a *reasonable* range of alternatives that would avoid or substantially lessen any significant effects of the project but need not consider every conceivable alternative. The CEQA Guidelines further state that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (CEQA Guidelines, Section 15126.6(b)). Therefore, an EIR must describe a range of reasonable alternatives to the proposed project (or to its location) that could feasibly attain most of the basic objectives of the project. The feasibility of an alternative may be determined based on a variety of factors, including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines, Section 15126.6(f)(1)).

Alternatives in an EIR must be potentially feasible (CEQA Guidelines, Section 15126.6(a)). Agency decision makers ultimately decide what is "actually feasible." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 981 (*CNPS*).) Under CEQA, "feasible" is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, Section 15364). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1506-1509; *CNPS*, *supra*, 177 Cal. App. 4th at p. 1001; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165, 1166.) Moreover, "'feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.)

An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project. The alternatives discussion is intended to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives as listed in Chapter 2, Project Description, and in this chapter of this Draft EIR.

The lead agency's decision-making body, in this case the St. Helena City Council, has the discretion to select a Proposed Project alternative in lieu of the Proposed Project. If this were to occur, the City Council would need to ensure that the level of detail included in the alternatives analysis is adequate and that there would not be any new or significant impacts as a result of selecting the alternative. The required Findings of Fact and Mitigation Monitoring Plan (MMP) would need to be prepared that identifies the alternative as the project selected for approval. It is anticipated that if one of the Proposed Project alternatives is selected, the mitigation measures identified for the Proposed Project would not change and would still be required and, depending on the alternative selected, may require additional mitigation measures where impacts are more severe than the Proposed Project.

This chapter identifies the Proposed Project objectives, describes the Proposed Project alternatives, and evaluates the comparative effects of the alternatives relative to the Proposed Project. As required under Section 15126.6(e) of the CEQA Guidelines, the environmentally superior alternative is identified and included at the end of this chapter.

Significant and Unavoidable Impacts

The Proposed Project would result in the following significant and unavoidable transportation impacts. There is no feasible mitigation available to reduce these impacts to less than significant.

- The Proposed Project would generate an increase in project-specific vehicle miles traveled (VMT) that would exceed the Office of Planning and Research's (OPRs) threshold of 15% below that of existing development.
- Under cumulative conditions the Proposed Project would generate an increase in VMT that would exceed the threshold.

Project Objectives

Pursuant to CEQA Guidelines, Section 15124(b), a clear statement of project objectives is required. The Proposed Project includes the following project objectives:

- Subdivide the site consistent with the City's General Plan and Zoning for the site to accommodate residential development.
- Provide opportunities to develop a variety of housing types, including multi-family, single-family, and accessory dwelling units, affordable to a range of incomes including, very low, low and moderate-income households.
- Provide opportunities to contribute to the provision of workforce and affordable housing consistent with the City's adopted Housing Element and the Regional Housing Needs Assessment (RHNA) approved by the Association of Bay Area Governments (ABAG).
- Minimize traffic-related environmental impacts, such as noise, air quality and greenhouse gases by lowering commute patterns for St. Helena workers by providing more local housing opportunities.
- Support alternative transportation by providing a pedestrian and bicycle linkages through St. Helena, eventually connecting the regional Vine Trail from Calistoga to the Vallejo Ferry.
- Exceed the City's green building ordinance (Municipal Code Chapter 15.53) and incorporate sustainable design features including water conservation measures, drought resistant landscaping with low flow watering systems, south and west side tree placement to reduce reliance on air conditioning units, and pre-wiring for photovoltaic systems.
- Implement the General Plan Circulation Element by completing the planned extension of Starr Avenue and the partial planned extension of Adams Street from where Adams Street terminates to connect to the Project site.
- Minimize City water use by continuing the use of an existing on-site water well for irrigation of Project landscaped areas.

Alternatives Considered but Dismissed from Further Consideration

As noted previously, the purpose of an alternatives analysis is to develop alternatives to the Proposed Project that substantially lessen at least one of the significant environmental effects identified as a result of the Project, while still meeting most, if not all, of the basic Proposed Project objectives. Proposed Project alternatives that would lessen the severity of some of the impacts identified under the Proposed Project are addressed later in this chapter.

One of the requirements for an alternatives analysis that is set forth in the CEQA Guidelines is identification of alternatives that were considered by the lead agency but rejected as infeasible

during the scoping process. As stated in Section 15126.6(c) of the CEQA Guidelines, the EIR should briefly explain the reasons underlying this determination. Among the factors that may be used to eliminate alternatives from detailed consideration in the EIR are:

(i) Failure to meet most of the basic project objectives,

(ii) Infeasibility, or

(iii) Inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6(c))

Section 15126.6(f)(1) of the CEQA Guidelines states that, "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." However, as stated in this subsection, no single factor establishes a fixed limit on the scope of reasonable alternatives.

An alternate site or off-site alternative was determined to be infeasible for the Proposed Project because the Project applicant owns the Project site and it would not be feasible to acquire, control or otherwise have access to a new property within the City large enough to accommodate the Proposed Project. Therefore, an off-site or alternate Proposed Project location was dismissed from further evaluation.

A reduced density alternative was considered but dismissed because it does not avoid or reduce any potentially significant impacts and would not avoid any health and safety concerns required for the City to make findings under Section 15041 of the CEQA Guidelines and Government Code Section 65589.5(j).

Lastly, a mixed-use alternative that includes commercial uses in addition to residential was also considered and dismissed because it would not be consistent with the underlying land use designation and zoning and would require a General Plan Amendment and rezone. Therefore, this alternative was considered but ultimately dismissed from further review.

5.1 ALTERNATIVES CONSIDERED IN THIS EIR

This section provides a description of the alternatives to the Proposed Project analyzed in this Draft EIR and evaluates how specific impacts differ in severity from those associated with the Proposed Project. For purposes of this analysis, the potentially significant impacts identified under the alternatives analysis are assumed to be fully mitigated through compliance with mitigation measures identified in the Executive Summary chapter in Table ES-1 and in Sections

3.1 through 3.15 included in Chapter 3, which contains the environmental analysis of the Proposed Project.

The Proposed Project alternatives identified herein address the significant construction-related and operational impacts (before mitigation) identified for the Proposed Project including aesthetics/visual resources, biological resources, cultural resources, geology and soils, noise and vibration, and traffic and circulation. Thus, the alternatives developed for the Proposed Project contemplate a change in land uses to address these impacts. In many instances, the impacts are virtually identical to the Proposed Project and are described as such.

This Draft EIR has incorporated a reasonable range of Proposed Project alternatives that, collectively, attain a majority of the Proposed Project objectives in a reasonable manner while reducing the severity of the significant impacts (before mitigation) identified under the Proposed Project.

CEQA Guidelines Section 15126.6(e) requires that an EIR include an alternative that describes what would reasonably be expected to occur on the property in the foreseeable future if the Proposed Project were not approved, based on current plans and consistent with available infrastructure and community services (i.e., "No Project" alternative). For projects other than a land use plan (for example, a development project on an identifiable property), the "No Project" alternative is considered to be a circumstance under which the project does not proceed. (CEQA Guidelines Section 15126.6(e)(3)(A-B)). "If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. … [W]here failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." Because the Proposed Project is on land that is designated and zoned for housing, it would be artificial to assume that the Project site's existing physical environment would be preserved by rejection of the Proposed Project. Therefore, this EIR includes two "No Project" alternative analyses: (1) the scenario where the Project does not proceed and the Project site remains in its existing undeveloped condition is evaluated as the "No Project/No Development Alternative," and (2) the potential scenario where the Project site is used and developed in accordance with the City's existing land use plans (2019 General Plan) is evaluated as the "No Project/General Plan Alternative."

The alternatives to the Proposed Project analyzed in this Draft EIR are as follows:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/General Plan

- Alternative 3: Park/Open Space Preserve
- Alternative 4: Increased Density/Affordable Housing

Alternative 1: No Project/No Development Alternative

Description

The No Project/No Development Alternative considers the effects of forgoing the Project entirely and leaving the Project site in its current undeveloped condition. Under the No Project/No Development Alternative, the Proposed Project would not be approved or constructed. Under this alternative, the Project site would retain its current land use designation and zoning consistent with both the 1993 General Plan and the City's current 2019 General Plan. The No Project/No Development Alternative allows decision-makers to compare the impacts of the Proposed Project to retaining the existing condition of the site. The No Project/No Development Alternative describes the environmental conditions that exist at the time that the environmental analysis commenced (CEQA Guidelines, Section 15126.6 (e)(2)).

This alternative would not meet the City's General Plan policies or Project objectives, or state policies of promoting development of new housing, including affordable housing. For policy reasons, and because the No Project/No Development Alternative would fail to meet any of the basic objectives of the Project or of the City's General Plan, this alternative could be rejected in favor of the Proposed Project.

Comparative Analysis of Environmental Effects

The No Project/No Development Alternative would produce no changes on the Project site, because the site would remain in its current undeveloped condition, effectively eliminating the Project impacts discussed in this Draft EIR.

There would be no change to visual conditions at the site, so no mitigation would be required related to spillover light. There would be no air emissions associated with Project construction and operation and there would be no increase of any emissions, including ozone, $PM_{2.5}$, or $PM_{10,}$ which are designated nonattainment in the San Francisco Bay Area Air Basin (SFBAAB), that could substantially contribute to a potential violation of applicable air quality standards or to nonattainment conditions. There would be no increase in greenhouse gases (GHG), energy, or demand for public service or utilities. There would be no land disturbance so there would be no impacts to biological, cultural, or geological resources, or any impacts related to hazardous materials, so no mitigation would be required. Additionally, there would be no changes in ambient noise levels associated with Project construction and operation.

Lastly, there would be no increase in the number of vehicles accessing the site and on area roadways and intersections. Thus, there would be no impact associated with the Project's increase in VMT.

Ability to Meet Proposed Project Objectives

The No Project/No Development Alternative would not achieve any of the Project objectives because development would not occur.

Alternative 2: No Project/General Plan Alternative

Description

Under this alternative, it is assumed the Project would be developed consistent with the underlying MDR land use designation and MR zoning which allows development of the Project site with residential uses up to a maximum density of 12 dwelling units/acre (du/ac) under the 1993 General Plan MDR designation which was revised to 16 du/ac under the 2019 General Plan consistent with the MR zoning, which permits a maximum density of 16 du/ac. For the purposes of this alternative a density of 9 du/ac was assumed for a total of 152 single-family residential units. Based on the number of units this alternative would result in a population of 372 residents, an increase of 159 residents as compared to the Project. It is assumed Starr Avenue and Adams Street would both be extended to connect to the Project site and the street and lot layout would be very similar to the Project with the exception of the 3.4-acre portion of the site currently designated for multifamily units (Lot 52). This portion of the Project site would be configured to accommodate single-family residences.

Comparative Analysis of Environmental Effects

Due to the denser development and increased number of residential units, it is anticipated that impacts associated with air quality, greenhouse gases, energy, public utilities, population and housing, and noise would be increased. It is anticipated the same mitigation measures for impacts to nesting birds and bats (biological) and the potential to unearth any previously unknown historic, archeological, or paleontological resource (cultural, geology and soils), potential soil contamination from agricultural chemical residues (hazards), and noise from construction equipment would be still be required. The potential impacts are compared below.

Impacts Identified as Being the Same or Similar to the Proposed Project

Under this alternative, impacts to the loss of agricultural land would remain less than significant, the same as the Proposed Project because the entire site would be developed. There would be

an increase in lights, the same as the Proposed Project, so mitigation would be required to address spillover light (AES-1).

Biological impacts related to special-status species, riparian habitat, sensitive natural communities, migratory wildlife corridors, wildlife nursery sites, tree preservation policies, and any other conservation plans would remain the same as the Proposed Project. This alternative would still require implementation of Mitigation Measures BIO-1 through BIO-3 to minimize impacts to bats and nesting birds and erosion impacts. This alternative would also still require development over the existing seasonal wetlands in order to accommodate single-family development. Thus, impacts to the seasonal wetlands would total 0.7 acres, the same as the Proposed Project.

Cultural and geological impacts would be similar to the Proposed Project. Ground disturbance would be performed in the same development area and mitigation would still be required to ensure that any historical, archaeological, and paleontological impacts are less than significant (Mitigation Measures CUL-1 and GEO-2). A design-level geotechnical report would also be required, per Mitigation Measure GEO-1 to ensure the homes are constructed consistent with any site-specific grading or foundation recommendations.

Because this alternative would still involve disturbance of site soils, soils testing for agricultural chemicals of concern would still be required as a condition of approval for construction and grading permits. Mitigation would still be required (Mitigation Measure HAZ-1) to ensure potential impacts would be less than significant.

It is assumed Starr Avenue and Adams Street would both be extended to connect to the Project site and the street and lot layout would be very similar to the Proposed Project with the exception of the 3.4-acre portion of the site currently designated for multifamily units. Internal roadways would be similar and still be designed consistent with all applicable City street design criteria and impacts would remain less than significant.

Impacts Identified as Being Less Severe than the Proposed Project

No impacts were identified as being less severe than the Proposed Project.

Impacts Identified as Being More Severe than the Proposed Project

The No Project/General Plan Alternative would include 152 single-family residential units and no multifamily units. This alternative would result in a population of 372 residents, an increase of 159 residents as compared to the Proposed Project. While air quality impacts would be slightly more severe, they would still be less than significant and would not require any mitigation. This would be the same for greenhouse gas emissions impacts and energy impacts.

Noise from construction equipment would be greater from the Proposed Project due to the increased amount of development and the nature of construction of single-family residences. Construction equipment would still need to be equipped with suitable exhaust and intake silencers, and stationary construction equipment would need to be located away from adjacent residential property boundaries as is practical, in accordance with Mitigation Measure NOI-1. This would ensure that noise impacts related to construction would still be less than significant. Noise impacts from operation as well as vehicle trips would also be slightly greater but would not be substantial enough to constitute significant impacts.

The increase in 159 residents would also increase the demand for water supply, wastewater conveyance and treatment, schools, and solid waste disposal. However, the increase in severity would not be great enough to constitute significant impacts. These impacts are described in further detail below.

For the Proposed Project, the water demand for single-family residences assumes eight persons per home, based on the City's demand factor of four bedrooms and two persons per bedroom for the market rate homes and two bedrooms for the affordable housing units, based on the Preliminary Water Calculations prepared for the Proposed Project (see Appendix J). The projected residential water demand for this alternative is shown in Table 5-1 below. With the City's demand factor assumption of eight occupants per single-family residence, the water demand calculation assumes this alternative would result in a total anticipated water demand of approximately 47.6 acre-feet (AF) per year. Water demand is expected to increase, but the same as the Proposed Project any development is required to offset its increase in water in compliance with the City's Water Neutral Ordinance. The same as the Proposed Project, all units would be designed to include efficient and lower-water-using fixtures and appliances and irrigation systems consistent with Green Building Standards Code (CAL Green Code) that requires the installation of water-efficient indoor infrastructure to conserve water. The landscape irrigation demand under this alternative would comply with the City's Model Water Efficient Landscape Ordinance (MWELO) as well. In addition, irrigation of public landscaping would be offset through planting of drought tolerant plants, water conservation measures, and use of the on-site well, the same as the Proposed Project.

Table 5-1
Alternative 2: No Project/General Plan Alternative Residential Water Demand

Fixture	Flow Rate gal/min or gal/flush	Flow Duration (min., flush, load, etc)	Daily Uses per Occupant	Number of Occupants[1]	Gallons per Day	Acre-feet Per Year
Showerheads	2	8	1	1,216	19,456	21.79
Sink Faucets	1.5	0.25	3	1,216	1,368	1.53
Kitchen Faucet	1.5	4	1	1,216	7,296	8.17
Toilet	1.3	1	3	1,216	4,742.4	5.31

Table 5-1
Alternative 2: No Project/General Plan Alternative Residential Water Demand

Fixture	Flow Rate gal/min or gal/flush	Flow Duration (min., flush, load, etc)	Daily Uses per Occupant	Number of Occupants[1]	Gallons per Day	Acre-feet Per Year
Clothes Washer	19.7	1	0.37	1,216	8,863.424	9.93
Dish Washer	6.3	1	0.1	1,216	766.08	0.86
				Total Water Demand	42,491.9	47.59

Note:
[1] For the purposes of determining the Proposed Project's water demand, the City's demand factor is based on the number of bedrooms and persons per bedroom, which differs from the City's persons per household (PPH) to determine the number of residents a residential project would generate, which is 2.45 PPH.
Source: Appendix J.

The water demand of 47.6 AF per year would also translate to 47.6 AF per year of wastewater demand, also expected to be higher than the Proposed Project but would not require mitigation.

This alternative is also expected to result in a slight increase in solid waste generation (see Table 5-2). The solid waste generation rates used for the Proposed Project are based on the U.S. Environmental Protection Agency (EPA) estimate of 0.0033 tons/day/dwelling unit for multi-family residential homes. This would result in a solid waste generation estimate of 0.234 tons per day, 0.277 tons greater than the Proposed Project's estimate. However, the amount of solid waste generated during operation would still be much less than the unused daily capacity of the Clover Flat landfill (425 tons per day), and therefore would not exceed the capacity of the landfill. The impact would remain less than significant and would not require mitigation.

Table 5-2
Alternative 2: No Project/No Action Alternative Projected Solid Waste Generation

Land Use	Generation Rate (tons/day/unit)	Waste Disposed (tons per day)
152 Single-family Residential Units	0.0033	0.502
	Total	0.502

Source: CalRecycle 2018.

Table 5-3 considers the increase in school-age children attending primary, elementary, middle and high schools. Student generation rates were derived from the SHUSD Facility Master Plan, which outlines expected growth in demand for school facilities associated with projected development and plans how to fund and respond to such growth. This alternative is expected to generate approximately 35 students in total, an increase of 7 students compared to the Proposed Project. This increase would not exceed the current capacity of schools within the SHUSD, and development under this alternative would still be required to pay the necessary school impact fees.

Table 5-3
Alternative 2: No Project/No Action Alternative Student Generation

Grades	Student Generation Rate (per total number of units)	Students Generated
K-2	0.058	8.816
3-5	0.080	12.16
6-8	0.088	13.38
9-12	0.088	15.84
	Total	57

Source: SHUSD 2010.

Because of the increased number of residential units, the Project's VMT would be greater than the Proposed Project and the impact would remain significant and unavoidable.

Ability to Meet Proposed Project Objectives

The No Project/General Plan Alternative would develop the site consistent with the underlying land use designation and zoning assuming ag a density of 9 du/ac and would complete the planned extensions of Adams Street and Starr Avenue. However, this alternative would not achieve the Proposed Project objective of developing a variety of housing types, including multifamily housing and ADUs. Housing would be less affordable to a range of incomes since development would be limited to single-family homes. This alternative would not minimize traffic-related environmental impacts due to the increase in units and residents. Overall, this alternative would not meet most of the Proposed Project objectives.

Alternative 3: Park/Open Space Preserve Alternative

Description

The Park Preserve/Open Space Alternative includes an approximately 1-acre park/open space that would preserve a majority of the on-site wetlands to help lessen impacts to seasonal wetlands (Impact 3.4-2), as shown on Figure 5-1, Park Preserve Alternative. To accommodate the park three lots would need to be removed (Lots 44, 45, 46) and vegetated swales to capture runoff would be located adjacent to developed areas. It is anticipated the park would be landscaped with native plants and may include a small tot lot or be left as passive open space. The remaining approximately 16-acres would be developed with approximately the same number of residential units as the Proposed Project and would maintain a density of 5.1 du/ac. The single-family lots would be slightly smaller than the Proposed Project and there could be an increase in the number of multifamily units. Site access and internal roads would essentially be the same as the Proposed Project. The same number of residents, 213, is conservatively assumed under this alternative, the same as the Proposed Project.

Comparative Analysis of Environmental Effects

Disturbance to the Project site to accommodate development would be slightly less as compared to the Proposed Project. Even though this alternative would result in a slightly smaller development footprint, it is anticipated construction-related impacts associated with potential impacts to biological, cultural, geological resources, hazardous materials, and noise would essentially remain the same as the Proposed Project, less-than-significant with mitigation. It is anticipated the same mitigation measures for impacts to nesting birds (biological) and the potential to unearth any previously unknown historic, archeological, or paleontological resource (cultural, geology and soils), and potential soil contamination from agricultural chemical residues (hazards) would be still be required. While there would still be impacts to two seasonal wetlands (0.006 of an acre), this alternative would minimize impacts to the 0.065 acre of seasonal wetlands at the site. The potential impacts are compared below.

Impacts Identified as Being the Same or Similar to the Proposed Project

The change in visual quality would be the same as the Proposed Project and the impact would remain less than significant. There would be an increase in lights, the same as the Proposed Project, so mitigation would be required to address spillover light (AES-1). Under this alternative, impacts to the loss of agricultural land would also remain less than significant.

Biological impacts related to special-status species, riparian habitat, sensitive natural communities, migratory wildlife corridors, wildlife nursery sites, tree preservation policies, and any other conservation plans would remain the same as the Proposed Project. This alternative would still require implementation of Mitigation Measures BIO-1 through BIO-3 to minimize impacts to bats and nesting birds and erosion impacts. Impacts related to jurisdictional wetlands are described further below, under “Impacts Identified as Being Less Severe than the Proposed Project.”

Cultural and geological impacts would be similar to the Proposed Project. The extent of ground-disturbance would be similar, albeit slightly less, and mitigation would still be required to ensure that any historical, archaeological, and paleontological impacts are less than significant (Mitigation Measures CUL-1 and GEO-2). A design-level geotechnical report would also be required, per Mitigation Measure GEO-1 to ensure the homes are constructed consistent with any site-specific grading or foundation recommendations.

Because this alternative would still involve disturbance of site soils, soils testing for agricultural chemicals of concern would still be required as a condition of approval for construction and grading permits. Mitigation would still be required (Mitigation Measure HAZ-1) to ensure potential impacts would be less than significant.

Noise from construction equipment would likely be similar to the Proposed Project. Construction equipment would still need to be equipped with suitable exhaust and intake silencers, and stationary construction equipment would need to be located away from adjacent residential property boundaries as is practical, in accordance with Mitigation Measure NOI-1. This would ensure that noise impacts would still be less than significant.

Under this alternative, impacts associated with air and GHG emissions due to construction and operation and increase in demand for public services, utilities and energy would remain less than significant, the same as the Proposed Project.

The potable water and landscape irrigation demand under this alternative would be very similar to the Proposed Project and would comply with the City's MWELO and Water Neutrality Ordinance and would be required to off-set the increase in water demand. Water and wastewater impacts would be less than significant, the same as the Proposed Project.

Because the same number of units would be developed the impact to VMT would remain the same as the Proposed Project, significant and unavoidable. Internal roadways would remain the same and still be designed consistent with all applicable City street design criteria and impacts would remain less than significant.

Impacts Identified as Being Less Severe than the Proposed Project

The Project site currently supports four seasonal wetlands for 0.07 acre and two agricultural ditches, as shown on Figure 3.4-2 in Section 3.4, Biological Resources. These features are anticipated to meet the criteria for jurisdictional waters of the United States.

With implementation of this alternative, the impact to seasonal wetlands would be less severe than the Proposed Project. The Park Preserve/Open Space Alternative includes an approximately 1-acre park that would preserve two of the larger wetland features to help reduce Impact 3.4-2. The area of impacted wetlands would be reduced to .006 acres rather than 0.07 acres from the Proposed Project. In order to ensure viability of the wetlands, vegetated swales would be located between the park and any developed uses. The swales would capture runoff from adjacent developed areas in order to maintain the water quality of the wetlands.

Impacts Identified as Being More Severe than the Proposed Project

No impacts were identified as being more severe than the Proposed Project.

Relationship to Proposed Project Objectives

The Park Preserve/Open Space Alternative would still manage to achieve all stated Proposed Project objectives. The main changes from this alternative would be a small decrease in the residential footprint and the avoidance of seasonal wetlands at the Project site. This alternative

would still subdivide the site consistent with the underlying land use designation and zoning, complete the planned extensions of Adams Street and Starr Avenue, provide a variety of housing types, including affordable housing, and provide more local housing opportunities.

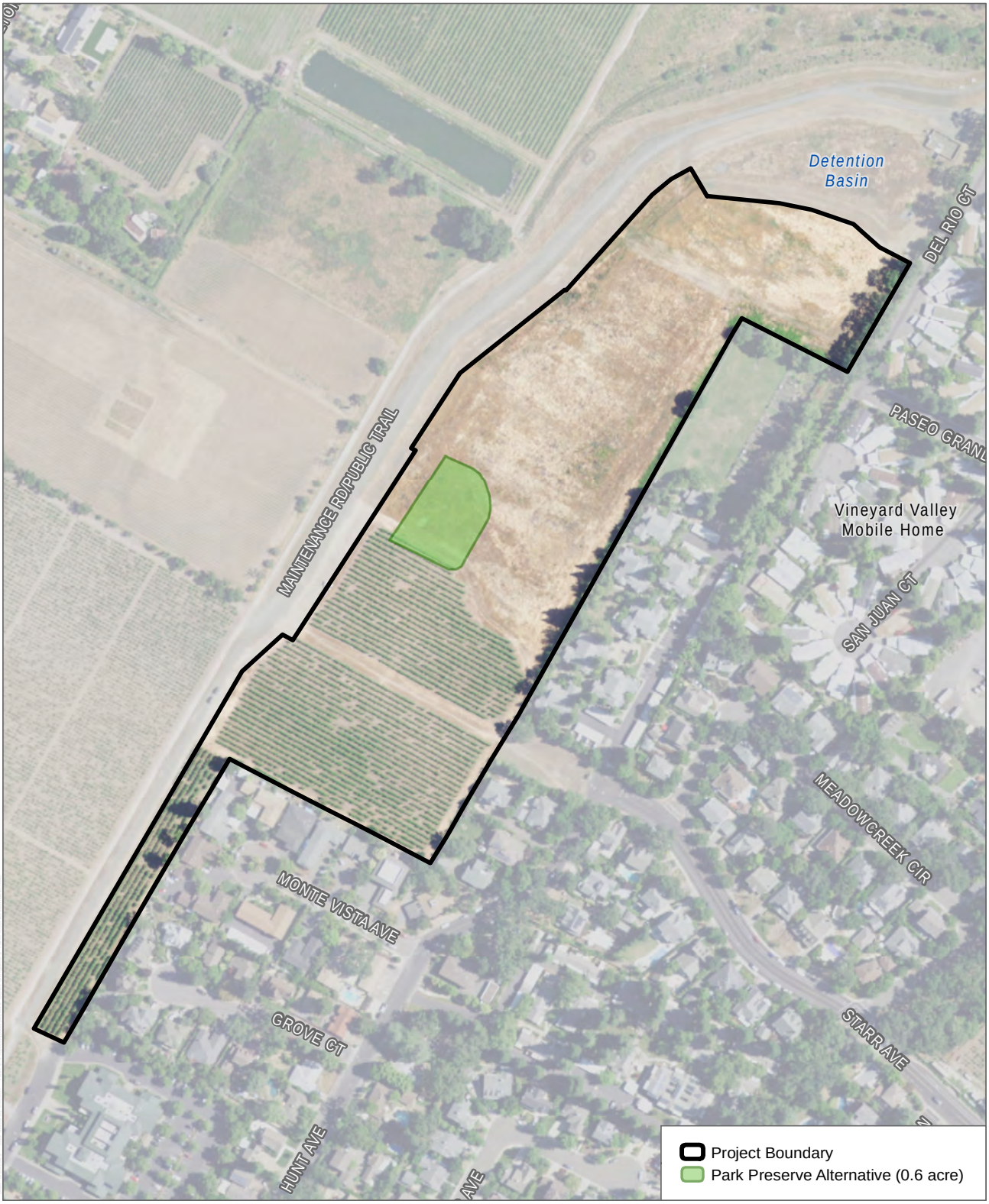
Alternative 4: Increased Density/Affordable Housing Alternative

Description

The Increased Density/Affordable Housing Alternative includes the approximately 1-acre park to preserve a majority of the on-site seasonal wetlands with the remaining approximately 16-acres designated for up to 180 affordable housing units, assuming a density of 11.3 dwelling units per acre (du/ac) under the existing Medium Density Residential (MDR) land use designation (current zoning allows for a maximum density of 16.0 du/ac). The units would be attached housing (duplex or triplex) and would be 100% affordable. It is assumed buildings would be no taller than 30-feet, consistent with the underlying MR zoning. Under the technical guidance issued by the Office of Planning and Research, a 100% affordable housing project is exempt from the requirement to calculate VMT. Site access and internal roads would essentially be the same as the Proposed Project. Using the City's persons per household factor of 2.45 people per unit for medium/higher density residential land uses this alternative would generate 441 residents, an increase of 194 residents as compared to the Proposed Project.

Comparative Analysis of Environmental Effects

The Proposed Project includes a Tentative Subdivision Map to create 51 market-rate single-family residences (with ADUs on 11 of these lots) and 25 attached multifamily units. The Increased Density/Affordable Housing Alternative would increase the density from 5.1 du/ac to a density of 11.3 du/ac. All units would be attached housing (duplex or triplex) and would be 100% affordable. Due to the increase in residents, it is anticipated the increase in air pollutants and GHG emissions associated with operation would be slightly higher than the Proposed Project due to the increase in vehicle trips, as well as the demand for water supply, wastewater conveyance and treatment, schools, solid waste disposal, and energy. Construction and footprint-related impacts associated with biological, cultural, and geological resources, hazardous materials, and noise would essentially be the same as the Proposed Project, as these impacts would be less-than-significant with mitigation. It is anticipated the same mitigation measures for impacts to bats, and nesting birds (biological) and the potential to unearth any previously unknown historic, archeological, or paleontological resource (cultural, geology and soils), and potential soil contamination from agricultural chemical residues (hazards) would be still be required. This alternative would minimize impacts to on-site seasonal wetlands with inclusion of the 1-acre park, similar to the Park Preserve/Open Space Alternative. The potential impacts are compared below.



SOURCE: USDA 2016, USGS 2018, Napa County 2015

DUDEK

0 125 250 Feet

FIGURE 5-1

Park Preserve Alternative

Hunter Subdivision Project

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Impacts Identified as Being the Same or Similar to the Proposed Project

Under this alternative, impacts to the loss of agricultural land would remain less than significant, the same as the Proposed Project. The change in visual quality would be greater than the Proposed Project but essentially the impact would remain less than significant. The increase in lighting associated with development would also be the same as the Proposed Project and would require mitigation (AES-1).

Biological impacts related to special-status species, riparian habitat, sensitive natural communities, migratory wildlife corridors, wildlife nursery sites, tree preservation policies, and any other conservation plans would remain the same as the Proposed Project. This alternative would still require implementation of Mitigation Measures BIO-1 through BIO-3 to minimize impacts to bats and nesting birds and erosion impacts. Impacts related to jurisdictional wetlands are described further below, under “Impacts Identified as Being Less Severe than the Proposed Project.”

Cultural and geological impacts would be similar to the Proposed Project. While the extent of ground disturbance may differ due to construction of more duplex/triplex housing essentially the same area of disturbance would occur and mitigation would still be required to ensure that any historical, archaeological, and paleontological impacts are less than significant (Mitigation Measures CUL-1 and GEO-2). A design-level geotechnical report would also be required, per Mitigation Measure GEO-1 to ensure the homes are constructed consistent with any site-specific grading or foundation recommendations.

Under this alternative, the Project would still be required to perform soils testing for agricultural chemicals of concern as a condition of approval for construction and grading permits for the Project site. Mitigation would still be required (Mitigation Measure HAZ-1) to ensure potential impacts would be less than significant.

Impacts Identified as Being Less Severe than the Proposed Project

The impact to jurisdictional wetlands under this alternative would be less severe than the Proposed Project. This alternative would include an approximately 1-acre park, as described in the Park Preserve/Open Space Alternative that would preserve a majority of the on-site wetlands to help reduce Impact 3.4-2. The area of impacted wetlands would be 0.006 of an acre rather than 0.07 acre under the Proposed Project.

Because affordable housing projects are not required to evaluate VMT, there would be no impact to an increase in VMT eliminating the significant and unavoidable Project impact.

Impacts Identified as Being More Severe than the Proposed Project

Under this alternative the density would increase from 5.1 du/ac under the Proposed Project to 11.3.0 du/ac. As discussed above, this alternative would generate 441 residents, an increase of 228 residents as compared to the Proposed Project.

Due to the increase in residents, it is anticipated the increase in air pollutants associated with operation would be slightly higher than the Proposed Project due to the increase in vehicle trips and emissions from the increased number of residents. While air quality impacts would be slightly more severe, they would still be less than significant and would not require any mitigation. This would be the same for greenhouse gas emissions impacts and energy impacts. While the severity of impacts would slightly increase, they would still remain less than significant and would not require mitigation to address.

Noise from construction equipment would be greater from the Proposed Project due to the nature of construction of single-family residences versus attached duplex/triplex housing. Construction equipment would still need to be equipped with suitable exhaust and intake silencers, and stationary construction equipment would need to be located away from adjacent residential property boundaries as is practical, in accordance with Mitigation Measure NOI-1. This would ensure that noise impacts related to construction would still be less than significant. Noise impacts from operation as well as vehicle trips would also be slightly greater but would not be substantial enough to constitute significant impacts.

The increase in 228 residents would also increase the demand for water supply, wastewater conveyance and treatment, schools, and solid waste disposal. However, the increase in severity would not be great enough to constitute significant impacts. These impacts are described in further detail below.

For the Proposed Project, the water demand for single family residences assumes eight (8) persons per home, based on the City's demand factor of four bedrooms and two persons per bedroom for the market rate homes and two bedrooms for the affordable housing units, based on the Preliminary Water Calculations prepared for the Project (see Appendix J). The projected residential water demand for this alternative is shown in Table 5-4 below. The water demand calculation for this alternative assumes the 180 attached duplex and triplex units would be equally divided between 2-bedroom, 3-bedroom, and 4-bedroom units. With the City's demand factor assumption of two occupants per bedroom, the water demand calculation assumes this alternative would result in a total anticipated water demand of approximately 42.3 acre-feet (AF) per year. Water demand is expected to increase, but the same as the Proposed Project any development is required to offset its increase in water in compliance with the City's Water Neutral Ordinance. The same as the Proposed Project, all units would be designed to include

efficient and lower-water-using fixtures and appliances and irrigation systems consistent with Green Building Standards Code (CAL Green Code) that requires the installation of water-efficient indoor infrastructure to conserve water. The landscape irrigation demand under this alternative would comply with the City's Model Water Efficient Landscape Ordinance and possibly may be lower than the Proposed Project's irrigation demand because there would be no private lawns. In addition, irrigation of public landscaping would be offset through planting of drought tolerant plants, water conservation measures, and use of the on-site well, the same as the Proposed Project.

Table 5-4
Alternative 4: Increased Density/Affordable Housing Alternative
Residential Water Demand

Fixture	Flow Rate gal/min or gal/flush	Flow Duration (min., flush, load, etc)	Daily Uses per Occupant	Number of Occupants[1]	Gallons per Day	Acre-feet Per Year
Showerheads	2	8	1	1,080	17,280	19.37
Sink Faucets	1.5	0.25	3	1,080	1,215	1.36
Kitchen Faucet	1.5	4	1	1,080	6,480	7.26
Toilet	1.3	1	3	1,080	4,212	4.72
Clothes Washer	19.7	1	0.37	1,080	7,872.12	8.82
Dish Washer	6.3	1	0.1	1,080	680.4	0.76
				Total Water Demand	37,739.52	42.3

Note:
[1] For the purposes of determining the Proposed Project's water demand, the City's demand factor is based on the number of bedrooms and persons per bedroom, which differs from the City's persons per household (PPH) to determine the number of residents a residential project would generate, which is 2.45 PPH.
Source: Appendix J.

The water demand of 42.3 AF per year would also translate to 42.3 AF per year of wastewater demand, also expected to be higher than the Proposed Project but would not require mitigation.

This alternative is also expected to result in a slight increase in solid waste generation. The solid waste generation rates used for the Proposed Project are based on the U.S. Environmental Protection Agency (EPA) estimate of 0.0013 tons/day/dwelling unit for multi-family residential homes. This would result in a solid waste generation estimate of 0.234 tons per day, only 0.001 tons greater than the Proposed Project's estimate, as shown in Table 5-5. The impact would remain less than significant and would not require mitigation.

Table 5-5
Alternative 4: Increased Density/Affordable Housing Alternative
Projected Solid Waste Generation

Land Use	Generation Rate (tons/day/unit)	Waste Disposed (tons per day)
180 Multi-family Residential (Duplex/Triplex) Units	0.0013	0.234
	Total	0.234

Source: CalRecycle 2018.

Table 5-6 considers the increase in school-age students for primary, elementary, middle and high schools. Student generation rates were derived from the SHUSD Facility Master Plan, which outlines expected growth in demand for school facilities associated with projected development and plans how to fund and respond to such growth. This alternative is expected to generate approximately 57 students in total, an increase of 29 students compared to the Proposed Project. This increase would not exceed the current capacity of schools within the SHUSD, and this alternative would still be required to pay the necessary school impact fees.

Table 5-6
Alternative 4: Increased Density/Affordable Housing Alternative Student Generation

Grades	Student Generation Rate (per total number of units)	Students Generated
K-2	0.058	10.44
3-5	0.080	14.4
6-8	0.088	15.84
9-12	0.088	15.84
	Total	57

Source: SHUSD 2010.

Relationship to Proposed Project Objectives

The Increased Density/Affordable Housing Alternative would subdivide the site consistent with the underlying land use designation and zoning, would complete the planned extensions of Adams Street and Starr Avenue, and would contribute to the provision of workforce and affordable housing objective. However, this alternative would not achieve the Proposed Project objective of developing a variety of housing types, including single-family and ADUs. The housing would be affordable to a range of incomes including, very low, low and moderate-income households, but would not include any single-family or market rate homes. This alternative generally meets a majority of the Proposed Project objectives but not all of the objectives.

5.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Development alternative is the environmentally superior alternative. It would avoid all Project-related environmental impacts. CEQA Guidelines Section 15126.6(e)(3)(A) requires that when the No Project alternative is environmentally superior, another alternative be selected as the environmentally superior alternative. The environmentally superior alternative would be the Park Preserve alternative. This alternative would reduce Impact 3.4-2 by developing a passive park surrounding three out of four of the site's jurisdictional wetlands. However, this alternative would not avoid all of the significant impacts associated with the Project and all of the identified mitigation would still be required.

Table 5-7 provides an overview of impacts compared to the Proposed Project.

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.1 Aesthetics/Visual Resources					
3.1-1: Would the Project have a substantial adverse effect on a scenic vista? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.1-2: Would the Project conflict with applicable regulations governing scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.1-3: Would the Proposed Project potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? This would be a potentially significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.1-4: Would the Proposed Project contribute to cumulative changes in the existing visual character or conflict with applicable regulations governing scenic quality? The project's contribution would not be considerable.	LS	NI	LS	LS	LS
3.1-5: Would the Proposed Project contribute to a cumulative increase in light and glare? The project's contribution would not be considerable with mitigation.	LS/M	NI	LS/M	LS/M	LS/M

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.2 Agricultural and Forestry Resources					
3.2-1: Would the Proposed Project convert Prime Farmland and Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? This is a less-than-significant impact.	LS	NI	LS	LS	LS
3.2-2: Would the Proposed Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use? This is a less-than-significant impact.	LS	NI	LS	LS	LS
3.2-3: Would the Proposed Project contribute to cumulative impacts associated with the loss or conversion of existing agricultural resources? The project would result in a less than considerable contribution.	LS	NI	LS	LS	LS
3.3 Air Quality					
3.3-1: Would implementation of the Proposed Project conflict with or obstruct implementation of the applicable air quality plan? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.3-2: Would implementation of the Proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.3-3: Would implementation of the Proposed Project expose sensitive receptors to substantial pollutant concentrations? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.3-4: Would the Proposed Project contribute to cumulative air quality emissions within the existing area? The contribution would not be considerable.	LS	NI	LS+	LS	LS+

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.4 Biological Resources					
3.4-1: Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? This would be a significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.4-2: Would the Proposed Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means? This would be a significant impact.	LS/M	NI	LS/M	LS/M-	LS/M-
3.4-3: Would the Proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? This would be a potentially significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.4-4: Would the Proposed Project contribute to cumulative impacts with respect to biological resources? The project's contribution would not be considerable.	LS	NI	LS	LS	LS
3.5 Cultural and Tribal Cultural Resources					
3.5-1: Would the Proposed Project cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? This would be a significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.5-2: Would the Proposed Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? This would be a potentially significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.5-3: Would the Proposed Project disturb human remains, including those interred outside of formal cemeteries? This would be a less-than-significant impact.	LS	NI	LS	LS	LS

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.5-4: Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency to be significant? This impact is considered potentially significant.	LS/M	NI	LS/M	LS/M	LS/M
3.5-5: Would the Proposed Project contribute to cumulative impacts to cultural resources, including historical and archeological resources as defined in CEQA Guidelines Section 15064.5 and human remains? This impact is considered potentially significant.	LS/M	NI	LS/M	LS/M	LS/M
3.5-6: Would the Proposed Project contribute to cumulative impacts to tribal cultural resources, currently listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources, or a resource determined by the lead agency to be significant? This impact is considered potentially significant.	LS/M	NI	LS/M	LS/M	LS/M
3.6 Geology and Soils					
3.6-1: Would implementation of the Proposed Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and/or liquefaction? This would be a potentially significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.6-2: Would implementation of the Proposed Project occur on weak, compressible, and/or expansive soils that could result in adverse impacts on habitable structures? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.6-3: Would implementation of the Proposed Project directly or indirectly destroy a unique paleontological resource or site? This would be a potentially significant impact.	LS/M	NI	LS/M	LS/M	LS/M
3.6-4: Would the Proposed Project contribute to cumulative impacts related to geologic or seismic hazards? This would be a less than considerable contribution.	LS	NI	LS	LS	LS

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.7 Greenhouse Gas Emissions					
3.7-1: Would implementation of the Proposed Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.7-2: Would implementation of the Proposed Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.7-3: Would the Proposed Project contribute to cumulative GHG emissions within the region? The Project's contribution would not be considerable.	LS	NI	LS+	LS	LS+
3.8 Hazards and Hazardous Materials					
3.8-1: Would implementation of the Proposed Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.8-2: Would implementation of the Proposed Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? This would be a potentially significant impact.	LS/M	NI	LS/<	LS/M	LS/M
3.8-3: Would implementation of the Proposed Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.8-4: Would implementation of the Proposed Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? This would be a less-than-significant impact.	LS	NI	LS	LS	LS

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.8-5: Would implementation of the Proposed Project contribute to a cumulative increase in the potential exposure of people to sites where soil contamination could be present from past or current uses, or to hazards associated with the use and transport of hazardous materials? The project's contribution would be less than considerable.	LS	NI	LS	LS	LS
3.9 Hydrology and Water Quality					
3.9-1: Would implementation of the Proposed Project violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.9-2: Would implementation of the Proposed Project deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.9-3: Would implementation of the Proposed Project substantially alter the existing drainage pattern of the site or area through the addition of impervious surfaces resulting in erosion or siltation on- or off-site; increasing the rate or amount of surface runoff resulting in flooding on- or off-site; contributing runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide polluted runoff; or impede or redirect flood flows? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.9-4: Would implementation of the Proposed Project release pollutants during flooding? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.9-5: Would implementation of the Proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? This would be a less-than-significant impact.	LS	NI	LS	LS	LS

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.10 Land Use					
3.10-1: Would implementation of the Proposed Project conflict with the City's 1993 General Plan policies or other regulations adopted for the purpose of avoiding or mitigating an environmental effect? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.11 Noise and Vibration					
3.11-1: Would short-term construction noise levels cause a substantial temporary increase in ambient noise levels? This would be a potentially significant impact.	LS/M	NI	LS/M+	LS/M	LS/M+
3.11-2: Would existing residential areas be exposed to vibration peak-particle velocities greater than 0.2-inch per second or vibration levels greater than 80 VdB due to project construction? This would be a less than significant impact.	LS	NI	LS	LS	LS
3.11-3: Would on-site operation noise from the proposed residences result in noise exposure levels that would impact adjacent residences? The impact would be less than significant.	LS	NI	LS+	LS	LS+
3.11-4: Would the Proposed Project vehicle trips result in off-site roadway noise level increases that could impact noise sensitive land uses located along such roadways? The impact would be less than significant.	LS	NI	LS+	LS	LS+
3.11-5: Would the Proposed Project, in addition to cumulative development in the City, increase traffic noise that exceeds the City's noise standards? The Project's contribution would not be considerable.	LS	NI	LS	LS	LS
3.12 Public Services and Recreation					
3.12-1: Would the Proposed Project increase demand for public services requiring the need to construct new facilities, or expand existing facilities, the construction of which could cause significant environmental impacts? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.12-2: Would the Proposed Project increase the use of existing neighborhood parks or other recreational services such that a substantial physical deterioration of the facility would occur, or require the construction or expansion of facilities that could have a physical adverse effect on the environment? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.12-3: Would the Proposed Project contribute to a cumulative increase in demand for public services, schools, and recreation facilities? The Project's contribution would not be considerable.	LS	NI	LS+	LS	LS+
3.13 Utilities					
3.13-1: Would the Proposed Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.13-2: Would the Proposed Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.13-3: Would the Proposed Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.13-4: Would the Proposed Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.13-5: Would the proposed project comply with federal, state, and local statutes and regulations related to solid waste? This is a less-than-significant impact.	LS	NI	LS+	LS	LS+

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.13-6: Would the Proposed Project contribute to an increase in demand for water supply, wastewater treatment, stormwater or solid waste? The Project's contribution would not be considerable.	LS	NI	LS+	LS	LS+
3.14 Transportation and Traffic					
3.14-1: Would the Proposed Project conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? This would be a less-than-significant impact.	LS	NI	LS	LS	LS
3.14-2: Would the Proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This is a significant impact.	SU	NI	SU	SU	NI
3.14-3: Would the Proposed Project increase hazards due to a geometric design feature or incompatible use? This is a less-than-significant impact.	LS	NI	LS	LS	LS
3.14-4: Would the Proposed Project result in inadequate emergency access. This is a less-than-significant impact.	LS	NI	LS	LS	LS
3.14-5: Under Cumulative conditions, would the Proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This is considered a significant impact.	SU	NI	NI	NI	NI
3.14-6: Under Cumulative conditions, would the Proposed Project increase hazards due to a geometric design feature or incompatible use? This is considered a less than significant impact.	LS	NI	SU	SU	SU
3.15 Energy					
3.15-1: Would implementation of the Proposed Project result in wasteful, inefficient or unnecessary consumption of energy resources during construction or operation? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+
3.15-2: Would implementation of the Proposed Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? This would be a less-than-significant impact.	LS	NI	LS+	LS	LS+

Table 5-7
Comparison of Project Alternatives

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No project/general Plan	Alternative 3: Park Preserve	Alternative 4: Increased Density/Affordable Housing
3.15-3: Would the Proposed Project contribute to an increase in wasteful, inefficient or unnecessary consumption of energy resources during construction or operation? The Project's contribution would not be considerable.	LS	NI	LS+	LS	LS+

Notes:
LS = Impacts less than significant
NI = No impact
LS/M = Impacts less than significant after mitigation
PS = Potentially significant (mitigation not determined)
SU= Significant and Unavoidable
"+" indicates the impact is more severe than the Project impact
"-" indicates that the impact is less severe than the Project impact

CHAPTER 6
REPORT PREPARERS

City of St. Helena

City of St. Helena Planning & Community Improvement Department
1572 Railroad Avenue
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Dylan Duvergé, PG, Hydrogeologist
Jonathan Leech, AICP, INCE, Acoustician

Transportation Subconsultant - W-Trans

Steve Weinberger, Principal

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NOTICE OF PREPARATION
FOR THE HUNTER SUBDIVISION PROJECT
ENVIRONMENTAL IMPACT REPORT
COMMENT PERIOD: March 6, 2018 through April 9, 2018.

All persons and public agencies are invited to submit written comments as to the scope and content of the EIR.

This Notice of Preparation (NOP) initiates the environmental review process in accordance with the California Environmental Quality Act (14 California Code of Regulations [CCR] Section 15082) for a land development project in the City of St. Helena (City). The City will be the Lead Agency and will commission the preparation of an Environmental Impact Report (EIR) for the Hunter Subdivision project (proposed project). The purpose of an NOP is to provide sufficient information about the proposed project and its potential environmental impacts to allow agencies and interested parties the opportunity to provide a meaningful response related to the scope and contents of the EIR, including mitigation measures that should be considered and alternatives that should be addressed (State CEQA Guidelines 14 CCR Section 15082[b]).The project description, location, and probable environmental effects of the proposed project are briefly described below.

Providing Comments

The City is soliciting comments from responsible and trustee public agencies, private organizations, and individuals regarding the scope and content of the EIR for 30 days. Because of time limits mandated by State law, comments should be provided no later than 5:00 PM on **April 9, 2018**. Please send all comments to:

Noah Housh, Planning and Community Improvement Director
City of St. Helena, Planning & Community Improvement Department
1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

Agencies that will need to use the EIR when considering permits or other approvals for the proposed project should provide the name of a contact person, phone number, and email address in their comment. Each responsible and trustee agency must also provide the City with specific detail about the scope and content of the environmental information related to the responsible or trustee agency's area of statutory responsibility that must be included in the EIR. (CEQA Guidelines, § 15082, subd. (b).)

Comments provided by email should include “Hunter Subdivision Project NOP Scoping Comment” in the subject line, and the name and physical address of the commenter in the body of the email.

Public Scoping Meeting

A public scoping meeting will be held by the City to inform interested parties about the proposed project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. Following a brief presentation of the project description and an overview of the CEQA process the floor will be opened to citizens, agency representatives and other individuals to provide comments directly to staff and the consultant team regarding the scope of the EIR. Additionally comment cards will be available to provide written comments to staff and consultants and will be accepted both at the meeting and afterward at City Hall.

The meeting time and location are as follows:

March 12, 2018
6:00 p.m. to 7:30 p.m.
City of St. Helena Fire Department
1480 Main Street
St. Helena, CA 94574

The meeting space is accessible to persons with disabilities. Individuals needing special assistive devices will be accommodated to the City’s best ability. For more information, please contact Noah Housh (at the contact information above) at least 48 hours before the meeting.

Project Location

The project site is located in the northeast portion of the City, at the eastern terminus of Adams Street, north of Starr Avenue and west of the Napa River (Assessor’s Parcel 009-030-057), see Figure 1, Project Location.

Project History

The environmental review process for the proposed project started in June 2011 when a NOP was prepared and circulated. The Draft EIR was released for public review in May 2012 and the City’s Planning Commission held hearings in July and August 2012 to take comments on the adequacy of the EIR. A Final EIR was prepared in September 2013, but due to new project information and a request from the applicant representative, the City opted to continue the item. From 2013-2016 the Draft EIR was updated to include some new information however the revised draft was never completed and therefore the revised Draft EIR was not released for public review or comment. Due to the age of the overall document and analysis, staff recommended that the project be reanalyzed through a new EIR process, and this NOP is intended to inform the public a new EIR analysis has been initiated.

Separately, the City completed the construction of the Flood Protection Project in 2011, which consisted of river channel improvements, a levee, and floodwall construction along the Napa River adjacent to the project site. On November 5, 2012, the Federal Emergency Management Agency (FEMA) accepted the Flood Protection Project and revised the Flood Insurance Rate Map (FIRM), such that the project site is no longer located within a 100-year flood zone.

Project Description

The proposed project includes a request to approve a Tentative Map to subdivide the existing 16.9-acre parcel into 51 single-family lots, one 3.4-acre parcel, and a 0.06-acre remainder parcel. The 51 single-family lots would typically range in size from 7,000 to 8,000 square feet, with some larger corner and cul-de-sac lots. The single-family lots could be developed with single-family market-rate housing and may include, under City and state housing law, the construction of an Accessory Dwelling Unit (ADU).[1] In order to meet the minimum density requirements for the site, at least 87 dwelling units must be built as a part of the project. Information from the applicant identifies 51 single family homes, and at least 11 ADUs are proposed to be built on the single-family lots, with the remaining 25 required units proposed to be constructed on the 3.4 acre parcel, as a multifamily development likely in the form of duplex units. This combination of single-family homes, ADUs and multifamily homes is proposed to meet the 87 total units required to be constructed in by projects' Medium Density Residential (MDR) General Plan and Medium Density Residential (MR) zoning designations.

Properties designated as MDR by the General Plan typically are used for residential purposes, for example, single-family attached and detached homes, secondary residential units, and similar and compatible uses. This designation permits densities of 5.1 to 16.0 dwelling units per acre (du/acre). The project proposes the minimum allowable density of 5.1 du/acre, although the maximum density allowed on the site 16.0 du/ac, allowing up to 270 dwelling units based on the 16.9 acre parcel size. The City is in the process of updating its General Plan, however the project will be evaluated under the City's adopted 1993 General Plan, based on the timing of the application.

The project site is zoned MR. The MR district is consistent with the MDR General Plan land use designation. This district provides for single-family detached homes, ADUs, supportive and transitional housing, and other similar uses found consistent with the General Plan and MR district, as permitted land uses. Conditional land uses include single-family housing where the minimum density would otherwise require two units or more and new attached duplex and/or triplex units.

The project design also includes onsite water, sewer and storm drain infrastructure to tie into the City's existing system and the extension of Adams Street and Starr Avenue to connect to the City's roadway system, in keeping with the City's 1993 General Plan Circulation Element.

[1] Accessory Dwelling Units are also known as granny flats, in-law units, or secondary units.

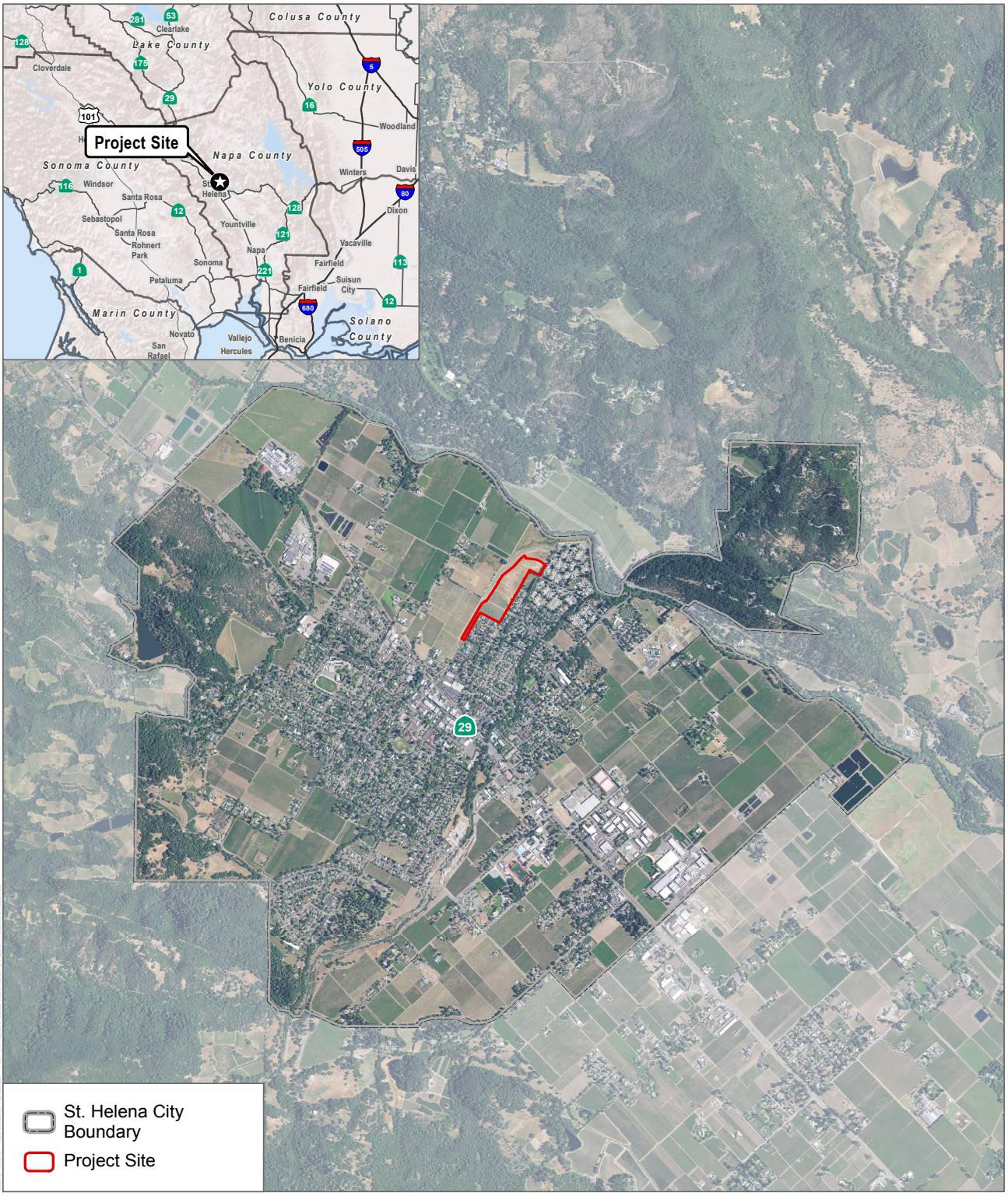
Anticipated project approvals required to construct all units proposed in the project include: Tentative Map, Final Subdivision Map, Conditional Use Permit, Design Review, and Allocations under the City's Growth Management System.

To date, the applicant has filed a Tentative Map application requesting that the City subdivide the existing 16.9 acre parcel into 52 individual residential lot including 51 single-family residential lots and one 3.4 acre parcel for 25 multifamily homes. The applicant has indicated an intent to create affordable units on the 3.4-acre parcel and provide an Affordability Agreement.

Potential Environmental Effects

The EIR will describe the reasonably foreseeable and potentially significant adverse effects of the proposed project (both direct and indirect). The EIR will also evaluate the cumulative impacts of the project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. The City anticipates that the proposed project could result in potentially significant environmental impacts in the following topic areas, which will be further evaluated in the EIR:

Aesthetics
Air Quality
Agricultural Resources
Biological Resources
Cultural/Paleontological/Tribal Resources
Greenhouse Gas Emissions
Geology, Soils and Seismicity
Hazards and Public Safety
Hydrology and Water Quality
Land Use/Demographics
Noise and Vibration
Public Utilities/Energy
Public Services/Recreation
Transportation



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

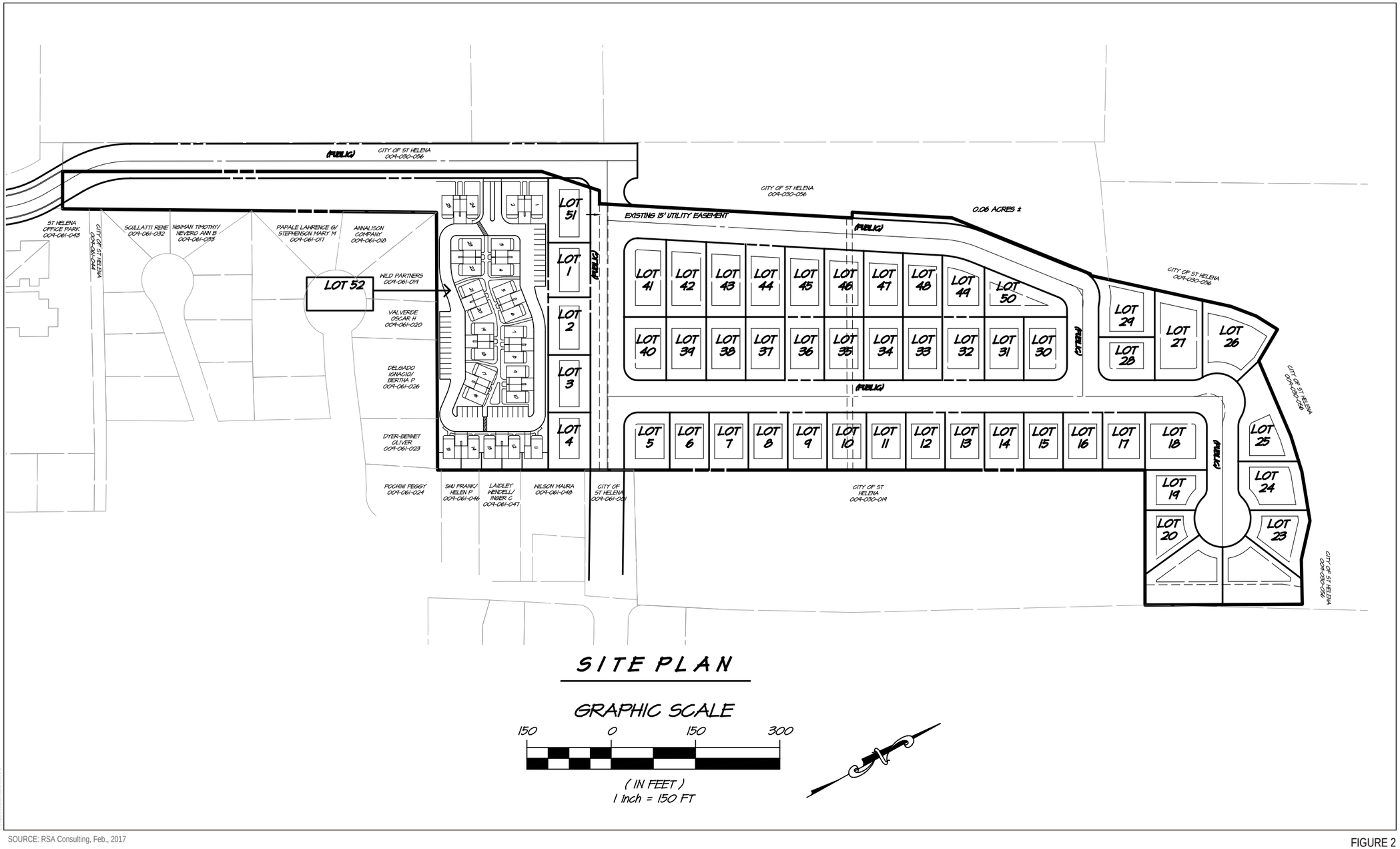
DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project



SITE PLAN

GRAPHIC SCALE

150 0 150 300

(IN FEET)

1 inch = 150 FT

SOURCE: RSA Consulting, Feb., 2017

FIGURE 2

Site Plan

Hunter Subdivision Project

DUDEK

From:	Lederer, Steven
To:	Noah Housh
Cc:	Lederer, Steven; Dillon, Diane; Morrison, David; Stangland, Steve; Chapin, Craig; McDowell, John; Arias, Juan; Erica Ahmann Smithies
Subject:	RE: Hunter NOP Electronic Notification
Date:	Wednesday, March 07, 2018 8:49:27 AM
Attachments:	image001.png

Mr. Housh,
Thank you for the opportunity to provide input on the NOP for the Hunter Ranch Development. The County may provide other comments later, but one specific area of concern the County has is traffic and circulation as it relates to impacts on Silverado Trail. In conjunction with Highway 29, Silverado Trail is the primary method vehicles have for traversing the valley from north to south, and the only one that bypasses the large traffic delays caused by St. Helena.

The EIR should study all practical methods for avoiding increasing traffic impacts on Silverado Trail. It is also necessary to point out that the County's General Plan contains many policies on maintaining the rural character of the valley, part of which is avoiding the installation of traffic signals wherever possible. Should the EIR find that any changes are needed on Silverado Trail (such as at Pope Street or perhaps creation of a new access), we strongly recommend solutions such as roundabouts or something similar in lieu of traffic signals.

We look forward to continue to participate in this process.

Steve Lederer
Director, Napa County Public Works

From: Housh, Noah
Sent: Tuesday, March 06, 2018 5:18 PM
To: Housh, Noah <nhoush@cityofsthelena.org>
Subject: Hunter NOP Electronic Notification

Information Only; Please Do Not Reply All

Greetings,

At the recently held neighborhood meeting for the Hunter Residential Subdivision, you provided your email contact information indicating you would like to be notified of future project activities.

Attached please find the formal Notice of Preparation initiating the Environmental Impact Review (EIR) process for this project.

As was identified at the neighborhood meeting, a scoping meeting for the EIR is scheduled for Monday, March 12, 2018, from 6:00 – 7:30 pm at the St Helena Fire Department (1480 Main Street). This meeting will provide an opportunity for individuals to speak directly to the California Environmental Quality Act (CEQA) consultants regarding the scope of the EIR analysis.

Alternatively, if you are unable to attend this meeting, please feel free to provide your written comments to me (electronically or hard copy) any time before April 9, 2018, to ensure they are considered in the EIR analysis. My contact information is provided in the notice, and in the signature below

After the initial analysis is completed, a draft EIR will be published for a 45-day public review and comment period, during which the public will have an additional opportunity to comment on the environmental analysis and resulting document. This is tentatively scheduled to occur in late spring or early summer, 2018.

These comments will then be used to finalize the document making modifications or expanding the analysis, as appropriate. Further, a response to each comment will be provided in the Final draft EIR for the project, which will then be taken before the Planning Commission for review and action at a public hearing tentatively proposed to be held in late summer or early fall of 2018.

Please forward this message to anyone you feel may be interested in the Hunter Residential Subdivision EIR process. Thank you for your attention to this matter.

NOAH HOUSH
PLANNING & COMMUNITY IMPROVEMENT DIRECTOR
City of St. Helena | Planning & Community Improvement Department
1480 Main Street | St. Helena, CA 94574
Direct: (707) 968-2659 | NHoush@cityofsthelena.org | http://cityofsthelena.org/planning

CONFIDENTIALITY NOTICE: This email message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential, and/or exempt from disclosure under applicable law. If you are not the intended recipient of the message, please contact the sender immediately and delete this message and any attachments. Thank you.

From: Sandra Lowry
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: HUNTER EIR
Date: Thursday, April 12, 2018 4:48:17 PM

Gentlemen,

I am writing on behalf of my husband, Cecil Lowry. and myself. Our address is 1175 Starr Avenue and we moved here in July, 1997. We are opposed to yet another development near our home on Starr Avenue.

The EIR should look carefully at traffic and parking. More developments mean more cars and trucks coming and going and where will they park? Already our neighborhood is impacted by overflow trucks and automobiles from the Hunts Grove residents parking up and down Starr and Meadowcreek Circle. We are additionally impacted by speeding vehicles up and down Starr at all times of the day and night, making crossing the street to visit a neighbor a hazard. The crosswalk at Starr and Meadowcreek Circle is basically ignored. Most importantly, all the traffic comes to a dead stop on Pope Street because of the Pope Street bridge. I believe the last EIR decided traffic was an unmitigable issue.

The EIR must look at the Hunter Project in terms of water consumption. Previous EIR study suggested a water neutrality by installing low flush toilets. Is this a joke? More people means more water use in common sense terms.

The proposed development will have many of the homes built behind the levee, in an area at serious risk of liquification, not to mention flooding, a disaster waiting to happen.

Thank you for listening. Sandra Lowry

From:	John Milliken
To:	Cindy Tzafopoulos
Cc:	Noah Housh; Mark Prestwich
Subject:	Hunter EIR Scoping Comments
Date:	Thursday, April 12, 2018 11:14:19 AM
Attachments:	C001 SENT Hunter Comment Ltr.pdf NPS_Urban-facts_final.pdf Response to Response.docx

Hunter EIR Scoping Comments 4/12/18

Please find listed below areas that should be included in the scope of the new EIR. In addition, I have attached comments from a CEQA Attorney and my own comments prepared in response to the original DEIR. Also attached is an informational report prepared by the EPA that reviews how to protect water quality from Urban Runoff. These attachments detail many of the shortcomings of the original DEIR and I would like them included for consideration for the scoping of the new EIR.

Design, Implementation and Administration of the Affordable Units

It will be very difficult to conduct a thorough EIR that subscribes to CEQA standards until the design, implementation, and administration of the affordable housing components are fully understood. How and who is going to build them? Will they have to built before the market rate houses? How large will they be and how many occupants will they have. How many bedrooms, bathrooms, and parking spaces will there be? Are they going to be rentals or owner occupied? Will the multi-family units need zoning variances or conditional permits? Will the 10 lots with Granny units be deed restricted or under the control of the owner? What mechanisms are in place to ensure that the 10 granny units are indeed made available as affordable and when will they be built. If the project qualifies for a density bonus by right, should the EIR anticipate this and factor in the potential impact of additional units? All of this should be explained and understood BEFORE the EIR is started so that there are no surprises that could derail this second attempt at completing an EIR for this project. It is one thing to draw boxes on a sub-division map and designate them as affordable for development concessions. It is quite another to adequately explain how this will all work within the parameters of existing regulations and requirements. And, without this information, preparing an informed EIR will be incredibly difficult.

Design and Implementation of a controlled intersection at the Pope Street Bridge and Silverado Trail

Well after the completion of the last DEIR, the applicant claimed they had new information and that they would submit a design and pay for this intersection (along with approval from the County) to mitigate traffic impacts. Will information on how this will be accomplished (or is even practical) be provided BEFORE the start of the new EIR?

Plans for mitigating loss of State Designated Prime Agricultural Land

Well after the completion of the last DEIR, the applicant claimed that they had new information for a plan for offsetting the loss of Prime Agricultural Land. Will this information be provided BEFORE the start of the new EIR?

Impacts of Traffic Through Neighborhoods

Beyond traffic count studies, will the new EIR take into account traffic that will utilize the Adams and Starr extensions to circumvent traffic delays on the Silverado Trail and Highway 29. The advent of apps like Waze and Google Maps will re-direct increasing amounts of traffic through neighborhoods. Residents of Hunts Grove will now have to cross a busy intersection upon exiting their development. This is a particular concern for the safety of children and pedestrians who now do not face crossing a street in order to walk to/from school or shopping.

Loss of open space and safe access to the Napa River Walk for pedestrians and dog walkers
Once Starr is extended to meet Adams, residents and visitors who currently use the undeveloped city owned lot to access the River walk will be faced with sharing their walk with traffic and parked cars to reach the walk. This will be a significant danger to children and dog walkers.

John Milliken
jmzin@comcast.net
707-963-8134 (Office) 707-486-4266 (Mobile\Text)
1256 Hudson Ave.
St. Helena, CA 94574

Lippe Gaffney Wagner LLP www.lgwlawyers.com

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Thomas N. Lippe
Brian Gaffney
Keith G. Wagner
Kelly A. Franger
Cathy D. Lee

July 12, 2012

Via U.S. Mail and email

Greg Desmond, Interim Planning Director
City of St. Helena
Planning Department
480 Main Street
St. Helena CA 94574
gregd@ci.sthelena.ca. us

Re: Hunter Subdivision Project Draft Environmental Impact Report (SCH: 2012032048).

Dear Mr. Desmond:

This office represents St. Helena Residents for Responsible Growth, an association dedicated to protecting environmental values in the St. Helena area. I am writing on behalf of St. Helena Residents for Responsible Growth to comment on the Draft Environmental Impact Report (DEIR) for the Hunter Subdivision Project (Project) pursuant to the California Environmental Quality Act ("CEQA," codified at Pub. Resources Code, §§ 21000, et seq.) and to object to the approval of the Project.

I. PLANNING AND ZONING CODE VIOLATIONS

All land use decisions must be consistent with a city's general plan and zoning ordinance. (*Collier v. City and County of San Francisco* (2007) 151 Cal.App.4th 1326, 1333, citing Gov. Code, § 65860, subd. (a)(2); *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 355. See also *Land Waste Management v. Contra Costa County Bd. of Supervisors* (1990) 222 Cal.App.3d 950, 957–958 "[i]ssuance of a permit inconsistent with zoning ordinances or the general plan may be set aside and invalidated as ultra vires"].) The proposed Tentative Subdivision Map and related residential construction violate the designated land use of the Hunter property established in the St. Helena Zoning Ordinance and General Plan.

A. The Project Violates the St. Helena Zoning Ordinance.

The Tentative Subdivision Map includes a 3.4-acre parcel for the future construction of 25 multi-family units ("Lot 52"). (DEIR 49-50.) The "conceptual" residential development depicted in the Tentative Subdivision and Grading Map includes 7- and 9-unit multi-family apartment buildings, consisting of somewhere between 30,000 to 45,000 square feet of building area, plus covered and surface parking. (DEIR 50; Figure III-4.)

Under the St. Helena Zoning Ordinance, the land use designation for the Project site is Medium Density Residential (MR). MR districts provide for "single-family detached homes, accessory dwelling units, limited agricultural uses and compatible uses." (DEIR 45. See also (St. Helena Municipal Code (Mun. Code), § 17.40.020.) With respect to the construction of new primary residences, the only permitted use is "[n]ew construction of one single-family dwelling on parcels where the minimum density is 1.99 units or less." (Mun. Code, § 17.40.020.) Conditional uses in MR districts (relevant to new primary residences), which require approval of a use permit, are limited to "[n]ew construction of one single-family dwelling on parcels where the minimum density is 2.0 units or greater" and "[n]ew attached duplex or triplex units." (Mun. Code, § 17.40.030.)

Multi-family dwellings, which are defined as a residential structure with "four or more" dwelling units, are not among the allowable uses in MR districts. (Mun. Code, § 17.04.160. See also Mun. Code, § 17.44.010 [In contrast to the MR designation, High Density Residential (HR) districts "provide[] for single-family and multifamily residential units, group quarters and compatible uses."].)

The proposed multi-family parcel conflicts with the Zoning Ordinance because multi-family development is not an "allowable use" in MR districts—even with a conditional use permit, residential development may not exceed three attached units. (Mun. Code, §§ 17.40.020; 17.40.030.) The proposed tentative subdivision map depicts 7- and 9-unit multi-family apartment buildings. (DEIR Figure III-4.) This violates the Zoning Ordinance provision that "[n]o land . . . shall be used, designated or intended to be used for any purpose or in any manner other than that which is permitted by this title, the regulations of the applicable zoning district . . . , and any conditions of approval imposed upon any permit authorized by this title." (Mun. Code, § 17.16.040(A).)

Nor does this Project fall within the "flag lot"[1] provisions of the Zoning Ordinance. A "'[f]lag lot' (also known as a 'panhandle lot') means a lot which [1] has less than the minimum required frontage on a public or private street, [2] is connected to a public or private street by a narrow strip of land and [3] has the largest portion of the lot situated behind adjoining lots which front on the same public or private street." (Mun. Code, §§ 17.04.160 [Definitions]; 17.40.030.) In short, a flag lot is a parcel of land that is accessible only by a long narrow strip leading from a main road.

Lot 52, as depicted on the Tentative Subdivision Map, includes none of these features. Lot 52 is accessed off Adams Street, just west of its intersection with Starr Avenue. (DEIR 50; Figure III-4.) The lot has 197 feet of frontage on Adams Street, not including the strip of land extending south along Adams Street upon which vineyards will remain. (DEIR Figure III-4.) The minimum required frontage in MR districts is 70 feet. (Mun. Code, § 17.40.060.) Lot 52 is not connected to

[1] The DEIR refers to the multi-family lot as a "flag lot," but contains no discussion of the relevance of that term.

Adams Street by a "narrow strip of land." Although there is a narrow strip of land extending from the lot along Adams Street, this "panhandle" does not connect the remainder of the lot to Adams Street or otherwise provide access to Lot 52. (DEIR Figure III-4.) Finally, the largest portion of Lot 52 is not situated behind adjoining lots which front on the same street. The single-family lots to the east of Lot 52 front on Starr Avenue, while Lot 52 fronts on Adams Street. (DEIR 50, Figure III-4.) Thus, to the extent that the City views Lot 52 as a "flag lot" permitting departure from any MR district development standards, it is incorrect.

B. The Project Is Inconsistent With the General Plan.

The proposed Project also conflicts with the General Plan. The 1993 General Plan, currently in effect, classifies the Project site is Medium Density Residential (MDR). (DEIR 45.) Like the MR zoning designation, the MDR classification provides for "single-family" residential development: properties designated as MDR are used for "single-family attached and detached homes, secondary residential units, and similar and compatible uses." (DEIR 45.)

The proposed multi-family parcel thus conflicts with the General Plan because multi-family residential development is not included in "single-family attached and detached homes, secondary residential units, and similar and compatible uses." (DEIR 45, citing St. Helena, City of, 1993. *General Plan, Land Use and Growth Management Element.*)

II. VIOLATIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. The DEIR Does Not Describe Housing Construction Plans In Sufficient Detail to Conduct Project-Level Impacts Analysis.

The DEIR violates CEQA because it purports to be a "Project" EIR for "full buildout" of the Hunter Subdivision, but the DEIR's project description only includes "project-level" information about the subdivision itself and the construction of roads, utilities, and landscaping. In contrast, the DEIR's discussion of housing construction is entirely theoretical. Any information about the location, size, height, footprint, and massing of residential structures is "assumed" based on generally-applicable development standards. This is inadequate for project-level review under CEQA.

The actions described in detail in the EIR are (1) subdivision of the property; (2) grading/construction of a retaining wall; (3) street construction; and (4) the construction of utilities infrastructure and tree planting. (DEIR 49-59; Figure III-4 [Tentative Subdivision and Grading Map]; Figure III-6 [Utility Plan]; Figure III-7 [Landscaping Plan].) The landscaping and infrastructure construction is planned to begin immediately after approval of the Final Map and "related improvement plans"—presumably the Utility and Landscaping Plans—and will be completed within an 18-month time period. (DEIR 59.)

The proposed tentative map and related plans, while indicating the location of proposed single-family lots (Lots 1-51), do not indicate where houses will be constructed on those lots or the

proposed size, height, design of such structures. (See DEIR Figure III-4 [Tentative Subdivision and Grading Map]; Figure III-5 [Street Sections]; Figure III-6 [Utility Plan]; Figure III-7 [Landscaping Plan].) Nor do they indicate which lots will include "granny-units" or the size and location of those structures. (See *id.*) And, while three apartment buildings are depicted on Lot 25 in the Tentative Map, the plan for multi-family housing (including not only a site plan, but also the number of buildings, units per building; building height, location, and design; and parking and access) is "not yet determined." (DEIR 50; Figure III-4 [Tentative Subdivision and Grading Map].) There is no "phasing" plan for the proposal and/or construction of housing. (DEIR 59.)

Despite the fact that the DEIR's Project description does not include any housing construction that would be subject to design review or applications for building permits, the DEIR includes "Design Review" and "Building Permits" in the list of "approvals and actions necessary for the proposed project." (DEIR 59-60.) Rather than clearly disclosing that the DEIR neither describes nor assesses the impact of the applicant's plan for housing construction as part of the proposed Project, the DEIR states that "specific residential building designs" would be presented for review and approval in the future as part of the City's Design Review process. (*Id.* ["Future building designs would be subject to approval by the City, which includes Design Review of proposed construction, including the exterior design and location of individual dwellings, landscaping and related features."].) This improperly characterizes the most fundamental features of a construction project (i.e., the location, height, and size of proposed structures) as mere "design" elements.[2]

In lieu of a project-level description of a particular proposal for housing construction, the EIR states that "it is anticipated" that structures proposed in the future will conform to the St. Helena

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[2] Characterizing fundamental details about future construction projects as "design features" appears to be an attempt to cast residential construction proposals as "final designs" that may be approved after CEQA review. (See, e.g., *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 35-36 [upholding an EIR for a mining project where the EIR included a "general description of [stream] diversion structures . . . coupled with approval of final designs after the project is approved"].) This situation here, however, is readily distinguishable from *Dry Creek Citizens*. Foremost, in that case, the stream diversion structures, as mitigation measures for a mining project, were actually proposed for the agency's approval. (*Id.*) Here, housing construction is "not being proposed at this time or as part of this application." There, the actual technical and environmental characteristics of the structures were "described and illustrated" in the EIR. (*Id.*) Here, the applicant did not provide, and the DEIR does not include, even basic information regarding actual plans for the construction of homes or structures on the Project site. Finally, in *Dry Creek Citizens*, there was no evidence that "more detailed engineered drawings" would facilitate understanding of the proposed project's environmental impacts and such drawings may supply "extensive detail beyond that needed for evaluation and review of the environmental impact." (*Id.* at p. 36.) The DEIR here does not contain the basic information about housing construction needed to assess environmental impacts. This is not a failure to include "enough detail"—it is the failure to include any description of future construction projects.

Zoning Ordinance's standards and requirements for Medium Density Residential (MR) districts. (DEIR 57.) The fact that future construction projects should comply with local planning and zoning rules does not provide any information about what will actually be proposed and approved and a description of those rules is utterly inadequate for even a "general description of the project's technical, economic, and environmental characteristics."[3] CEQA clearly mandates a description of the proposed project itself—not just the rules with which future proposals must comply or parameters within which future construction proposals should fit. (CEQA Guidelines, § 15124[4].) This information is essential for a realistic analysis and mitigation of impacts at a project level.

Indeed, it is "crucial" for the public and the government decision maker to know "what the 'project' is that the decision maker is approving":

> "[O]nly through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal . . . and weigh other alternatives in the balance" . . . "[a]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR."

(*Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 201, quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192-193.)

The DEIR violates this fundamental CEQA requirement by purporting to analyze housing construction at a "project-level" in the absence of the project details necessary to do so, as described in this letter with respect to impacts on particular resource areas. It is true that, under CEQA, an agency must describe and assess the impact of all activities associated with a proposed project, including reasonably foreseeable future activities that may change its impacts. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 396 (*Laurel Heights I*).) The general review of future projects at the time that a related or precursor project is approved,

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[3] Moreover, the only Zoning Ordinance provisions specifically mentioned in the project description are height limits for single-family homes ("principal dwellings") and accessory structures: 30 and 15 feet, respectively. (DEIR 57.)

[4] Guidelines, section 15124 states: "The description of the project shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact. [¶] ... (c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities. [¶] (d) A statement briefly describing the intended uses of the EIR. [¶] (1) This statement shall include, to the extent that the information is known to the lead agency, [¶] (A) A list of the agencies that are expected to use the EIR in their decision-making, and [¶] (B) A list of permits and other approvals required to implement the project. [¶] ... (2) If a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur..."

however, does not discharge the agency's CEQA obligation to conduct "detailed" review of the future projects when details become available.

B. Aesthetic Resources.

1. The DEIR Lacks Project-Specific Information Necessary To Analyze and Mitigate the Aesthetic Impacts of Future Housing Construction Projects.

The DEIR's analysis of the aesthetic impacts of future housing construction is based on conjecture, not project-specific facts. The aesthetic impacts analysis is largely based on "[c]ross sections of the site, based on the Tentative Map provided by the project applicant." (DEIR 65.) The DEIR asserts that

> The cross sections are intended to convey a realistic impression of the project in terms of future building location, scale and massing based on the details included in the Tentative Map.

(DEIR 65.) The Tentative Map, however, does not include any details regarding the scale and massing of future housing construction. (DEIR Figure III-4.) At most, the Map indicates that single-family homes of unknown size, height, and footprint could be constructed somewhere within each of the 7000-12814 square-foot single-family lots. (DEIR Figure III-4.) Nothing on the Map indicates which lots will include "granny units" or the size, height, and footprint of such structures. (*Id.*) There is no concrete information, at all, regarding the size, layout, and massing of structures on the multi-family lot. (DEIR Figure III-4.) Moreover, the cross sections do not intersect with the multi-family lot and thus do not provide even a general or conceptual assessment of the visual impacts of multi-family apartment buildings. (See DEIR Figures IV.A-7, IV.A-8.)

The DEIR states that, "because the project under review is a subdivision without specific designs for proposed structures, the sections do not portray the exact architectural design of the structures on the project site." (DEIR 65.) This is misrepresentation by omission. In reality, the project under review is a subdivision without any proposed structures, and the cross sections not only do not portray the "exact architectural design," they do not portray even the most basic features—including the location and size of structures—of any housing construction that may occur in the future.

CEQA requires "the presentation of information sufficient to understand the environmental impacts of the proposed project and to permit a reasonable choice of alternatives so far as environmental aspects are concerned." (Guidelines, § 15156; *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376.) Basic information about the location, size, and height of the single- and multi-family structures to be constructed is vital for a realistic, project-level assessment of the aesthetic impacts threatened by the construction of housing.

Without this information, one cannot fully understand the nature and extent of the impacts of residential development on scenic vistas and the visual character of the area. As a result, the DEIR is fundamentally inadequate, depriving the public and decision makers of their right, under CEQA, to review and comment on potentially significant aesthetic impacts and mitigation measures for the visual impacts of a particular structure (such as restrictions on the location, height, and/or massing to preserve views).

2. The DEIR Does Not Adequately Describe the Affected Environment.

The DEIR does not adequately describe the affected environment, which must identify "sensitive receptors" in the Project area. As explained by visual impact expert Harry Benke, the DEIR fails to provide any information about the number of "sensitive receptors" in the area and the quality of their views. (Exhibit 3 [July 2, 2012 Letter of Harry Benke of Visual Impact Analysis LLC] at pp. 1-2.) This information is essential to a determination regarding the significance of any views impaired by project. (*Id.*)

3. The DEIR Does Not Adequately Analyze Impacts To Scenic Vistas.

Under CEQA, a project has a significant impact on visual resources if it has "a substantial adverse effect on a scenic vista." (Appendix G of the CEQA Guidelines, Question A.1; DEIR Table IV.A-1.) The Initial Study identifies this is a "potentially significant" impact, explaining that:

> Proposed dwellings that could be constructed within the subdivision could block existing views to the north from existing dwellings south of the project site. The potential for a substantial impact to existing views will be analyzed in the EIR.

(DEIR Appendix A at p. 14.) The City defines "scenic vistas" to include views of the "surrounding agricultural open space," "vineyard[s], hillsides, creeks, and major landscape features." (DEIR 66, citing 1993 General Plan Policy 4.5.1.[5])

The DEIR's analysis of impacts to scenic vistas is incomplete because it discusses only impacts on public views of hillsides, ignoring impacts to other scenic vistas within the City's threshold of significance—including agricultural open space, vineyards, creeks, and major landscape features. (DEIR 80.) Specifically, the DEIR states that residential structures may decrease the amount of hillside visible at two public view points (depicted in Figures IV.A-2c [intersection of Starr Avenue and Hunt Avenue] and Figure IV.A-2d [Paseo Grand Drive and Del Rio Court]); but that "at no point would hillside views from public viewpoints be entirely blocked by the project." (DEIR 80.) The DEIR then concludes: "[a]s a result, the introduction of the proposed project would not significantly alter these views, and the project would not have a substantial adverse effect on a public scenic vista." (DEIR 80.)

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[5] The 1993 General Plan is currently in effect. The DEIR heavily references a Draft General Plan Update, which has not yet been adopted and thus does not reflect existing City policy.

Although it appears obvious that two-story single family residences and multi-family apartment buildings would block and/or obscure views of surrounding open space, vineyards, and the Napa River, the DEIR does not describe or analyze the significance of impacts to these views. As a result, the DEIR fails as an informational document because it does not disclose and analyze impacts to all scenic vistas, as they are defined by the City's own threshold of significance.

Furthermore, the DEIR discusses only the impact of structures on scenic vistas—not the impacts of trees or other landscaping features. Based on the proposed Landscaping Plan (Figure III-7), visual impacts expert Harry Benke found that the combination of residential structures and trees, particularly when they mature, would likely "wholly eliminate" views of hillsides by motorists, pedestrians, and cyclists at the intersection of Hunt Avenue and Starr Road. The DEIR must disclose, analyze, and mitigate this significant impact of the Project.

Finally, the DEIR fails to explain the reasoning behind its conclusion that a "substantial adverse effect on a scenic vista" occurs only when a view is "completely blocked."

4. The DEIR's Analysis of Visual Quality Impacts Is Not Supported By Substantial Evidence.

As in its discussion of impacts to scenic views, the DEIR's analysis of impacts to the "visual quality of the site or the area" also considers whether the Project would impact views. Here, the DEIR states that future housing construction would not "entirely block" views of the hillsides and the Howell Mountains, relying on two projected site cross sections. (DEIR 85.)

As explained by Mr. Benke, the cross sections include "only profiles of houses and a ground profile of the project area," and do not demonstrate any relationship between the "visibility of the surrounding hills and mountains," view points, and the extent to which the project may impair these views. (Exhibit 3 at p. 3.) Indeed, the diagrams do not provide any information about what is visible beyond the Project from any particular viewpoint—including the perceived height of the hillsides in relation to the structures. Additionally, the cross sections show nothing regarding the visual impacts of the affordable (multi-family) housing units because they do not intersect that portion of the site. (*Id.*)

Furthermore, the projected cross sections do not provide any information regarding how or to what extent the Project would block existing views of surrounding open space and vineyards.

As a result, the DEIR's discussion and significance determination is comprised only of the bare conclusion, unsupported by facts or analysis, that the Project would not "entirely block" hillside views. The DEIR does not serve its information disclosure purpose and, thus, is inadequate. (See *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351, 1388.)

5. The DEIR Employs An Improper Baseline In Determining that Impacts to Visual Quality of the Site and Project Area Are Insignificant.

The DEIR's analysis of impacts to the visual quality of the site and area employs an improper baseline to conclude that the impact will be insignificant and ignores evidence demonstrating the contrary.

On one hand, the DEIR states that although the project will result in development "similar in scale and form to the residential development around the site and in St. Helena," eliminating the existing agricultural land and open space will cause "a significant impact on the visual character of the site." (DEIR 81.) The DEIR further explains that residential construction will block existing views of the undeveloped project site, open space, vineyards, and hillsides. (DEIR 85.)

On the other hand, ignoring all evidence that development will eliminate and block views of open space and agricultural land, the DEIR concludes that the project will not "substantially degrade the visual quality of the site and its surroundings" because (1) under the General Plan, the project site is designated for medium density residential (MDR) development and the character of new residential buildings should be compatible with surrounding development; and (2) "urban development of similar types and densities are located east and south of the project site." (DEIR 86-87.) These statements do not provide an adequate basis for the City's conclusion that visual impacts are less than significant.

First, the General Plan's MDR land use designation and policy that new buildings should conform to the character of older neighborhoods have no bearing on impacts to the existing visual quality of the site and area. Indeed, it is well established that aesthetic impacts analysis must be based on a comparison "actual existing physical conditions." (*Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (1997) 150 Cal.App.4th 683, 709-710 ["in assessing the impacts of a project proposed for an undeveloped piece of property, agencies should compare project impacts against the existing environment, rather than some hypothetical, impacted future environment that might occur without the project under existing general plan and/or zoning designations."].) Impacts analyses based on "hypothetical allowable conditions" contemplated by an existing plan—such as that here—applies an improper baseline which "can only mislead the public as to the reality of the impacts and subvert full consideration of the actual environmental impacts...." (*Id.*)

It is likewise irrelevant, for purposes of environmental review, that the "Design Review process will ensure that the single-family homes and multi-family buildings are in character that is compatible with the surrounding development." (DEIR 86.) As an initial matter, ensuring "compatibility" with other development does nothing to ameliorate the obstruction of views and destruction of the beauty of the existing open space/agricultural setting caused by the construction of housing. Moreover, reliance on "postapproval mitigation measures adopted during the subsequent design review process" significantly undermines CEQA's goals of full disclosure and informed decision making and, thus, constitutes improper deferral of environmental assessment. (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-93, quoting *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1605, fn. 4.)

Second, the vast majority of the project site is bounded by open space, agricultural, and low density residential uses. (DEIR Figure IV.A-7.) The "multi-family" lot in southern portion of the site, is bounded by low density residential uses—a sharp contrast to multi-family apartment buildings. (DEIR Figure IV.A-7.) Only a fraction of the site is bounded by "higher" density residential uses—the trailer park the located to the east, a use which, in contrast to the 30 foot-tall buildings allowed on the Project site, includes only one-story structures. (DEIR Figure IV.A-7.) In light of the major differences between reasonably foreseeable Project development and surrounding uses, it is unclear how exactly the design review process would ensure "compatibility" with the character of existing neighborhoods.

The DEIR's focus on General Plan consistency and similarities between future construction and existing residential uses is not only misplaced, it improperly minimizes the adverse aesthetic impacts caused by altering the project site and obstructing and/or blocking views of open space, vineyards, hillsides—impacts which the DEIR identifies as "significant." (DEIR 85.) The purpose of CEQA review is to disclose and mitigate adverse environmental impacts, not to mask or dilute significant adverse impacts by shifting focus to the project's merits.[6] On the whole, even taken as program-level review, the DEIR is "legally inadequate as an informational document because it fail[s] to analyze consistently and coherently the impacts of the project relative to leaving the land in its existing physical condition." (*Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (1997) 150 Cal.App.4th 683, 709-710.)

C. Hydrology and Water Quality

1. The DEIR Does Not Adequately Analyze Impacts to Related to Groundwater.

The DEIR states that an on-site well will be used to supply "separately plumbed landscape irrigation systems" in the Hunter Subdivision, estimating that demand will be 25 acre feet (AF) per year. (DEIR 274, 298.) As detailed below, the DEIR's analysis of the impacts of groundwater use is deeply flawed and, with respect to some significant impacts, nonexistent. The City must correct and complete its analysis in a revised DEIR and recirculate the DEIR for public review and comment.

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[6] Moreover, for every General Plan policy with which the Project would (according to the DEIR) comply, there is one with it which it demonstrably will not. Policy 4.5.1, for example, provides: "The sense of a strong connection to the surrounding agricultural open space and hillsides must be preserved in the future. Views of vineyard, hillsides, creeks and major landscape features should be maintained..." (See Exhibit 3 at pp. 3-4.) Construction on the Project site will block views of vineyards, the Napa River, and open space; and it will obstruct views of hillsides. (DEIR 80, 85.)

a. The DEIR Does Not Include Project Details Necessary For Project-Level Review of Future Construction Projects.

The estimated demand for irrigation water, which requires information regarding the amount of land that must be irrigated, was based on "assumed" information about building foot print, drive ways, and other impervious surfaces and number and size of units. (DEIR 295-297.) As noted above in section II.A, this represents a failure to provide required information for a project-level EIR.

b. The DEIR Employs An Improper Baseline In Its Analysis of Groundwater-Related Impacts.

Water has not been extracted from the well for use on the Project site for many years. (DEIR 274.) Accordingly, the "actual existing physical condition" to which the Project must be compared for purposes of assessing its impacts is zero groundwater extraction from the on-site well. (*Woodward Park Homeowners Ass'n, Inc. v. City of Fresno* (1997) 150 Cal.App.4th 683, 709-710; Guidelines, § 15125, subd. (a) ["[A]n EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published . . . from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant."] (emphasis added)].)

Courts have approved the use of projected future conditions as a baseline for traffic impacts when a project will not begin causing such impacts until years in the future and the environmental setting will be substantially different at that time. (See, e.g., *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351.) Courts have also held that a "temporary lull or spike in operations that happens to occur at the time environmental review for a new project begins should not depress or elevate the baseline." (*Id.* at p. 1375, quoting *Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 127, 104.)

But nothing in CEQA permits use of a "previous usage" baseline where the previous use ceased entirely many years before environmental review began. If such were the case, then any impact could be deemed insignificant on the ground that it only slightly exceeded the most intensive previous use of the land, regardless of the actual, existing environmental condition at the time of environmental review. This, like use of a "hypothetical allowable conditions" baseline for land use impacts, "can only mislead the public as to the reality of the impacts and subvert full consideration of the actual environmental impacts..."(*id.*)—especially when it involves a discontinued previous use which was and is substantially more intensive than the existing use.

Moreover, the selection of a baseline that deviates from the existing physical conditions must be supported by substantial evidence, which the DEIR does not provide. The baseline for use of the on-site well was determined based on an estimated demand historical "demand" for water that provides no information about how that demand has, historically, met. It is quite likely that historic agricultural water needs were met, at least in part, with surface water because (1) the property

adjoined the river prior to the flood control project and likely had riparian water rights and (2) the property contained a pond, now filled in, that was likely used to store surface water.

Despite the fact that well use records exist, are maintained by the City, and were provided to the applicant during the environmental review process, there is absolutely no evidence regarding the historic use of the well. The DEIR somewhat craftily states that "active management of the well for irrigation" has ceased, but never states when exactly that use ceased or the extent to which the well was in fact used for irrigation. (DEIR 277.) Accordingly, the estimated historic demand for irrigation water (22 AF per year) says nothing about either existing or historic groundwater use because there is no evidence that groundwater supplied that demand. The EIR must analyze impacts based on a comparison of the existing use of the well (0 AF per year) and post-project use (25 AF per year).

Further, the DEIR includes a confusing discussion of irrigation demands for vineyards before and after the flood control project, which seems to suggest that the existing on-site vineyards are irrigated with groundwater from the on-site well (at 11 AY per year). (AR 276.) Careful reading of the DEIR, however, indicates that this is false. The DEIR explicitly states that "active management of the well for irrigation has ceased." (AR 274.) The DEIR does not disclose the current source of irrigation water for the vineyards. The obfuscating language in the DEIR's discussion violates the basic requirement that the "EIRs shall be written in plain language . . . so that decision-makers and the public can rapidly understand the documents." (Guidelines, § 15140.)

c. The DEIR Does Not Include Any Facts About the On-Site Well or the Local Aquifer and/or Water Table.

The DEIR states that the Project's groundwater use will not "deplete groundwater supplies" and that the "existing on-site well, previously used for agricultural purposes, has the capacity to serve more water than is needed on-site." (DEIR 233, 298.) However, the DEIR does not provide any facts about the capacity of the well to support this conclusion. Nor does the DEIR provide any factual information about the water production capability of the aquifer supporting the wells. Further, as discussed above, while it may be true that the well produces more water than is "needed on-site" the City extracts water for use "off site" and the DEIR must analyze the well's capacity to serve both and the impacts of doing so on the aquifer.

The record indicates that this information is available. In fact, the City provided the developer with information regarding the production quantity, rate, and quality of the well on the property (though that information is not presented in the DEIR). (See, e.g. March 25, 2011 Letter from St. Helena to Ryan Gregory re Completeness of Hunter Tentative Map Application (2010-40), p. 1. See also General Plan Update Final PEIR 2030 at p. 5-13 (Revisions to DEIR, October 2010) [The City maintains a groundwater level monitoring program in the area that monitors groundwater levels. (City of St. Helena, 2010; West Yost Associates, 2010b)"].)

This information must be disclosed in the DEIR and used to assess the Project's direct and cumulative groundwater impacts on groundwater levels and supply. It is not enough to simply describe past water demands and assume that future increased uses will have a similar impact.[7]

d. The DEIR Does Not Adequately Analyze the Project's Interference With Groundwater Recharge.

The DEIR discloses that the Project "would introduce new impervious surfaces, which could interfere with groundwater recharge by diverting some precipitation to the storm drainage system." (DEIR 233.) It concludes that the impact is less than significant, however, because "the area of additional impervious surface would be considered insignificant compared to the area of the groundwater basin." (DEIR 233.)

There is no factual support for this conclusion. In particular, the DEIR does not disclose the size of the "groundwater basin," the rate and extent to which the currently existing grasslands on the project site permit groundwater recharge, or the amount of water that the new impervious surfaces will prevent from percolating into the aquifer. (See DEIR 233.)

Moreover, it is improper to conclude that an impact is insignificant based on its relative contribution to a larger environmental impact. Where a project may cause an incremental increase in the nature or extent of an impact—such as interfering with recharge of an aquifer—the EIR must determine whether the Project contributes to a significant cumulative impact. Courts have consistently rejected the "ratio approach" to impacts analysis demonstrated here, which focuses on the proportional contribution of an individual project to a larger general impact, such as an individual project's contribution to the overall loss of a resource over a wide geographic area. (See *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) This invalid approach inevitably understates the severity of real, additive, incremental cumulative impacts, and instead quantifies a pseudo-cumulative "impact" that an individual project may cause. CEQA requires instead an assessment of the incremental, collective, or combined effect of both the project at issue, past projects, contemporary projects, and reasonably foreseeable actions, within a scope of analysis relevant to the project's impact—in this case, loss of grasslands habitat within the County.

The Board's analysis of grasslands habitat loss understates the severity and significance of cumulative impacts and the necessity for mitigation measures, and impedes meaningful public review and participation. (See *Citizens to Preserve the Ojai v. Board of Supervisors* (1985) 176 Cal.App.3d 421, 431-432.)

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[7] Indeed, the hydrographs upon which the DEIR relies were prepared as part of Napa County's analysis of groundwater resources, yet the County explicitly requested that the DEIR include an "explanation and analysis of any groundwater use that may occur as a result of the project." (DEIR Appendix A [Scoping Comments Summary Report at p. 10].)

Finally, the DEIR's assertion that "landscaping around the structure and pavements would be pervious and would allow infiltration of rainfall" fails to address the issue. (DEIR 233.) The inquiry for purposes of impacts analysis must focus on the extent to which the Project will prevent recharge—the fact that some unquantified part of the Project will not contribute to the problem is not informative. Additionally, the DEIR's assertion that irrigation on the pervious surfaces "would result in additional infiltration" is misguided. The water used for irrigation will be extracted from the same aquifer that the Project will interfere with recharge of and a significant amount of that water will be lost to evapotranspiration. (DEIR 295-296.)

e. The DEIR's Analysis of Groundwater-Related Impacts Is Incorrect and Incomplete.

The DEIR states:

> Groundwater is a reliable resource in the area and will continue to reliably serve as part of the City's water supply portfolio in the future without concern of overdraft. As documented in the February 2011 report to the County of Napa Conservation Development and Planning Department regarding groundwater conditions throughout the County, "Groundwater levels have been generally stable [in the St. Helena region] over time and do not exhibit any long-term trends." Based on this and other information from the report, the City's target average use of 450 AF per year (AF/year) is conservative and well within the capacity of the groundwater basin for the foreseeable future. Figure IV.K-1 shows the current groundwater trends in the area as presented in the county groundwater study.

(DEIR 274.) This is flawed for numerous reasons.

First, the DEIR fails to discuss the increasing decline in summer water levels over time in the St. Helena subarea aquifer. As Mr. Kammon explains, the hydrographs from the February 2011 Report (reproduced in the DEIR) demonstrate that numerous wells in the St. Helena area have experienced "marked declines in the groundwater table elevation over the past four decades," and that the drops in the summer water table increase "progressively in magnitude over time." (Exhibit 1 [Greg Kammon July 12, 2012 Letter] at pp. 3-7.) In light of the St. Helena data, the "local area aquifer is not stable and may be reflecting the effects of depleted groundwater supplies, which is contrary to the conclusion in the DEIR of stable groundwater conditions reproduced." (*Id.* at p. 7.)

Second, well-documented decreases in summer stream flow in the Napa River indicate that the groundwater levels are in decline. (*Id.* at 7-8.) During the dry summer months, stream flow is supplied by groundwater alone. When groundwater pumping lowers the groundwater table, it may disconnect the river from the groundwater supply. (*Id.*) Napa River flow records from a gauge located a short distance downstream of the Hunter Project site indicates that the river channel ran completely dry during August and September of 2007, 2008 and 2009. (*Id.* at p. 8.) This has only happened one other time since 1929—during the drought of 1976-1977. (*Id.*) 2007-2009 were drier than average, but did not approach the severe drought conditions observed in the 70s. (*Id.*)

Accordingly, the stream flow declines signal declines in the water table due to increased groundwater pumping. (*Id.*)

This is of particular concern in the Project area. The State Water Board delineated areas in which groundwater extraction has the potential to deplete stream flow. (*Id.* at pp. 7-8.) The Project site is located within a "potential stream flow depletion zone." (*Id.* at p. 8.) In connection with the delineations, the Board developed a method for determining whether a particular groundwater extraction would, in fact, adversely impact stream flows. (*Id.* at p. 9, citing Stetson Engineering, February 28, 2008 Technical Memorandum at p. 9.) In addition to disclosing the potentially significant impact of groundwater extraction on Napa River stream flows in the DEIR, the City must analyze the direct and cumulative impacts of increased groundwater pumping from the on-site well in accordance with this method.

Third, as noted by St. Helena Mayor Del Britton, local wells have been going dry. (*Id.* at 10.) In addition to analyzing potential impacts on stream flow, the EIR must disclose and analyze whether any reductions in the local aquifer or water table level related to increased pumping from the on-site well may impair the production rate of pre-existing nearby wells. (DEIR 231.) Completely ignoring the CEQA threshold of significance, the DEIR does not analyze Project-specific impacts on the local aquifer or water table levels at all, much less impacts to other wells.

In lieu of the required analysis, the DEIR simply concludes that the Project will not cause any groundwater-related impacts because, "generally," conditions in the area are stable. This does not provide any information about the actual impacts of the Project and, combined with the improper "historic use" baseline, demonstrates complete abdication of the City's CEQA obligation to analyze impacts in good faith and to "use its best efforts to find out and disclose all that it reasonably can." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, quoting Guidelines, § 15144.)

Finally, it is improper to rely on the City's safe yield studies to assess the impacts of the Project's groundwater extraction and use. The City's studies were based solely on the supply and demand for potable water and explicitly exclude from their analyses both (1) private wells and (2) the City's extraction from wells for nonpotable park and irrigation purposes (such as its use of the on-site well). (See April 11, 2012 Staff Report [April 5, 2012 Technical Memorandum at p. 8.].) In short, pumping from the on-site well is not within the scope of the City's analysis of safe yield from local groundwater sources.

f. The DEIR Fails to Consider the Cumulative Impacts of Other Groundwater Extractions.

An EIR must disclose and analyze the impacts of a project in conjunction with other past, present, and probable future projects. (Guidelines, § 15065(a)(3).)

The City currently pumps an undisclosed amount of water from the on-site well to irrigate vegetation planted as part of the flood control project, and it appears that the City will continue to

do so in the future. (DEIR 274.) For purposes of assessing impacts caused by pumping from the on-site well, the DEIR must add the City's use to the Project's projected 25 AF per year and determine whether the combined extractions are within the well's capacity, would result in a lowering of the water table or aquifer, or would impair the production of other nearby wells in the vicinity.

Further, as discussed above, the City extracts groundwater from other wells to supply local demand for potable water. The City's groundwater extractions, as well as reasonably foreseeable increases in groundwater extraction to meet growing demands (see April 11, 2012 Staff Report), must be described in the DEIR and analyzed to assess the combined impacts of the Project and the City's groundwater use.

2. The DEIR Does Not Analyze the Impacts of Discharging Increased Storm Runoff Into the Napa River.

The City's General Plan requires review of development plans to ensure that new development provides adequate storm drainage infrastructure and that post-project runoff is limited to pre-project peak flow rates for the five- and ten-year storms." (DEIR 234.) Under CEQA, a project causes a significant impact if it may alter the existing drainage pattern so as to "increas[e] the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or off-site." (DEIR 232.)

As discussed above, the Project will create new impervious surfaces on the Project site, which will divert precipitation (i.e. stormwater runoff) into a storm drainage system, rather than permitting the water to percolate into the soil. (DEIR 233 [New impervious surfaces on the project site include buildings, access roadways, bicycle and pedestrian pathways, and surface parking lots. "The placement of new impervious surfaces would create stormwater runoff."].) The storm drainage system will divert water directly into the Napa River until doing to is prevented by high flows. (DEIR 212.) As a result, the amount of stormwater entering the river from the project site at any given time will be higher than it was prior to the construction of new impervious surfaces. Only when the river reaches extremely high volumes will the runoff be held in a detention basin to avoid flooding at the Project site. (DEIR 212.) At that point, water held in the detention basin will be pumped back into the river. (DEIR 212.)

The DEIR, which purports to address this impact at DEIR page 233 (DEIR 231) does not analyze whether post-project stormwater runoff will exceed pre-project rates or whether the additional runoff may increase the rate or amount of flow in the Napa River so as to cause erosion, siltation, or flooding downstream of the Project site. Instead, the DEIR states that:

> The proposed project would change the existing drainage pattern on-site as the site would change from largely agricultural to residential. However, the drainage pattern introduced by the project would not modify streams or rivers as none currently traverse the project site. As discussed under Stormwater Drainage Systems, below, the proposed project would include installation of a storm drainage system that would be connected to the City's drainage system. The modification would not cause

> significant erosion or flooding because runoff would be controlled and collected in storm drain pipes and discharged in accordance with City requirements. This potential impact would be considered less than significant.

(DEIR 233-234.)

As indicated by the underlined phrases above, the DEIR's analysis is improperly limited to impacts on the Project site. The threshold of significance requires analysis of "off-site" impacts as well. In this case, the DEIR must, but does not, consider impacts caused by discharging increased runoff into the Napa River.

Nor does the storm drainage system address the problem:

> The major storm drain infrastructure in the project vicinity was constructed as part of the Flood Protection Project for future project use. It includes a storm drain running through the project site within the future Starr extension right-of-way and an existing detention basin immediately north of the project on City-owned property. The Starr storm drain and the detention basin have been sized to accommodate the proposed project based on runoff coefficients associated with its planned residential density, so there is sufficient capacity to serve the project and detention of post-project runoff is not necessary. Furthermore, the Starr extension storm drain was sized to accommodate drainage from the area south of the pipe and the detention basin for drainage from that area between the pipe and the basin.

(DEIR 234.)

All this means is that the storm drain system was designed to move the increased stormwater runoff created by the Project into the river. It says nothing about the extent to which the increased runoff may increase peak flows in the Napa River, thereby causing erosion and flooding downstream. As explained by hydrologist Greg Kamman: "Although the DEIR does address the adequacy of the internal project storm drainage capacity, if fails to evaluate or address how the project may substantially increase the rate or amount of flow in receiving waters and downstream areas. Potential impacts from increase storm water runoff includes, increased downstream water levels and flood hazards along with increased erosion potential and water quality impacts." (Exhibit 1 [Greg Kammon July 12, 2012 Letter] at p. 10.)

Particularly important with respect to impacts to salmonid habitat and water quality in the Napa River, as discussed below, the DEIR must analyze whether its stormwater discharges may contribute to channel incision caused by an increase peak flows. "Channel incision" refers to the downcutting of a river—erosion of the bed and banks the stream channel—resulting sedimentation. (*Id.* at p. 10; Exhibit 2 at pp. 3-4.) It is caused by increases in the magnitude of peak stream flows. (*Id*) As documented by the State Water Board, channel incision is a primary cause of degradation of the Napa River stream channel and a primary source of sediment pollution. (Exhibit 2 at pp. 3-4.)

D. Biological Resources

1. The DEIR Entirely Fails To Analyze Potentially Significant Impacts to Protected Fish Species in The Napa River.

Despite the Project's potentially significant impacts on water quality and stream flow in the Napa River, the DEIR does not analyze, whatsoever, the potentially significant impacts of the Project to special status fish species in the Napa River. Failure to disclose and analyze this vital environmental impact is fatal to the DEIR's adequacy as an informational document. The Project's potential impacts to protected anadromous fish must be disclosed, analyzed, and mitigated.

The Napa River in the vicinity of the project site and in downstream reaches contains habitat suitable for rearing, spawning, and migration of two protected fish species: fall-run Chinook salmon (*Oncorhynchus tshawytscha*) and federally protected Central California Coastal steelhead (*Oncorhynchus mykiss*). (Exhibit 2 at pp. 2-3, citing Napa County Resource Conservation Department 2008, Leidy et al. 2005.) The section of the Napa River adjacent to the Project site is deemed "the most important spawning and nursery area for steelhead in the main stem Napa River." (*Id.* at p. 3.) Recent surveys identified abundant spawning habitat and juvenile chinook in St. Helena, about two miles south of the Project site. (*Id.*) Herculean efforts—including habitat restoration, major projects to remove fish migration barriers, and new sediment pollution limits—are currently underway within the Project area to protect and aid in the recovery of these species. (*Id.*)

The DEIR's only mention of chinook salmon and steelhead occurs in DEIR Table IV.D-1: "Special Status Plant and Wildlife Species That May Occur, or Are Known to Occur in Habitats Similar to Those Found on the Hunter Subdivision Project Area." (DEIR 132-133.) Therein, the DEIR tersely described the status and habitat requirements of these species, and then summarily concludes with respect to the likelihood of their occurrence:

"Not Present. No perennial aquatic habitat present in the project area."

(DEIR 132-133.)

In light of many surveys documenting chinook and steelhead in the Napa River either directly adjacent to or slightly downstream of the Project site, not to mention the millions of dollars and countless hours that have been and currently are devoted to protecting these species on the St. Helena stretch of the Napa River, the DEIR is plainly wrong.

It may be that the DEIR is engaging in a game of semantics by either (1) defining "project area" so narrowly that it includes only the actual Project site (as it did with respect to stormwater runoff impacts [(DEIR 233-234]), or (2) limiting the scope of its analysis to "perennial" habitat—a concept that is not explained in the DEIR. (See also DEIR 383 [defining the geographic area considered for cumulative biological impacts as the "City of St. Helena"].) On either count, the DEIR violates CEQA.

CEQA broadly defines the relevant geographical environment as "the area which will be affected by a proposed project." (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 384-385, c iting Pub. Resources Code, § 21060.5.) Consequently, "the project area does not define the relevant environment for purposes of CEQA when a project's environmental effects will be felt outside the project area." (*County Sanitation Dist. No. 2 of Los Angeles County v. County of Kern* (2005) 127 Cal.App.4th 1544, 1582–1583.) Thus, the City is mistaken to the extent it believes that it has no obligation under CEQA to consider geographically distant environmental impacts of the Project.

As explained by fisheries biologist Jeffery Hagar, the Project may adversely impact salmon and steelhead in numerous ways: (1) increasing stormwater runoff, thereby increasing the magnitude of peak flows in the Napa River and causing erosion of the stream bed and banks, increasing fine sediment loads, eroding spawning sites and damaging developing salmon and steelhead embryos; (2) reducing summer stream flow necessary to support fish species by interfering with groundwater recharge and increased groundwater pumping from the on-site well. (Exhibit 2 at pp. 3-4.) Mr. Hagar explains that in recent years, the Napa River has run completely dry in late summer months, a condition which previously occurred only once in an extreme drought. (*Id.* at p. 5.) Mr. Hagar concluded that increased stormwater discharge and stream flow reduction threatened by the Project may "adversely impact existing spawning, rearing, and migration habitat for salmon and steelhead from the project site downstream to the mouth of the Napa River." (*Id.* at pp. 5-6.)

Under Guidelines section 15065, subdivision (a), an agency must find that a project has a significant effect on the environment if the project has the potential to "reduce the number or restrict the range of an endangered, rare or threatened species." (*Napa Citizens, supra,* 91 Cal.App.4th at p. 381.) And, because CEQA placed the burden on the agency to study and determine whether a project will cause a significant impact, once the issue of impacts to a protected species is identified, the "burden shifts to the [City] to investigate the effect of the Project on that species." (*Id.* at pp. 385-386.) The DEIR must disclose and evaluate potential project impacts on fishery resources in the Napa River.

2. The DEIR Does Not Adequately Analyze Impacts to Special Status Plants and Species Habitat.

The DEIR acknowledges that the Project will result in the loss of the currently existing grasslands habitat on the site, but concludes that the impacts of habitat loss are insignificant because of the "small size" of the property and because there is "alternative" habitat on the opposite side of the levee. (DEIR 141.) The DEIR does not cite any facts in support of its analysis.

As explained in the Napa County's analysis of ecosystems within the County, grassland habitat supports a wide diversity of plant and wildlife species and performs many important

ecosystem functions.[8] (Exhibit 6 [Napa County Baseline Report, Chapter 4 "Biological Resources"] at p. 4-19.) However, grasslands in the County "have in the past and continue today to be lost to residential, commercial, and industrial development, and conversion to agriculture uses other than grazing." (*Id.*) Less than 20% of grasslands in the Bay Area are protected, they have already undergone a severe decline in Napa County, and they "continue to be highly threatened by development." (*Id.*)

The DEIR improperly limited its analysis of the impact of destructing grasslands to the Project site and adjacent land. CEQA requires analysis of not only indirect impacts, but also the cumulative impacts Proper analysis of the impact of habitat loss must include consideration of the abundance (or lack thereof) of the habitat in the region, the extent to which that habitat is threatened or in decline, and the extent to which the Project contributes to a cumulative impact by participating in the impact. The DEIR must analyze and disclose whether the Project's destruction of grasslands is a considerable contribution to a significant County-wide cumulative impact.

Additionally, by determining significance based on the "small size" of the property, the DEIR employ a "ratio approach" to impacts analysis that has been unequivocally rejected by the courts. The ratio approach focuses on the proportional contribution of an individual project to a larger general impact, such as an individual project's contribution to the overall loss of a resource over a wide geographic area. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692.) This invalid approach inevitably understates the severity of real, additive, incremental cumulative impacts, and instead quantifies a pseudo-cumulative "impact" that an individual project may cause. CEQA requires instead an assessment of the incremental, collective, or combined effect of both the project at issue, past projects, contemporary projects, and reasonably forseeable actions, within a scope of analysis relevant to the project's impact—in this case, loss of grasslands habitat within the County.

The Board's analysis of grasslands habitat loss "understates information concerning the severity and significance of cumulative impacts impedes meaningful public discussion and skews the decisionmakers perspective concerning the environmental consequences of a project, the necessity for mitigation measures, and the appropriateness of project approval."(*Citizens to Preserve the Ojai v. Board of Supervisors* (1985) 176 Cal.App.3d 421, 431-432.)

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[8] Among other things, grasslands not only provide habitat, but also perform an important role in maintaining stream systems because they maintain water quality through soil retention and by filtering out sediment and nutrients from run off; prevent flooding and minimize channel erosion by slowing surface runoff; and increase infiltration to groundwater. (Exhibit 6 [Napa County Baseline Report, Chapter 4 "Biological Resources"] at p. 4-19.)

E. Geology and Soils

1. The DEIR's Discussion of Subsidence Impacts is Flawed and Unsupported.

Under CEQA, a significant impact exists if project may expose people or structures to substantial risk of loss, injury, or death involving subsidence. (DEIR 178.) Subsidence is the lowering of the land-surface elevation and may result in increased flooding hazards, damage to underground utilities and damage to stormwater and sanitary sewer drainage. (DEIR 174.) Subsidence is generally caused by groundwater pumping (DEIR 174.)

Although the Project will pump groundwater from the on-site well, the DEIR concludes that the potential for subsidence is less than significant because the "demand is expected to be much less than the "historical agricultural demand by irrigation of vineyards." (DEIR 180.) This conflicts with the DEIR's discussion of groundwater use, which discloses that the Project demand is *greater* (25 AF per year) than historical uses (22 AF per year)—certainly not "much less." (DEIR 277.) Additionally, for the same reasons discussed above, it is improper to use "historical" or past use as a baseline for determining this Project's impacts.

The DEIR also states that "[t]here are no significant agricultural or industrial activities proposed that would result in the substantial pumping withdrawal of water from the underlying aquifer that could contribute to future subsidence on the project site." (DEIR 180.) This too conflicts with the DEIR and documents relied on therein, which indicate that the City pumps groundwater from wells in the area to supply local demand for potable water and, moreover, pumps water from the on-site well for irrigation purposes. (DEIR 247; Exhibit 8 [April 5, 2012 Technical Memorandum at p. 8.].) As discussed above, the DEIR must consider the impacts of its groundwater extraction in conjunction with the impacts of the City's groundwater extraction.

Thus, the DEIR's analysis of subsidence is legally flawed and entirely unsupported fact. The DEIR must be revised to include a proper analysis of this potentially significant impact and recirculated for public review and comment.

F. Hazards and Public Safety

1. The DEIR Does Not Adequately Describe the Existing Environmental Conditions.

The DEIR discloses that the soil on the Project site may be contaminated with hazardous materials from prior agricultural use of the land—including metals such as mercury, copper, lead, and/or arsenic and persistent organic compounds such as DDT. (DEIR 208 [Impact HAZ-1]. See also Exhibit 5 [Letter of Saul Bloom dated July 6, 2012] at pp. 3, 6-9.) "Exposure to these chemical residues during site grading and development activities could potentially affect the health and safety of construction workers and the general public. If left in place, residues could also affect future residents at the project site." (DEIR 208 [Impact HAZ-1]. See also Exhibit 5 at pp. 4-5.)

Maps of the Project site indicates that there is a water body directly adjacent to the site and a well and filled pond on the site itself. (Exhibit 5 at pp 6-9.) However, the DEIR does not describe whether metals and/or persistent organic compounds in the soil have leached into the surface or groundwater. (*Id.* at pp. 5-6.) This is of particular concern because the applicant intends to use groundwater extracted from the well at the project site for all irrigation and other outdoor water needs.

Finally, although acknowledging that stormwater runoff may be contaminated with hazardous materials (DEIR 222), the DEIR fails to disclose whether the drainage ditch in the Project area contains hazardous materials deposited by storm runoff and how any such materials may impact human health.

2. The DEIR Improperly Defers Analysis of Hazardous Material Impacts.

Rather than studying the soil on the site and disclosing any hazardous materials and their risks to the public, the DEIR calls for a future study to be conducted as a condition of approval for grading and building permits:

> Shallow soil samples shall be collected by a qualified environmental professional within all areas of the project area proposed for residential uses and analyzed for pesticides and herbicides in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties. . . . any detected organic compounds or metals above naturally-occurring concentrations must be evaluated in a human health risk assessment as described in the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual or in comparison to California Human Health Screening Levels (CHHSLs).

(DEIR 208-209.)

The DEIR improperly discusses this environmental investigation and analysis as a "mitigation measure." A mitigation measure, however, is a way to reduce or avoid impacts that have been identified and disclosed in the DEIR—not the study of the nature and extent of the impact itself. Moreover, while it may be appropriate, in some cases, to defer the selection of particular mitigation measures until after project approval, "[d]eferred mitigation" is permitted only "where practical considerations prohibit devising [mitigation] measures early in the planning process." (*Gentry, supra,* 36 Cal.App.4th at p. 1394, accord *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-93.) And even then, the EIR must still "(1) undert[ake] a complete analysis of the significance of the environmental impact, (2) propose[] potential mitigation measures early in the planning process, and (3) articulate[] specific performance criteria that would ensure that adequate mitigation measures were eventually implemented." (*CBE, supra,* 184 Cal.App.4th at p. 95.) As discussed above, these conditions are not met here.

There is no reason that soil sampling and any necessary risk assessment cannot be conducted now and included in this DEIR. The location of soils to be excavated as part of the grading process

and the location of communities that may suffer the health consequences of disturbing the materials are both known. (DEIR Figure III-4.) Moreover, it is not as though soil disturbance will occur only as part of a future, yet-to-be planned construction project. Approval of a grading plan is one of the activities currently presented for the City's approval and is the first step in developing the site. (DEIR 118.) There is no reason, practical or otherwise, to defer analysis and public disclosure of this important public health risk, nor does the DEIR provide a reason for doing so. Additionally, shallow soil sampling and analysis may be completed in a reasonable period of time (Exhibit 5 at p. 6) and, at any rate, must be conducted prior to grading the property.

CEQA requires an agency to "use its best efforts to find out and disclose all that it reasonably can." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, quoting Guidelines, § 15144.) The failure to study and disclose any hazardous materials on the project site, as well as the extent to which their disturbance threatens public health, constitutes a clear violation of the City's CEQA obligations.

G. Land Use Impacts.

1. The DEIR Entirely Fails To Analyze Land Use Impacts.

The DEIR states that land use impacts "were excluded from detailed analysis in the EIR because it was determined in the Initial Study and during the scoping period that the[y] would be less than significant." (DEIR 2, 377 [further stating, incorrectly, that "[a] detailed description of the project's impacts related to [land use] is provided in the Initial Study."].) The Initial Study concludes, without elaborating, that:

> The proposed project is consistent with land use designations and applicable goals and policies of the St. Helena General Plan, site zoning and other applicable land use regulatory documents. There are no significant impacts associated with land use policy planning impacts.

(*Id.*) Accordingly, the Initial Study and DEIR contain only the City's bare conclusion that the Project is consistent with land use designations and, thus, will not cause land use impacts.

"[T]he EIR must contain facts and analysis, not just the agency's bare conclusions or opinions.'" (*Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351, 1388, quoting *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn.* (1986) 42 Cal.3d 929, 935.) "[T]he public and decision-makers, for whom the EIR is prepared, should . . . have before them the basis for [an agency's] opinion so as to enable them to make an independent, reasoned judgment." (*Id.*, quoting *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 831.)

Indeed, even where an impact is determined to be insignificant, the EIR (or attached Initial Study) "shall contain a statement briefly indicating the reasons that [] possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."

(Guidelines, § 15128; Pub. Resources Code, § 21100.) The EIR and Initial Study do not provide any reasons for the City's conclusion that the Project is consistent with the General Plan and Zoning Ordinance's "land use designations."

2. The DEIR Fails To Disclose Significant Land Use Impacts.

As discussed above, with the Project violates the City's Zoning Ordinance and is inconsistent with the General Plan because the project calls for multi-family development which is prohibited in districts designated for medium density residential uses (MR and MDR, respectively.)

Under CEQA, a project has a potentially significant impact, which must be analyzed in an EIR, if it may "[c]onflict with a[n] applicable land use plan, policy or regulation (including, but not limited to the general plan . . . or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect." (DEIR Appendix A [Initial Study] at p. 30.) A DEIR must "identify any inconsistencies between the Project and the General Plan." (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 355-356, citing Guidelines § 15125, subd. (d).)

Failure to disclose and analyze the Project's significant land use impacts renders the DEIR insufficient as an informative document. The DEIR must be revised to disclose and properly analyze the Project's inconsistency with the City's land use designations and recirculated for public review and comment.[9] (See *Sunnyvale West Neighborhood Assn. v. City of Sunnyvale City Council* (2010) 190 Cal.App.4th 1351, 1388 [An "EIR 'must present information in such a manner that the foreseeable impacts of pursuing the project can actually be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made.'"].)

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[9] Conflict with land use designations also makes the proposed Project inconsistent with the project objective to "[s]ubdivide the site consistent with the City's General Plan and Zoning for the site to accommodate residential development." (DEIR 48.) This is the sole "project objective" that the "environmental superior alternative" identified in the DEIR—the "Residential/Agricultural Preserve Alternative"—would not meet. This alternative would reduce the number and size of parcels in the proposed subdivision and, instead, reserve a 6.48-acre parcel overlooking the Napa River for agricultural or open space use. (DEIR 370-372.) The Residential/Agricultural Preserve Alternative would reduce impacts to agricultural, hydrology, traffic, air quality, biological resources and water quality. (DEIR 376.) The DEIR concludes that this alternative "would meet all the project objectives except consistency with the City's General Plan and Zoning for the site" because a General Plan Amendment (from MDR to OS (Open Space)) and Rezoning (from MR to AP (Agriculture Preserve)) would be required. (DEIR 376.)

3. The DEIR Lacks Project-Specific Information Necessary To Analyze the Land Use Impacts of Future Housing Construction Projects.

Two bodies of information are necessary to determine whether a project is inconsistent with a general plan or zoning ordinance: (1) the policies, rules, and standards embodied in the General Plan and Zoning Ordinance and (2) relevant details of a proposed project. The analysis requires only a simple comparison of these two bodies of information to determine whether or not the project is consistent with the Plan and/or Ordinance. But, it should go without saying, a comparative analysis is impossible if one set of information is not available.

Such is the case here with respect to future housing construction projects. The Zoning Ordinance includes numerous standards for residential structures, including yard, setback, and building location and height regulations. (Mun. Code, § 17.16.040(B).) The height of principal buildings in MR districts, for example, is limited to 30 feet; accessory buildings to 15 feet. (Mun. Code, § 17.40.060(A).) Maximum lot coverage (the land area covered by all buildings or structures on a lot) is 45%. (Mun. Code, § 17.40.060(A).)

To analyze whether a particular construction project is consistent with these standards, there must be a proposal that specifies the size and height of the proposed structures. Without this information, there is no way to determine whether a particular building construction project is, in fact, consistent with the City's land use rules. Here, concrete construction projects have not been proposed and, as a result, the details necessary to determine their consistency with the Zoning Ordinance's development standards for MR disticts.

The DEIR, in many places, purports to describe the future construction projects by reference to applicable development standards and "analyzes" impacts based on an assumption that future proposals will conform thereto. (See, e.g., DEIR 57 [stating that structures will be consistent with Zoning Ordinance height limits for single-family homes and accessory structures].) While such a theoretical or "conceptual" approach may be proper for program-level review of development proposals that do not yet exist, it is utterly inadequate for a project-level EIR. This is especially true with respect to land use impacts—the General Plan and Zoning Ordinance consistency determination, in particular. Under the DEIR's approach, that inquiry would essentially amount to a determination that the Plan and Ordinance are consistent with themselves, which does not constitute a realistic assessment of any specific construction project.

The purpose of an EIR is "to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment." (§ 21061; see also *Environmental Planning & Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354.) Accordingly, an EIR's validity depends, in large part, upon "whether it provides the information necessary for the decisionmakers and the public to understand the nature and environmental consequences of the [p]roject." (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 355-356.)

This DEIR does not, and cannot in the absence of proposed construction projects, contain the detail necessary to conduct realistic, project-level review of the potential land use impacts of "full buildout" of the Hunter Subdivision. (DEIR 59-60.) As a result, the City's approval of future construction proposals, including design review for dwellings and building permits, must be preceded by additional CEQA review.

H. Traffic Impacts.

As explained as explained in the attached review of the DEIR by Civil and Traffic Engineer Dan Smith, the DEIR does not include the full traffic study prepared for the Hunter Subdivision and the DEIR does not explain or summarize many important and fundamental assumptions underlying the traffic study's conclusions. (Exhibit 4 [July 9, 2012 Letter of Dan Smith].) By presenting only the study's conclusions, the DEIR fails to provide any facts or rational supporting the findings therein and the DEIR fails as an informational document.

1. The DEIR's Baseline For Traffic Impacts Is Not Explained or Supported.

The DEIR estimated existing conditions by

> Conducting November 2011 traffic counts at 11 key intersections during the weekday AM and PM peak commute periods, and Saturday PM peak period. Counts were then factored to fall harvest conditions in order to present peak season traffic conditions.

(DEIR 301, 310.) However, as explained by Civil and Traffic Engineer Dan Smith, the DEIR does not explain how the counts were "factored" or the bases for the factors used:

> [T]he adjustment factors and the derivation thereof is completely unexplained in the DEIR. Consequently, the public has no way of assessing whether or not the adjusted baseline counts adequately represent peak harvest season conditions.

(Exhibit 4 at p. 1.) As a result, it is impossible to determine whether the figures in the DEIR accurately reflect existing conditions. By failing to explain baseline assumptions, the EIR does not "present information in a manner calculated to reasonably inform the public and decisionmakers about the project, which contributed to its inadequacy as an informational document." (*Madera Oversight Coalition, Inc. v. County of Madera* (2011) 199 Cal.App.4th 48, 95.) Indeed, because the existing conditions are an integral component of impacts analysis—the baseline against which Project-related traffic projections are compared—the DEIR's failure to provide any explanation of the methodology or bases for its existing condition figures renders the entire analysis unreliable.

Additionally, the map of the Project area prepared by the City's traffic consultant as part of its analysis incorrectly depicts Railroad Avenue as being continuous from Hunt Avenue to Pope Street, whereas, in actuality, Railroad Avenue dead-ends south of Hunt, about halfway to Pope. (Exhibit 4 [July 9, 2012 Letter of Dan Smith] at p. 2, citing DEIR Figure IV.L-1.) If the traffic impacts analysis included this nonexistent road extension in its underlying assumptions—a matter

not revealed in the DEIR—the analysis is, of course, not representative of reality. Failure to clearly define the Project area, as considered in the traffic analysis, renders the DEIR inadequate as an informational document.

J. Public Review.

The City impaired the public's right to fully and meaningfully review the adequacy of the DEIR's findings and scope by withholding basic information referenced and relied upon in the DEIR. Not only were the documents referenced in the DEIR unavailable for the entire comment period, the City refused to provide them, despite repeated requests.

On July 3, 2012, I requested access to the DEIR's appendices and a range of other materials referenced in the DEIR, which were not included with the copy of the DEIR posted at the City's website. These documents include technical information forming the basis of the DEIR's impacts analysis, such as the complete traffic study, the 2012 St. Helena water metering study used to calculate the Project's potable water demand, an assessment of the existing conditions on the Project site, the geotechnical reports prepared for the Project site in 2009 and 2011, and many others. Thereafter, the City posted the DEIR's appendices on its website and mailed this office a CD containing the DEIR and its appendices. However, the CD and website still do not include the requested reference materials. On July 5, 2012, our client's member, Mr. Chuck Vondra, contacted the City, again providing the City with the requested list of documents referenced in the DEIR. I again sent this list to the City on July 6, 2012.

On July 10, 2012, the City emailed a revised list of documents referenced in the DEIR and two documents that had been revised earlier in the week. The City asserted that this comprised all of the information previously requested. However, we did not request two newly revised studies and a revised *list of* references—we requested the actual documents referenced and relied upon in the DEIR. We made clear that these documents were necessary to review the adequacy of the DEIR's impacts analysis.

The City also asserted that all of the material previously requested has been available in a CD at the City's desk since the my initial request. However, the CD left at the front desk, at my request, was to be identical to the one mailed to my office. As stated, the CD mailed to my office does not include any of the material cited in the DEIR's "references" section—it includes only the DEIR and its appendices.

On July 12, 2012, another of our client's members, Mr. Greg David, went to City Hall and again requested the documents referenced in the DEIR (including those previously requested, documents included in the new DEIR references list, and the versions of two recently "revised" documents that were actually relied upon in the DEIR[10]). The attendant told Mr. David that only

[10] One of the recently "revised" documents included in the City's July 10, 2012 email—"53a - City of St. Helena 2012. Meter Study"—contains only data from the City's water metering study.

Greg Desmond or Gary Broad, the city Manager, could provide the requested material and directed him to complete a form with his name, contact information, and information sought. The City did not furnish the CD, which purportedly contained all of the information sought, to Mr. David.

In a July 11, 2012 letter, a law firm representing the City as City Attorney asserted that the City need not make the documents referenced in the DEIR available during the public comment period—even if these documents include the underlying data, studies, surveys, and analysis that form the basis of the DEIR's analysis and conclusions. (July 11, 2012 letter of Karen Murphy at pp. 1-2.) In the City's view, it need only share with the public documents "incorporated by reference" into the DEIR. This is absurd.

Under CEQA Guidelines section 15087, subdivision (c), agencies must make "copies of the EIR and all documents referenced in the EIR" available for public review during the public review period. (Guidelines, § 15087, subd. (c) (emphasis added).) The documents must be "readily accessible to the public during the lead agency's normal working hours." (*Id.*)

Section 15087 is not limited to the documents "incorporated by reference" pursuant to Guidelines section 15150, nor would that may any sense in light of the nature of material that may be so incorporated. Under section 15150, "[a]n EIR . . . may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public." (Guidelines, § 15150, subd. (A) (emphasis added).) Many of the documents "referenced in" the DEIR are not publicly available—the traffic analysis, geotechnical surveys of the property, and the City's water meter study, for example—and thus may not be "incorporated by reference. Further, it is nonsensical to read CEQA as requiring an agency to make available documents which are already publicly available, but permitting concealment of those which are not. This runs contrary to the must fundamental disclosure and transparency purposes of CEQA.

Instead, the technical information, data, and analysis underlying the DEIR's discussion and conclusions must be available to the public. While it need not be included in the body of an EIR, it must, at a minimum, be included in appendices:

> The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily

---

It is entirely inappropriate to "revise" the data upon which the DEIR relied after circulation of the DEIR. The City must release earlier version of this document to enable the public to determine the adequacy of the DEIR in light of the data upon which it relied. Data which has been made to conform to the DEIR's analysis and conclusions is utterly meaningless.

> available for public examination and shall be submitted to all clearinghouses which assist in public review.

(Guidelines, § 15147 (emphasis added).)

That the City failed to include the relevant technical data and analysis relied upon in the DEIR in its appendices, no doubt, violates Guidelines section 15147 and handicaps the public's ability to fully and meaningfully review the DEIR. But the City's steadfast refusal to provide this information upon specific request, combined with a hollow justification for failure to so, demonstrates something far more insidious—willful concealment of the information necessary to assess the City's CEQA compliance. This is beyond the pale.

The City is required by law to renotice CEQA's full, statutory 45-day comment period on the DEIR, after it makes the documents referenced in the DEIR available for public review. (Pub. Resources Code, § 21091, subd. (a).) Any failure to do so would impermissibly violate CEQA's most fundamental disclosure and public participation objectives and procedures. (Guidelines, § 15088.5, subd. (a)(4); *Laurel Heights Improvement Assn. v. Regents of University of California* (1993) 6 Cal.4th 1112, 1130 (*Laurel Heights II*); *Mountain Lion Coalition v. Fish & Game Com.* (1989) 214 Cal.App.3d 1043, 1052.)

Thank you for your attention to this matter.

Very Truly Yours,

Kelly A. Franger

enclosures:

Exhibits 1-8, in relevant part, are attached in hardcopy hereto. Full copies of all exhibits, along with sub-exhibits to the letters of Mr. Kammon and Mr. Hagar are located on the CD submitted herewith, as per your July 12, 2012 discussion with Amelia Mooney of this office. We will submit all exhibits and sub-exhibits in hard copy upon request.

L:\Hunter\Administrative Proceedings\LGW Docs\C001h Comment Letter on DEIR.wpd

EXHIBIT 1

Kamman Hydrology & Engineering, Inc.
7 Mt. Lassen Drive, Suite B250, San Rafael, CA 94903
Telephone: (415) 491-9600
Facsimile: (415) 680-1538
E-mail: Greg@KHE-Inc.com

July 10, 2012

Thomas N. Lippe
Lippe Gaffney Wagner LLP
329 Bryant Street, Suite 3D
San Francisco, CA 94107

Subject: Review of Draft EIR
Hunter Subdivision Project, St. Helena, CA
SCH: 2012032048

Dear Thomas:

I am a hydrologist with over twenty five years of technical and consulting experience in the fields of geology, hydrology, and hydrogeology. I have been providing professional hydrology services in California since 1991 and routinely manage projects in the areas of surface- and groundwater hydrology, water supply, water quality assessments, water resources management, and geomorphology. Most of my work is located in the Coast Range watersheds of California, including the Northern and Southern San Francisco Bay Counties. My areas of expertise include: characterizing and modeling watershed-scale hydrologic and geomorphic processes; evaluating surface- and ground-water resources/quality and their interaction; assessing hydrologic, geomorphic, and water quality responses to land-use changes in watersheds and causes of stream channel instability; and designing and implementing field investigations characterizing surface and subsurface hydrologic and water quality conditions. I co-own and operate the hydrology and engineering consulting firm Kamman Hydrology & Engineering, Inc. in San Rafael, California (established in 1997). I earned a Master of Science in Geology, specializing in Sedimentology and Hydrogeology as well as an A.B. in Geology from Miami University, Oxford, Ohio. I am a Certified Hydrogeologist (CHg) and a registered Professional Geologist (PG).

I have reviewed the Hunter Subdivision Project Draft EIR (DEIR)(SCH: 2012032048), prepared by Urban Planning Partners, Inc. for the City of St. Helena and dated May 29, 2012. The purpose of this letter is to provide you with an independent opinion regarding potential significant hydrologic impacts to the environment associated with the proposed project. In addition to reviewing the DEIR, I have reviewed the following documents and rely on technical information contained in these documents to help formulate my opinions:

- City of St. Helena, 2011, Water supply and demand conditions update. Staff report to Mayor and City Council, April 12, 2012, 64p.
- City of St. Helena, 2005, City of St. Helena stormwater management standards, construction and post-construction. September 13, 46p.

- Duarte, J., 2012, Council critical of water report. Article in St. Helena Star, April 19.
- Luhdorff & Scalmanini Consulting Engineers, 2011, Executive Summary, Napa County comprehensive groundwater monitoring program. Prepared for Napa County, February, 35p.
- Luhdorff & Scalmanini Consulting Engineers, 2011, Napa County groundwater conditions and groundwater monitoring recommendations. Prepared for Napa County, Department of Public Works, February, 608p and 1 plate.
- Nakano, G. and Connell, J., 2005, 2005 Napa Valley Resources Study, Napa County Municipal and Industrial Demands, Incorporated areas. Technical Memorandum No. 2 prepared for Don Ridenhour, Project Manager, by West Yost & Associates, October 19, 68p.
- Nakano, G. and Connell, J., 2005, 2005 Napa Valley Resources Study, Napa County Incorporated areas Water Supplies. Technical Memorandum No. 4 prepared for Don Ridenhour, Project Manager, by West Yost & Associates, October 19, 28p.
- Nakano, G. and Connell, J., 2005, 2005 Napa Valley Resources Study Project, Comparison of demand projections and supply capacities. Technical Memorandum No. 6 prepared for Don Ridenhour, Project Manager, by West Yost & Associates, October 19, 66p.
- Nakano, G. and Connell, J., 2005, 2005 Napa Valley Resources Study Project, Potential local and regional water supply projects. Technical Memorandum No. 7 prepared for Don Ridenhour, Project Manager, by West Yost & Associates, October 19, 28p.
- Napa County Dept. of Conservation, Development and Planning, 2009, Napa County General Plan (2008), Conservation Element: Water Resources. June 23.
- Stetson Engineers, Inc., 2008, Methodology and sources of information, delineation of subterranean streams and potential streamflow depletion areas – policy for maintaining instream flows in Northern California coastal streams. Draft technical memorandum, May 16, 49p.
- Stetson Engineers, Inc., 2008, Approach to delineate subterranean streams and determine potential streamflow depletion areas – policy for maintaining instream flows in Northern California coastal streams. Technical memorandum, February 28, 10p.
- Stetson Engineers, Inc., 2008, Delineation of subterranean streams and potential stream depletion areas, Saint Helena Quadrangle. February 20, 1 map sheet.
- United States Geological Society (USGS), 2012, USGS Surface-Water Data for California, monthly discharge statistics for USGS gauge #11456000, Napa River near St. Helena, CA, retrieved July 1, 2012, 18:38 EDT, http://waterdata.usgs.gov/ca/nwis/dv/?site_no=11456000&agency_cd=USGS&referred_module=sw.

Based on my review of the DEIR and the documents and data listed above, it is my professional opinion that the project has the potential to impart significant adverse impacts to vicinity groundwater and summer surface water base flow in the Napa River.

In addition, storm water runoff from the project site has the potential to increase flood risks along the Napa River as well as within the project boundaries. The rationale for these opinions is provided below.

1.0 Potential Depletion of Groundwater and Napa River Base Flows

The DEIR does not provide an evaluation of the potential project induced changes in groundwater conditions and associated summer base flows in the Napa River due to the combined effects of increased domestic household demands on the City's water supply and increased pumping from the on-site irrigation well. The DEIR states the following at the top of page 274:

> *Groundwater is a reliable resource in the area and will continue to reliably serve as part of the City's water supply portfolio in the future without concern of overdraft. As documented in the February 2011 report to the County of Napa Conservation Development and Planning Department regarding groundwater conditions throughout the County, "Groundwater levels have been generally stable [in the St. Helena region] over time and do not exhibit any long-term trends." Based on this and other information from the report, the City's target average use of 450 AF per year (AF/year) is conservative and well within the capacity of the groundwater basin for the foreseeable future. Figure IV.K-1 shows the current groundwater trends in the area as presented in the county groundwater study.*

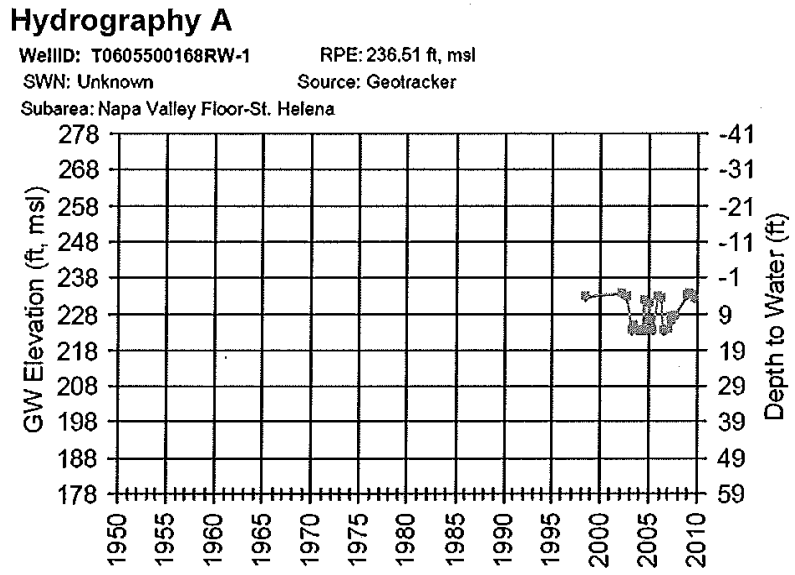
I disagree with the DEIR's contention that groundwater conditions are stable within the Napa Valley within the project vicinity for the following reasons.

A) Careful examination of the hydrographs (plots of groundwater table elevations over time) presented in DEIR as figure IV.K-1 and the report from which these figures were taken(Luchdorff & Scalmanini's 2011 groundwater conditions letter report cited above) indicate that there are numerous wells in the St. Helena area that display marked declines in the groundwater table elevation over the past four decades. Three of the six St. Helena Subarea well hydrographs presented in the DEIR figure IV.K-1 contain only a decade of monitoring data and don't capture long-term changes.

   To aid in further discussion, the available hydrographs presented in the DEIR figure are reproduced here, as copied from the Appendix of the Luhdorff & Scalmanini report. In reviewing the hydrographs there are a number of features that are similar in each. First, the hydrographs plot water levels measured in both winter and summer periods and the annual variability in water level reflects the seasonal rise and decline between winter wet and summer dry conditions. It also appears that winter water table levels are very shallow as indicated by the relatively low depth-to-water values provided on the right-hand Y-axis of each graph. Of the hydrographs presented below, only Hydrograph A and D display no clear decline in groundwater levels over time. Although Hydrograph A only captures the last decade, Hydrograph B, which spans a similar period as Hydrograph A, indicates a clear decline in the groundwater levels since about 2002. Hydrographs C, E and F all display remarkably similar traits that suggest significant depletion in groundwater levels over time. First, prior to about 1974, there is relatively little seasonal fluctuation in water levels suggesting groundwater levels remained relatively stable and shallow year-round. After 1974, Hydrographs C, E and F all display a dramatic increase in the seasonal fluctuation in

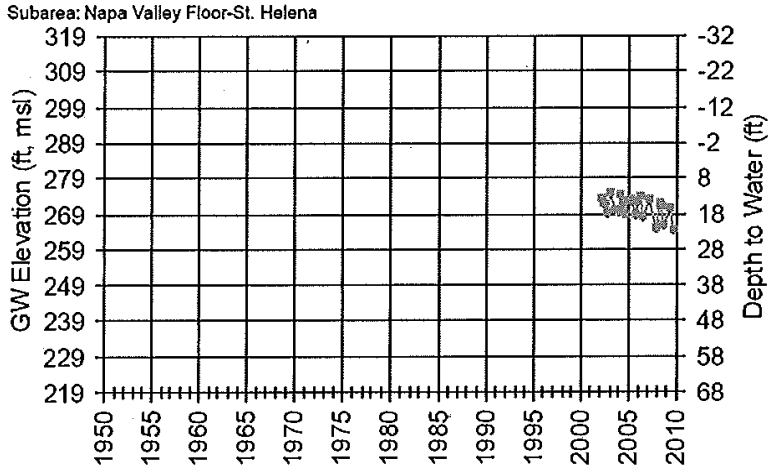
water levels and although the winter water levels return to a similar shallow condition each year, the summer water table drop increases progressively in magnitude over time.

The cause for declining summer water levels over time in the St. Helena subarea aquifer is not clear and may be related to increased groundwater withdrawal and/or reduced groundwater recharge. Regardless of the cause, it appears to me that the local area aquifer is not stable and may be reflecting the effects of depleted groundwater supplies, which is contrary to the conclusion in the DEIR of stable groundwater conditions.



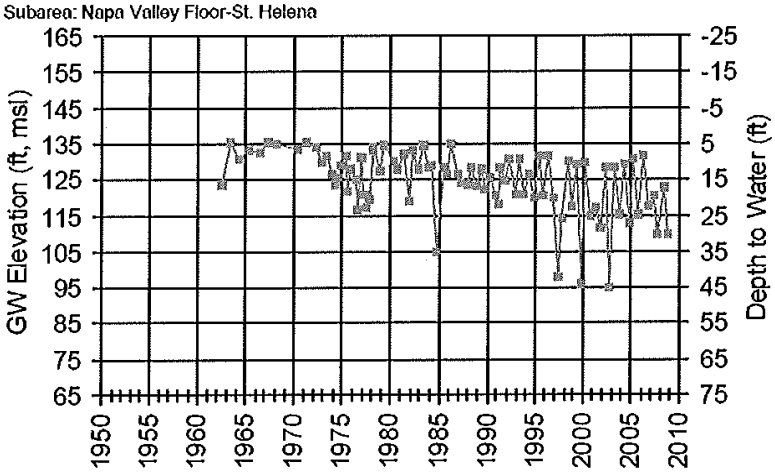
Hydrography B

WellID: T0605500143MW-1 RPE: 286.61 ft, msl
SWN: Unknown Source: Geotracker
Subarea: Napa Valley Floor-St. Helena



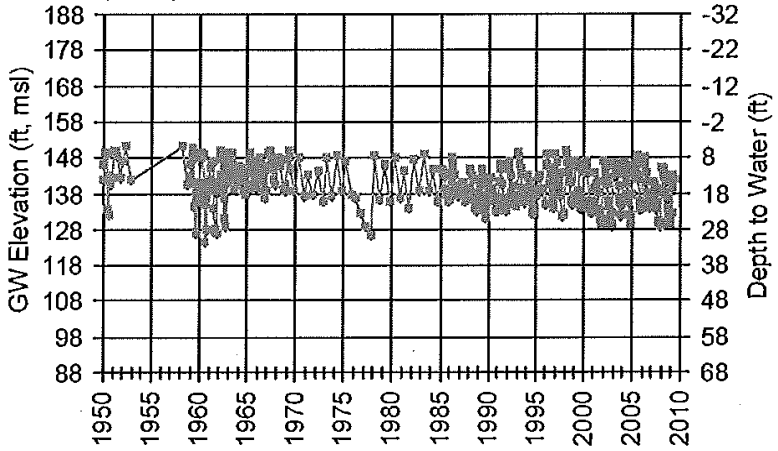
Hydrography C

WellID: NapaCounty-132 RPE: 140 ft, msl
SWN: 007N005W14B002M Source: NapaCounty
Subarea: Napa Valley Floor-St. Helena



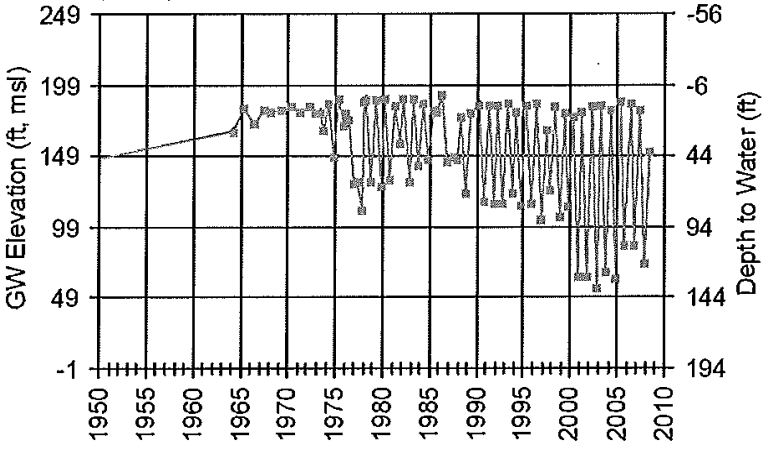
Hydrography D

WellID: 07N05W09Q002M RPE: 155.5 ft, msl
SWN: 007N005W09Q002M Source: DWR
Subarea: Napa Valley Floor-St. Helena



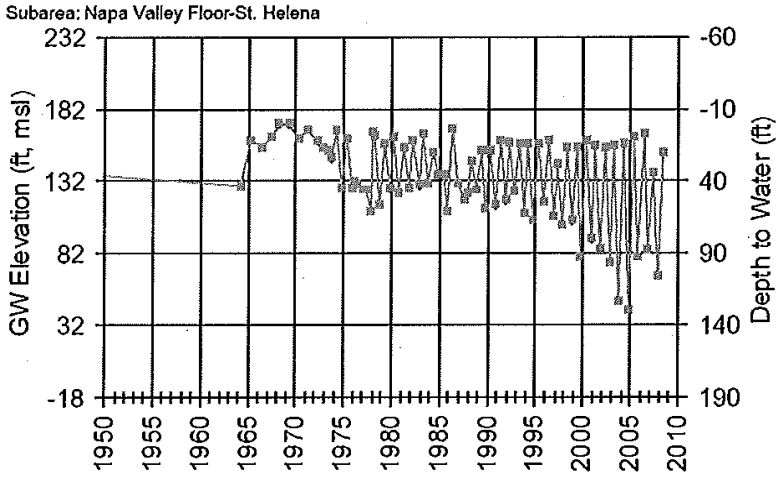
Hydrography E

WellID: 07N05W16N002M RPE: 193.1 ft, msl
SWN: 007N005W16N002M Source: DWR
Subarea: Napa Valley Floor-St. Helena



Hydrography F

WellID: 07N05W16L001M RPE: 171.8 ft, msl
SWN: 007N005W16L001M Source: DWR
Subarea: Napa Valley Floor-St. Helena



B) Another reason I believe shallow groundwater conditions are depleted within the project area is based on review of available stream flow records on the Napa River within the St. Helena groundwater sub-basin. Because the local area groundwater levels are very shallow, it is very likely that there is considerable surface water – groundwater interaction between the Napa Valley alluvial aquifer and the Napa River. During the winter rains, rainfall and high river flows infiltrate and recharge the aquifer, leading to the high winter groundwater levels illustrated in the hydrographs above. During the summer when river flows are low, it is very common for groundwater from alluvial aquifers to recharge the river channels, maintaining the perennial (year-round) flows. This relationship gets disrupted when development leads to groundwater pumping, which lowers the groundwater table, effectively disconnecting groundwater recharge into the river channel. Locally, within the Napa River, this relationship is further complicated by river releases from the upstream Kimball Creek and Ball Canyon Reservoirs.

In working on behalf of the California Department of Water Resources to develop a minimum instream flow policy for the State, Stetson Engineers (see citations above) have completed comprehensive studies and mapping of Northern California coastal streams to delineate Potential Stream Depletion Areas (PSDA). PSDA's are areas where topography and geologic conditions indicate that groundwater pumping could cause stream depletion and adversely impact (deplete) instream flows and associated aquatic habitat. Based on their work in Napa Valley, Stetson classified the entire

Napa River valley between the city of St. Helena and the River, including the entire Hunter Project area, as a Potential Stream Depletion area[1].

Table 1 presents the average monthly and annual flow rates (cubic feet per second; cfs) in the Napa River as reported by the United States Geological Survey for their stream flow monitoring gauge #11456000 on the Napa River near St. Helena (a short distance downstream of the Hunter Project site) for measurements collected since October of 1929. These monthly data are organized according to Water Year[2]. Of particular interest in this data set is the complete dry-down of the river channel during August and September of 2007, 2008 and 2009. In addition, the river completely dried down in July of 2007 and 2008 as well as October of 2009. The only other time the river has dried down during the summer-fall period was in 1976 and 1977, in response to the severe drought when average annual flow rates at the USGS gauge were 5.0- and 1.9-cfs, respectively. Although 2007-2009 were drier than average years (average annual flow rates of 29.6-, 60.2- and 44.3-cfs, respectively), they did not approach the severe drought condition experienced in 1976-77. In reviewing the flow record presented in Table 1, there were no other historic occurrences during comparably dry periods when the river dried up. Therefore, apart from some other reason that the river was depleted of flow (such as cessation of upstream reservoir releases or construction dewatering) it is reasonably plausible that the depleted summer aquifer conditions that have evolved over time and as indicated in the groundwater level hydrographs above, have lead to the summer dry-down of the Napa River in the project vicinity.

C) As presented in the DEIR, water supply studies by West Yost (see citations above) have concluded that future water demands within the City of St. Helena will exceed the City's water supply safe yield estimate of 1950 acre-feet/year (AF/yr). Until 2009, City water use has exceeded the safe yield estimate. The DEIR contends that, because recent annual water use totals have been declining and falling below the safe yield threshold, there is sufficient water to support new development. A problem I foresee in this conclusion is that the DEIR has not presented an analysis of supply and demand estimates based on future development scenarios (e.g., Likely Build-out and Full Build-out scenarios) like those being used by the City to revise their General Plan update. In short, the DEIR proponents have not demonstrated that the increases in project water demands (i.e., the combined effect of increased domestic demands and increased groundwater pumping from their irrigation well) alone, or in combination with projected future development, will not exceed the City's safe yield estimate; substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a continued lowering of the local groundwater table. In addition, the project

[1] Stetson Engineers further define Potential Stream Depletion Areas as areas where stream and adjacent alluvial aquifers are hydraulically connected, where groundwater pumping can potentially deplete streamflow.

[2] The USGS defines a water year as the 12-month period October 1, for any given year through September 30, of the following year. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1999 is called the "1999" water year.

TABLE 1: Average Monthly and Annual Flow Rates at USGS Stream Gauge: Napa River near St. Helena (WY1930 – WY2011)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Ann Avg
1930	0.1	0.5	320.7	201.5	162.7	174.2	26.2	13.4	4.8	1.8	0.5	0.4	75.6
1931	0.4	0.5	1.0	31.1	9.0	27.9	8.6	4.0	0.8	0.1	0.1	0.1	7.0
1932	0.1	0.1	340.3	159.0	105.7	24.5	13.6	10.6	4.6	1.4	0.3	0.1	55.0
1939													
1940	0.1	0.1	0.2	306.6	863.7	485.3	139.1	22.9	11.5	4.8	2.6	1.3	153.2
1941	0.9	2.8	444.0	683.0	537.3	328.0	489.1	38.8	14.5	7.7	4.4	3.1	212.8
1942	1.6	3.5	337.5	371.0	826.3	137.0	242.8	51.7	15.9	7.0	3.2	1.6	166.6
1943	1.2	22.1	95.0	525.3	140.9	142.4	45.5	22.4	8.9	4.3	1.9	0.7	84.2
1944	0.5	1.1	2.6	20.5	200.4	230.5	24.8	13.9	7.0	2.8	1.3	0.6	42.2
1945	0.7	21.8	39.1	47.5	361.8	156.1	48.2	18.1	6.4	3.0	1.3	1.1	58.8
1946	1.3	42.5	479.1	152.2	49.1	44.2	40.8	12.1	4.3	1.6	0.9	0.5	69.0
1947	0.5	11.8	42.8	7.7	115.7	133.4	43.6	9.3	4.1	1.0	0.7	0.2	30.9
1948	3.3	4.5	4.8	53.0	10.4	87.5	227.8	60.6	15.3	4.1	1.8	0.8	39.5
1949	0.7	1.6	23.9	28.7	107.1	388.0	34.5	12.7	3.0	1.9	1.2	0.5	50.3
1950	0.4	0.6	3.4	205.4	359.4	91.0	48.5	13.9	4.5	1.3	0.9	0.5	60.8
1951	2.3	137.3	450.4	384.8	175.0	120.6	24.5	21.5	6.2	2.8	1.3	0.9	110.6
1952	1.1	22.2	360.7	770.6	310.1	263.5	46.2	16.9	6.3	2.7	1.4	1.0	150.2
1953	0.6	1.8	445.8	618.0	47.6	115.7	67.7	35.0	11.6	3.3	1.7	1.3	112.5
1954	2.0	12.9	9.8	284.8	316.5	197.5	185.0	23.8	7.0	1.9	1.3	0.3	86.9
1955	0.5	23.5	60.3	86.8	39.5	24.9	41.4	16.8	4.1	0.9	0.2	0.0	24.9
1956	0.1	0.8	1088.0	847.6	728.8	92.4	31.7	24.8	6.1	1.7	0.9	0.1	235.2
1957	2.8	3.1	3.6	21.5	220.3	144.5	39.0	75.3	14.6	2.4	0.8	0.6	44.1
1958	22.3	14.5	82.8	293.8	1107.0	378.3	490.7	29.7	11.4	4.3	1.7	0.9	203.1
1959	1.0	1.7	2.8	77.5	274.3	39.2	14.9	5.5	0.9	0.1	0.0	1.1	34.9
1960	0.6	0.9	2.1	28.3	456.3	186.4	37.6	13.2	3.0	0.7	0.2	0.5	60.8
1961	0.3	3.0	28.5	71.9	182.9	116.4	41.7	12.6	3.9	0.5	0.4	0.4	38.5
1962	0.2	4.4	34.6	31.2	509.1	229.7	32.4	10.3	2.8	1.1	0.6	0.1	71.4
1963	178.9	13.9	143.6	321.4	393.6	162.2	367.2	45.9	14.1	4.3	2.6	1.2	137.4
1964	3.0	75.3	18.8	168.3	32.8	22.2	10.5	5.0	2.4	0.5	0.3	0.2	28.3
1965	1.0	40.7	685.7	607.6	67.6	24.9	148.1	27.5	8.5	2.6	1.8	1.4	134.8
1966	1.4	33.3	86.8	457.7	198.9	62.3	27.5	11.5	4.1	1.4	0.4	0.8	73.8
1967	1.1	68.4	352.6	753.2	158.3	234.6	317.2	53.9	27.3	6.5	2.6	1.5	164.8
1968	2.1	6.2	32.5	257.1	267.8	170.7	27.6	10.7	3.0	0.7	1.6	1.1	65.1
1969	1.8	4.6	239.1	905.7	696.6	192.6	52.3	19.1	7.4	2.9	2.1	1.3	177.1
1970	3.9	4.8	354.0	1338.0	240.8	174.7	24.0	10.5	4.4	2.3	1.1	1.2	180.0
1971	2.6	174.5	737.2	298.3	50.1	132.6	47.9	18.0	7.2	2.4	1.2	0.7	122.7
1972	0.7	3.0	47.9	53.3	98.4	38.5	20.8	9.1	3.2	1.1	0.3	0.5	23.1
1973	7.1	64.4	104.0	690.9	470.6	205.6	39.1	13.9	6.0	2.4	0.8	1.1	133.8
1974	8.5	414.5	279.6	474.8	158.9	556.4	219.5	24.6	10.1	5.8	3.1	2.9	179.9
1975	3.0	3.8	16.3	25.5	541.7	486.9	79.6	24.4	8.1	3.9	1.8	1.9	99.7
1976	5.7	7.8	6.4	6.5	7.5	10.3	11.4	3.5	1.2	0.0	0.0	0.2	5.0
1977	0.5	1.7	2.4	3.7	4.3	7.5	1.8	0.9	0.1	0.0	0.0	0.0	1.9
1978	0.0	39.9	145.7	755.5	429.3	294.1	90.5	26.2	8.3	2.8	1.4	1.3	149.6
1979	1.1	2.1	2.4	124.5	343.2	137.3	53.9	30.6	7.1	2.7	1.4	0.7	58.9
1980	7.2	14.2	124.0	564.1	619.2	179.6	40.9	17.2	6.5	2.2	1.1	0.8	131.4
1981	1.0	1.8	50.6	232.6	111.6	120.1	40.5	12.6	3.0	0.8	0.8	0.4	48.0
1982	3.2	222.5	598.4	477.7	444.1	329.4	583.9	38.8	14.4	5.9	2.8	6.4	227.3
1983	8.6	155.7	283.0	540.6	867.4	1144.0	145.8	93.0	19.5	7.3	3.4	2.4	272.6
1984	3.4	297.8	757.9	121.7	85.9	84.8	32.9	13.4	7.3	2.8	3.5	1.1	117.7
1985	3.1	125.0	70.1	42.5	219.0	100.9	45.9	13.0	6.3	0.7	1.0	1.7	52.4
1986	1.7	6.4	30.6	136.0	1798.0	442.5	44.8	19.9	7.7	3.6	1.6	2.7	208.0
1987	2.2	2.2	3.7	14.0	117.3	136.3	24.3	7.9	2.8	0.8	0.4	0.2	26.0
1988	0.8	4.3	151.7	253.3	39.2	14.1	12.1	9.1	4.9	1.1	0.5	0.4	41.0
1989	0.5	21.6	33.2	24.3	12.5	378.4	42.1	13.9	5.6	1.5	0.6	0.8	44.6
1990	6.6	8.2	4.7	72.8	98.3	38.0	12.8	27.1	14.1	3.2	0.9	0.5	23.9
1991	0.8	1.6	2.2	2.2	8.6	484.8	46.7	15.5	4.7	2.0	0.7	0.3	47.5
1992	1.1	2.0	5.5	9.3	229.7	136.8	33.6	11.9	4.2	1.9	0.4	0.2	36.4
1993	2.0	2.2	135.2	779.9	398.4	105.8	48.3	21.1	15.6	3.3	1.0	0.4	126.1
1994	0.5	3.1	42.3	35.3	144.2	31.2	14.1	8.8	2.9	0.5	0.2	0.1	23.6
1995	0.1	10.6	48.1	1186.0	148.3	929.4	108.3	104.7	20.0				
1996													
1997													
1998													
1999													
2000									7.7	2.9	0.8	0.4	
2001	3.5	5.0	5.4	48.6	229.8	164.4	20.8	8.3	2.0	0.5	0.4	0.2	40.7
2002	0.2	38.2	481.7	332.5	79.2	97.8	31.5	14.0	3.9	0.8	0.3	0.3	90.0
2003	0.1	4.2	792.5	355.5	115.3	121.0	135.2	126.1	18.6	4.9	1.5	0.5	139.6
2004	0.3	3.9	306.0	222.4	615.3	106.3	29.4	12.8	3.6	1.2	0.4	0.2	108.5
2005	3.3	7.6	236.1	286.5	144.6	281.2	79.0	130.9	28.2	7.1	1.5	0.6	100.5
2006	1.0	3.4	680.1	399.7	242.4	521.1	441.2	46.2	13.6	4.0	1.1	0.3	196.2
2007	0.4	3.9	42.5	15.6	210.9	58.0	16.4	6.3	1.4	0.0	0.0	0.0	29.6
2008	0.3	1.1	32.3	363.2	262.4	42.8	13.4	6.2	1.3	0.0	0.0	0.0	60.2
2009	0.0	2.6	9.6	5.7	284.7	195.0	8.5	21.8	2.9	0.6	0.0	0.0	44.3
2010	3.3	1.3	9.4	384.8	213.2	181.0	219.6	35.0	11.4	3.1	1.1	0.1	88.6
2011	13.8	16.7	293.0	103.8	274.6	706.0	77.0	24.5	21.8	5.9	1.7	0.2	128.3
											Long-Term Annual Average		93.7

proponents have not completed even the simple analytical solutions presented by Stetson Engineers in their February 28, 2008 Technical Memorandum as the "Jenkins" approach to quantify the potential stream depletions in the Napa River due to pumping of on-site and City production wells. This analysis is likely necessary given how close the project irrigation well is to the Napa River (approximately 2000-feet), given the statement by Stetson that, "The depletion rate for any specific time is most influenced by the distance of the pumping well from the stream." (see bottom of page 9 of Stetson's February 28, 2008 Technical memorandum).

D) A final line of evidence that groundwater conditions are depleted in the project vicinity comes from a statement that Mayor Del Britton provided to the St. Helena Star, where he states, "he's talked to three or four people who've had their wells go dry." The seasonal dry-down of wells reported by the Mayor would certainly be consistent with the pattern of declining summer water levels in local area wells presented in Hydrographs B, C, E and F, above. The St. Helena Star article (April 19, 2012) also quotes a couple Council Members who are skeptical about the West Yost conclusion that the local aquifer would be able to sustain increased pumping to boost water supply.

2.0 Potential Increase in Peak Flows on Napa River

The DEIR does not present any technical analyses or rationale about whether the project will increase storm water flow in the Napa River (receiving water) in response to the creation of increased impervious areas. Although the DEIR acknowledges County General Plan and City Stormwater Management Standards, there is no discussion or presentation of the necessary analyses or findings related to increases in peak flood flow and hazards to receiving water bodies. For example, as stipulated in the City's 2005 Stormwater Management Standards, projects that create over 10,000 square feet of new impervious surfaces are required to prepare a Stormwater Runoff Management Plan. Yet, even with the creation of what appears to be well over 10,000 square feet of road alone, it appears that the project proponents have not completed the necessary analyses or plan nor have they evaluated if the project will increase the magnitude of the 5- and 10-year storm flows or base flood elevations in the Napa River[3]. Although the DEIR does address the adequacy of the internal project storm drainage capacity, if fails to evaluate or address how the project may substantially increase the rate or amount of flow in receiving waters and downstream areas. Potential impacts from increase storm water runoff includes, increased downstream water levels and flood hazards along with increased erosion potential and water quality impacts.

[3] As presented in the table on page 227 of the DEIR, Implementing Action PF3.E of the County Draft General Plan Update states, "At the time of development review, require that post-project runoff be limited to pre-project peak flow rates for the five-year and ten-year storms as a condition of approval."

If you have any questions or wish to discuss these opinions and conclusions further, please feel free to contact me.

Sincerely,

Greg Kamman
Principal Hydrologist

EXHIBIT 1-1

Greg Kamman, PG, CHG
Principal Hydrologist

EDUCATION	1989	M.S. Geology - Sedimentology and Hydrogeology Miami University, Oxford, OH
	1985	A.B. Geology Miami University, Oxford, OH
REGISTRATION	No. 360 No. 5737	Certified Hydrogeologist (CHG.), CA Professional Geologist (PG), CA
PROFESSIONAL HISTORY	1997 - Present	Principal Hydrologist/Vice President Kamman Hydrology & Engineering, Inc. San Rafael, CA
	1994 - 1997	Senior Hydrologist/Vice President Balance Hydrologics, Inc., Berkeley, CA
	1991 - 1994	Project Geologist/Hydrogeologist Geomatrix Consultants, Inc., San Francisco, CA
	1989 - 1991	Senior Staff Geologist/Hydrogeologist Environ International Corporation, Princeton, NJ
	1986 - 1989	Instructor and Research/Teaching Assistant Miami University, Oxford, OH

SKILLS AND EXPERIENCE

As a hydrologist with over twenty years of technical and consulting experience in the fields of geology, hydrology, and hydrogeology, Mr. Kamman routinely manages projects in the areas of surface- and ground-water hydrology, stream and wetland habitat restoration, water supply, water quality assessments, water resources management, and geomorphology. Areas of expertise include: stream and wetland habitat restoration; characterizing and modeling basin-scale hydrologic and geologic processes; assessing hydraulic and geomorphic responses to land-use changes in watersheds and causes of stream channel instability; evaluating surface- and ground-water resources and their interaction; and designing and implementing field investigations characterizing surface and subsurface conditions. In addition, Mr. Kamman commonly works on projects that revolve around sensitive fishery, wetland, animal and/or riparian habitat issues and problems. Thus, Mr. Kamman is accustomed to working within a multi-disciplined team and maintains close collaborative relationships with biologists, engineers, planners, architects, lawyers, and various agency staff.

PROFESSIONAL SOCIETIES & AFFILIATIONS	American Geological Institute Society for Ecological Restoration International California Native Plant Society

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EXHIBIT 2



Hagar Environmental Science

11 July, 2012

Thomas N. Lippe
Lippe Gaffney Wagner LLP
329 Bryant Street, Suite 3D
San Francisco, CA 94107

RE: DEIR, Hunter Subdivision Project, St. Helena, California

Dear Mr. Lippe:

I am a fisheries biologist with over twenty-seven years of technical and consulting experience in California, primarily in the Central Coast region. I provide information, analysis, and research services to water resource agencies, utilities, public agencies, environmental organizations, and private clients. My primary areas of expertise are in fisheries and aquatic issues as they relate to water resource management and aquatic species conservation. Specialized technical services have included fish population and fish habitat assessments; development of fisheries and water resource management and restoration plans; permitting of habitat restoration and passage improvement projects; fish passage assessment and remediation; Endangered Species Act compliance; habitat conservation plans; and CEQA/NEPA documentation. I am the principal and senior biologist of Hagar Environmental Science (since 1994). I earned a Master of Science in Zoology at the University of Wisconsin Center for Limnology and a Master of Science in Water Resources Management from the University of Wisconsin Institute for Environmental Studies, Madison, Wisconsin.

I have reviewed the Hunter Subdivision Project Draft EIR (DEIR) (SCH: 2012032048), prepared by Urban Planning Partners, Inc. for the City of St. Helena and dated May 29, 2012. In particular, I focused on the project's potential effects on fish and other aquatic life, especially fall-run Chinook salmon (*Oncorhynchus tshawytscha)* and federally protected Central California Coastal steelhead (*Oncorhynchus mykiss*). In addition to reviewing the DEIR, I have reviewed the following documents and rely on technical information contained in these documents to help formulate my opinions:

Kamman, Greg. 2012. Review of Draft EIR Hunter Subdivision Project, St. Helena, CA. SCH: 2012032048. Letter to Thomas N Lippe, dated July 9, 2012

6523 Claremont Avenue • Richmond, CA 94805 • Phone: 510.333.9410 • Fax: 510.236.0447 • E-mail: jmhagan@sbcglobal.net

Leidy, R.A., G.S. Becker, B.N. Harvey. 2005. Historical distribution and current status of steelhead/rainbow trout (*Oncorhynchus mykiss*) in streams of the San Francisco Estuary, California. Center for Ecosystem Management and Restoration, Oakland, CA.

Napa County Resource Conservation District. 2008. Napa River Salmon Monitoring Program, Spawning Year 2007 Report.

Napa County Resource Conservation District and Jones & Stokes Associates. 2006 . Zinfandel Lane Bridge Fish Passage Assessment, Final Report. Prepared for U.S. Army Corps of Engineers, San Francisco District, San Francisco, California. Project # 105309, December, 2006

Napolitano, M, S. Potter, and D. Whyte. 2009 Napa River Sediment TMDL and Habitat Enhancement Plan, Staff Report. California Regional Water Quality Control Board, San Francisco Bay Region, Oakland, CA. September 16, 2009.

Stillwater Sciences and W. Dietrich. 2002. Napa River Basin Limiting Factors Analysis, Final Technical Report. Prepared for San Francisco Bay Water Quality Control Board, Oakland, California and California State Coastal Conservancy, Oakland, California. June 14, 2002

My review of the DEIR and the other documents lead me to conclude that the DEIR is deficient in that it does not address the potential for adverse impacts of the project on special status fish species including salmon and steelhead occupying habitat in the Napa River in the vicinity of the project site and in downstream reaches.

The DEIR does not evaluate potential adverse effects of the project on habitat for salmon and steelhead in the Napa River.

The DEIR states that Chinook salmon and steelhead are not present and that no perennial aquatic habitat is present in the project area. This would be a very narrow and inappropriate definition of the project area. The project site is in the Napa River watershed and is close to and hydrologically connected with the Napa River. According to the DEIR, stormwater generated on the site will be collected and discharged to the Napa River, either by gravity drainage through the levee culvert or pumping from the detention basin. In addition, there are potential project induced changes in groundwater conditions and associated summer base flows in the Napa River due to the combined effects of increased domestic household demands on the City's water supply and increased pumping from the on-site irrigation well. These project related effects have a potential adverse impact on salmon and steelhead habitat in the Napa River from the project site downstream to the estuary.

Both Chinook salmon and steelhead occupy the Napa River in the vicinity of the project

The Napa River supports runs of fall-run Chinook salmon and federally protected Central California Coast ESU steelhead. It is within the critical habitat designation for Central California Coast ESU Steelhead.

The Napa River in the vicinity of the project site and in downstream reaches contains habitat suitable for rearing, spawning, and migration of Chinook salmon and steelhead (Napa County Resource Conservation Department 2008, Leidy et al. 2005). The Napa River from Zinfandel Drive (just south of St. Helena) upstream to a mile north of Calistoga has been considered by CDFG staff to be the most important spawning and nursery area for steelhead in the main stem Napa River (Day 1961 cited in Leidy et al. 2005). Surveys conducted by the California Department of Fish and Game have identified steelhead in this reach of the Napa River and in tributaries including nearby Sulphur Creek and York Creek (Leidy et al. 2005). Sulphur Creek flows through the City of St Helena to its confluence with the Napa River just downstream of the project site. Recent surveys have indicated a run of 400 to 1000 fall-run Chinook salmon (*Oncorhynchus tshawytscha*) spawning annually in the main stem Napa River between St. Helena and Napa and in several tributary streams as well as a high abundance of juvenile salmon (Napa County Resource Conservation District 2008). An exceptionally high number of steelhead redds and young-of-year steelhead were observed in the main stem in May 2008 (Napa County Resource Conservation District 2008).

Multiple entities are working to restore and improve habitat conditions in the Napa River for the benefit of salmon and steelhead. For example a $1 million project was recently completed to improve migration passage at the Zinfandel Road Bridge. This project received funding and other support from the California Coastal Conservancy, U.S. Army Corps of Engineers, Napa County Resource Conservation District, public officials, local landowners, and environmental groups. Additional funding is being sought by the California Coastal Conservancy for additional restoration work in the Napa River and from the National Oceanic and Atmospheric Administration to fix another 20 barriers in the watershed (St. Helena Star, November 23, 2011). A group of 23 property owners with property that borders the Rutherford Reach, the 4.5-mile stretch of the Napa River between St. Helena and Oakville, are allowing prime land to return to a natural state in order to help preserve the ecology of the river. The southern part of the river has also been undergoing restoration as former salt ponds along the river are being restored to their natural state.

The project will discharge stormwater to the Napa River with likely impacts to water quality and sediments.

The project has the potential to generate increased stormwater runoff and deliver it to the Napa River, exacerbating conditions that degrade habitat for salmon and steelhead and limit their populations. Increases in impervious areas as a result of the project (roof surfaces, pavement, etc.) have the effect of increasing the magnitude of storm peaks which in turn results in greater erosion of

the stream bed and banks, incision of the channel, increasing fine sediment loads, eroding spawning sites and damaging developing salmon and steelhead embryos.

The California Water Quality Control Board has designated the Napa River as impaired due to excess sediment which adversely effects beneficial uses including recreation (i.e., fishing), cold freshwater habitat, fish spawning, and preservation of rare and endangered species (Napolitano et al. 2009). In a joint study conducted by the Water Board and the State Coastal Conservancy, two adverse impacts of erosion and sedimentation on salmon and steelhead habitat were documented. These were: 1) Low permeability values indicating a high concentration of fine sediment in the streambed, and 2) Channel incision in main stem Napa River (Stillwater Sciences and Dietrich, 2002). The study found that "Channel incision, which occurs in Napa River and lower reaches of its tributaries, has greatly reduced the quantity and quality of spawning and rearing habitat for salmon, and appears to be a key factor limiting Chinook salmon reproductive success and smolt survival under current conditions (Stillwater Sciences and Dietrich, 2002). High concentrations of fine sediment deposited in the streambed at potential spawning and rearing sites for salmon and/or steelhead in the Napa River and its tributaries causes high rates of egg and larval mortality during incubation, and also degrade the quality of juvenile rearing habitat for steelhead and salmon. Increases in the amount of fine sediment deposited in the streambed are contributing to the decline of what appears to be a very small run of steelhead. Other factors including poor flow persistence during the spring and dry season and poor habitat access appear to be even more important controls on steelhead productivity and survival in the Napa River watershed at present" (Napolitano et al. 2009).

The DEIR needs to address the effects of the project on storm flows in the Napa River and related increases in sediment deposition. This analysis needs to acknowledge and be informed by the magnitude of existing sediment problems in the Napa River as demonstrated by the State mandated program to control sediments in the Napa River, the Napa River TMDL administered by the San Francisco Bay Regional Water Quality Control Board.

The project will contribute to flow reduction in the Napa River.

The project may impact flow in the Napa River in a few different ways. Impervious surfaces cause water to run off the land surface and into local drainage networks, reducing the amount of rainfall that infiltrates into the ground and thereby reducing the amount of groundwater inflow to streams during the dry season. The residential development will also result in increased demand on local water supplies. I refer to the review of the project by Greg Kamman which states that, in Mr. Kamman's opinion, the project has the potential to impart significant adverse impacts to vicinity groundwater and summer surface water base flow in the Napa River due to the combined effects of increased domestic household demands on the City's water supply and increased pumping from the on-site irrigation well.

Mr. Kamman presents flow data for the Napa River as reported by the United States Geological Survey for their stream flow monitoring gauge #11456000 on the Napa River near St. Helena (a short distance downstream of the Hunter Project site) for measurements collected since October of 1929. These data indicate the complete dry-down (zero flow) of the river channel during August and September of 2007, 2008 and 2009, in July of 2007 and 2008, and in October of 2009. Mr. Kamman notes that the only other time the river has dried down during the summer-fall period was in 1976 and 1977, in response to the most severe drought of record. Mr. Kamman concludes that it is reasonably plausible that the depleted summer aquifer conditions that have evolved over time and as indicated in the groundwater level hydrographs he presents, have led to the summer dry-down of the Napa River in the project vicinity.

The Hunter Subdivision project has the potential to exacerbate this situation to the detriment of habitat conditions for salmon and steelhead.

Increased stormwater discharge and flow reduction have potential adverse effects on habitat for Chinook salmon and steelhead.

Salmon and steelhead require flowing streams with large amounts of gravel and cobble substrate to complete their life cycles. Gravel and cobble provide the ideal substrate for incubating salmon and steelhead eggs because there is space for the eggs to develop and for movement of freshwater through the gravels to supply oxygen and carry off metabolic wastes. Larger size cobbles also provide hiding spaces and protection from high flows for developing young (fry). Cobbles and gravels also provide habitat for microscopic and larger plants and algae (periphyton and macrophytes) that support small aquatic animals (benthic invertebrates) and in turn provide forage for fish. Sediment suspended in the water column has a myriad of effects from reduction of light that inhibits photosynthesis and primary production, abrasion and suffocation of periphyton and macrophytes, disruption of respiration and modification of behavior of invertebrates, coating and smothering of eggs and larvae, and in sufficient volume, filling the voids in the substrate and trapping developing eggs and fry of fish including salmon and steelhead.

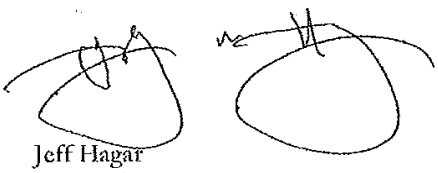
Salmon and steelhead also require suitable macro-habitat conditions including a mixture of shallow swift-flowing riffles and runs; deeper, slower velocity habitat in pools; and ample amounts of cover and structure such as boulders, tree roots and downed trees. Increased amounts of fine sediment can lead to habitat simplification with large amounts of low velocity, shallow habitat that is not suitable for salmon or steelhead. This can occur in concert with increased storm flows from urban runoff that both increase sediment supply through erosion of the stream bed and banks and through channel incision.

The Hunter Subdivision project has the potential to adversely impact existing spawning, rearing, and migration habitat for salmon and steelhead from the project site downstream to the mouth of the Napa River. The DEIR needs to acknowledge and evaluate potential project impacts on fishery

resources of the Napa River. It should evaluate the potential for project related changes on winter storm peaks and dry-season flow reduction. These impacts should be evaluated for their contribution to existing sediment problems in the Napa River and efforts by the San Francisco Bay Regional Water Quality Control Board to reduce sediment impacts through the TMDL for sediments in the Napa River. Impacts of the project also need to be addressed in the context of ongoing efforts to stabilize and recover fall run Chinook salmon populations and to protect and restore Central California Coast steelhead populations under the Federal Endangered Species Act and the California Endangered Species Act. The DEIR should also recognize the efforts of multiple entities to restore habitat conditions in the Napa River to support salmon and steelhead and the potential for project related impacts to interfere with these efforts. The DEIR needs to provide mitigation measures to eliminate the potential for increase in storm peaks such as project elements that provide for stormwater retention and infiltration, collection and storage of stormwater for landscape irrigation, and other measures. The DEIR also needs to provide an evaluation of how increased water needs of the project can be met without further reduction of dry-season flow in the Napa River and provide mitigation measures that meet this objective including incorporation of water conservation features in the development, use of recycled water, reliance on sources other than the on-site wells, and other measures. In recent years, many innovative approaches have been developed for minimizing impacts from stormwater runoff and better management of water resources to avoid depletion of stream flows (see for example the Occidental Arts and Ecology Center Water Institute, http://www.oaecwater.org/). Mitigation measures should be developed in light of these approaches.

The City needs to analyze the contribution of this project to cumulative effects of ongoing development and past habitat degradation. The effects of this project on habitat conditions in the Napa River occur within the context of efforts by multiple entities to reverse these trends and adverse effects on protected steelhead should be mitigated to less than significant levels.

Best Regards,



Jeff Hagar
Principal Biologist

EXHIBIT 2-1

Hagar Environmental Science

Statement of Qualifications

Company Overview

Since its inception in 1994, Hagar Environmental Science (HES) provides information, analysis, and research services to water resource agencies, utilities, public agencies, environmental organizations, and private clients. Our primary areas of activity are consulting on fisheries and aquatic issues as they relate to water resource management and aquatic species conservation. Specialized technical services include:

- fish population and fish habitat inventories,
- development of fisheries and water resource management and restoration plans,
- permitting of habitat restoration and passage improvement projects,
- fish passage assessment and remediation
- Endangered Species Act compliance, and
- CEQA/NEPA documentation.

Environmental resource planning and decision-making are conducted in complex social arenas that involve laws and regulations, economic constraints, political considerations, scientific knowledge, and individual values. HES is committed to the concept that the best plans and decisions are based on full and reliable information. While it is sometimes necessary to make decisions based on less than complete information, HES strives to obtain and utilize complete, relevant, accurate, and objective information to inform environmental decisions and planning. We focus on determining the information that is most needed and presenting that information in a way that is accessible and understandable to all involved in the process.

Our areas of operation include California and the Pacific Northwest and we have particularly strong experience in the California Central Coast region. HES is fully permitted to collect and handle protected steelhead, coho salmon, and tidewater goby. Our approach to projects emphasizes teaming arrangements with other specialists to provide interdisciplinary problem solving tailored to client and project specific needs.

July 12, 2012

Representative HES Project Experience

City of Santa Cruz Habitat Conservation Plan, 2005-present, for City of Santa Cruz Water Department. HES is providing technical support to assist the City, NOAA Fisheries, and California Department of Fish and Game in development of the City's HCP. HES is integrating existing information with ongoing field surveys implemented by us to develop conservation strategies that maximize anticipated benefits to fishery resources while maintaining the City's ability to operate within water supply constraints. Field surveys include habitat assessment using the California Salmonid Stream Habitat Restoration Manual methods and Instream flow assessment for spawning and rearing steelhead and coho salmon using the PHABSIM component of the Instream Flow Incremental Methodolgy (IFIM), and evaluation of migration passage obstacles using the Thompson methodology and approaches developed by Powers and Orsborn.

Salinas Valley Water Project Fishery Evaluations, 1994 –present. The Monterey County Water Resources Agency is developing the Salinas Valley Water Project to stop seawater intrusion, manage nitrate contamination in the ground water, provide adequate water supplies to meet current and future (year 2030) needs, and hydrologically balancing the ground water basin in the Salinas Valley. As part of this process, Hagar Environmental Science has completed fishery studies and environmental documentation for fishery resources of the Salinas River Basin. HES conducted studies in the Salinas River and its tributaries to determine the presence, distribution, and relative abundance of steelhead spawning populations and evaluated habitat conditions for suitability for steelhead spawning, rearing and migration. Tasks completed by HES have also included monitoring of stream temperature and its relationship to stream flow; evaluation of water quality conditions in the Salinas River Lagoon and project effects on its potential to support rearing steelhead; stream flow requirements for steelhead migration; and potential effects of a surface diversion alternative on steelhead migration, steelhead rearing, and other fish populations. HES worked closely with project planners and engineers to ensure that project alternatives would achieve project objectives without harming remnant steelhead runs within the Salinas River Basin. HES was also involved in consultation with the National Marine Fisheries Service on steelhead and provided technical information on steelhead and steelhead habitat for the Biological Assessment for the project.

Calaveras Dam Replacement Project, 2005-2008, for San Francisco Public Utilities Commission. HES is the fisheries lead as part of the project team for environmental impact assessment and permitting. Key tasks include the integration of extensive background information to address project compliance with environmental regulations, implementation of field surveys to resolve information gaps, and coordination with ongoing fisheries investigations conducted by the client and its consultants. Fisheries surveys included habitat assessment for over 16 miles of streams using modified Level IV effort as described in The California Salmonid Stream Habitat Restoration Manual and an instream flow assessment for steelhead and native rainbow trout spawning using the PHABSIM component of the Instream Flow Incremental Methodolgy (IFIM).

Carmel and Salinas River Flood Control, Steelhead Monitoring Plan, January 2001-present. Flood Control activities conducted by Monterey County entail artificial breaching of the Carmel River mouth when river flows raise the lagoon elevation to a predetermined level. Artificial breaching anticipates the natural opening of the lagoon that is imminent. There has been concern that artificial breaching has the potential to impact the lagoon ecology, and particularly steelhead, since it may cause the lagoon to open somewhat earlier and at a lower elevation than would otherwise occur. Hagar Environmental Science developed a monitoring

program to evaluate the effect of this activity on lagoon ecology and determine how future flood management should be undertaken to minimize adverse impacts to steelhead trout, a threatened species. HES has conducted pre- and post-breach steelhead population and water quality assessment during the winter of 2001-2002 in the Carmel River Lagoon and 2002-2003 in both the Carmel and Salinas lagoons according to this program.

Aptos Creek Watershed Assessment and Enhancement Plan, 2001-2003, for Coastal Watershed Council and California Coastal Conservancy. In this recently completed assessment for the Coastal Watershed Council, HES teamed with specialists in hydrology, geomorphology and vegetation to complete a thorough evaluation of habitat conditions and limiting factors for steelhead and coho salmon. HES completed a habitat assessment for over 16 miles of stream in the Aptos Creek watershed. HES used the habitat assessment data together with existing information and information developed by other team members on hydrology, geomorphology, and riparian over-story to complete a limiting factors analysis and worked with the team to develop a list of high priority restoration projects. The practicality of addressing key limiting factors was weighed against the relative benefits to be expected.

Steelhead Habitat Assessment for the San Pedro Creek Watershed, 2001-2002. HES conducted an assessment of the San Pedro Creek Watershed for the San Pedro Creek Watershed Coalition. The assessment included a review of existing information, habitat survey for the mainstem and major tributaries, assessment of factors most likely to limit steelhead, and recommendations for habitat protection and enhancement in the watershed.

Wilder Ranch State Park Habitat Assessment and Aquatic Vertebrate Survey, 2001-2002. Under contract to California State Parks, HES conducted a survey of streams within Wilder Ranch State Park as part of a statewide biological resources monitoring program being developed by State Parks. Surveys involved stream reach classification, habitat assessment using the California Salmonid Stream Habitat assessment methodology, and development of abundance and distribution information for aquatic reptiles, amphibians, and fish using both visual observation and electrofishing. The objective of the Wilder Ranch surveys was to provide a baseline inventory of habitat conditions and aquatic vertebrate populations in Park streams and to develop a long term aquatic monitoring program. The monitoring program will be developed to provide Park Managers with information to identify changes in the areal extent and quality of aquatic habitat and changes in the presence or abundance of key aquatic taxa.

Fish Habitat and Fish Population Assessment for San Lorenzo Creek, Alameda County, 1999 – 2002. The Alameda County Public Works Agency has initiated a pilot watershed study for San Lorenzo Creek. As a part of this work Hagar Environmental Science is conducted a fisheries habitat and fish population assessment. The objectives of fisheries investigations were to develop a comprehensive understanding of the existing condition of fish populations and their habitat in the San Lorenzo Creek watershed; identify major factors that limit the native fish populations; develop aquatic resource objectives and quantifiable indicators that can be used to monitor the health of fish populations over time; identify and prioritize potential sites to enhance, protect and restore habitat for native fish communities; and understand how sediment and flow affect fish habitat. HES trained County staff in habitat assessment methods, provided oversight and supervision for the habitat assessment, developed and implemented a fish sampling program, provided guidance on implementation of a stream temperature monitoring network, and coauthored the final report.

Stream Reach and Aquatic Habitat Inventory in the Guadalupe River, Coyote and Stevens Creeks, Santa Clara County, 1999. The Santa Clara Valley Water District (SCVWD) has been

engaged in a multi-party dispute resolution process identified as the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE). The FAHCE has conducted various investigations to identify factors limiting the production of chinook salmon and steelhead inhabiting streams in the SCVWD service area. Hagar Environmental Science teamed with ENTRIX, Inc. to complete the stream reach and aquatic habitat inventory. HES worked with the FAHCE committee and project team to develop project specific field protocols and provided field training in these protocols for survey crews. HES also provided field oversight and survey calibration and verification as part of the project quality assurance and quality control program.

Aquatic Resource Inventory of Oakland Streams, 1998. Hagar Environmental Science conducted aquatic habitat and fishery surveys in 11 streams in the City of Oakland to identify sensitive resources and factors potentially influencing aquatic resource conditions. Stream reaches were surveyed to evaluate instream and watershed conditions. Aquatic habitat conditions were described including habitat features, substrate, cover, suitability for rearing and migration of fish, presence of aquatic invertebrates, bank conditions, riparian vegetation and surrounding land-use. Fish abundance and distribution was assessed by electrofishing. The presence of sensitive resources and factors potentially influencing aquatic life were described as a first step in determining impacts of stormwater on beneficial uses of local creeks.

Coastal Lagoon Ecological Assessment Project, 2004, for Santa Cruz County Resource Conservation District . HES is teamed with Swanson Hydrology and Geomorphology in a collaborative project with NOAA Fisheries, USGS, The City of Santa Cruz, Santa Cruz County, and the California Coastal Conservancy in a pilot study to assess ecological processes in several lagoons associated with coastal streams in central California. HES is conducting fisheries assessments including development of sampling protocols and description of fish community profiles, species presence and relative abundance. We are also using PIT tag technology to assess growth rates and movement of steelhead using lagoons for rearing. This information will be used together with hydrologic, water quality, plankton, and aquatic invertebrate monitoring data to assess potential limiting factors for steelhead and tidewater goby in these lagoons and as a basis for developing management actions to enhance lagoon habitat.

Branciforte Creek Flood Control Channel Maintenance. 2003-present, for City of Santa Cruz. The City of Santa Cruz maintains the U.S. Army Corps of Engineers Branciforte Creek Flood Control Channel Project. Maintenance requires periodic removal of sediment and associated wetland vegetation from the channel to maintain flood conveyance capacity. Recent collections of tidewater goby in the San Lorenzo River lagoon have raised questions concerning the possibility for tidewater goby to be present in the Branciforte Creek FCC project area. Permitting for the project requires NOAA Fisheries to quantify the amount of take of Central California Coast steelhead that may be present in the flood control channel. HES was contracted to develop steelhead population estimates and monitor temperature conditions in the FCC. Recent collections of tidewater goby in the San Lorenzo River lagoon have raised questions concerning the possibility for tidewater goby to be present in the Branciforte Creek FCC project area. HES recently completed reconnaissance level surveys to determine whether tidewater goby are likely to be present in the FCC.

Mountain Charlie Gulch Steelhead Monitoring Program, 2003-2005 for the City of Santa Cruz Water Department. The City of Santa Cruz Water Department manages lands adjacent to Mountain Charlie Gulch. In the summer of 2002, the Water Department implemented a steelhead passage improvement project in portions of the Creek on City property. In order to assess the effectiveness of passage improvement projects and to develop better information on the status and limiting factors for steelhead/rainbow trout populations in Mountain Charlie Gulch, the City

contracted with HES to develop and implement a steelhead monitoring project for portions of Mountain Charlie Gulch on City property. The purpose of the monitoring program is to: describe habitat conditions in the stream and evaluate potential for supporting steelhead; estimate the abundance of steelhead/rainbow trout of different age classes in the study reach and compare abundance upstream and downstream of the passage improvement project; compare visual methods and electrofishing population assessment for accuracy and cost; and, provide recommendation for a standard monitoring protocol that can be repeated by the City in the future to monitor changes in habitat conditions and steelhead populations.

Gateway Pedestrian Bridge, 2004, for John Gilchrist and Associates (CALTRANS Project). A pedestrian bridge crossing the San Lorenzo River in the vicinity of Gateway Mall is proposed. This reach of the San Lorenzo River is known to support threatened Central California Coastal ESU steelhead/rainbow trout (*Oncorhynchus mykiss*). Recently, endangered tidewater goby (*Eucyclogobius newberryi*) have been collected downstream in the San Lorenzo River lagoon. HES conducted surveys in the vicinity of the proposed bridge to assess the potential for presence of *O. mykiss* and *E. newberryi* and prepared a report documenting findings.

Boulder Creek Seasonal Dam Fish Passage Improvement, 2004-present, for Boulder Creek Recreation and Park District. The Boulder Creek Seasonal Dam, located on the San Lorenzo River in Boulder Creek (Santa Cruz County), was typically installed during the summer months to create a recreational swimming area for the community. Historically, the Boulder Creek Recreation and Park District (District) obtained a Streambed Alteration Permit issued by the California Department of Fish and Game (CDFG) to install and operate the seasonal dam. The most recent permit expired in June 2003. To obtain a new permit the District is required to evaluate fish passage at the project site and potentially improve the dam to provide bi-directional year round passage of juvenile and adult steelhead. HES is working with Fall Creek Engineering, Inc. and John Gilchrist & Associates to assist the District in improving seasonal fish passage at the dam and to obtain the state and federal permits that will be required to operate the dam. As part of this work HES has evaluated habitat conditions within the impoundment area to determine the effect of the impoundment on rearing habitat for juvenile steelhead, and evaluated the existing apron in the center of the dam for passage by adult and juvenile steelhead.

Tucker Road Ford Passage Improvement Project. 2005- . for Santa Cruz County RCD. HES participated in a multidisciplinary team of consultants lead by Fall Creek Engineering to analyze fish passage and prepare plans to restore steelhead passage at an at-grade road crossing of the West Branch Soquel Creek. HES conducted a habitat condition and passage analysis at the crossing to document existing passage conditions and anticipate post-project improvements. HES used an analytical computer program (FishXing, version 2.1, Six Rivers Watershed Interaction Team, November 1999) to evaluate elements of the crossing.

LLNL Arroyo Mocho Passage Improvement Project. 2002-2003. for University of California, Lawrence Livermore National Laboratory. HES participated in a multidisciplinary team of consultants lead by Fall Creek Engineering to analyze fish passage and prepare plans to restore steelhead passage at an at-grade road crossing of the Arroyo Mocho near Livermore. HES conducted a passage analysis at the crossing to document existing passage conditions and anticipate post-project improvements. HES also developed mitigation and monitoring guidelines for fish passage. HES used an

analytical computer program (FishXing, version 2.1, Six Rivers Watershed Interaction Team, November 1999) to evaluate elements of the crossing.

Biological Assessment and Fish Relocation for the Lower Codornices Creek Restoration Project, 2004- . Lower Codornices Creek is a small urbanized watershed tributary to San Francisco Bay in the cities of Berkeley and Albany. HES prepared a Biological Assessment to address project elements for the protection and enhancement of a steelhead/rainbow trout population in the creek. The BA was used by NOAA Fisheries to support issuance of a Biological Opinion allowing project implementation. As part of this work, HES re-located steelhead/rainbow trout from the project area to temporary holding locations in other parts of the stream. HES took samples from a few of these fish and has arranged to have them analyzed at UC-Davis for age, growth rates, and life-history/ancestral origin (sea-run steelhead or non-migratory rainbow trout).

Alameda Creek Steelhead Restoration, 1999 – 2004. Working with the Alameda Creek Fisheries Restoration Workgroup, Hagar Environmental Science teamed with AMS to complete an assessment of the feasibility of restoring a steelhead trout population in the Alameda Creek watershed. The Workgroup includes members representing County flood control and water districts, resource agencies, municipalities, and citizens groups. The assessment documented historical use of the watershed by steelhead, evaluated current habitat conditions and fish populations, and considered existing beneficial uses of the watershed for water supply, flood control, and recreation and potential conflicts between these uses and restoration of steelhead. The assessment provided a set of findings and recommended nine essential actions necessary for steelhead to complete their life cycle in the watershed, five additional restoration actions to increase the likelihood of successful restoration, and seven follow-on technical investigations to reduce technical uncertainties. The assessment met with approval from all members of the Workgroup and the Workgroup is proceeding with implementation of the recommendations. The primary recommendations involve passage improvement at several sites, modification of recreational fisheries management, and evaluation of alternative water delivery scenarios to enhance migration conditions for steelhead while meeting water supply and quality needs.

Hosler Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Soquel Creek (Santa Cruz County) as part of a streambank stabilization project for a private property owner.

Wilder Ranch State Park Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Wilder Creek (Santa Cruz County) as part of a dam removal and streambank stabilization project in Wilder Ranch State Park sponsored by California State Parks.

Mill Creek Fish Relocation, 2000. Hagar Environmental Science completed fish relocation for steelhead/rainbow trout in Mill Creek (Pilarcitos watershed, San Mateo County) as part of a dam removal and streambank stabilization project in Burleigh Murray Ranch State Park sponsored by California State Parks. Tissue samples were collected from steelhead/rainbow trout for genetic analyses by the National Marine Fisheries Service.

Arroyo Leon Fish Passage Enhancement Project, 2000-present. HES participated on a multi-disciplinary team managed by the San Mateo County Resource Conservation District and Pilarcitos Creek Advisory Committee to evaluate fish passage and steelhead rearing issues at two seasonal dams on Arroyo Leon. The team developed preliminary engineering designs and specifications for improvements at these dams; identified potential environmental impacts and

permitting conditions associated with the project alternatives; and incorporated mitigation measures and protective provisions developed in consultation with the National Marine Fisheries Service and California Department of Fish and Game. HES conducted site surveys and evaluated design alternatives for their potential effects on steelhead populations in Arroyo Leon.

Salinas River Flood Maintenance Program, 2000. Hagar Environmental Science provided review and assisted with establishment of guidelines for implementation of 2000 River Maintenance Program involving removal of vegetation and sandbars from the Salinas River channel. HES also provided technical assistance to landowners by completing channel marking and mapping and preparation of permit application packages submitted to National Marine Fisheries Service.

Potrero Road Tide Gate Configuration and Performance Study, 2000. As part of the Performance Study conducted by Schaaf & Wheeler Consulting Civil Engineers for MCWRA, HES evaluated fish passage issues at the Potrero Road tide gates, Old Salinas River channel and Salinas River Lagoon. HES provided relevant background information on steelhead migration and recommended measures to enhance existing conditions.

Old Salinas River Channel Dredging, 2001. Hagar Environmental Science was called in to relocate all fish, particularly steelhead/rainbow trout, from the Old Salinas River Channel prior to dredging and subsequent deepening of the channel. The dredging is part of on-going maintenance work conducted by the Monterey County Water Resources Agency, Salinas, California

Apanolio Creek Fish Passage, 2000-2002. As part of a restoration project team, Hagar Environmental Science evaluated conditions in Apanolio Creek for steelhead/rainbow trout including an assessment of instream habitat conditions and presence of structural barriers to steelhead migration at two small diversion dams and a culvert. The restoration project is sponsored by the San Mateo County Resource Conservation District. HES worked with the restoration project engineering contractor to assess biological conditions and develop, screen, and select alternative restoration plans for each passage barrier.

Santa Clara Valley Water District Stream Maintenance Program EIR and Section 7 Consultation, 2000-2002. The Stream Maintenance Program is designed to meet the District's flood protection and water supply mandates. The District is pursuing multi-year environmental permitting to conduct these activities. Hagar Environmental Science developed background information and impact analyses on steelhead and chinook salmon in Santa Clara Valley streams as part of this work. HES also developed a mitigation program and best management practices for the bank protection and repair component of the stream maintenance program. HES was also involved with coordination and consultation on steelhead and chinook salmon with National Marine Fisheries Service as part of Section 7 Endangered Species Act (ESA) compliance on the multi-year permit for stream maintenanee activities.

Long-Term Contingency Water Supply Plan for the Monterey Peninsula, 1999 –2000. The California Public Utilities Commission developed a long-term water supply contingency plan (Plan B) as an alternative to a proposed dam on the Carmel River. As part of the Plan B consultant team, Hagar Environmental Science evaluated the Carmel River steelhead resource and effects of current project operations on Carmel River aquatic resources and worked with the team to develop specific objectives and criteria for evaluating alternative water supply components, identify and analyze potential water supply components, and develop a strategy for meeting water supply needs as an alternative to the proposed dam.

Guadalupe River Fish Ladder and Fish Screen at the Alamitos Drop Structure, 1998. for Santa Clara Valley Water District. HES completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification.

Guadalupe River Fish Barrier Removal Project. 1998. for Santa Clara Valley Water District. HES completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification, and CEQA categorical exemption.

Hillsdale Bridge Removal Project, 1999-present. Completed permit acquisition including U.S. Army Corps of Engineers 404 Nationwide Permit pre-construction notification, California Department of Fish and Game streambed alteration agreement, and Regional Water Quality Control Board water quality certification, and CEQA Initial Study/Negative Declaration.

Synthesis and Analysis of Information Collected on the Fishery Resources and Habitat Conditions of the Lower Santa Ynez River, 1996-1998. Hagar Environmental Science worked with Hanson Environmental, Inc. to compile and synthesize hydrology, water quality, habitat, and fishery resource data collected over a four year period in the Santa Ynez River and Santa Ynez River lagoon. The purpose of this work was to summarize a wide range of available data, determine what conclusions could be supported by the information available, and make recommendations for the direction of ongoing studies conducted by the Santa Ynez River Technical Advisory Committee. Hydrologic conditions including precipitation, reservoir storage and elevation, spill, controlled releases, river flows, tributary flows, and breaching of the Santa Ynez River lagoon were described and summarized. Water temperature and dissolved oxygen data were evaluated to characterize seasonal trends and patterns, inter-annual variations, longitudinal gradients, diel fluctuations, analysis of potentially stressful water temperatures, evaluation of potential cold water refuges. The relationship of water quality variables to river flows was also evaluated. Habitat characteristics including depth, substrate, areal extent of habitat type units, riparian vegetation, instream vegetation, substrate, passage barriers, and other habitat features in the mainstem Santa Ynez River and its tributaries were summarized. Fishery resources were characterized in terms of species presence, longitudinal distribution, seasonal distribution and abundance, upstream and downstream migration, and rainbow trout/steelhead stock of origin. Water quality, habitat, and flow conditions were evaluated to determine observable effects on fishery resource condition, identify potentially limiting factors, and recommend appropriate modifications to the long-term study plan.

South Delta Barrier Project, 1995. HES worked with a team of biologists to evaluate monitoring methods for the California Department of Water Resources (CDWR) South Delta Barrier Project. Monitoring data collected by CDWR and CDFG were analyzed to evaluate the relationship between placement of barriers in South Delta channels and direct loss of fish at the Central Valley Project and State Water Project Delta export pumping facilities. Experimental design and study methods were critically reviewed and evaluated. Several years of monitoring data were evaluated to determine potential impact of temporary barriers on fish salvage at the export pumps. Statistical analyses were performed using fish salvage and pumping data during periods with and without barriers in Middle River and Old River. Fish species of particular interest were winter-run chinook salmon, delta smelt, longfin smelt, striped bass, Sacramento

splittail, and fall run chinook salmon. Problems with the study plan were identified and recommendations for study modifications were presented.

Sausal Creek Steelhead/Rainbow Trout Studies. 1995-98. For Kendall-Jackson Winery, Ltd. Conducted field investigation to determine flow requirements, summer habitat conditions, and population inventories for steelhead in this Russian River tributary. Assisted in preparation of testimony for water rights proceeding.

Status of Steelhead Populations in California, 1996. Hagar Environmental Science contributed to a special report for the Association of California Water Agencies (ACWA) describing the status of steelhead populations in California in regards to the Endangered Species Act. The report was submitted on behalf of ACWA to the National Marine Fisheries Service to provide information for their determination as to whether to list steelhead as threatened or endangered under the federal Endangered Species Act.

July 12, 2012

Additional Selected Project Experience for Jeff Hagar

Sacramento River Basin Chinook Salmon Productivity Model 1985-1988. For the National Marine Fisheries Service Jeff Hagar analyzed population and life history data for chinook salmon and developed input data and assumptions for Sacramento River Basin Chinook Salmon Productivity Model. This project included evaluation of ocean harvest and natural mortality rates; factors influencing upstream migration including passage at dams; factors influencing spawning, hatching and emergence success; factors influencing rearing and migration success. Mr. Hagar worked with a modeler to develop model structure and incorporate existing measured population parameters and relevant environmental variables and developed conceptual relationships between environmental variables and chinook salmon productivity.

Lower Mokelumne River Project FERC Proceeding, 1994. Provided technical support to EBMUD in its proceeding to resolve FERC proposed license modifications to operations of the Mokelumne River Project. Completed critical review of FERC FEIS and comparative analysis of FERC and EBMUD alternatives using analytical tools developed under the direction of Jeff Hagar. Participated in technical meetings with FERC staff at Oak Ridge National Lab to resolve technical issues related to management of river flows and resulting habitat conditions for chinook salmon and steelhead populations in the Lower Mokelumne River

Lower Mokelumne River Management Plan, 1990 - 1994. As a consultant, Jeff Hagar served as project manager for the development of the Lower Mokelumne River Management Plan for EBMUD Updated Water Supply Management Program. He supervised preparation of technical documents including EIS/EIR sections and technical appendices. He contributed to studies evaluating chinook salmon and steelhead in the Mokelumne River, including estimation of spawning escapements, run-timing, factors influencing run size, timing and enumeration of smolt emigration, factors influencing rearing success and smolt emigration, and mortality factors. Mr. Hagar worked with a team of hydrologists, biologists, and engineers to develop and evaluate management strategies for chinook salmon and steelhead in the Lower Mokelumne River, California using an integrated application of an instream temperature model and reservoir model to a reservoir/tailwater system. Mr. Hagar served as a member of the Mokelumne River Technical Advisory Committee to establish a long term management plan for the Mokelumne River and provided technical information and analysis to negotiations between EBMUD and California Department of Fish and Game to determine management of flows in the Mokelumne River.

Entrainment of Fish at Eastern Sierra Hydroelectric Facilities, 1988. As part of FERC license review, Jeff Hagar developed and implemented special studies and conducted analyses to document the magnitude and significance of entrainment of trout at representative hydroelectric facilities in the Eastern Sierra Nevada.

July 12, 2012

RESUME

Jeffery M. Hagar, Principal/Senior Biologist

Jeff Hagar has worked since 1985 as a fisheries consultant in California. He provides expertise on projects involving significant or complex fisheries issues, generally working with multi-disciplinary teams involving environmental planning, engineering, hydrology, geomorphology, and/or legal components. Services include biological surveys such as population abundance and habitat characterization, fish passage assessment and remediation, special studies in fisheries, development of resource management and restoration plans, permitting of habitat restoration and passage improvement projects, preparation of NEPA and CEQA documentation, and endangered species act compliance. Mr. Hagar has been involved in projects throughout California including the Sierra, Eastern Sierra, Central Valley, Sacramento-San Joaquin Delta, and San Francisco Bay. Mr. Hagar has particularly extensive experience in coastal streams of Central and South Central California including the Santa Ynez River, Salinas River and Russian River, as well as numerous smaller streams. Much of his current work involves issues relating to management of threatened and endangered species, particularly coastal steelhead. Mr. Hagar has worked closely with representatives of California Department of Fish and Game, National Marine Fisheries Service, and US Fish & Wildlife Service on compliance with the Endangered Species Act within these streams and has all required permits for collecting and handling steelhead, coho salmon, and tidewater goby.

July 12, 2012

Jeffery M. Hagar
Principal
Senior Fisheries Biologist

EXPERTISE

- Fisheries population census, habitat assessment, aquatic inventories and fish passage assessment
- Resource management plans
- Habitat restoration planning and permitting
- Endangered Species Act compliance
- Preparation of technical documents including CEQA/NEPA and resource management planning
- Riverine habitat analysis using hydrologic, stream temperature, and reservoir operations analysis
- Fisheries population modeling
- Critical review and evaluation of technical information

PROFESSIONAL HISTORY

1994 - present	Principal/Senior Biologist Hagar Environmental Science
1991 - 1993	Senior Fisheries Biologist BioSystems Analysis, Inc., Tiburon, California
1989 - 1991	Fisheries Biologist East Bay Municipal Utility District, Oakland, California
1985 - 1989	Aquatic Ecologist/Fisheries Biologist BioSystems Analysis, Inc., Sausalito, California

EDUCATION

M.S. Zoology, 1984
University of Wisconsin, Madison, Center for Limnology

M.S. Water Resources Management, 1984
University of Wisconsin, Madison, Institute for Environmental Studies

B.S. Biological Aspects of Conservation, 1979
University of Wisconsin, Madison

PERMITS AND CERTIFICATIONS

California Department of Fish & Game Scientific Collecting Permit 801111-04

National Marine Fisheries Service Section 10 Permit for Scientific Research, Permit 1105 including Endangered Species Act take authorization for Central California Coast Steelhead, South-Central California Coast Steelhead, Central California Coast Coho Salmon

US Fish and Wildlife Service 10(a)(1)(A) Federal Fish and Wildlife Permit TE089980-0 including take of tidewater goby (*Eucyclogobius newberryi*)

EXHIBIT 3

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July 2, 2012

Tom Lippe
Lippe Gaffney Wagner LLP
329 Bryant St.; Suite 3D
San Francisco, CA 94107

Re: Review of Aesthetic Resources Section DRAFT EIR: Hunter Subdivision Project

Dear Mr. Lippe:

In accordance with your request to evaluate the adequacy of the "Aesthetics" section of the Draft EIR for the proposed Hunter Subdivision in the City of St. Helena, below are my comments. They are based upon the following: (1) review of the Project Description chapter and the "Aesthetics" section of the Hunter Subdivision Draft EIR; (2) June 18, 2012 field reconnaissance of the proposed development site and its viewshed; (3) a review of the City of St. Helena General Plan U(GP) update and associated EIR (1993); (4) my extensive experience with preparation and peer review of numerous CEQA documents, with specific focus upon visual impact analysis.

1) General Comments and Impressions. The evaluation of the potential impact of the proposed project, contained in the "Aesthetics" section of the DEIR, does not appear to be very well organized and written. Components of the evaluation (e.g., setting; significance criteria as applied to views from private areas) are not sufficiently described and/or defined. Potential impacts are not adequately analyzed. "Mitigation" of possible project effects are a listing of GP policies that are general, by their nature, rather than being more specific to a project-level of environmental analysis. Furthermore, a review of the policies indicates inconsistencies amongst their objectives when applied to the proposed subdivision development.

2) Visual Setting and Viewshed. The visual setting and viewshed are not adequately identified and described. A number of view areas and locations (residences and trailer park on the south side of the project site, the pedestrian trail along the eastern extension (beyond the locked gate) of Adams Street, and public views at the Adams Street terminus and the Hunt Avenue/Starr Avenue intersection) are identified. In addition, screening by vegetation and structures is also noted to describe the general quality of views, placing particular importance upon locations with public access.

However, after a brief description of what a "view corridor" is, there is little mention of the specific "sensitive receptors" in the area, their number, and the quality of their views. Adequate description of the existing viewshed and its physical characteristics is required to provide a sound baseline for the evaluation and extent of visual impacts that likely will occur from the implementation of the proposed project. Typically, areas in proximity to the proposed development parcel, including privately-owned properties (see item #3, Significance Criteria,

below) should be surveyed to disclose information that include, but are not limited to, the following:

- how many residences and businesses comprise the viewshed?
- although the area is generally flat, several residences appear to have second-story decks and balconies with "superior" views across the project site located to the south and southwest that are not obscured by trees and other vegetation (shown in the DEIR photos, figures IVA-3b and 3-3d). What is the current quality of views and features visible from these residences?
- what is the distance from residential view areas to the project site (important when determining the amount of view obstructed by project structures and landscaping).
- will the quality of views change when leaves have fallen from trees during part of the year?
- how much user activity occurs on the trail that presently runs east from the current terminus of Adams Street? From the publicly accessible street (Del Rio Court) within the trailer park that parallels part of the southern boundary of the project site?

Onsite reconnaissance of the project and vicinity on June 18, 2012 indicate that there are prominent views across the expanse of the project site from at least several residences as well as views from Del Rio Court through sizeable gaps in the trees lining the southern boundary of the proposed development parcel.

The DEIR also omits a discussion and description of the views from a winery (David Fulton Winery and Vineyards, which has a tasting room accessible to public visitation) and several residences on the south side of Fulton Lane, less than 1,000 feet away from the northern perimeter of the project boundary. Existing vineyards within the proposed development site are visible from Fulton Lane. From Fulton Lane near the winery, single-family residences, including several two-story structures with decks and balconies are readily apparent (see attached photos Fig.1 and Fig. 2).

3) Significance Criteria. The DEIR indicates that the significance criteria used to analyze the impacts of the proposed project upon the existing environment, including aesthetic/visual considerations is based upon the CEQA Guidelines (Appendix G, Environmental Checklist Form). However, for Aesthetics, item I.a, of the CEQA Checklist, which poses the question, "...Would the project have a substantial adverse effect on a scenic vista?...", the text in the Hunter Subdivision DEIR has been changed so that the word, "public" has been inserted before the term "scenic vista." As a result, it appears that there is a distinction between the significance of public compared to private views. According to CEQA case law (Ocean View Estates Homeowners Ass'n, Inc. v. Montecito Water Dist. (2004) 116 Cal.App.4th 396, 401-403), the level of significance for private views must be evaluated.

4) Impacts Analysis. The DEIR aesthetics impact analysis is inadequate. Although public views of the mountains to the north of the pedestrian trail would not be entirely blocked by part of the development (i.e., landscaping trees), it is likely that the view from one of the current public locations -- the intersection of Hunt Avenue/Starr Road identified in the DEIR-- would be wholly eliminated rather than merely obscured as stated in the DEIR. Figure III-7, Hunter

Subdivision Project EIR Landscaping Plan, appears to indicate that residential structures and trees, particularly when they mature, would likely remove any distant views from the intersection travelled by motorists, pedestrians, and cyclists.

Moreover, consistent with comment #3, above, views from several residents along the southern boundary of the project site will probably also lose all or much of their view of the remaining nearby vineyards and Mayacamas Mountains to the north. Figure III-7 indicates that the backs of proposed residences would only be about 30 feet from the fence line of existing residences. These new residential structures would have a maximum height of 30 feet and as much as an additional four feet of elevation above the current ground level resulting from planned grading. Combined with several rows of landscape trees, that will probably exceed 30 feet upon maturity, and the views of the mountains from the second-story decks and balconies of existing residences, along with one-story dwellings, will be significantly obscured if not entirely eliminated. The illumination from night-time lighting of new residences, street lighting, and vehicle traffic in relatively close proximity to the existing residences will pose a significant impact.

Page 81, section (3) Visual Character of the DEIR states that "...As a result [of converting vineyards/agricultural land to residential development], there would be a significant impact on the visual character of the site..." Cross-sections are presented to demonstrate that views of the mountains would not be entirely blocked. The cross-sections are inadequate, only profiles of houses and a ground profile of the project area are shown and nothing for the affordable housing units. Since the cross-sections do not show any relationship to the mountains in the distance, they do not support any findings of visibility of the surrounding hills and mountains.

5) Mitigation Measures. The mitigation of potential visual impacts from the implementation of the proposed project are largely based upon the policies set forth in the "Community Design Element" of the 1993 General Plan Update. Rather than specific details for the implementation of a project-level residential development (in which the zoning ordinances applicable to a MDR land use are likely more relevant), the GP Update policies are intended to provide an overall framework that provides objectives and goals for managing the land uses, the form, character, and appearance of the entire community. Furthermore, the objectives and policies typically represent actions that the City must take to ensure that the General Plan goals and objeetives are achieved rather than measures to be implemented by an applicant.

As such, the policies included in the Hunter Subdivision DEIR as mitigation measures are often inconsistent or irrelevant to the proposed housing development project or will result in potentially significant impacts unless contradictory objectives are reconciled. An example would be Policy 4.3.27, to "...encourage large specimen street trees and generous landscaping to shade homes and the street..." which could result in vegetation that screens significant views from existing nearby residents. Policy 4.5.1, "...The sense of a strong connection to the surrounding agricultural open space and hillsides must be preserved in the future. Views of vineyard, hillsides, creeks and major landscape features should be maintained..." would be affected by the proposed project which would remove vineyards, potentially block views of agricultural open spaces and hillsides for existing residents. Policy 4.6.1 to "...Retain key undeveloped open space areas where views to the vineyard and hills can be maintained.

Require that these areas be planted in vines or other low vegetation..." would eliminate

currently expansive views from the pedestrian trail and open space extending east from the terminus of Adams Street by planting of landscaping, including large trees.

The Hunter Subdivision DEIR further includes Community Design objectives policies from the ongoing Draft General Plan Update effort being conducted by the City. Since the GP Update is currently a draft that has not been approved by the City of St. Helena, the policies would not have any applicability as mitigation measures for the proposed project and should be deleted. In accordance with CEQA Guidelines (section 15125(a)), either the publication of the Notice of Preparation, or the date on which the preparation of the EIR is undertaken, serves as the baseline date for the environmental analysis.

Sincerely,

Digitally signed by Harry Benke
DN: cn=Harry Benke, o, ou, email=hbenke@visualimpactanalysis.com, c=US
Date: 2012.07.03 18:44:49 -07'00'

Harry Benke
Visual Impact Analysis LLC

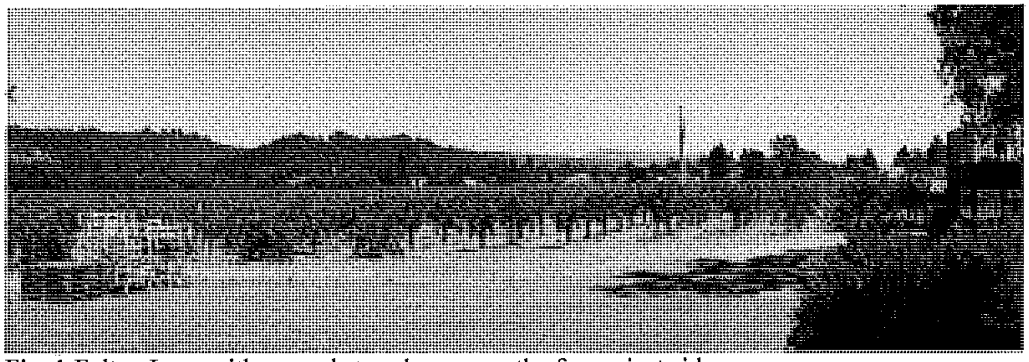

Fig. 1 Fulton Lane with second story houses on the far project side.

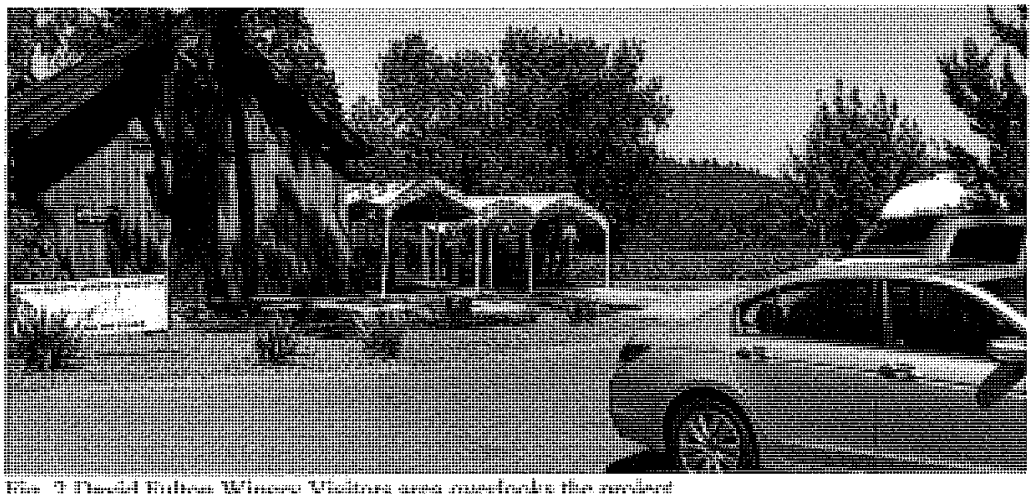

Fig. 2 David Fulton Winery Visitors area overlooks the project

EXHIBIT 3-1

Visual Impact Analysis LLC

www.visualimpactanalysis.com

60 Jackson Drive
P.O. Box 1926
Novato, CA 94948

T 415 897 5505
F 415 897 3373
C 415 606 5505

Harry Benke

Owner/Partner - Visual Impact Analysis LLC

Senior Project Manager - Visual Analysis Expert / Photosimulation Production / Visual Resources Inventory (VRI)

Qualifications Summary

Harry Benke is the Project Director for the visual analysis services provided by Visual Impact Analysis LLC. Mr. Benke personally executes, or oversees the execution of all VRI, report analysis and photosimulations . He has extensive experience in the issues of project development, NEPA and CEQA, and in the specific issues of visual impacts and BLM's VRM . His talents in mathematics, design, and his years of computer programming combine for a unique ability to understand, address, and accurately simulate, matters of visual impact significance.

He has an extensive knowledge of multiple engineering disciplines and their interaction as they relate to project design and to visual resources. His understanding of complex engineering issues allows Mr. Benke to effectively support and participate with a project team.

Mr. Benke is highly experienced and sensitive to lighting, shadowing, masses and surrounding components. His teaching of 3D computer modeling along with his computer programming and computer language skills, help him to develop evolving new methodologies and apply new technologies to visual analysis.

Mr. Benke has participated in over 250 visual impact analysis projects.

Education, Training

BLM Visual Resource Management Training; Course 8400-05, Las Vegas, NV 2009

Instructor/3D Computer Modeling-Computer Arts Institute, San Francisco, CA 1986-88

Sculpture - California College of the Arts, Oakland, CA 1972-75

Mathematics - Drexel University, Philadelphia, PA 1968-72

Professional Affiliations

American Mathematical Society

Mathematical Association of America

Professional History

Visual Analyist – Visual Impact Analysis LLC 1989 - Present

Areas of specialty

- CEQA analysis and practice of Aesthetics Analysis [Visual Impact Analysis]
- Photosimulations – from detailed realism to massing
- Visual Resource Inventories / VRI based on BLM VRM
- Shadow Studies
- Night Lighting Simulations
- Digital Terrain Models (DTMs)
- Nighttime LED Signage Simulations
- Signage Simulations and Studies
- SMARA Reclamation Simulation
- Peer Review
- Panoramic Digital Photography
- Color Selection Studies and Camouflage Techniques
- Exhibits and Simulations for Negotiated Legal Documents
- Scenic Quality Assessments
- Visually Sensitive Design Strategies
- Landscape and Vegetation Simulation
- Reclamation and Restoration Simulations
- Visual Mitigation Strategies
- GIS support

Instructor/3D Computer Modeling-Computer Arts Institute, San Francisco, Ca 1986 To 88

- Taught among the first publicly offered courses in the U.S. in 3D modeling and computer graphics.

EXHIBIT 4

SMITH ENGINEERING & MANAGEMENT

July 9, 2012

Mr. Tom Lippe
Lippe Gaffney Wagner LLP
329 Bryant St.; Suite 3D
San Francisco, CA 94107

Subject: Hunter Subdivision Project Draft Environmental Impact Report, St Helena, CA (SCH# 2012032048)

P12006

Dear Mr. Lippe:

Per your request, I have reviewed the Draft Environmental Impact Report (hereinafter "the DEIR") and supporting documentation for the proposed Hunter Subdivision (hereinafter "the Project") in the City of St. Helena (hereinafter "the City"). The focus of my review is in regard to matters involving traffic and circulation. My qualifications to perform this review include registration as both a Civil and Traffic Engineer in California and 44 years professional consulting practice in these fields. I have prepared, reviewed, and commented on the traffic and circulation components of numerous environmental impact documents under the California Environmental Quality Act (hereinafter "CEQA"), working for Lead Agencies, Responsible Agencies and private citizens and organizations. I am familiar with the Project vicinity, having performed numerous assignments in the Napa Valley and personally visited the area extensively. My professional resume is attached. My comments follow.

The DEIR Traffic Study Adjustments to Traffic Counts Are Not Adequately Explained

The DEIR Traffic Impact Study is based on traffic counts taken in November of 2011. The count data was then purportedly "adjusted" to represent peak October harvest season traffic. However, the adjustment factors and the derivation thereof is completely unexplained in the DEIR. Consequently, the public has no way of assessing whether or not the adjusted baseline counts adequately represent peak harvest season conditions. Hence, the DEIR is inadequate as an information document.

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Figure IV.L-1 Misrepresents the Local Street Network

Figure IV.L-1 represents Railroad Avenue as being continuous from Hunt Avenue to Pope Street. In actuality, Railroad Avenue dead-ends south of Hunt, about halfway to Pope. Please correct the figure. Please also respond as to whether the DEIR traffic study assigned any Project or other traffic to the non-existent portion of Railroad north of Pope. If such errant assignments have been made, the traffic study will need to be completely revised.

The DEIR Traffic Analysis Fails To Consider the Impacts of Railroad Operations on Traffic

The DEIR's sole assessment of rail operations issues is limited to consideration of whether the temporary blockages of emergency access to the Project site when train passage obstructs the grade crossings of Adams, Hunt and Pope is a significant public safety impact. The finding of less than significant impact based on the opinion of the City's Fire Chief, based solely in the context of present Wine Train schedule, utterly fails to recon with the possibility that the Wine Train could add runs or to consider that queues on east-west streets blocked during train passage could extend into Main Street, thereby obstructing north-south traffic on this vital circulation artery. There is virtually no separation between the Wine Train trackway and the intersections of Adams Street and Hunt Avenue with Railroad Avenue. The respective queue storage distance on Adams and Hunt between their intersections with Railroad Avenue and their intersections with Main Street is about 254 feet (storage for 10 to 12 cars) and about 135 feet (storage for 5 to 6 cars). On Pope Street, the separation between the trackway and Main Street is only about 56 feet (sufficient for storage of only a 2 to 3 car queue, even less if a large truck were in the mix). Obviously, if the Wine Train were to add a train or change train schedule so that a train passed through the grade crossings of these streets, available queue storage could easily be exceeded, obstructing Main Street. This would be both a significant public safety impact and a significant traffic impact. Because of the plausibility of such circumstances, the DEIR traffic study is inadequate without analysis of train-passage related eastbound queues on the above-named streets with- and without the Project in the current and 2030 scenarios. Such an analysis should be performed, and if it reveals any significant impacts, the revised document should be recirculated in draft status.

The DEIR's Analysis of Left Turn Queue Storage Issues Is Inadequate

The DEIR only analyzes queue length and adequacy of queue storage capacity at left turn lanes that would logically be used by Project traffic. However, at any intersection where the Project adds traffic and increases overall delay, this can also cause queues on left turn storage lanes only logically used by non-project traffic to exceed available storage lengths. Consequently, the DEIR should have

also analyzed the queue storage adequacy for the northbound left at Fulton-Madrona and Main, the northbound left at Adams and Main, and the northbound left at the compound intersection of Pope, Mitchell and Main. Without such an analysis, the DEIR traffic study is inadequate. If the revised traffic study finds significant impacts at any of these locations, it should be recirculated in draft status.

The DEIR Fails To Analyze Residential Traffic Impacts of the Project

Many of the streets that would carry Project traffic are residential in character. The entirety of the DEIR traffic impact analysis is focused on traffic service metrics: congestion, delay and levels of traffic service (LOS). Although the discussion of Construction Traffic Impacts[1] essentially admits that traffic effects on the quality and amenity of residential can be an impactful condition, no attempt has been made to estimate, disclose and mitigate the Project's traffic impacts on residential quality of life along the affected streets, even though widely recognized and employed metrics for evaluating those impacts exist. The DEIR is deficient in its failure to assess residential traffic impacts.

The DEIR's Basis for the Estimates of 2030 Traffic Is Not Adequately Explained

The DEIR narrative explains that "a small annual growth rate was applied to through volumes to account for regional growth from 2011 to 2020". Nowhere does the DEIR disclose what this "small annual growth rate" is or what factual basis was used to substantiate it. The DEIR narrative also indicates that "to project growth to Year 2030 conditions, a growth rate developed by the City, 0.75 percent per year, was applied to Year 2020 volumes at all intersections for a 10-year period." Again, the DEIR fails to provide any substantiation for the assumed growth rate over the last 10 years of the forecast. Hence, the public has no basis for judging whether the 2030 forecasts are reasonable or not. Hence, the DEIR is deficient as an information document.

The Trip Distribution for The Project and for Other Planned and Approved Developments Is Not Adequately Explained in the DEIR

The manner in which the trip distribution for the Project's generated trips was estimated is only vaguely described in the DEIR narrative.[2] The actual trip distribution is not documented in narrative or figures. Only end result traffic volumes at intersections are documented. The manner of estimation and actual distribution of trips from other approved or planned projects is not documented at all. Hence the public is provided no reasonable basis of judging whether or not the DEIR's estimates of trip distributions reasonably conform

[1] DEIR page 337.
[2] DEIR pages 335 and 336.

to recognized traffic patterns in the Project vicinity. Consequently, the DEIR is inadequate as an information document.

Study Maps Inadequate To Assess Project Conformity with General Plan Roadway Improvements

On pages 328 and 329, the DEIR traffic analysis lists certain road development provisions in the City's General Plan that individual development projects such as Hunter Subdivision must demonstrate conformity with. However, for 6 of the 9 road development projects listed from the General Plan that the Project must demonstrate general consistency with, the map illustrations presented in the DEIR lack identification of street names and other landmarks that define the limits of those General Plan roadway development projects. Since most of the project limits are undefined on the DEIR map work, the public has no basis for judging whether or not the Project has potential non-conformity with those General Plan projects. Consequently, the DEIR is inadequate as an information document in this regard.

There Is No Indication How High Pedestrian Volumes Are Considered In DEIR Traffic Analysis

The DEIR identifies the fact that there are high pedestrian volumes at some study intersections and documents these in Appendix E Figures IV.E-1, IV.E-2 and IV.E-3. Please explain how the high pedestrian volumes are taken into account in the LOS calculations, particularly for the intersections of Adams with Main, Adams with Railroad, Hunt with Main, Hunt with Railroad, and for the compound intersection of Pope and Mitchell with Main.

DEIR Fails to Document Actual LOS Calculations

The above issue regarding consideration of high pedestrian volumes gives rise to the further observation that this subject DEIR does not provide as an appendix, all of the LOS calculation sheets and, where performed, queue calculation sheets. Such appendix provision is customary with most DEIRs in most Lead Agencies. Indeed, the City only posted the meager 12 pages of tables and figures contained in Appendix E on its web site where it would be broadly available to the public only 8 days before the expiration of the 45 day period for filing comments on the DEIR. The lack of the LOS calculation sheets and the late posting of the DEIR appendices is inconsistent with the transparent process CEQA demands and renders the DEIR inadequate as an information document.

Diversions of Non-Project Traffic Inadequately Documented

The DEIR assumes that the new roadway connections provided by the Project (the connection of Starr through to Adams) will alter the routes of some non-project traffic and indicates that these diversions will have beneficial effects at some study intersections. However, it only documents the diverted volume changes at the study intersections, not the overall flow patterns of diversions. This makes it impossible for the public to determine whether the assumed patterns and numbers of non-project trip diversions are reasonable or not. This also renders the DEIR inadequate as an information document.

Pope Street – Silverado Trail Intersection Mitigation Unsatisfactory

Mitigation measure TRAF-1 proposes that the Project pay a fair share contribution to striping a right turn lane from southbound Silverado Trail to Pope Street westbound. However, there are several things wrong with this mitigation.

First, according to the DEIR narrative, the proposed mitigation only offsets the Project's contribution to the deficiency at this intersection. However, the Project is claiming the full benefit of the improvement while only contributing a fair share payment. Also, there are many other approved projects in the City and elsewhere in the region that are potential fair share payers who may claim the full benefit of the purported improvement. In essence, the City appears to be attempting to use one band-aid to staunch the bleeding of multiple wounds.

Second, current aerial and site photography shows that the proposed right turn lane already exists. The Project cannot claim the benefit of creating something that is already there.

Third, there is a simple and effective short term solution to reducing delay at the subject intersection. This involves creating a raised "pork-chop" island separating the southbound through lane from the southbound right turn lane on Silverado Trail. The island would create a shelter enable advancing the stop line on eastbound Pope to the edge line of the southbound through lane on Silverado. With the stop line advanced, vehicles attempting to turn right from eastbound Pope to southbound Silverado could do so even when vehicles attempting to turn left from Pope to Silverado northbound are awaiting breaks in both directions of traffic on Silverado. This improvement would remain of benefit when the intersection ultimately becomes signalized.

Vine Trail Issue Not Clearly Resolved

The DEIR identifies that the Project would conflict with the Vine Trail portion of Napa County's Countywide Bikeway Plan, Napa County Regional Park Open Space District's Master Trail Plan and the City's Draft General Plan Circulation Element because the Project does not specifically provide for the Vine Trail along the extensions of Starr Avenue and Adams Street. As mitigation (TRAF-7) the DEIR proposes that the Project provide Class II signed and striped bike lanes along the Starr Avenue and Adams Street roadway extensions. However, it is not clear that the proposed Class II bike lanes will provide the "family friendly" environment that the Vine Trail is intended to provide. The City should clarify whether or not the Project Sponsor will be required to provide the Class 1 bike facility along Starr Avenue that is held out as a vague possibility in the concluding discussion of Impact TRAF-7.

DEIR Should Have Considered Project With Connection of Adams to Silverado Trail

The City clearly plans ultimate connection of Adams Street to Silverado Trail. Even though the City at this time has no clear funding commitment for such a connection, given the location of the Hunter Project and the fact that such a roadway connection could have dramatic consequences for the quality and livability of the residential units proposed, as well as significantly increased traffic demands at key study intersections such as Adams with

Railroad and Adams with Main, the DEIR should, at a minimum, should have evaluated the Project with the Adams-Silverado connection in place as an alternative Year 2030 scenario. Without such an analysis, the DEIR is deficient.

Conclusion

Based on all of the points noted in detail above, we are convinced the DEIR traffic analysis of the Project's significant impacts and mitigation needs is inadequate. Particularly problematic are the inadequacies as an information document and the absence of a long-range analysis scenario with the Adams-Silverado connection in place. The traffic analysis should be completely redone in light of all of the above comments and observations herein and the DEIR should be recirculated in draft status.

Sincerely,

Smith Engineering & Management
A California Corporation



Daniel T. Smith Jr., P.E.

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EXHIBIT 4-1

SMITH ENGINEERING & MANAGEMENT

DANIEL T. SMITH, Jr.
President

EDUCATION

Bachelor of Science, Engineering and Applied Science, Yale University, 1967
Master of Science, Transportation Planning, University of California, Berkeley, 1968

PROFESSIONAL REGISTRATION

California No. 21913 (Civil)
California No. 938 (Traffic)
Nevada No. 7969 (Civil)
Arizona No. 22131 (Civil)
Washington No. 29337 (Civil)

PROFESSIONAL EXPERIENCE

Smith Engineering & Management, 1993 to present. President.
DKS Associates, 1979 to 1993. Founder, Vice President, Principal Transportation Engineer.
De Leuw, Cather & Company, 1968 to 1979. Senior Transportation Planner.
Personal specialties and project experience include:

Litigation Consulting. Provides consultation, investigations and expert witness testimony in highway design, transit design and traffic engineering matters including condemnations involving transportation access issues; traffic accidents involving highway design or traffic engineering factors; land use and development matters involving access and transportation impacts; parking and other traffic and transportation matters.

Urban Corridor Studies/Alternatives Analysis. Principal-in-charge for State Route (SR) 102 Feasibility Study, a 35-mile freeway alignment study north of Sacramento. Consultant on I-280 Interstate Transfer Concept Program, San Francisco, an AA/EIS for completion of I-280, demolition of Embarcadero freeway, substitute light rail and commuter rail projects. Principal-in-charge, SR 238 corridor freeway/expressway design/environmental study, Hayward (Calif.) Project manager, Sacramento Northeast Area multi-modal transportation corridor study. Transportation planner for I-80N West Terminal Study, and Harbor Drive Traffic Study, Portland, Oregon. Project manager for design of surface segment of Woodward Corridor LRT, Detroit, Michigan. Directed staff on I-80 National Strategic Corridor Study (Sacramento-San Francisco), US 101-Sonoma freeway operations study, SR 92 freeway operations study, I-880 freeway operations study, SR 152 alignment studies, Sacramento RTD light rail systems study, Tasman Corridor LRT AA/EIS, Fremont-Warm Springs BART extension plan/EIR, SRs 70/99 freeway alternatives study, and Richmond Parkway (SR 93) design study.

Area Transportation Plans. Principal-in charge for transportation element of City of Los Angeles General Plan Framework, shaping nations largest city two decades into 21'st century. Project manager for the transportation element of 300-acre Mission Bay development in downtown San Francisco. Mission Bay involves 7 million gsf office/commercial space, 8,500 dwelling units, and community facilities. Transportation features include relocation of commuter rail station; extension of MUNI-Metro LRT; a multi-modal terminal for LRT, commuter rail and local bus; removal of a quarter mile elevated freeway; replacement by new ramps and a boulevard; an internal roadway network overcoming constraints imposed by an internal tidal basin; freeway structures and rail facilities; and concept plans for 20,000 structured parking spaces. Principal-in-charge for circulation plan to accommodate 9 million gsf of office/commercial growth in downtown Bellevue (Wash.). Principal-in-charge for 64 acre, 2 million gsf multi-use complex for FMC adjacent to San Jose International Airport. Project manager for transportation element of Sacramento Capitol Area Plan for the state governmental complex, and for Downtown Sacramento Redevelopment Plan. Project manager for Napa (Calif.) General Plan Circulation Element and Downtown Riverfront Redevelopment Plan, on parking program for downtown Walnut Creek, on downtown transportation plan for San Mateo and redevelopment plan for downtown Mountain View (Calif.), for traffic circulation and safety plans for California cities of Davis, Pleasant Hill and Hayward, and for Salem, Oregon.

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Transportation Centers. Project manager for Daly City Intermodal Study which developed a $7 million surface bus terminal, traffic access, parking and pedestrian circulation improvements at the Daly City BART station plus development of functional plans for a new BART station at Colma. Project manager for design of multi-modal terminal (commuter rail, light rail, bus) at Mission Bay, San Francisco. In Santa Clarita Long Range Transit Development Program, responsible for plan to relocate system's existing timed-transfer hub and development of three satellite transfer hubs. Performed airport ground transportation system evaluations for San Francisco International, Oakland International, Sea-Tac International, Oakland International, Los Angeles International, and San Diego Lindberg.

Campus Transportation. Campus transportation planning assignments for UC Davis, UC Berkeley, UC Santa Cruz and UC San Francisco Medical Center campuses; San Francisco State University; University of San Francisco; and the University of Alaska and others. Also developed master plans for institutional campuses including medical centers, headquarters complexes and research & development facilities.

Special Event Facilities. Evaluations and design studies for football/baseball stadiums, indoor sports arenas, horse and motor racing facilities, theme parks, fairgrounds and convention centers, ski complexes and destination resorts throughout western United States.

Parking. Parking programs and facilities for large area plans and individual sites including downtowns, special event facilities, university and institutional campuses and other large site developments; numerous parking feasibility and operations studies for parking structures and surface facilities; also, resident preferential parking .

Transportation System Management & Traffic Restraint. Project manager on FHWA program to develop techniques and guidelines for neighborhood street traffic limitation. Project manager for Berkeley, (Calif.), Neighborhood Traffic Study, pioneered application of traffic restraint techniques in the U.S. Developed residential traffic plans for Menlo Park, Santa Monica, Santa Cruz, Mill Valley, Oakland, Palo Alto, Piedmont, San Mateo County, Pasadena, Santa Ana and others. Participated in development of photo/radar speed enforcement device and experimented with speed humps. Co-author of Institute of Transportation Engineers reference publication on neighborhood traffic control.

Bicycle Facilities. Project manager to develop an FHWA manual for bicycle facility design and planning, on bikeway plans for Del Mar, (Calif.), the UC Davis and the City of Davis. Consultant to bikeway plans for Eugene, Oregon, Washington, D.C., Buffalo, New York, and Skokie, Illinois. Consultant to U.S. Bureau of Reclamation for development of hydraulically efficient, bicycle safe drainage inlets. Consultant on FHWA research on effective retrofits of undercrossing and overcrossing structures for bicyclists, pedestrians, and handicapped.

MEMBERSHIPS

Institute of Transportation Engineers Transportation Research Board

PUBLICATIONS AND AWARDS

Residential Street Design and Traffic Control, with W. Homburger *et al.* Prentice Hall, 1989.

Co-recipient, Progressive Architecture Citation, *Mission Bay Master Plan*, with I.M. Pei WRT Associated, 1984.

Residential Traffic Management, State of the Art Report, U.S. Department of Transportation, 1979.

Improving The Residential Street Environment, with Donald Appleyard et al., U.S. Department of Transportation, 1979.

Strategic Concepts in Residential Neighborhood Traffic Control, International Symposium on Traffic Control Systems, Berkeley, California, 1979.

Planning and Design of Bicycle Facilities: Pitfalls and New Directions, Transportation Research Board, Research Record 570, 1976.

Co-recipient, Progressive Architecture Award, *Livable Urban Streets, San Francisco Bay Area and London*, with Donald Appleyard, 1979.

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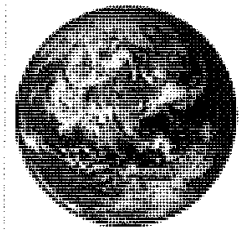
EXHIBIT 5



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& CEO
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Controller

"The moral arc of the universe is long, but it bends toward justice"
Reverend Martin Luther King Jr.
Where Do We Go From Here?
August 1966

1331 Evans Street, San Francisco, California 94124, United States of America
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COMMENTS

From: Saul Bloom
To: Kelly Franger and Tom Lippe
Date: 7/6/12

Hunter Subdivision Project Draft EIR SCH: 2012032048
Prepared For The City Of St. Helena May 29, 2012

Overview

Below are Arc Ecology's comments on the Hunters Subdivision Project Environmental Impact Report. I wanted to note that the development of these comments was challenging because from a hazardous substances/ property contamination perspective there was very little data provided to comment upon. This is unfortunate as there are virtually no other sources of information available with which to check this document. I conducted an on-line search for materials and several of the pictures of the site were obtained independently through Google Earth.

Site Characterization

"The project site contains approximately 16.9 acres of land, is relatively flat, and is currently undeveloped. The site is generally rectangular with a "panhandle" extension that connects the site to Adams Street west of the panhandle. Approximately 40 percent of the site is under cultivation with a vineyard and the remainder is vacant. No trees, rock outcroppings or other significant natural features exist on the site. Figures III-2 shows an aerial view of the project and Figure III-3 shows views of the site from two different vantage points. The eastern portion of the site is currently located within a 100-year Flood Hazard area as mapped by the Federal Emergency Management Agency (FEMA). This portion is mapped on Figure III-4. There is also a drainage ditch located along the northern edge of the property that is likely jurisdictional waters of the U.S.[1] "

EIR Page 41. (Figure III—1 on following page)

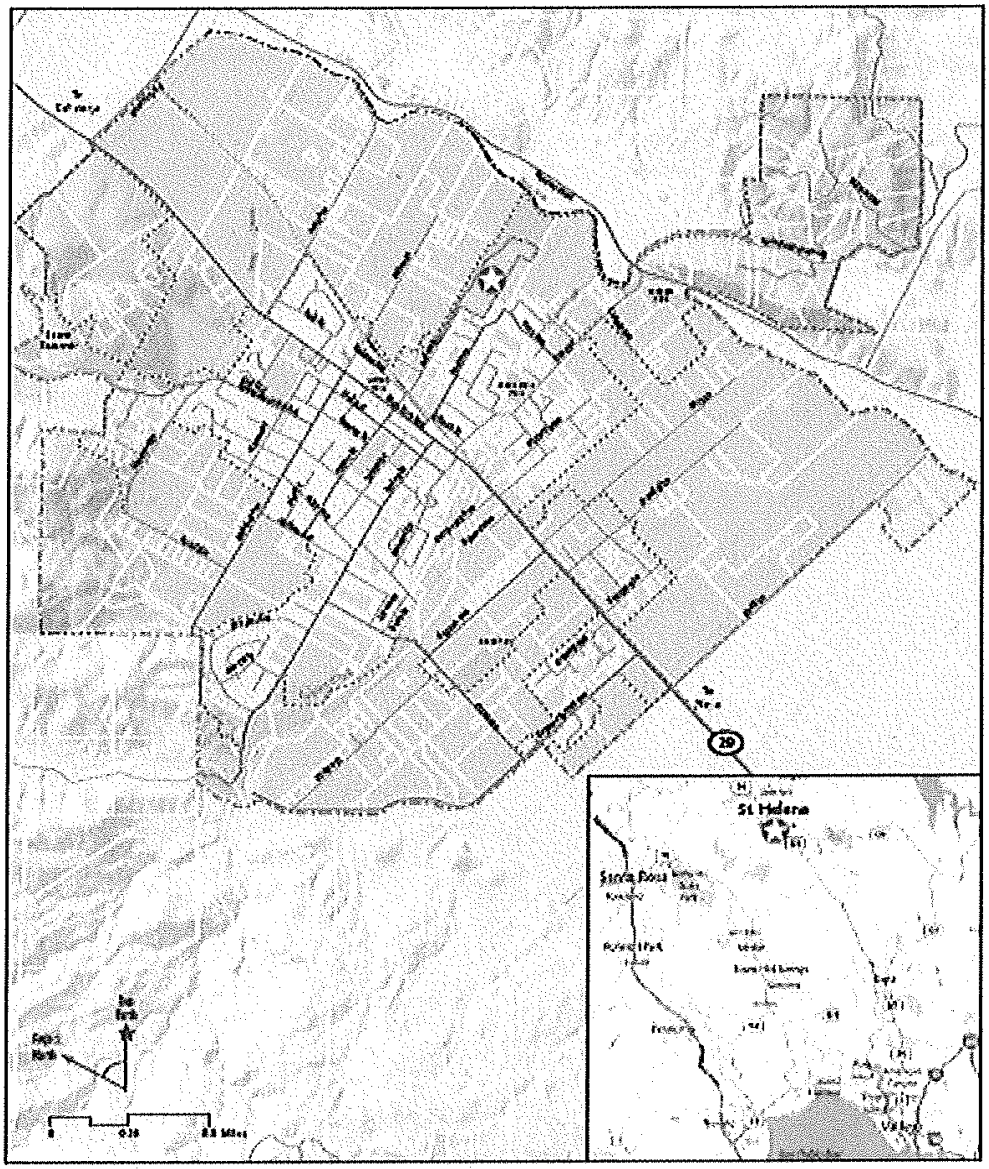
As regards potential soil contamination the Hazards section of the EIR reports:

"H. HAZARDS AND PUBLIC SAFETY

1. Setting

a. Existing Conditions
Hazardous materials may be present in the subsurface as a result of past and present land uses. Exposure to such materials could adversely affect the health of construction workers and/ar the public during project construction.

Hazardous materials issues at the project site were evaluated by reviewing historical land use infor-



Source: City of St. Helena Draft General Plan 2030; and Google Earth, 2011.

Figure III-1
Hunter Subdivision Project EIR
Project Location and Regional Vicinity Map

mation, reviewing regulatory agency hazardous material records, and a site reconnaissance performed by a BASELINE Enviranmental Consulting profassional geologist on November 3, 2011.

(1) Historical Land Uses
Potential hazardous materials issues associated with historical land uses at and near the project site were evaluoted by reviewing historical aerial photographs from 1940, 1958, 1965, 1973, 1982, 1993, 1998, 2005, 2006, and 2009 and historical topographic maps from 1945, 1960, and 1993. 2,3 ...
[2] Environmental Data Resources (EDR), 2012. Aerial Photo Decade Package, Hunter Praperty Subdivision, Inquiry Number 3231027.5.
[3] Environmental Data Resources (EDR), 2011. Histarical Topographic Map Report, Hunter Property Subdivision, Inquiry Number 3231027.4."

EIR Page 197

"In summary, the primory historical land uses identified at the project site were agricultural. Aerial photos from 1940 and 1958 show orchards and what appear to be field crops on the project site; and photos on and after 1965 show rows of plants indicative of vineyards. It is likely thot agricultural chemicals were applied ta the project site at this time.

Prior to 1950, inorganic pesticides that contained elevated concentrations of heavy metals, such as arsenic, were cammonly used in California agriculture. After 1950, organochlorine pesticides (e.g., DDT, chlordane) were commonly used in California agriculture until about the mid-1970s. Residues from inorganic and organochlorine pesticides used in the past have the potential to persist for many decades in shallow soils and can affect human health or the environment[4]. Chemical residues in shallow soils, if present, cauld affect development of the project site by posing a health risk to canstruction warkers and future residents.

Environmental Data Resources, Inc. (EDR), an environmental resource service, was contracted to canduct a search of federal, state, and local regulatory agency records pertaining to past and present hazardous material uses and releases at the project site and nearby properties.5 No records of sites using, storing, or disposing of hazardous materials were identified within ¼-mile of the project site. Na reported hazardous materials releases were identified within ¼-mile.

Eight hazardous materials release sites were identified between ¼-mile and 1 mile from the project site. Six sites were listed due to leaking USTs; releases from this type af sites typically do not migrate more than about 250 feet from the release.6 Other releases were being investigated and remediated under low priority cleanup programs, such as the Water Boord's Spills, Leaks, Investigotions, and Cleanups (SLIC) program and DTSC's Voluntary Cleanup Program (VCP). No high priority hazardous release sites, such as National Priority List (Superfund) sites, were identified in the project vicinity. The findings of the regulotory agency record search indicate that no reported hazardaus materials release would have the potential to affect soils and groundwater at the project site."

EIR Pages 198-199

<u>Comment 1</u>: I find it curious that the potential for hazardous waste and contaminated sites on the property seem to be entirely focused on aerial photographs and topographical maps dating back to 1940.

"(1) Historical Land Uses
Potential hazardous materials issues associated with historical land uses at and near the project site were evaluated by reviewing historical aerial photographs from 1940, 1958, 1965, 1973, 1982, 1993, 1998, 2005, 2006, and 2009 and historical topographic maps from 1945, 1960, and 1993. 2,3 ..."

According to the Saint Helena Chamber of Commerce Website the town of Saint Helena began in 1854 and by 1915 was a popular tourist attraction. Given the age of the town and the length of time many toxic and hazardous materials such as arsenic persist in the soil the historic overview included in the hazards section should have included a summary of the results of a title/ deed search from the Hall of Records or County Clerk as would be typical in an EIR.

Comment 2: The EIR fails to provide information cited as relevant to the characterization of the site.

While the information in the afore quoted section provide a reasonable overview:

- The EIR reports photographic information it does not provide, and reports on which this section was based which are not included.

- There is generally no particular way we as a reviewer of the EIR would be able to determine the relevance of this information to the current state of the property's contamination, the hazards posed to the public and how it might change the project.

Comment 3: Hazards Section Proposed Mitigation is helpful in that a commitment is made to addressing pollution found on the site, however it substitutes a commitment to addressing a potential problem for providing meaningful data and analysis for public review.

- The EIR states that a risk assessment "will be subject to review and/ or approval by DEM and/ or other regulatory oversight agencies" absent is any commitment to public engagement which lies at the core of the CEQA process.

- The EIR proposes the following as a mitigation but the proposal comes after the fact and provides Arc Ecology as reviewer of this document no assistance in informing us about the site's conditions or whether any of the proposed controls or other forms of mitigation are adequate.

"Exposure to these chemical residues during site grading and development activities could potentially affect the health and safety of construction workers and the general public. If left in place, residues could also affect future residents at the project site.

Mitigation Measure HAZ-1: As a condition of approval for construction and grading permits for the project site, the following subsurface investigation and follow-up analysis shall be performed to evaluate agricultural chemical residues in site soils:

- *Shallow soil samples shall be collected by a qualified environmental professional within all areas of the project area proposed for residential uses and analyzed for pesticides and herbicides in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties9.*
- *The sampling shall be conducted prior to site grading and development activities. As specified in the Interim Guidance, any detected organic compounds or metals above naturally-occurring concentrations must be evaluated in a human health risk assessment as described in the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual or in comparison to California Human Health Screening Levels (CHHSLs).*
- *The risk assessment shall describe measures that must be implemented to ensure that any potential added health risks to construction workers, maintenance and utility workers, site users, and the general public as a result of hazardous materials are reduced to a cumulative risk of less than 1 × 10-6 (one in one million) for carcinogens and a cumulative hazard index of 1.0 for non-carcinogens, or as required by a regulatory oversight agency.*
- *The risk assessment will be subject to review and/or approval by DEM and/or other regulatory oversight agencies.*
- *The potential risks to human health in excess of these goals would be reduced either by remediation of the contaminated soils (e.g., excavation and off-site disposal) and/or implementation of institutional controls and engineering controls (IC/EC). IC/EC may include the use of a construction risk manage-*

ment plan (for mitigating exposures during construction and maintenance of the project), hardscape (buildings and pavements), importatian of clean soil in landscaped areas to eliminate exposure pathways, and/or deed restrictions. If IC/EC are implemented, an Operations and Maintenance Program must be prepared and implemented to ensure that the measures adopted are maintained throughout the life of the project. If IC/EC are implemented, the Operations and Maintenance Program will be subject to review and approval by DEM and/or other regulatory oversight agencies. Implementation of the above mitigation measure would reduce this impact to a less-than-significant level. (LTS)

EIR Pages 208-209

Comment 4: The EIR fails to provide the public with relevant data regarding the contamination of the property which could have been knowable at the time of publication.

Arc Ecology is frustrated with the lack of actual data in the EIR. Instead of providing a summary of which chemicals contaminate the property and the extent to which contamination is documented, the EIR instead substitutes a list of hazardous and toxic chemicals known to have been broadly used throughout the State and might be present at this location. At 16.9 acres this is a relatively small site and better site specific characterization of toxic and hazardous contamination should have been provided. While sparse, there is sufficient background information to help guide even a small scale preliminary sampling effort to inform the EIR:

- *"In 1940, the project site and vicinity were primarily agricultural. Five rectangular sewage disposal ponds, totaling about 3 acres, were located to the east of the project site...*
- *Between 1965 and 1973, the sewage disposal ponds were filled in...*
- *Between 1973 and 1982, a small pond (approximately 50 feet in diameter) was constructed in the southeast corner of the project site.*
- *Prior to 1950, inorganic pesticides that contained elevated concentrations of heavy metals, such as arsenic, were commonly used in California agriculture. After 1950, organochlorine pesticides (e.g., DDT, chlordane) were commonly used in California agriculture until about the mid-1970s. Residues from inorganic and organochlorine pesticides used in the past have the potential to persist for many decades in shallow soils and can affect human health or the environment4. Chemical residues in shallow soils, if present, **could affect development of the project site by posing a health risk to construction workers and future residents."***

EIR Page 198

Given that these sites were known and that it was understood that the possibility of contamination could impact the project site, to perform its informational role the EIR should have provided the public with a study that assessed the nature of the contamination, the extent of the contamination and the health risks associated with the contamination.

Comment 5: A preliminary sampling study could have easily been mounted to inform the EIR prior to its publication thereby affording reviewers such as Arc Ecology an opportunity to evaluate the possible impacts on the project as cited in the quote from EIR Page 198 above.

The EIR with rare exception provides only annual dates and withholds information on the month of a documents publication. For example:

"[3] Environmental Data Resources (EDR), 2011. Historical Topographic Map Report, Hunter Property Subdivision, Inquiry Number 3231027.4."

Even though from reading the EIR it is difficult to know when in 2011 this document was produced it is nevertheless clear from this citation as well as other documents cited in the EIR that there was sufficient information on hand and adequate time to create and execute at the very least a preliminary sampling program. Given that the location of sites on and around the project like the former sewage ponds, the adjacent drainage ditch, and the agricultural history were known it would in our view take less than nine months to assemble, gain approval for, and execute a discrete sampling program to inform the EIR.

Such data is necessary for evaluating the impacts of hazards on the project than the information provided in the EIR.

Comment 4: Areas of Concern

The map below shows Arc Ecology's areas of concerns relatively to hazardous materials impacts on the project site. The area within blue figure is the project site itself and the flood detention pond, the project site is known to be potentially impacted by agricultural pollutants. The red circles denote ponds. Such bodies of water are known to collect agricultural runoff and therefore concentrate the pollutants. They are also frequently the site of past disposal of other chemical contaminants. The area inside the yellow rectangles are the mobile home park and a portion of an adjacent development. Little is said about these sites in the EIR.

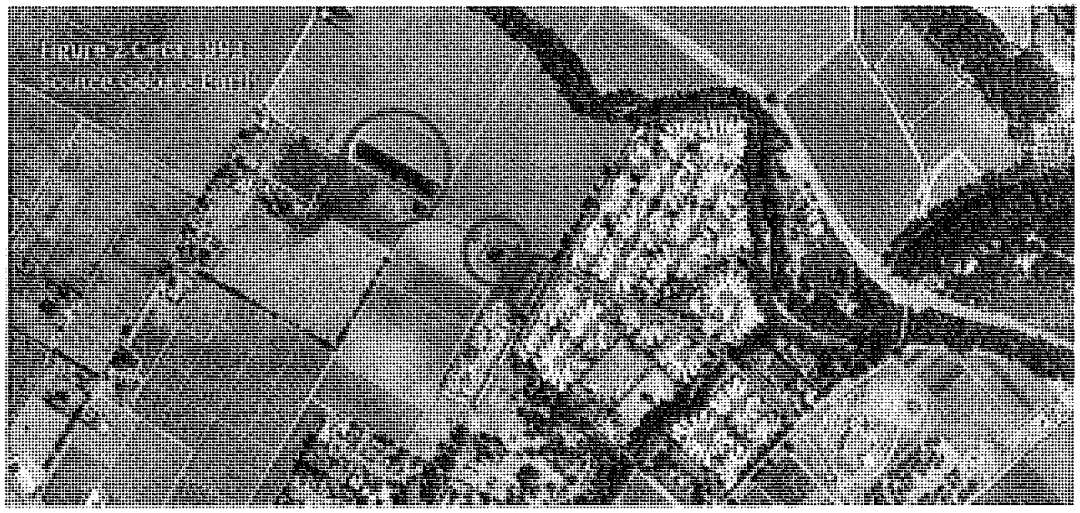


The large red circle is shown as a body of water. From a look in Google Earth, it's a pond although it could easily be a drainage ditch or something else. The concern is that this body of water could be contaminated with both agricultural (pesticides etc) and other liquid or heavy metal pollutants which could have already leached into the project area.

The small red circle is also shown as a body of water and is referred to in the EIR as a pond, but there is no further description of it except that it is reported to have been excavated and filled in 2005 but apparently still contains or collects water.

The EIR makes it clear that the small pond on the property is not lined (although it doesn't say so directly). The EIR is silent on the condition of the body of water in the large red circle on adjacent property.

The mobile home park is of concern because of the potential for broken or improperly constructed sewer/ water transport connections to contaminate the groundwater.



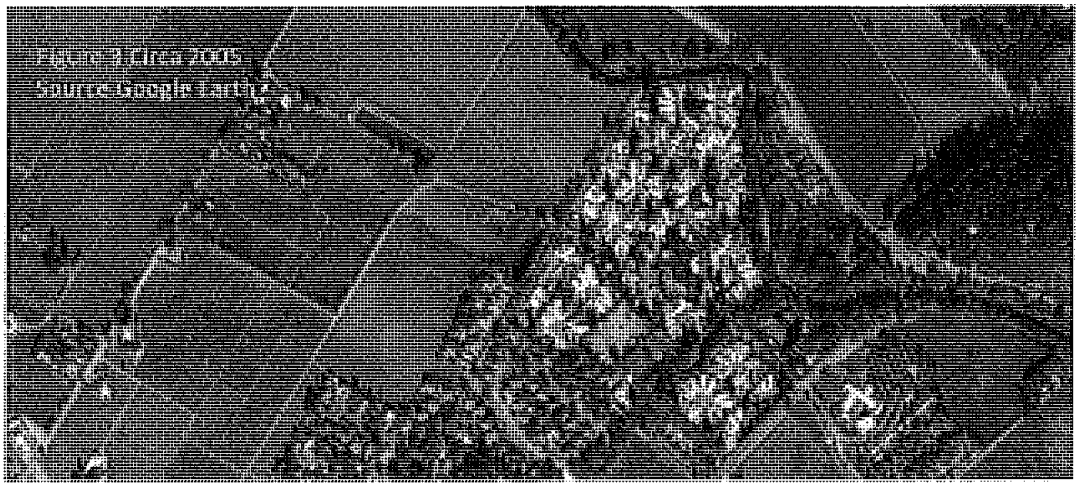
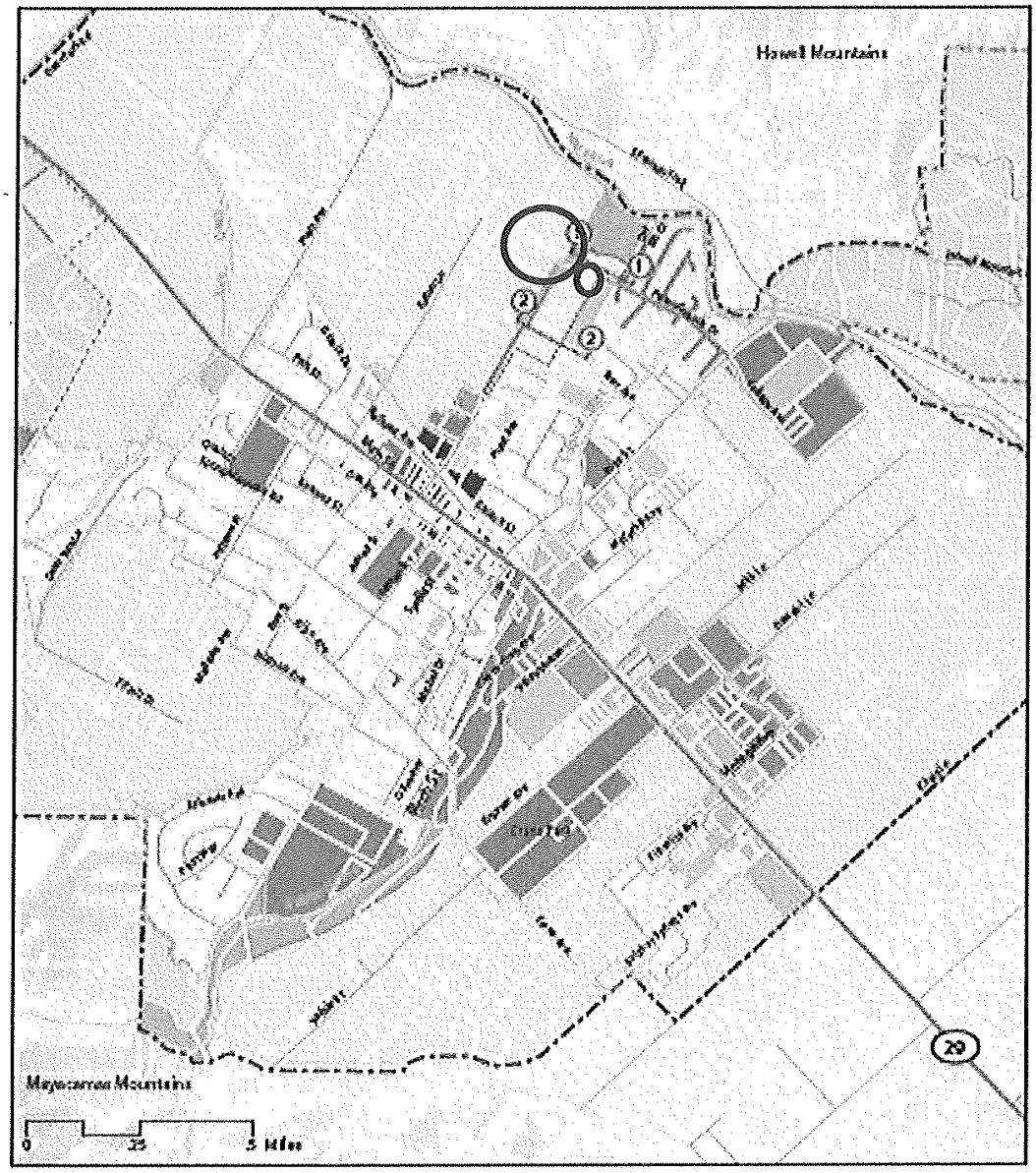
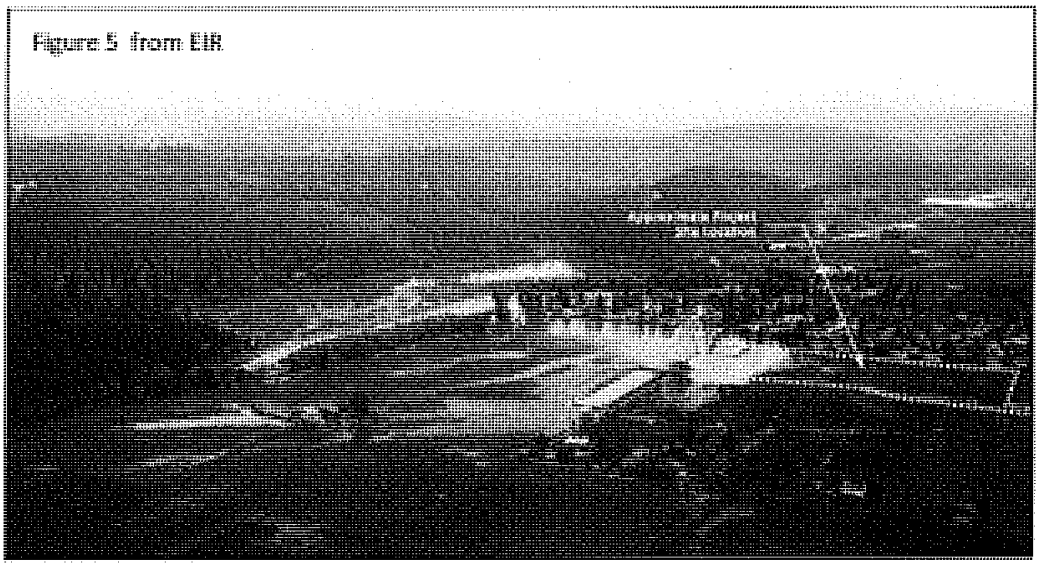


Figure 4 From EIR Identifying Ponds as existing bodies of water



Source: City of St. Helena Draft General Plan 2030.

Figure IV.A-7
Hunter Subdivision Project EIR
Locations for Cross Sections



Source: City of St. Helena Public Works Department, Photo Dated: December 13, 2005.

Figure IV.I-2
Hunter Subdivision Project EIR
Historic Flooding 2005

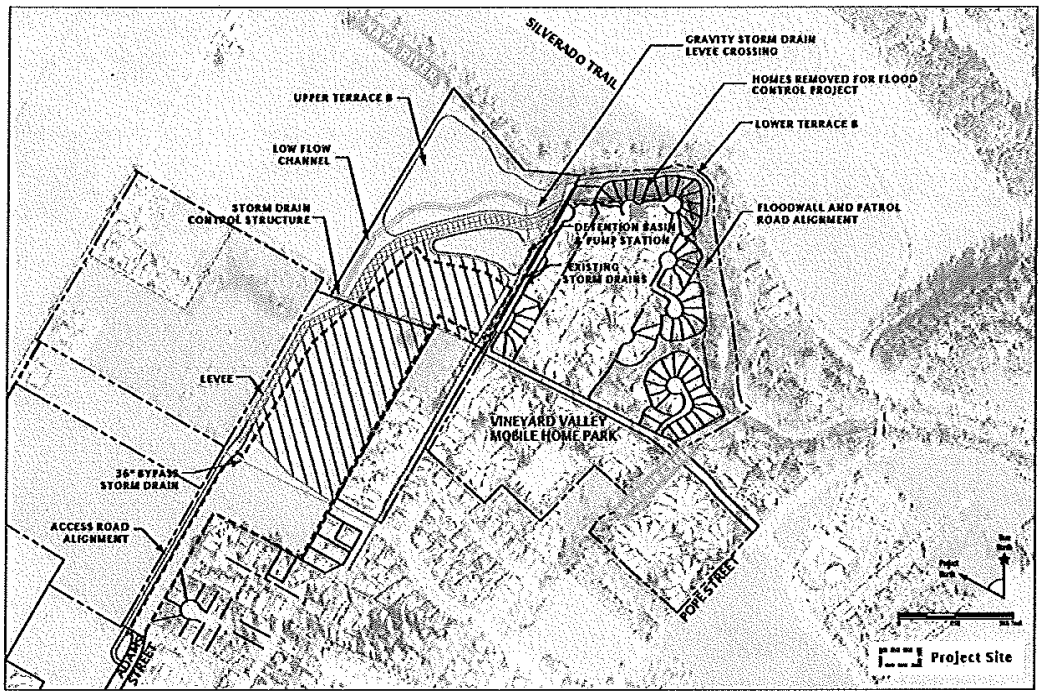
Figure 5 illustrates why these ponds are of concern relative to the project. Both are clearly visible in the photo above. During the flooding of 2005 river water overran the embankments of the ponds and a portion of the property was flooded. If contaminated some portion of the collected or disposed pollutants in these ponds seems likely to have been carried onto the property. If contaminated, some of this pollution seems likely to have seeped into the water table.

The EIR reports:

"An existing well near the southeastern end of the praperty is proposed to be maintained in place and used for irrigation of the project's exterior landscaping areas, pending City approval. The project would be designed not to exceed 0.4 AF/year/dwelling bosed on the installotion of increasingly efficient and lowerwoter- using fixtures and appliances. For further detail on proposed project woter demonds, see Section IV.K Public Services, Recreotion and Utilities

EIR Page 56.

However the EIR does not discuss what the quality of this water is nor does it discuss any potential contamination issues from the ponds shown above or any other source.



Source: Comprehensive Flood Protection Project, Project Overview Schematic, City of St. Helena, June 2011.

Figure IV.I-1
Hunter Subdivision Project EIR
Hydrologic Features



Figure IV.I-3
Hunter Subdivision Project EIR
Current Pre-Flood Control Project Regulatory 100-Year Flood Hazard Area



Figure IV.I-4
Hunter Subdivision Project EIR
100-Year Flood Hazard Area with Flood Control Project

Qualifications

Arc Ecology is a nonprofit public interest technical services provider to environmental and economic justice communities throughout Northern California. Arc Ecology funds its nonprofit community service mission in part through the provision of fee-based technical consultation to projects or entities engaged in activities consistent with our organizational mission—www.arcecology.org.

Brief Sample of Relevant Consulting Projects:
The following projects involved the review of Superfund Remedial Investigation and Response Documents/ Plans and Environmental Impact Statements and Reports.

- 2011-2012: Bayview Hunters Point Community Environmental Technical Advisor. India Basin Neighborhood Association, US Environmental Protection Agency Technical Assistance Grant. Hunters Point Shipyard CERCLA remedial response program US Navy.
- 2001-2010: San Francisco Redevelopment Agency/ San Francisco Department of Environment. Bayview Hunters Point Community Environmental Technical Advisor. Hunters Point Shipyard CERCLA remedial response program US Navy.
- 1995-2000: Monterey Community Technical Environmental Advisor. Fort Ord Toxics Project. US Environmental Protection Agency Technical Assistance Grant. Fort Ord CERCLA remedial response program US Army.

Awards and Citations:

- 2007 American Society of Landscape Architects National Award for Research, Planning & Community Engagement: Hargreaves Associates/ Arc Ecology *"From Pollution to Parklands:"* A planning analysis for public park designs for the Hunters Point Shipyard.
- 2009 Boston Architectural Society - Citation for Research, Planning & Community Engagement: Bionic/ Arc Ecology *"Alternatives for Study:"* A critical planning analysis of the redevelopment plans for the Hunters Point Shipyard.
- 2009 Northern California Chapter of American Society of Landscape Architects - Award for Research, Planning & Community Engagement: Bionic/ Arc Ecology *"Alternatives for Study:"* A critical planning analysis of the redevelopment plans for the Hunters Point Shipyard.

Saul Bloom, Executive Director/ CEO
The following projects involved the review of Superfund Remedial Investigation and Response Documents/ Plans and Environmental Impact Statements and Reports.

- 1984-present - Arc Ecology Executive Director and CEO
- 1994-2005 - Restoration Advisory Board Membership: Alameda Naval Air Station, Hunters Point Naval Shipyard, Oakland Army Base, Presidio Army Base, Treasure Island Naval Station.
- 1994-2008 - Chair Environment and Reuse Subcommittee, Hunters Point Shipyard Citizens Advisory Committee
- 1994-1999 Member - East Bay Conversion and Reinvestment Commission
- 1994-1998 Member - California EPA Base Closures Environmental Advisory Committee
- 1989 - 1994 Member - Technical Review Committee Presidio Army Base

Expert Testimony:
2000 - US Congressional Advisory Hearing - *Community Engagement in Base Closure Cleanup*
1996 - Committee on the Environment, Philippine Senate, *Pollution Impacts of Closing Bases.*
1995 - Parliamentary Inquiry on Military Base Pollution, UK
1991 - Subcommittee on Military Construction US House Armed Services Committee: *Pollution Impacts on Base Realignment and Closures Time Schedule*
1986 - Subcommittee on Water and Energy Policy US House Interior Committee: *Pollution of San Francisco Bay Area Military Bases*

EXHIBIT 6

Table 4-3 indicates how land cover types were grouped into the biotic communities that follow. Table 4-4 summarizes the acreage of each biotic community within each evaluation area, and in the County as a whole. Map 4-3 depicts the distribution of these biotic communities in the County.

GRASSLAND

DISTRIBUTION

Grassland is a relatively common land cover in the County, covering over 53,700 acres or nearly 11% of the County (Map 4-3 and Table 4-3). Large grassland areas are most common in southeastern portion of the County, around the cities of American Canyon and Napa, in Jamieson/American Canyon, Napa Valley Floor, and Napa River Marshes Evaluation Areas. These three evaluation areas contain about 13% of the grassland in the County. The Pope Valley and Knoxville Evaluation Areas in the north together contain about 15% of the County's grassland. However, grassland also occurs elsewhere throughout the County in large patches on flat to gently rolling hills.

TYPES

Three grassland assemblages exist within the County: annual grassland, native grassland and serpentine (bunchgrass) grassland. Of these assemblages, both native grassland and serpentine grassland are considered sensitive communities. Vernal pools, which provide habitat for a number of special-status species, are found in some grassland areas.

ANNUAL GRASSLAND

GENERAL DISTRIBUTION

Non-native annual grassland has only been present in the County since about the mid-1800s, when non-native grasses and forbs introduced from Europe largely replaced the native grassland vegetation (Heady 1988). This land cover has increased in extent and distribution throughout the County since that time, as non-native grasslands have replaced the native grasslands previously present and woodlands that have been cleared. Today, annual grassland covers slightly over 10% of the County (approximately 51,000 acres) and is found scattered throughout the County. The largest and least fragmented annual grasslands in the County are located in the Jamieson/American Canyon Evaluation Area, in the southeastern part of the County. The Pope Valley Evaluation Area, in the north-central part of the County, also contains significant unfragmented annual grasslands.

COMMON PLANTS

California annual grassland, or nonnative grassland, is an herbaceous plant community dominated by nonnative annual grasses (Holland 1986, Sawyer and Keeler-Wolf 1995). In the County, the dominant grasses include wild oat (*Avena*) species, brome (*Bromus*) grasses, wild barley (*Hordeum*) species, Italian ryegrass (*Lolium multiflorum*), medusa head (*Taeniantherum caput-medusae* and annual fescue (*Vulpia*) species.

Species composition of the annual grassland is highly diverse and includes many other native and nonnative forbs. Common species in the County include many clover (*Trifolium*) species, filaree (*Erodium*) species, miniature lupine (*Lupinus bicolor*), Douglas's lupine (*Lupinus nanus*) slender cottonweed (*Micropus californicus* var. *californicus*), birdsfoot trefoil (*Lotus comiculatus*), evening snow (*Linanthus dichotomus*), California poppy (*Eschscholzia californica*), purple owl's-clover (*Castilleja densiflora*), valley tassels (*Castilleja attenuata*), blow wives (*Achyrachaena mollis*), buttercup (*Ranunculus* spp.), star thistle (*Centaurium sp.*), and smooth cat's-ear (*Hypochaeris glabra*).

Barbour and Witham (2004) point out that the conservation value of annual grasslands is generally underestimated. While dominated by nonnative grasses, these grasslands also provide habitat to many native forbs (nine of the common forbs listed above are native).

The annual flora of annual grasslands has the following cycle: germination after the first fall rains, growth in winter, flowering and fruit set in spring, and survival as seeds buried in the soil during the summer drought (Heady 1988). In general, species composition varies according to annual rainfall, slope, exposure, soil type, and the presence of disturbance (Pitt and Heady 1978, Heady 1988). Vernal pools and other seasonal wetlands sometimes occur in this community.

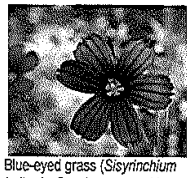
COMMON WILDLIFE

A variety of reptiles, including the western fence lizard (*Sceloporus occidentalis*), common garter snake (*Thamnophis sirtalis*), and gopher snake (*Pituophis catenifer*) are characteristic of annual grassland.

Mammals typically found in this land-cover type include the black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), and coyote (*Canis latrans*).

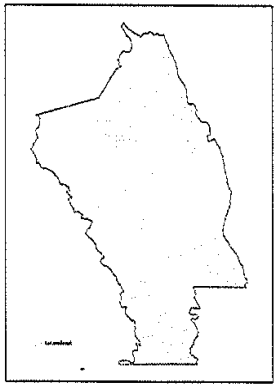
Common birds that breed in annual grassland habitats include the western kingbird (*Tyrannus verticalis*), loggerhead shrike (*Lanius ludovicianus*), California horned lark (*Eremophila alpestris actia*), Savannah sparrow (*Passerculus sandwichensis*) western bluebird (*Sialia mexicana*), Say's phoebe (*Sayornis saya*) and western meadowlark (*Sturnella neglecta*). Annual grassland also provides important foraging habitat for the golden eagle (*Aquila chrysaetos*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), white-tailed kite, red-tailed hawk (*Buteo jamaicensis*), and wintering ferruginous hawk (*Buteo regalis*).

Non-native annual grasslands vary in productivity for wildlife depending on soil type, adjacent land use, and management regime. Different species of wildlife and plants benefit from different grazing intensities or mowing regimes, and frequencies of burning. Annual grasslands can be extremely productive wildlife habitats, providing abundant seed and insects as a food source for small mammals and birds, which in turn provide prey for numerous raptors and other predators.



Blue-eyed grass (*Sisyrinchium bellum*). Species composition of the annual grassland is highly diverse and includes many native and nonnative forbs.

Napa County is home to many wildlife species, including many rare, threatened and endangered species.



Schematic map of County showing distribution of native grassland.

Table 4-3. Napa County Biotic Communities and Associated Land Cover Types

Land Cover Type	Biotic Community	ICE Map Code	MCV Biotic Community (used in ICE map)	Area (in acres)	Percentage of County
Grassland	Annual Grassland	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	5	0.00
	Annual grassland and Native grassland	7100	Upland Annual Grasslands & Forbs Formation	12,153	2.39
	Annual grassland and Native grassland	7120	California Annual Grasslands Alliance	39,174	7.72
	Native grassland	7101	Perennial Bunchgrass Restoration Sites	256	0.05
	Serpentine grassland	7130	Serpentine Grasslands NFD Super Alliance	2,119	0.42
Total Grassland				**53,706**	**10.58**
Chaparral/scrub	Chaparral	2127	California Juniper Alliance	2	0.00
	Chaparral	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	11,037	2.18
	Chaparral	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	8,609	1.70
	Chaparral	4321	Chamise Alliance	30,914	6.09
	Chaparral	4322	Chamise - Wedgeleaf Ceanothus Alliance	7,106	1.40
	Chaparral	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	42	0.01
	Chaparral	4503	*Lotus scoparius* Alliance (post-burn)	29	0.01
	Chaparral	4300	*Sclerophyllous* Shrubland Formation	3,277	0.65
Total Non-serpentine Chaparral				61,017	12.03
	Serpentine Chaparral	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	26,986	5.32
	Serpentine Chaparral	4304	Leather Oak - California Bay - *Rhamnus* spp. Mesic Serpentine NFD Alliance	4,399	0.87
	Serpentine Chaparral	4305	White Leaf Manzanita - Leather Oak - (Chamise - *Ceonothus* spp.) Xeric Serpentine NFD Super Alliance	8,005	1.58
	Serpentine Chaparral	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	7,176	1.41
Total Serpentine Chaparral				46,566	9.18
Total Chaparral/scrub				**107,583**	**21.20**
Oak Woodland	Deciduous Oak woodland	3121	Black Oak Alliance	2,572	0.51
	Deciduous Oak woodland	3122	Blue Oak Alliance	44,104	8.69
	Deciduous Oak woodland	3123	Valley Oak Alliance	2,903	0.57
	Deciduous Oak woodland	3124	Oregon White Oak Alliance	1,124	0.22
	Evergreen Oak Woodland	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	18,252	3.60
	Evergreen Oak Woodland	1122	Canyon Live Oak Alliance	662	0.13
	Evergreen Oak Woodland	1124	Tanbark Oak Alliance	245	0.05
	Evergreen Oak Woodland	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	26,374	5.20
	Evergreen Oak Woodland	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	18,084	3.56
	Evergreen Oak Woodland	1221	Coast Live Oak Alliance	13,139	2.59
	Evergreen Oak Woodland	1222	Interior Live Oak Alliance	5,297	1.04
	Evergreen Oak Woodland	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	516	0.10
	Evergreen Oak Woodland, Deciduous Oak Woodland	1223	Mixed Oak Alliance	28,703	5.66
Total Oak Woodland				**161,976**	**31.92**

Table 4-3. Continued

Land Cover Type	Biotic Community	ICE Map Code	MCV Biotic Community (used in ICE map)	Area (in acres)	Percentage of County
Riparian woodland	Mixed Willow woodland	3221	Mixed Willow Super Alliance	542	0.11
	Mixed Willow woodland	5222	Brewer Willow Alliance	272	0.05
	Valley Oak woodland	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	5,721	1.13
	Valley Oak woodland	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	558	0.11
	White alder woodland	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	967	0.19
Total Riparian Woodland				**8,060**	**1.59**
Coniferous forest	Cypress forest	2125	Sargent Cypress Alliance	2,044	0.40
	Cypress forest	2124	McNab Cypress Alliance	2,387	0.47
	Douglas-fir/Redwood Forest	2201	Coast Redwood – Douglas-fir / California Bay NFD Association	2,876	0.57
	Douglas-fir/Redwood Forest	2222	Douglas-fir Alliance	17,280	3.41
	Douglas-fir/Redwood Forest	2224	Douglas-fir - Ponderosa Pine Alliance	9,198	1.81
	Douglas-fir/Redwood Forest	2230	Coast Redwood Alliance	324	0.06
	Pine forest	2122	Knobcone Pine Alliance	5,892	1.16
	Pine forest	2123	Ponderosa Pine Alliance	168	0.03
	Pine forest	2126	Sugar Pine - Canyon Oak NFD Association	3	0.00
	Pine forest	2121	Foothill Pine Alliance	1,874	0.37
	Pine forest	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	939	0.19
Total Coniferous forest				**42,984**	**8.47**
Aquatic	Freshwater wetlands	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	271	0.05
	Freshwater wetlands	6403	(*Carex* spp. - *Juncus* spp - Wet Meadow Grasses) NFD Super Alliance	282	0.06
	Salt Marsh	6501	Saltgrass - Pickleweed NFD Super Alliance	3,550	0.70
	Streams and reservoirs	9400	Water	28,804	5.68
	Streams and salt marsh	9002	Riverine, Lacustrine and Tidal Mudflats	389	0.08
Total Aquatic				**33,296**	**6.56**
Rock Outcrop	Rock Outcrop	9001	Rock Outcrop	1,687	0.33
	Serpentine Rock Outcrops	9003	Serpentine Barren	51	0.01
Total Rock Outcrops				**1,739**	**0.34**
Agricultural Cropland	Agricultural Cropland	9200	Agricultural Cropland	64,423	12.70
Total Agricultural Cropland				**64,423**	**12.70**
Developed Lands	Developed Lands	9100	Urban or Built-up	26,461	5.21
	Developed Lands	9300	Vacant*	1,782	0.35
Total Developed Lands				**28,244**	**6**
Other	Other	9999	Other	1,159	0.23
	Other	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	620	0.12
	Other		blank	3,221	0.63
Non-native woodland	Non-native woodland	1123	Eucalyptus Alliance	408	0.08
Total Other				**5,408**	**1.07**
Total				**507,419**	**100**

Note:
* Vacant refers to areas that are unvegetated, apparently due to human disturbance.

Table 4-4. Distribution of MVC Biotic Communities Across Napa County's Thirteen Evaluation Areas

Community Type	Biotic Community	MCV Biotic Community (used in ICE map)	Acreage by Evaluation Areas												
			Angwin	Berryessa	Cameros	Central Interior Valleys	Eastern Mountains	Jamieson/American Canyon	Knoxville Area	Livermore Ranch Area	Napa River Marshes	Napa Valley Floor	Pope Valley	Southern Interior Valleys	Western Mountains
Grassland	Annual Grassland	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	0	0	0	0	0	0	0	0	0	0	0	5	0
	Annual grassland and Native grassland	Upland Annual Grasslands & Forbs Formation	122	539	833	586	644	2,060	1,327	18	1,314	1,612	1,737	835	526
	Annual grassland and Native grassland	California Annual Grasslands Alliance	52	5,132	552	1,764	7,723	5,917	5,613	298	84	1,047	3,861	3,877	3,254
	Native grassland	Perennial Bunchgrass Restoration Sites	0	0	0	0	0	0	256	0	0	0	0	0	0
	Serpentine grassland	Serpentine Grasslands NFD Super Alliance	0	539	0	152	150	0	853	2	0	5	360	2	54
Total Grassland			174	6,211	1,385	2,502	8,517	7,978	8,049	318	1,399	2,663	5,959	4,718	3,835
Chaparral/Scrub	Chaparral	California Juniper Alliance	0	2	0	0	0	0	0	0	0	0	0	0	0
	Chaparral	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	0	5,693	0	620	1,364	0	2,324	0	0	0	226	810	0
	Chaparral	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	221	68	6	113	4,252	0	31	2,038	0	1	178	82	1,619
	Chaparral	Chamise Alliance	183	9,543	0	2,072	9,286	0	5,517	341	0	9	1,010	919	2,035
	Chaparral	Chamise - Wedgeleaf Ceanothus Alliance	0	3,201	0	129	137	0	3,329	7	0	0	200	103	0
	Chaparral	Coyote Brush - California Sagebrush - (*Lupino* spp.) NFD Super Alliance	0	0	0	0	17	20	0	0	0	0	0	0	5
	Chaparral	Lotus scoparius Alliance (post-burn)	0	29	0	0	0	0	0	0	0	0	0	0	0
	Chaparral/Scrub	Sclerophyllous Shrubland Formation	0	0	30	17	3,046	0	0	0	0	8	0	174	2
Total Non-serpentine Chaparral			404	18,536	36	2,951	18,102	20	11,200	2,386	0	18	1,614	2,088	3,661
	Serpentine Chaparral	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	0	6,442	0	2,729	1,084	0	11,650	66	0	2	4,829	9	176
	Serpentine Chaparral	Leather Oak - California Bay - *Rhamnus* spp. Mesic Serpentine NFD Alliance	0	761	0	1,050	359	0	1,602	22	0	0	503	6	96
	Serpentine Chaparral	White Leaf Manzanita - Leather Oak - (Chamise - *Ceanothus* spp.) Xeric Serpentine NFD Super Alliance	0	1,465	0	793	681	0	3,359	93	0	6	1,473	24	111
	Serpentine Chaparral	California Bay - Leather Oak - (*Rhamnus* spp.) Mesic Serpentine NFD Super Alliance	0	1,699	0	1,107	372	0	2,054	33	0	22	1,558	7	324
Total Serpentine Chaparral			0	10,367	0	5,679	2,496	0	18,664	215	0	30	8,363	45	707
Total Chaparral/Scrub			404	28,903	36	8,630	20,598	20	29,864	2,601	0	48	9,977	2,133	4,368
Oak Woodland	Deciduous Oak woodland	Black Oak Alliance	298	156	0	700	395	0	32	161	0	0	386	392	50
	Deciduous Oak woodland	Blue Oak Alliance	1	17,721	0	2,551	2,442	0	10,409	236	0	218	2,889	7,478	157
	Deciduous Oak woodland	Valley Oak Alliance	0	212	54	253	268	20	401	0	0	248	1,179	62	205
	Deciduous Oak woodland	Oregon White Oak Alliance	0	0	0	0	102	0	0	0	0	112	0	0	910
	Evergreen Oak Woodland	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	10	265	22	693	4,649	25	0	395	0	526	458	791	10,416
	Evergreen Oak Woodland	Canyon Live Oak Alliance	28	83	0	6	314	0	9	111	0	0	0	112	0
	Evergreen Oak Woodland	Tanbark Oak Alliance	44	0	0	124	9	0	0	0	0	0	68	0	0
	Evergreen Oak Woodland	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	45	931	0	5,944	9,279	0	0	165	0	866	2,095	7,050	0

Table 4-4. Continued

Community Type	Biotic Community	MCV Biotic Community (used in ICE map)	Acreage by Evaluation Areas												
			Angwin	Berryessa	Cameros	Central Interior Valleys	Eastern Mountains	Jamieson/American Canyon	Knoxville Area	Livermore Ranch Area	Napa River Marshes	Napa Valley Floor	Pope Valley	Southern Interior Valleys	Western Mountains
	Evergreen Oak Woodland	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	0	10,937	0	1,240	0	0	5,574	59	0	0	273	0	0
	Evergreen Oak Woodland	Coast Live Oak Alliance	5	338	105	558	5,837	355	0	0	0	1,283	169	1,000	3,489
	Evergreen Oak Woodland	Interior Live Oak Alliance	0	3,994	0	172	9	0	1,045	0	0	0	16	61	0
	Evergreen Oak Woodland	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	0	241	0	0	0	0	266	0	0	0	0	10	0
	Evergreen Oak Woodland, Deciduous Oak Woodland	Mixed Oak Alliance	480	3,519	30	2,548	8,571	0	405	969	0	704	3,087	2,630	5,759
Total Oak Woodland			911	38,397	212	14,789	31,877	399	18,143	2,098	0	3,956	10,622	19,586	20,987
Riparian woodland	Mixed Willow woodland	Mixed Willow Super Alliance	0	49	21	51	34	66	26	0	1	90	115	31	58
	Mixed Willow woodland	Brewer Willow Alliance	0	30	0	15	74	0	90	17	0	0	47	0	0
	Valley Oak woodland	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	0	261	226	624	410	42	575	0	1	1,957	683	558	383
	Valley Oak woodland	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	0	0	87	0	40	13	51	0	0	270	36	60	0
	White alder woodland	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	0	19	1	52	450	0	5	99	0	27	26	35	252
Total Riparian Woodland			0	359	336	742	1,008	121	747	116	2	2,345	908	684	692
Coniferous forest	Cypress forest	Sargent Cypress Alliance	0	961	0	51	1	0	98	0	0	0	933	0	0
	Cypress forest	McNab Cypress Alliance	0	26	0	10	0	0	2,225	43	0	0	84	0	0
	Douglas-fir/Redwood Forest	Coast Redwood - Douglas-fir / California Bay NFD Association	12	0	0	0	105	0	0	13	0	0	70	0	2,675
	Douglas-fir/Redwood Forest	Douglas-fir Alliance	26	0	0	89	4,688	0	0	1,563	0	878	89	0	9,949
	Douglas-fir/Redwood Forest	Douglas-fir - Ponderosa Pine Alliance	1,350	0	0	317	2,557	0	0	2,515	0	22	2,299	0	137
	Douglas-fir/Redwood Forest	Coast Redwood Alliance	0	0	0	8	23	0	0	0	0	18	24	0	253
	Pine forest	Knobcone Pine Alliance	0	0	0	0	2,545	0	40	2,263	0	19	267	0	758
	Pine forest	Ponderosa Pine Alliance	133	0	0	0	10	0	0	0	0	0	25	0	0
	Pine forest	Sugar Pine - Canyon Oak NFD Association	0	0	0	0	0	0	0	3	0	0	0	0	0
	Pine forest	Foothill Pine Alliance	31	276	0	57	389	0	82	237	0	5	643	1	154
	Pine forest	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	0	418	0	30	33	0	209	152	0	8	10	18	61
Total Coniferous forest			1,552	1,680	0	562	10,351	0	2,655	6,788	0	947	4,443	19	13,986
Aquatic	Freshwater wetlands	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	4	0	15	15	33	4	3	0	14	27	123	32	1
	Freshwater wetlands	(*Carex* spp. - *Juncus* spp - Wet Meadow Grasses) NFD Super Alliance	1	10	0	10	54	37	67	1	0	1	40	60	0
	Freshwater wetlands	Vernal pools	None mapped**	Present**	Present**	None mapped**	Present**	Present**	Present**	None mapped**	Present**	Present**	Present**	Present**	Present**
	Salt Marsh	Saltgrass - Pickleweed NFD Super Alliance	0	0	9	0	0	127	0	0	3,407	7	0	0	0
	Streams and reservoirs	Water	94	18,714	258	152	1,171	54	275	11	6,326	681	528	442	99
	Streams and salt marsh	Riverine, Lacustrine and Tidal Mudflats	0	4	0	0	6	0	169	0	198	0	11	0	0
Total Aquatic			99	18,728	282	177	1,264	222	514	13	9,946	716	701	534	100

Table 4-4. Continued

Community Type	Biotic Community	MCV Biotic Community (used in ICE map)	Acreage by Evaluation Areas												
			Angwin	Berryessa	Carneros	Central Interior Valleys	Eastern Mountains	Jamieson/American Canyon	Knoxville Area	Livermore Ranch Area	Napa River Marshes	Napa Valley Floor	Pope Valley	Southern Interior Valleys	Western Mountains
Agricultural Cropland	Agricultural Cropland	Agricultural Cropland	773	267	7,377	2,593	4,166	4,318	569	114	701	30,343	5,455	1,505	6,242
Total Agricultural Cropland			**773**	**267**	**7,377**	**2,593**	**4,166**	**4,318**	**569**	**114**	**701**	**30,343**	**5,455**	**1,505**	**6,242**
Rock Outcrop	Rock Outcrop	Rock Outcrop	0	18	0	9	894	0	73	533	0	9	29	27	95
	Serpentine Rock Outcrops	Serpentine Barren	0	9	0	0	1	0	35	2	0	0	5	0	0
Total Rock Outcrops			**0**	**27**	**0**	**9**	**895**	**0**	**108**	**535**	**0**	**9**	**34**	**27**	**95**
Developed Lands	Developed Lands	Urban or Built-up	921	845	584	400	1,632	2,569	611	43	1,455	16,059	276	174	892
	Other	Vacant	4	92	21	36	305	207	50	25	158	589	13	13	270
Total Developed Lands			**921**	**845**	**584**	**400**	**1,632**	**2,569**	**611**	**43**	**1,455**	**16,059**	**276**	**174**	**892**
Other	Non-native woodland	Eucalyptus Alliance	0	0	104	0	4	183	0	0	23	65	0	0	29
	Other	Winter-Rain Sclerophyll Forests & Woodlands Formation	0	0	0	0	518	0	0	0	0	0	0	2	0
	Other	Unknown	5	198	28	51	289	6	178	33	79	55	51	149	38
	Other	blank	0	0	257	2	81	101	121	818	1,657	0	41	22	123
Total Other			**9**	**290**	**410**	**89**	**1297**	**497**	**349**	**876**	**1,917**	**709**	**105**	**186**	**460**
Total			**4,843**	**95,707**	**10,622**	**30,491**	**81,605**	**16,123**	**61,610**	**13,501**	**15,420**	**57,795**	**38,479**	**29,565**	**51,657**

Notes:

* Vacant refers to areas that are unvegetated, apparently due to human disturbance.

** Vernal pool acreage is not mapped with sufficient accuracy to report here. However, presence or absence of mapped vernal pools is indicated.



A variety of reptiles, including the common garter snake (*Thamnophis sirtalis*), are characteristic of annual grassland.

Although once extensive in the greater Bay Area and Central Valley, invasion by exotic annual grasses and improper livestock grazing has led to the decline of this land cover type.

SPECIAL-STATUS SPECIES

Appendices B and C provide a list of special-status plants and animals species potentially occurring in annual grassland. Showy Indian clover (*Trifolium amoenum*), bent-flowered fiddleneck (*Amsinckia lunaris*), dwarf downingia (*Downingia pusilla*), adobe lily (*Fritillaria pluriflora*), Colusa layia (*Layia septentrionalis*), northern harrier, and the white-tailed kite are among the special-status species that use annual grasslands in the County for habitat.

In total, 38 special-status plants and 18 special-status animals utilize annual grassland habitat type in the County.

NATIVE GRASSLAND

GENERAL DISTRIBUTION

Native grasslands dominated by a mixture of annual and perennial grasses, such as small fescue (*Vulpia microstachys*), purple needlegrass (*Nasella pulchra*), and nodding needlegrass (*Nasella cernua*), likely occurred in the County in most areas currently occupied by annual grassland (Heady 1988, Wester 1981). Although once extensive in the greater Bay Area and Central Valley, invasion by exotic annual grasses and improper livestock grazing has led to the decline of this land cover type. Some native grasslands contain high concentrations of wildflowers and are referred to as *wildflower fields*. Wildflower fields are recognized as a sensitive community by the DFG.

Historical records do not provide definitive data on the distribution of native perennial grasslands, but research indicates human use of fire may have had a profound impact on the distribution and extent of historic grasslands. Prior to European settlement, native perennial grasslands in the County were likely subject to regular burning by Native American people. Keeley (2002) surmises that because dense scrub or chaparral had little value to Native Americans, they used periodic burning to clear shrubs and provide habitat for fire tolerant native grasses. Keeley (2002) also implies that the current mosaic of grassland is likely a result of historic vegetation management that favored open grasslands over chaparral.

Starting in 1769, another human-made change to the landscape occurred with the introduction and spread of many nonnative plants throughout California. These plants include Mediterranean annual grasses and herbs such as wild oats, bromes, barleys (*Hordeum*), ryegrass (*Lolium*), and thistles (*Centaurea, Cirsium*) (Bartolome and Gemmill 1981). European settlers grazing livestock in the study area likely became more widespread after the gold rush of the 1850s. The combination of livestock grazing, drought, and spread of exotic grasses and herbs dramatically altered the native grasslands that occurred in the County prior to the 1850s (Heady 1988). Grazing by livestock and wildlife continues today in almost all of the grasslands in the County, although less intensively than in the past. While most grasslands in the County are dominated by nonnative annuals, small patches of native grasses, below the resolution of the land cover map, are found in many of these grasslands (Rugyt, personal communication; Callizo, personal communication).

It is difficult to estimate the overall acreage of native grassland remaining in the County, but it is likely on the order of thousands of acres, not tens of thousands, covering less than 1% of the County. One significant area of native grassland in the County is located in the Wantrup Preserve in Pope Valley.

COMMON PLANTS

Native grassland is an herbaceous grassland community in which perennial grasses such as purple needlegrass or nodding needlegrass are dominant or co-dominant species (Holland 1986, Sawyer and Keeler-Wolf 1995). In the County, native grassland generally occurs as patches within the larger annual grassland complex. Accordingly, native grassland contains an abundance of nonnative annual grasses mixed with perennial grasses and forbs.

Species commonly found associated with native grassland in the County include slender wild oats (*Avena barbata*), one-sided bluegrass (*Poa secunda*), prairie junegrass (*Koeleria macrantha*), California golden violet (*Viola pedunculata*), common lomatium (*Lomatium utriculatum*), California poppy, Douglas's lupine (*Lupinus nanus*), notched clover (*Trifolium bifidum*), blue dicks (*Dichelostemma capitatum*), ookow (*Dichelostemma congestum*), harvest Brodiaea (*Brodiaea elegans*), smooth tidy tips (*Layia chrysanthemoides*) and arroyo lupine (*Lupinus succulentus*).

COMMON WILDLIFE

The wildlife that use native grassland are the same as those that use annual grassland (see *Common Wildlife* discussion in *Annual Grassland* above).

SPECIAL-STATUS SPECIES

The same special-status species that potentially occur in annual grassland potentially occur in native grassland. However, the likelihood of occurrence for these species is much higher (Appendices B and C). Three subclasses of native grassland are considered sensitive by DFG: creeping ryegrass (*Leymus triticoides*) grassland, purple needlegrass grassland, and one-sided bluegrass grassland. Moreover, the very limited extent of this vegetative community in the County clearly makes native grasslands a sensitive community from a local standpoint.

SERPENTINE BUNCHGRASS GRASSLAND

GENERAL DISTRIBUTION

Serpentine bunchgrass grassland has always been a rare plant community in the landscape (McCarten 1987). Residential and vineyard development, particularly in the last 35 years, has slightly reduced serpentine habitat in the County (California Natural Diversity Database 2004). While serpentine soils are not prime agricultural lands, they may sometimes be used for vineyards, as the serpentine soils provide a natural source of desired stress to the vines (e.g., Silver Oak's Geyserville Vineyard, Louis Martini Winery in St. Helena).

Today serpentine grassland covers about 2,100 acres or 0.5% of the County, making this a sensitive habitat from a local standpoint. Moreover, three subclasses of serpentine grassland found in the County (i.e., creeping ryegrass grassland, purple needlegrass grassland, and one-sided bluegrass grassland) are considered sensitive by DFG. The Knoxville and Berryessa Evaluation Areas contain about 65% of the County's serpentine grassland.

COMMON PLANTS

Serpentine bunchgrass grassland occurs on soils derived from serpentinite and generally has less overall vegetation cover, and less cover of non-native species than the other grasslands discussed (McNaughton 1968, Holland 1986). As a result, the amount of forage provided is lower. The native bunchgrasses typically occur in patches of both single and multiple species (McCarten 1987).

As with other grasslands in the County, the dominant grasses late in the season are nonnative annual grasses, primarily medusa head, goatgrass (*Aegilops triuncialis*) and foxtail brome (*Bromus madritensis*) are nonnative annual grasses, primarily slender wild oats, Italian ryegrass, soft chess (*Bromus hordeaceus*), and foxtail barley (*Hordeum murinum* ssp. *leporinum*). However, nonnative annuals are much less dominant in serpentine areas (Harrison et al. 2003).

Patches of native grasses, including purple needlegrass, small fescue, California melic (*Melica californica*), and one-sided bluegrass and squirreltail grass (*Elymus multisetus*), are scattered throughout. Herbaceous species characteristic of serpentine bunchgrass grassland in the County include California goldfields (*Lasthenia californica*), hayfield tarweed (*Hemizonia congesta*), navarretia (*Navarretia* spp.), willow herb (*Epilobium brachycarpum*), fringed sidalcea (*Sidalcea diploscypha*), warty spurge (*Euphorbia spathulata*), bull clover (*Trifolium fucetum*), lotus (*Lotus* spp.), delphinium (*Delphinium* spp.), annual mountain dandelion (*Agoseris heterophylla*), owl's clovers (*Castilleja* spp.), California plantain (*Plantago erecta*), and blue dicks.

The characteristics of native bunchgrasses in serpentine habitat are generally similar to those in non-serpentine habitats, although serpentine populations may be more tolerant of heavy metals present in the soil and may have lower growth rates compared to non-serpentine populations (Huntsinger et al. 1996).

COMMON WILDLIFE

The types of wildlife that use serpentine bunchgrass grassland are the same as those that use annual grassland (see discussion above). Serpentine grasslands are less productive for wildlife, however, due to the reduced forage and cover available.

SPECIAL-STATUS SPECIES

Serpentine grassland provides habitat to the same suite of special-status wildlife species found in other grassland types. However, 13 special-status plant species are preferentially associated with serpentine grasslands (Appendix B). These species appear to be adapted to the low nutrient levels and high levels of toxic minerals in serpentine soils. Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*) and Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*) are two of the special-status plant species found in serpentine grasslands.

ECOSYSTEM PROCESSES

The primary sources of disturbance to annual, native, and serpentine grasslands are grazing, fire, and recreation.

Annual grasslands appear to be relatively stable, recovering rapidly following cessation of disturbance (White 1966). Burning appears to have little long-term effect on annual grassland (Heady 1988, Kyser and Di Tomaso 2002). Grazing also appears to have little effect, although overgrazing may affect the species composition (Heady 1988). Both grazing and burning may serve to maintain grasslands, which may otherwise convert over time to chaparral (Keeley 2002).

Non-serpentine native grasslands in the County are generally found as small patches in a mosaic of annual nonnative grasslands. There is great interest throughout California in using disturbance as a tool to increase cover and diversity of native grasses in California grasslands. The effects of disturbance on native species composition, however, are not clear. It appears that the effects of grazing and burning vary depending on their timing and intensity. Some studies have shown that grazing and burning may result in increased numbers of exotic species in non-serpentine grasslands (Harrison et al. 2003). Other studies indicate that these disturbances can result in an increase in cover of native bunchgrass species compared to annual grasses (Bartolome et al. 2004, Dyer 2003).

GRAZING

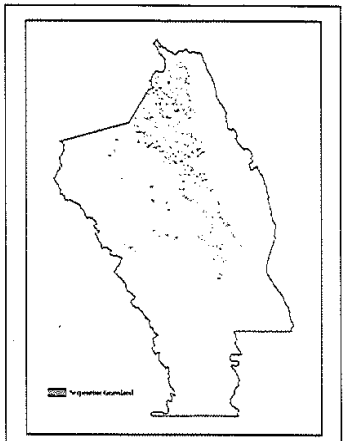
Grazing may have little effect on species diversity in serpentine grasslands (Harrison 1999) or it may alter the species composition, favoring species that are more tolerant of grazing (McCarten 1987). Because invasive nonnatives generally are not tolerant of serpentine soils (with the important exception of goatgrass and medusa head), these species are less invasive in serpentine bunchgrass grasslands that in non-serpentine grasslands (Harrison 1999). Serpentine substrates in the County, as in the San Francisco Bay Region generally, are lighter and more plastic than other crust and mantle rocks, due to their alteration by hydrothermal activity in the subduction zone (Elder 2001). This may explain the observation that serpentine areas appear to be more prone to slumping than non-serpentine areas, and large slumps with accompanying erosion may be present in serpentine bunchgrass grasslands.

FIRE

Grasslands are considered a fire-tolerant community type (Howard 1998). The direct effect of fire on grassland is to remove essentially all of the aboveground biomass. Fires in grassland are therefore described as stand-replacing fires. The immediate effect of this biomass removal on annual grasses is negligible, as they have typically completed their growth cycle before fires occur (Howard 1998). Perennial bunchgrasses suffer a temporary loss of foliage, but regenerate immediately through tillering and regrowth of green foliage that typically remains in the center of grass tussocks (Steinberg 2002).

The immediate effect of a fire in grasslands is typically an increase in annual forb germination and flowering and an increase in overall productivity in response to the light and nutrients made available by the removal of the mulch layer (Harrison et al. 2003). In the 2–3 years following a fire, the elimination of

Serpentine bunchgrass grassland has always been a rare plant community in the landscape. Residential and vineyard development, particularly in the last 35 years, has slightly reduced serpentine habitat in the County.



Schematic map showing serpentine bunchgrass grassland.



A controlled burn of a grassland.

the mulch layer may shift the species composition of grasslands towards annual forbs and small-seeded species such as purple needlegrass (*Nasella pulchra*) and little quakinggrass (*Briza minor*) (Steinberg 2002, Howard 1998). In the absence of heavy grazing, however, a heavy mulch layer will be re-established in approximately three years, and this effect will disappear. Burning appears to have little long-term effect on annual grassland (Heady 1988, Kyser and Di Tomaso 2002, Paysen et al. 2000). In grasslands that are already dominated by non-native annual grasses, non-natives may increase their dominance following fire by outcompeting natives for the newly available space and light. Native grasses may increase their dominance in serpentine grasslands following fire through the same mechanism (Harrison et al. 2003). More discussion on fire is in *Fire Ecology*, included in this report. See Chapter 18.

RECREATION

Recreational use of grasslands in the County includes hunting, bird watching, hiking, mountain biking, horseback riding, and off highway vehicle (OHV) use. OHVs in the County are restricted to the Knoxville area. Recreation may reduce habitat value for wildlife, due to increased human disturbance. Recreation may increase the frequency of fire, as increased access may lead to a greater number of ignitions. Recreation may increase the spread of noxious weeds to areas not yet infested by them, as humans often transport weed seeds on their vehicles and clothing. If recreation is not properly managed through appropriate trail maintenance and prevention of off-trail use, it may be a source of erosion, reducing grassland productivity and degrading streams.



Grasslands in the County provide opportunities for recreation, including horseback riding.

ECOSYSTEM FUNCTIONS

The primary ecosystem functions of grassland in the County are the following:

- maintain water quality through soil retention and by filtering out sediment and nutrients from run-off;
- prevent flooding and minimize channel erosion by slowing surface runoff;
- increase infiltration to groundwater;
- provide wildlife habitat;
- provide fodder for grazing livestock; and
- provide opportunities for recreation, including but not limited to hunting, bird-watching, hiking, horseback riding, and OHV use.

The key characteristics of grassland habitat that enhance these functions are a high-cover of native herbaceous vegetation, a low-cover of woody vegetation, and low to moderate levels of disturbance.

THREATS

The main threat to grasslands today and in the past has been conversion to urban or agricultural uses other than grazing. Non-native invasive species also constitute a threat.

HABITAT CONVERSION

Grasslands in the County have in the past and continue today to be lost to residential, commercial, and industrial development, and conversion to agriculture uses other than grazing. Overlaying the County's 1993 and 2002 vineyard datalayers with the land cover layer indicates that approximately 2,662 acres of grassland (5% of the County's grasslands) were converted to vineyard during this period. Only 0.7 acre of the grasslands converted to vineyards were mapped as serpentine grassland.

While loss of annual grasslands to development is generally not regarded as a significant impact, the San Francisco Bay Area Gap Analysis (Wild 2002) identified annual grasslands as in need of protection for several reasons: less than 20% of grasslands in the Bay Area are protected, this community supports a wide diversity of plant and wildlife species, they have already undergone a severe decline in the County, and they continue to be highly threatened by development.

INVASIVE SPECIES

Grasslands in the County are threatened by the spread of noxious weeds. While non-native annual grasses have dominated much of the grassland in the County for over a century, noxious weeds such as yellow star-thistle (*Centaurea solstitialis*) and Harding grass (*Phalaris aquatica*) may further reduce the cover of native species and degrade habitat for wildlife. Yellow star-thistle reduces grassland forage value and depletes soil moisture levels (Gerlach and DiTomaso 2005). Harding grass can increase fire intensity (Harrington and Lanini 2005). Of particular concern is the spread of barbed goatgrass (*Aegilops triuncialis*) in serpentine grasslands, which have in the past had lower cover of non-native annual grasses and which are critical to the special-status plant species that are endemic to this habitat.

CHAPARRAL/SCRUB

DISTRIBUTION

Chaparral/scrub is the second most common land cover in the County, covering approximately 107,000 acres or 21% of the County (Map 4-3 and Table 4-3). This community is dominated by woody shrubs, with less than 10% cover of trees, and generally occurs in settings that are too hot, dry, rocky, and steep to support tree-dominated habitats (Holland 1986). They occur especially on south and southwest-facing slopes.

Chaparral/scrub occurs on a wide variety of rock types including recent volcanic rocks with shallow soils, serpentinite, slates, and metamorphosed volcanic rock; they do not occur on alluvial soils. The

parent material, particularly serpentinite, often influences species composition. Chaparral shrubs have thick, stiff, leathery evergreen leaves, called sclerophylls, an adaptation to heat and drought.

Chaparral/scrub forms over 20% of the total land area of seven of the 13 evaluation areas. It is particularly abundant in the Knoxville Area, forming almost half of the land cover there. Chaparral/scrub is found throughout the rest of the County and is a dominant land cover in five other evaluation areas, forming between one-fifth and one-third of the land cover in the Berryessa, Central Interior Valleys, Eastern Mountains, Livermore Ranch, and Pope Valley Evaluation Areas.

TYPES

Thorne and his colleagues (2004) recognize 12 alliances within the chaparral/scrub group in the County. Two alliances are dominated by chamise (*Adenostoma fasciculatum*), six are mixed chaparral types, and four are serpentine chaparral (Table 4-3).

Mixed serpentine chaparral is considered a sensitive community by the State of California (California Department of Fish and Game 2000) and a conservation priority for the Bay Area by Wild (2002). The DFG designation of mixed serpentine chaparral corresponds to the four serpentine chaparral alliances found in the County. Moreover, mixed serpentine chaparral was given a high conservation priority score by Wild (2002) (7 out of 10). Vernal pools, which are also a sensitive community, are sometimes found in chaparral/scrub areas of the County (e.g., in Pope and Foss Valleys).

The three most common chaparral/scrub types present are chamise chaparral, leather oak–white leaf manzanita–chamise (a serpentine chaparral), and scrub interior live oak–scrub oak (*Quercus berberidifolia*).

Cypress woodland and foothill pine (*Pinus sabiniana*) woodland are often found in close proximity to chaparral. Foothill pine forest frequently contains chaparral species in the understory. The adaptation of these coniferous forest communities to fire and their ability to grow in steep areas with thin soils results in their association with chaparral communities.

For discussion purposes the chaparral/scrub group has been divided into 3 major sub-groups: chamise-dominated chaparrals (two types), mixed chaparrals (five types), and serpentine chaparrals (four types).

CHAMISE CHAPARRAL

Chamise chaparrals occupy the most extreme, dry, steep south facing slopes and are climax communities, whereas mixed chaparrals occur on more mesic sites.

DOMINANT PLANTS

Chamise-Dominated Chaparral

In the two chamise-dominated chaparrals, the chamise alliance and the chamise-wedge leaf ceanothus alliance, chamise is the dominant species. In chamise alliance, chamise is the sole dominant; other shrubs present in small amounts include toyon (*Heteromeles arbutifolia*), buckbrush (*Ceanothus* spp.), sticky monkeyflower (*Mimulus aurantiacus*), coyote brush (*Baccharis pilularis*) and manzanitas (*Arctostaphylos* spp.).

In the chamise-wedge leaf ceanothus alliance, chamise is co-dominant with wedge leaf ceanothus (*Ceanothus cuneatus*), with associate species similar to those present in chamise alliance. The ground layer is generally sparse in both chamise-dominated types because of the typically continuous canopy cover.

Chamise chaparrals occupy the most extreme, dry, steep south facing slopes and are climax communities, whereas mixed chaparrals occur on more mesic sites.

Mixed Chaparral/Scrub

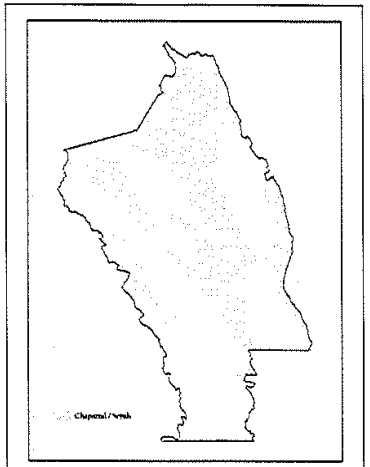
Five types of mixed chaparral/scrub are mapped (Table 4-3), three of which are classified as evergreen sclerophyllous chaparral. The two remaining types are deciduous (deer brush) or microphyllous (coyote brush–California sagebrush [*Artemisia californica*]) and are both very small in extent in the County.

The sclerophyllous chaparral types are dominated by various species of shrubby oaks: interior live oak (*Quercus wislizenii*), leather oak (*Quercus durata*) and scrub oak or manzanitas, and others. Associate species are highly variable depending on type and physical site characteristics, and include California bay (*Umbellularia californica*) on more mesic sites and chamise on xeric sites. Other shrubs present as associates include birch-leaf mountain mahogany (*Cercocarpus betuloides*), flowering ash (*Fraxinus dipetala*), coffeberry (*Rhamnus* spp.), pitcher sage (*Lepechinia calycina*), toyon, sticky monkeyflower, chaparral pea (*Pickeringia montana*), poison oak (*Toxicodendron diversilobum*) and several *Ceanothus* species as minor components.

Serpentine Chaparral

Four types of serpentine chaparral are recognized on the ICE map, and together they form almost 10% of the total land cover of the County (Table 4-3). Serpentine chaparral grows on infertile soils derived from serpentinite rock that have a unique mineral composition with high concentrations of iron and magnesium and low concentration of nutrients such as nitrogen and calcium (Kruckeberg 1984). These harsh soils support a distinctive flora, including many endemic species: Ten percent of California's endemic plants are confined to serpentine soils (Skinner and Pavlik 1994).

The dominant shrubs of serpentine chaparral are usually leather oak, chamise (*Adenostoma fasciculatum*), or white leaf manzanita (*Arctostaphylos viscida*). Species composition is related to aspect, mineral content, and soil moisture levels, and the transition between chaparral types can be subtle. On more mesic, north-trending sites, California bay becomes a dominant, with smaller components of toyon, foothill pine, and cypress species (*Cupressus* spp). On xeric sites, chamise may be dominant. Other shrubs present include musk brush (*Ceanothus jepsonii* var. *albiflorus*), silk-tassel bush (*Garrya congdonii*), toyon, deer brush (*Ceanothus integerrimus*), and fremontia (*Fremontodendron californicum*). Scattered emergent foothill pine trees are generally present.



Schematic map showing distribution of chaparral/scrub in County.

EXHIBIT 7

The City of St. Helena will conduct city affairs on behalf of our citizens using an open and creative process.

March 25, 2011

Ryan Gregory
Reichers Spence & Associates
1515 Fourth Street
Napa CA 94559

Re: Completeness of Hunter Tentative Map Application (2010-40)

Dear Mr. Gregory,

Debra Hight, Assistant Director of Public Works, and I have reviewed all the Hunter Tentative Map application re-submittal materials that were received by City of St. Helena staff on February 24, 2011, with your transmittal letter dated February 23, 2011. We have concluded that your letter dated February 23, 2011, and all related materials submitted with the letter, meet all of the City of St. Helena's Subdivision Ordinance and Tentative Map handout application requirements.

For ease of reference, I am attaching annotated copies of my two prior Incompleteness Letters, dated December 23, 2010 and January 15, 2011, that specify how the various previously outstanding completeness items have been satisfied. I have made similar annotations to a copy of your transmittal letter. All of those annotated copies are attached for your information. Also attached is the memorandum dated March 24, 2011 from Debra Hight stating that the Public Works Department finds that you have addressed the completeness review items requested in my letter dated January 15, 2011. That letter of mine included all of the completeness items requested by Ms. Hight representing the Public Works Department. Lastly, please do not forget the information in the attached September 16, 2010 communication from DSI, the firm that provides contract Building Official and Fire Marshall services.

There are some items previously requested from your team that we agreed at our City-Applicant teams meeting on February 4, 2011, were to be provided by the City of St. Helena Public Works Department. Those items include:

- Information about the production quantity, rate and quality of the well on the property. That well was used by the City and its contractors during construction of the City Flood Control Project. City Engineer John Ferons stated on February 4, 2011, that he would gather any available well information for your and

City of St. Helena • 1480 Main Street, St. Helena, CA 94574
Phone: (707) 967-2792 • Fax: (707) 963-7748 • Website: www.ci.st-helena.ca.us

Planning staff's use, as that would be the only and most recent such information available. (Item e., pg. 3 in your February 23, 2011 letter)

- City Engineer John Ferons also stated on February 4, 2011, that he would provide information regarding the drainage report prepared for the City Flood Control Project that includes analysis of the Hunter property as fully developed consistent with the current St. Helena General Plan. You need that report from the City to confirm the analysis done for the sizing of the detention basin. (Your Item g., pg. 4)
- Likewise, you have requested a copy of that existing drainage report for the City Flood Control Project, as that report would have included 10-, 50- and 100-year storm events detention requirements. You need a copy of that report to confirm the analysis done for the sizing of the detention basin. (your Item h., pg.4)
- Planning staff's use, as that would be the only and most recent such information available. (Item e. in your February 23, 2011 letter)
- City Engineer John Ferons also stated on February 4, 2011, that he would provide information regarding the drainage report prepared for the City Flood Control Project that includes analysis of the Hunter property as fully developed consistent with the current St. Helena General Plan. You need that report from the City to confirm the analysis done for the sizing of the detention basin.
- Likewise, you have requested a copy of that existing drainage report for the City Flood Control Project, as that report would have included 10-, 50- and 100-year storm events detention requirements. You need a copy of that report to confirm the analysis done for the sizing of the detention basin.

The only other previous request for a completion item that you met in a different way than requested concerns note 3 on Sheet TM-1. Instead of changing the text of that note, you provided the requested information about current one-hundred year floodplain on the appropriate TM sheets.

If you have any questions, please contact me prior to April 1, 2011. As of that date, Greg Desmond, currently Senior Planner, will be the City of St. Helena's Acting Planning Director.

Sincerely,

Anne Cronin Moore AICP

cc: Mary Neilan, City Manager
John Truxaw, City Attorney
Greg Desmond, Senior Planner
John Ferons, Director of Public Works/City Engineer
Debra Hight, Assistant Director of Public Works
Clay Clement, Applicants' Attorney
Ken Blackman (via email as requested)

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Project File

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City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574
(707) 967-2792

TENTATIVE PARCEL MAP

Office Use Only - Do Not Write in this Area

File Number 2010-40
General Plan Medium Density Residential / Zoning MR/FLP
Flood Plain Overlay
Background Files LLA 2008-04 / Flood Control Project
Related Applications

Initial Deposit Received 1/15/2010 Received By CC

Please Type or Print

Project Name Hunter Subdivision Site Address Dennis Hunter

APN 009 - 030 - 057 - - Site Area Sq. Ft. (or) 16.92 Acres

☐ Residential ☐ Commercial ☐ Industrial

# of Lots Existing	1		
# of Lots Proposed	53		

Units		Construction	
Existing units	0	Existing square footage	0
Existing units to be demolished	0	Existing s.f. to be demolished	0
Proposed units	76	Proposed square footage	
Total residential units:	76	Total square footage	

New Units

Single-family attached	0	Multi-family (2-4 units)	0	Mobile homes	0
Single-family detached	51	Multi-family (5+ units)	25	Accessory dwellings	0

Property Owner(s) Dennis Hunter
(Last Name, First Name)
Mailing Address 900 College Avenue
City Santa Rosa State CA ZIP Code 95404
Phone Number 707.579.0120

Applicant(s) Ben & Kelly Vanzutphen
(Last Name, First Name)
Mailing Address 237 Lorraine Court
City Healdsburg State CA ZIP Code 95448
Phone Number 707.431.8582

NOTE: Additional property owners and/or applicants (name, address, phone number, and signature) shall be attached to the application. In the case of a partnership, all general and limited partners shall be identified. In the case of a corporation, all shareholders owning 10% or more of the stock and all officers and directors shall be identified.

If you would like project correspondence and notice of meetings to be sent to parties other than the applicant, please list their names, address and telephone numbers on a separate sheet.

I, BEN VANZUTPHEN, hereby file this application for a development project and agree to pay any and all processing fees imposed by the St. Helena Municipal Code and City Council Resolutions (as they may be amended from time to time).

Staff time is billed at an hourly rate and the initial deposit may not be sufficient for processing your application. If expended staff time exceeds the initial deposit, you will be notified that additional funds are required. Applications with a negative balance at the time of the public hearing will be continued until the balance is paid in full.

In the event the property owner is different from the applicant, the property owner must sign to indicate her/his/its consent to the filing and agreement to be liable with the applicant for payment of the processing fees.

Failure to pay all accumulated fees by the time of public hearing will result in a continuance or denial of the project.

A finance charge of 12% per annum shall accrue on any balance unpaid after 30 days.

In the event the City is required to take legal action to enforce any of the terms and conditions of this application, Applicant and Property Owner agree to pay to City reasonable attorney fees and costs incurred in such action.

We, the owner and the applicant, will defend, indemnify and hold the City, its agents, officers, and employees harmless from any claim, action or proceeding to attack, set aside, void or annul an approval of the City concerning the project, as long as the City promptly notifies the applicant of any such claim, action or proceedings and the City cooperates fully in the defense. We have also reviewed the requirement to disclose the complete list of partners and/or shareholders.

Date: 9/9/10 Applicant's Signature:

x

x

Revised 03/05

ATTACHMENT 7

Napa County Department of Environmental Management
CUPA-Related Business Activities Form

Business Name: HUNTER SUBDIVISION

Business Address:

Contact: BEN VANBUTPHEN Phone #: 707.431.0582

A. HAZARDOUS MATERIALS Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in AST's and UST's or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☐ YES ☒ NO
B. UNDERGROUND STORAGE TANKS (UST's) 1. Own or operate underground storage tanks? 2. Intend to upgrade existing or install new UST's?	☐ YES ☒ NO ☐ YES ☒ NO
C. ABOVE GROUND STORAGE TANKS (AST's) Own or operate AST's above these thresholds: -Any tank capacity with a capacity greater than 660 gallons, or -The total capacity for the facility is greater than 1,320 gallons?	☐ YES ☒ NO
D. HAZARDOUS WASTE 1. Generate hazardous waste? 2. Recycle more than 220 lbs/month of excluded or exempted recyclable materials (per H&SC §25143.2)? 3. Treat hazardous waste on site? 4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)? 5. Consolidate hazardous waste generated at a remote site?	☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO ☐ YES ☒ NO
E. OTHER 1. Does the business activity include car/fleet washing, mobile detailing, auto-body related activities? 2. Does the business handle Extremely Hazardous Substances in amounts that would qualify for the Risk Management Program? Some examples and their thresholds common to Napa County include: Ammonia – 500 lbs, Sulfur Dioxide – 500 lbs, Chlorine – 500 lbs.	☐ YES ☒ NO ☐ YES ☒ NO

Business Activity.doc (1/99) - 1/2 Rev. 1-01

All forms and handouts are available on www.cityofnapa.org

G:\COD\Forms & Handouts\Napa Forms\Planning Div\Applications Revised 2010\FordMap.doc
Revised: 05/14/10

HUNTER SUBDIVISION
PROJECT DESCRIPTION

GENERAL INFORMATION

The subject property is a 16.9-acre parcel (APN 009-030-057) located north of Hunt Avenue and east of Adams Street. The site is bounded by single-family homes to the west and southwest, a mobile-home park to the southeast, the flood control project to the east and a City-owned parcel (for access to the flood control project) to the north. There is existing vineyard over a portion or the property with the remaining land being vacant and recently disturbed/graded as part of the flood control project.

The owner, Mr. Dennis Hunter, seeks approval to subdivide the parcel into 51 single-family residential lots, 11 of those with affordable granny units, and a parcel designated for a future 25-unit workforce/affordable housing development. The parcel currently has a *Medium Density Residential* Zoning and General Plan designation allowing for a density range of 5.1 to 16.0 du/acre and maximum yield of 270 du. The proposed 87 units (51 lots + 11 granny units + 25 future multi-family units) results in a density of 5.1 du/acre thereby meeting the minimum requirement.

In terms of development standards, the resulting lots meet or exceed all the shape, size and setback requirements of the MR zoning district. Houses are not being proposed at this time or as part of this application. The affordable units will be deed restricted for a minimum of 30 years (per SB 1818). This project is a housing development entitled to a density bonus and multiple incentives aud concessions under the provisions of Government Code §65915.

As indicated above, there are a few remainder parcels being proposed as part of this subdivision. Parcel A is 3.13 net acres and will be set aside for a future 25-unit multi-family development. There is also a small sliver of land along the north PL that is Parcel B.

The project will be served by new public streets including the interconnection of Starr Avenue to Adams Street. These streets are classified as collectors and have been designed to the 60-foot right-of-way standard. All others streets are designed to the minor residential standard (56'). Adams Street is shown on the City-owned parcel with a small portion lying on the subject property.

In terms of utilities, there is an existing sanitary sewer in Hunt Avenue and new water and storm drain lines that run through the property, all of which are accessible for connection by the new project. There are also existing dry utilities nearby in Hunt Avenue and in Adams Street for service of gas, electric, cable and phone to the project. There is an existing well near the southeastern end of the property that is proposed to be maintained in place and used for irrigation of the project's landscape areas. It is a high-producing well that it also capable of supplying additional water to the project should it be found necessary.

HUNTER SUBDIVISION
PROJECT DESCRIPTION

The grading design for the project, as shown on the Tentative Map, is based on the Soil Stockpile Grading Plan dated January 2009 prepared by Mead & Hunt for the flood control project. The grades have been set to utilize the pad that is being constructed and to achieve an earthwork balance in an effort to avoid future offhaul of material. The fill slope along the south and southeast property lines being constructed will be replaced by a retaining wall and drainage swale, also as shown on the Tentative Map. The grading and drainage design has been coordinated with the flood control project based on feedback from and a field meeting with Jon Lander.

It is anticipated that site improvements for the project will be complete within one and one-half years after the approval of the project's entitlements.

HISTORY OF PRIOR KNOWN DEVELOPMENT ACTIVITY

The architectural firm Dahlin Group was retained in May of 2005 to prepare a Master Plan for the site. Following several meetings with City Staff, at Staff's suggestion, the design work was halted to allow for the completion of the General Plan Update program. On May 23, 2006 the Civil Engineering firm Riechers Spence & Associates (RSA) was retained to start Tentative Map work but again at the suggestion of City Staff the work was halted to permit the completion of the General Plan Update program.

In June of 2007 the City first contacted Mr. Hunter with a request for right of entry to the property to explore Indian remains identified in their Cultural Resources Study. The City explained that their flood control project was a life-safety project for the senior residents of the mobile home park. Mr. Hunter signed the right of entry (without charge) on October 11, 2007.

?1, soils ?.

During the summer of 2006 the City again contacted Mr. Hunter to see if he would consider allowing the spoils from the flood control project to be placed on his property. This action would reduce the cost of the flood control project to the City. Mr. Hunter agreed subject to the fill being placed in a compacted form, suitable for development. It was the City's estimate that 37,000 cubic yards of fill would be available. A grading plan was prepared by Civil Design and submitted to the City and a Soils Report for the site was prepared by Miller Pacific Engineering Group.

In the spring of 2008 the City again approached Mr. Hunter to see if he was interested in a possible trade in lieu of the purchase of his property for the flood control project. A number of meetings were held and a lot line adjustment agreed upon. Land was appraised and a price was established. The Agreement of Purchase and Sale was signed in December of 2008.

In the fall of 2007 the City again approached Mr. Hunter asking if he would support placing an Assessment District on property benefiting from the flood control project. Additional money was required to complete the City's project. Mr. Richard McDonnell

assessment district

HUNTER SUBDIVISION
PROJECT DESCRIPTION

of Vineyard Valley Mobile Home Park, on Marcy 21, 2008 protested the Assessment District which constituted a majority protest and killed the Assessment District. Mr. Hunter agreed to the Assessment District which would place a lien of $586,084.96 on his property.

All of the meetings with the City to this point, including meetings held with Councilman Eric Sklar in attendance, envisioned development of the Hunter parcel. The values of property arrived at for the land trade/sale with the City was based on developable land prices. And, the placement of City fill on the Hunter property was to be done consistent with the future urban development of the parcel. Furthermore, to accommodate development and as part of the land swap, the City's Flood Control Project:

- Removed grape vines along the north side of the property for the extension of Adams Street and through the middle of the site where Starr Avenue was to be extended.
- Moved the water main from the center of the property to the location of the future Starr Avenue right-of-way.
- Up-sized the retention pond and pumps to serve the developed Hunter parcel.
- Created an easement and moved the sewer line.
- Created an easement to facilitate the extension of Starr Avenue.

In September of 2009 architect Mark Scheurer was retained as designer of the project and Mark met with City Staff. In December of 2009 the design work was again put on hold to allow for the completion of the General Plan Update program. The Civil Engineering firm RSA then rejoined the development team.

At the present time the right-of-way for Adams Street has been graded and rocked, the right-of-way for Starr Avenue has been cleared and the water utility installed. The easterly half of the Hunter property has been used as a construction staging area by the City and is devoid of any vegetation. And the stockpile is currently being placed and compacted on the eastern portion of the site (per the stockpile Plan referenced above). The ground water well on the site previously used for irrigation of the grape vines is presently used by the City (free of charge) to start the landscape required by their flood control project.

before application is complete

Dennis Robinson
Applicant *or* Property Owner Signature

Sept 9, 10
Date

CONSULTING CIVIL ENGINEERS
RUTHERS & SPENCE ASSOCIATES

#4110047.0
September 9, 2010

City of St. Helena Planning Department
1480 Main Street
St. Helena, CA 94574

RE: Hunter Subdivision-
Tentative Subdivision Map Submittal

To Whom It May Concern:

On behalf of our client, Dennis Hunter, and applicant, Ben and Kelly vanZutphen, we are submitting the following items to initiate concurrent processing of both a Conceptual Map review and a Tentative Subdivision Map application for a subdivision on Mr. Hunter's property. Per the City's checklist, the following items are included in this package:

- (20) 24x36 copies of the Conceptual Map
- Completed application form, with property owner and applicant signatures
- Written Statement, signed and dated
- (13) 24x36, (13) 11x17 & (1) 8-1/2x11 copies of the Tentative Subdivision Map, including:
  a. Cross Sections
  b. Grading Plan/Contour Map
- (13) 24x36, (13) 11x17 & (1) 8-1/2x11 copies of the Landscape Plan, including,
  a. Fence/Wall details
- Site Photos
- A mailing list of all owners of property within a 300' radius of the subject property
- Current Preliminary Title Report
- Napa County Solid Waste Disposal Info Form
- Processing Fee Initial Deposit of $1,500

Additional items to accompany the Subdivision Map (not already included above) are:

- Listed Item #8- A cost estimate for all off-site improvements

rsacivil.com
1541 Third Street Napa, CA 94559
P. 707.252.3301 F. 707.252.4966

RSA ~ CELEBRATING 30 YEARS OF CIVIL ENGINEERING

Lastly, for your easy reference, the following technical and environmental studies are attached which were performed as part of the flood control project:

- Geotechnical Report
- Army Corps 404 Permit
- Archeological Report

Note that, as described in the written statement, homes or structures are not proposed as part of this application. Mr. Hunter seeks approval of the subdivision only at this time. So, the floor plans and presentation plans/exhibits listed in the checklist are not included in this package.

Please call if you have any questions in regards to this submittal, and we'll connect you with the applicant and/or the property owner.

Sincerely,

Francis Adrias, PE
Project Manager

cc: Dennis Hunter w/ enclosure
Ben vanZutphen

Job No. 4110047.0
Date: Sept 8, 2010
By: JCP

Carolyn Mason Debbie Don
Walter ~~Tom~~ Sue Melany Mathew
Terry

HUNTER SUBDIVISION - OFFSITE IMPROVMENTS
St. Helena, California
OPINION OF PROBABLE CONSTRUCTION COSTS
Based on DESIGN REVIEW PLANS
Prepared By: Riechers Spence and Associates, Dated: Sept 8, 2010

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
A. GRADING AND STREET WORK				
Mobilization	1	l.s.	$ 8,000.00	$ 8,000.00
Clearing and Grubbing	1	l.s.	$ 5,000.00	$ 5,000.00
Rough Grading	1,800	c.y.	$ 6.00	$ 10,800.00
Overexcavation & Recompaction	1	l.s.	$ 5,000.00	$ 5,000.00
Finish Grading - Streets	10,830	s.f.	$ 0.30	$ 3,249.00
Asphalt Concrete *	200	ton	$ 100.00	$ 20,000.00
Class II Aggregate Base *	270	c.y.	$ 45.00	$ 12,150.00
Saw-cut and conform	160	l.f.	$ 4.50	$ 720.00
Traffic Striping and Signage	1	l.s.	$ 2,000.00	$ 2,000.00
Traffic Control	1	l.s.	$ 5,000.00	$ 5,000.00
Erosion Control	1	l.s.	$ 15,000.00	$ 15,000.00
			Subtotal	$ 86,919.00
B. CONCRETE WORK				
Standard Curb and 12" Gutter	580	l.f.	$ 25.00	$ 14,500.00
Pedestrian Ramp, (Caltrans - Case A)	1	each	$ 1,600.00	$ 1,600.00
4" Thick Concrete Sidewalks	1,940	s.f.	$ 7.00	$ 13,580.00
			Subtotal	$ 29,680.00
C. SEWER SYSTEM WORK				
8" PVC Sanitary Sewer Pipe	175	l.f.	$ 42.00	$ 7,350.00
Sanitary Sewer Manhole	1	each	$ 4,000.00	$ 4,000.00
Connect to existing sewer system	1	l.s.	$ 1,200.00	$ 1,200.00
			Subtotal	$ 12,550.00
E. WATER WORK				
8" PVC Water Pipe	40	l.f.	$ 48.00	$ 1,920.00
Connect to existing water system	1	l.s.	$ 1,200.00	$ 1,200.00
			Subtotal	$ 3,120.00
			Total	$ 132,269.00
			15% Contingency	$ 19,840.35
			GRAND TOTAL	$ 152,109.35

* Pavement section is assumed. Actual section will be based on the projects geotechnical report recommendations.

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT

NOTES:

1. This estimate of probable construction costs is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy, which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of this estimate.

2. This estimate does not include the following:

   a. Comcast, Pac-Bell, AT&T and PG&E (dry utilities) costs.
   b. Relocation of power poles.
   c. Landscaping/hardscape costs.
   d. City of St. Helena fees.
   e. Detention facilities or maintenance costs.
   f. Cost associated with environmental mitigations.
   g. Fence relocations.
   h. Phased construction or out-of-regular-sequence construction.
   i. Land costs, acquisition of right of way, easements, and/or rights of entry.
   j. Costs associated with high groundwater or inclement weather conditions.
   k. Costs associated with limitation on construction access.
   l. Demolition of existing structures or facilities.

3. Costs presented herein represent an opinion based on historical information and previous bid prices on current projects. No provision has been made for inflation.

EXHIBIT 8

STAFF REPORT

DATE: April 11, 2012

TO: Mayor and City Council

FROM: City Staff

RE: Water Supply and Demand Conditions Update

Summary

Discussion of City water supply and demand conditions related to certification of the General Plan Update EIR and adoption of the General Plan Update document.

Background

The General Plan Update process has been underway since late 2008. The process was initiated through a public workshop in early 2009 followed by monthly General Plan Update Steering Committee meetings throughout 2009 and 2010. In early 2010, there was another public workshop followed by two Town Hall meetings and a communitywide survey. Public hearings for the adoption of the General Plan Update document and Certification of the General Plan Update EIR were initiated in August of 2010.

November 9, 2010 City Council Meeting

On November 9, 2010, the City Council held a public hearing on the General Plan Update EIR and declared that Mitigation Measure Utilities 1-a (page 4.R-20) which outlines a conservation program intended to result in a reduction in annual water demand of 495 AF is not feasible and that even with the remaining mitigation measures (Mitigation Measures 1-b, 1-c, 1-d), the impact of the increased demand for water from new development would be significant and unavoidable. Because the City Council determined that these specific measures would not mitigate this impact, additional and/or revised mitigation measures were required. Staff was directed to work with the Infrastructure Committee and consultants to develop appropriate measures. At that meeting the City Council approved the General Plan Update document and directed staff to re-circulate the EIR once it had resolved the water-related issues. The minutes from the November 9, 2010, City Council meeting are attached.

Safe Yield Committee

At their meeting on December 14, 2010 the City Council appointed the Safe Yield Committee to ascertain the annual safe yield of the City's water system. The goal of the committee was to determine, at the present time, if potable water usage was below, above or equal to the safe yield of the potable water system. The meaning of safe yield was defined by the Planning Commission and approved by the City Council during the review/approval process of the General Plan Update during the fall of 2010. The definition is as follows:

The safe annual yield of the St. Helena water supply system is that quantity of water which can be reliably delivered on an annual basis through most rainfall years, including a Dry Year (rainfall at 22" to 25.9") without undue hardship on water customers through water shortage restrictions. It is recognized that the safe annual yield, as so defined, could place significant

hardship on water customers in a Critically Dry Year (rainfall at 21.9" or less) or in periods of two or more consecutive Dry Years."

The Safe Yield Committee presented their recommendations to the City Council at their meeting on March 22, 2011. The Committee determined that the annual safe yield of the City's potable water supply system is currently 1,950 acre feet. To calculate annual demand, the Committee recommended using a five-year rolling average. As shown in the table below, the supply/usage balance equation yielded a deficit of 206 acre feet in FY 09-10 and 133 acre feet in FY 10-11. It is interesting to note that actual water demand in both of these years was lower than the annual safe yield of 1,950 acre feet. Because the five-year rolling average is used in the equation, it takes some time for reductions in water usage to "catch up" in the calculated surplus/deficit. As shown in the italicized projections in the table below, if water demand remains at the FY 10-11 level, water emergency restrictions could potentially be lifted in July 2012. Furthermore, a surplus of 107 acre feet could be realized at the end of FY 12-13.

Fiscal Year	Water Use *(acre feet)*	Unaccounted for Water (UAF)[1] *(acre feet)*	Annual Total Water Use *(acre feet)*	5-Year Rolling Average Total Water Use[2] *(acre feet)*	Surplus/ (Deficit) *(acre feet)*
2005 - 2006	1,853	327	2,180		
2006 - 2007	2,026	358	2,384		
2007 - 2008	1,894	334	2,228		
2008 - 2009	1,807	319	2,126		
2009 - 2010	1,581	279	1,860	2,156	(206)
2010 - 2011	1,573	206	1,779	2,083	(133)
2011 -2012 est.	*1,573*	*206*	*1,779*	*1,915*	*35*
2012-2013 est.	*1,573*	*206*	*1,779*	*1,843*	*107*

[1]Unaccounted for water is estimated at 15% of total water use for FY 05-06 through FY 09-10 years 2006 to 2010. UAF water for FY 10-11 is the actual usage.

[2]The five-year rolling average for FY 09-10 is computed by averaging water use and adding 15% UAF water use (water use 5-year average ÷ .85). The five year rolling average for FY 11-12 and FY 12-13 projections use 12% UAF water use in the calculation (water use 5-year average ÷ .88).

Update on Water-Related Activities in 2011

In its final report dated March 27, 2011, the Safe Yield Committee recommended the City develop a new system for triggering water emergencies, and on October 25, 2011 the Council adopted a new Water Shortage Emergencies Ordinance, amending Chapter 13.04 Water Service Systems, Article 2, Water Shortage Emergencies. The new ordinance incorporated the definition of Safe Annual Yield and added a new definition for Supply/Usage Balance, as follows:

"Supply/Usage Balance" is the difference between the Safe Annual Yield and total current usage. Total current usage is average usage as determined by taking total metered potable water supply entering the water system's distribution system over the last five fiscal years, divided by five. The city shall calculate that the Supply/Usage Balance as soon after the end of each fiscal year as is practicable, as well as at any time that there is a material change in potable water supply. The Balance is positive when the Safe Annual Yield exceeds total current usage. The Balance is negative, or in Deficit, when the Safe Annual Yield is less than total current usage.

The ordinance establishes three water shortage emergency phases with increasing water use restrictions. Phase I water regulations are triggered when the supply/usage balance is in deficit, as is currently the case. Under Phase I regulations, water customers are prohibited from expanding or installing new water-using appliances, plumbing, or improvements, such as landscaping and pools, unless the installation will result in no increase in water use. Replacement fixtures and appliances must be water-efficient. In addition, new water connections for new development may only be approved if the projected water demand for the project can be offset by a corresponding reduction in the existing water demand on the City water system.

City of Napa Water Agreement. On November 8, 2011, the city adopted and amended its water supply agreement with the City of Napa to provide 600 acre-feet per year (afy) under all hydrologic conditions through the end of 2035. This is a significant change from the previous three tier system. The net effect is to provide more water in a critically dry year, the same amount of water in a dry year, and less water in wet, normal and below normal years.

Water Rate Increase. On July 1, 2011, new water rates went into effect which increased rates by an average of 56%. The new rates have a higher tiered rate structure than the previous water rates and should encourage increased water conservation. The impact of the new water rates on water demand is not yet known, as the most recently reported supply/usage balance covers the period before the new water rates went into effect.

Discussion

Building on the information developed by the Safe Yield Committee, the City requested West Yost Associates to prepare a report that would supplement and update the information contained in the 2010 Water Supply Plan (West Yost Associates, October 2010). The West Yost technical memorandum, dated April 5, 2012, is attached to this staff report.

The technical memorandum shows that, without water conservation measures, the metered water demand is projected to increase from 1,875 afy (2,080 afy including unaccounted for water) to 2,116 afy (2,350 afy including unaccounted for water) by the year 2030 under the likely build-out scenario, an increase of approximately 270 afy in total projected water use (Table 1-1). Staff notes that the 2010 metered water use and total water use estimates incorporated in the report are significantly higher than the actual water use figures for 2010, but approximate the five-year rolling average.

The technical memorandum describes the existing revised potable water supply under different hydrologic conditions, and compares water demand projections to water supply, given the new water shortage emergency regulations. Table 3-3 shows that total potable water supply is not capable of providing reliable supplies under all hydrologic conditions for the likely build-out scenario, except during a critically dry year, due to a combination of the impact of the Phase III water shortage emergency restrictions and increased groundwater pumping. The technical memorandum assumes the City's current groundwater use practice of using groundwater for up to 20 percent of the water supply in most years, and 30 percent in dry and critically dry years.

Beginning on page 13 of the technical memorandum, West Yost explores several strategies to mitigate the water supply deficit between the potable water supply and projected water demand

under the likely build-out scenario. One strategy is to increase groundwater pumping; according to West Yost, it appears that the City could increase groundwater pumping by at least several hundred acre-feet per year – enough to reduce or eliminate the water supply deficit – and not exceed the perennial yield of the groundwater basin. West Yost cites a 2050 Napa Valley Water Resources Study that indicates that groundwater levels in the Napa Valley Groundwater Basin, including the St. Helena area, have been stable over 55 years and that there is no indication that the perennial yield has been exceeded. Furthermore, the perennial yield of the basin has been estimated as being anywhere from 21,000 afy to almost 30,000 afy, with a volume in storage of over 200,000 acre-feet. Although only a portion of the total basin recharge and storage would be attributable to the immediate area around St. Helena, the City's long-term pumping average of 450 afy is not a significant draw on the groundwater basin, amounting to approximately 2% of the annual basin recharge. Water Strategy 1, discussed below, would increase pumping to 650 afy, or approximately 3% of the annual basin recharge.

The technical memorandum reviews the Water Use Efficiency Recommendations discussed in the 2010 Water Supply Plan, and concludes that these options still apply. The recommendations and corresponding potential water savings listed below would be refined once a water conservation plan is fully developed and implemented.

- Hire a full-time Water Conservation Coordinator (necessary to achieve reductions listed below)
- Modify rate structure to increase high tier rates (unspecified)
- Update the new construction offset program, 227 afy
- Fully develop the meter leak detection and monitoring program, 90 afy
- Establish an Irrigation Advisory Service, 60 afy
- Promote "Smart Irrigation Controllers," 77 afy
- Adopt requirements for "ultra-efficient" plumbing fixtures for new development and rebates to existing users, 15 afy
- Provide incentives for replacement of turf, 13 afy
- Provide incentives for roof water catchment, 13 afy

These measures total 425 afy, although additional water use reductions are likely to occur from the higher water rates already imposed and potential restructuring of high-tier water rates to discourage water waste. In regard to the meter leak detection and monitoring program, staff notes that while the City's recent customer water meter upgrade has contributed to the drop in unaccounted for water from approximately 15% to 12% (an estimated 72 acre-feet in FY 10-11), more work could be done. In particular, the City could conduct a comprehensive leak survey and repair and upgrade leaking water pipes in the municipal system.

In section 4.1, the technical memorandum describes five water supply strategies the City Council could adopt to ensure sufficient and reliable water supplies to meet needs of the likely build-out scenario. These strategies provide several points on a continuum between low water conservation action plans combined with more groundwater use than the current practice, to high water conservation action plans combined with lower groundwater use than the current practice. These strategies, described in detail on pages 15 and 16 of the technical memorandum, are:

4

Strategy 1: Minimize water conservation, resulting in an average long-term groundwater pumping of 650 afy, and no long-term water conservation measures under the likely build-out scenario.

Strategy 2: Hold groundwater to the historical average of 450 afy, resulting in a need for long-term water conservation of 277 afy under the likely buildout scenario (13% of projected demand).

Strategy 3: Hold supply to 2008 levels, resulting in a long-term average groundwater pumping of 481 afy and long-term water conservation measures of 243 afy under the likely building scenario (12% of projected demand).

Strategy 4: Maximize water conservation, resulting in average groundwater pumping of 251 afy and long-term water conservation measures of 495 afy under the likely build-out scenario (24% of projected demand).

Strategy 5: Hold water supply to 1,950 afy and keep the long-term average groundwater pumping to 450 afy, as recommended by the Safe Yield Committee. This results in the need for long-term water conservation measures of 360 afy under the likely buildout scenario (17% of projected demand).

The potential for a water surplus as early as FY 2012-13, and increasing in FY 2013-14, came to light subsequent to West Yost articulation of the 5 Strategies above. West Yost should opine on whether such a water surplus could further reduce the need for groundwater pumping or conservation outlined in the above 5 strategies.

Next Steps

The City Council may select one of the five water strategies described above in order to move forward with the process of certifying the General Plan Update EIR. The Water Use Efficiency Recommendations described above are sufficient to balance water supply and demand for all strategies under the likely build-out scenario except Strategy 4, and in fact, exceed the water conservation amount required under these measures. Strategies 1, 2, 3 and 5 require water conservation measures that would reduce projected demand from 12% to 17%. As described in the attached memo on State Water Regulations, the Water Conservation Act of 2009 requires the state to reduce urban per capita water use by 20% by the year 2020. While the St. Helena Water Enterprise has less than 3,000 connections and is not required to comply with the reporting requirements of SBX 7-7, the City is required to comply with state regulations designed to meet this water reduction goal, including the State Water Efficient Landscape Ordinance and the 2010 CALGreen Building Code, which requires a reduction of indoor water use by at least 20% for all new construction projects. Local water conservation efforts, in concert with these state regulations, could help to bring projected water supply and demand in balance.

Strategies 1 and 3 require an increase in long-term average groundwater pumping to 650 afy and 481 afy, respectively. This would represent an increase of 200 afy and 31 afy above the historical long-term average of 450 afy. In order to determine the feasibility of increasing

groundwater production, the City could solicit proposals from qualified groundwater hydrogeologists to conduct a comprehensive groundwater assessment that augments the findings from the studies cited in the technical memorandum. The study would provide a better understanding of the long-term yield characteristics of the St. Helena groundwater basin analysis, and could include: an assessment of historical groundwater level, quality, and production data; volumetric assessments of the basin to quantify groundwater availability; and development of a groundwater budget in consideration of present and future water demand and anticipated yields of municipal water supply wells.

While choosing its preferred water supply strategy, the City Council should bear in mind that, due to the recent amendments to the Water Shortage Emergencies Ordinance, new development requiring additional water supplies must prove, through a water demand analysis report, that the proposed development will not create additional water demand. It is envisioned that this practice will be followed until water supply and demand are brought into balance. The rolling five-year average used to calculate "current" water demand in the supply/usage equation ensures that conservation efforts and restructured water rates must translate into real and long-lasting reductions in water demand before new development will be approved.

Recommended Council Action

The City Council should select one of the five strategies analyzed in the West Yost Technical Memorandum dated April 5, 2012, and direct staff to prepare the document(s) necessary for the City Council to certify the General Plan Update EIR. The City's EIR consultant has determined that recirculation of the EIR will not be required if the City Council selects one of the five water strategies.

Alternatives

If the Council chooses not to adopt one of the five water supply strategies analyzed in the West Yost technical memorandum, there will be insufficient water to serve new development under the likely build-out scenario of the draft General Plan Update. The City would then have the following options to consider:

Option One: Reduce all general plan growth to zero. This would require a rewrite of the General Plan Update and EIR and would potentially be in conflict with the City's adopted housing element.

Option Two: Modify the General Plan Update likely build-out scenario to a lower level of growth that can be accommodated with some increase in water supply, achieved through water conservation, increased groundwater pumping, and/or regulations requiring new development to offset existing water usage in the community. This would also require a rewrite of the General Plan Update and EIR, but, depending on the decision the Council makes in regard to the above factors, may be less extensive than Option One.

Option Three: Shorten the term of the General Plan Update, in concert with some mix of water conservation and increased groundwater pumping. Reducing the General Plan horizon to the year 2020, for example, would reduce projected water demand by 120 afy. The water

conservation measures and/or increased groundwater pumping requirements described in Water Strategies 1-5 would therefore be reduced by 120 afy.

Fiscal Impact
Staff and consultant time to prepare documents to certify the General Plan Update EIR and adopt the General Plan Update. A rewrite of the General Plan Update and EIR could be costly and take a significant amount of time. Staff would need to develop cost estimates with its consultants in consideration of Council's action and the scope of changes that are required.

Attachments
West Yost Associates Technical Memorandum, April 5, 2012
State Water Regulations Memorandum, February 21, 2012
City Council Minutes from the Meeting of November 9, 2010

Distributed Previously
Final General Plan Update Document
Final General Plan Update PEIR

MEMORANDUM

Date: February 21, 2012
TO: Gary Broad, City Manager
FROM: Christine O'Rourke, Consultant
SUBJECT: State Water Regulations

The purpose of this memorandum is to provide a summary of state water regulations that are designed to improve water efficiency and conservation.

State Water Efficient Landscape Ordinance (AB 1881)
In 2009, the state adopted a new model water efficient landscape ordinance and required all agencies to either adopt it or develop an ordinance that was as efficient as the state's ordinance. The state ordinance went into effect on January 1, 2010. The ordinance applies to: 1) new construction and rehabilitated landscapes for public agencies, commercial development projects, and developer-installed residential projects of 2,500 square feet or greater that require a building or landscape permit, plan check or design review; and 2) new construction landscapes installed by a home-owner or home-owner's contractor that are 5,000 square feet or greater and require a building or landscape permit, plan check, or design review.

The state model ordinance is designed to reduce landscape water use to the lowest practical amount and set an upper water budget that may not be exceeded. Ordinance requirements include the following elements:

- Water-use calculated based on the maximum applied water allowance. Any plants may be used as long as the water budget is not exceeded.
- Smart controllers that use evapotranspiration or soil moisture data.
- Dedicated meters for projects with 5,000 square feet or more of landscape area (except single family homes).
- Rain shut-off sensors.
- No overhead spray for narrow planting areas less than 8' wide.
- 24-inch setback from hard surfaces for overhead spray heads.
- No turf allowed on slopes exceeding 25% unless the toe area is permeable.
- 2" of mulch in most planting areas.

The state reports that several local agencies have adopted ordinances more stringent than the model ordinance. Some of the local provisions include:

- The ordinance applies to all new construction and rehabilitated irrigated landscape areas equal to or greater than 1,000 square feet.
- The ordinance applies to all new landscapes regardless of size or occupancy type.
- The ordinance limits the allowable turf area to 25% of the irrigated area, unless the project applicant chooses to develop a water budget.

- The ordinance requires at least 80% of the plants in non-turf areas to be native plants, low-water using plants, or no-water using plants, unless the project applicant chooses to develop a water budget.
- The ordinance requires dedicated irrigation meters at all accounts with landscaping that exceeds 5,000 square feet.

2010 CALGreen Building Code

In 2010, the state adopted the CALGreen Building Code which went into effect on January 1, 2011. The code requires a reduction of indoor water use by at least 20%, and provides both prescriptive and performance methods to meet the requirement.

For indoor water use, projects may either show a 20% reduction in water use using the worksheets provided in the code or install the following high-efficiency fixtures:

- Showerheads with a maximum water rate flow rate of 2.0 gallons per minute at a pressure of 80 psi.
- Lavatory faucets with a maximum flow rate of 1.5 gallons per minute at 60 psi.
- Kitchen faucets with a maximum flow rate of 1.8 gallons per minute at 60 psi.
- Toilets that use a maximum of 1.28 gallons per flush.
- Urinals that use a maximum of 0.5 gallons per flush.

In addition, the code requires that irrigation controllers must be weather or soil-based controllers capable of delaying an irrigation cycle during wet weather.

Some local agencies have adopted additional requirements. The Marin Municipal Water District, for example, requires high-efficiency clothes washers and pool covers for all new outdoor swimming pools, as well as high-efficiency fixtures for commercial applications.

Water Conservation Act (SBX 7-7)

Senate Bill X 7-7 requires the state to achieve a 20% reduction in urban per capita water use by the year 2020. The Act requires urban water agencies with 3,000 service connections or sales of 3,000 acre feet to calculate baseline per capita water use and develop water use targets for 2020.
A retail water supplier should also provide a general description in their Urban Water Management Plan of how the supplier intends to reduce per capita water use to meet its urban water use target. An example of the Conservation Measures Description for an Urban Water Management Plan is attached as Appendix A to this memorandum.

Agencies that are not in compliance with the Act by July 1, 2016, are not eligible for state water grants and loans. Failure to meet the 2020 targets will be a violation of the law subject to administrative or judicial proceedings. The City is not currently required to comply with this law, but it may be required to do so in the future.

Appendix A

Marin Municipal Water District 2010 Urban Water Management Plan
Conservation Measure Descriptions

Table 3-15
Conservation Measure Descriptions

Customer Sector	Name of Measure	Description
SF,MF	Residential Water Surveys - Indoor	This is the indoor component of indoor and outdoor water surveys for existing single-family and multi-family residential customers. Normally those with high water use are targeted and provided customized report to homeowner.
SF, MF	Residential Water Surveys - Outdoor	This is the outdoor component of indoor and outdoor water surveys for existing single-family and multi-family residential customers. Normally those with high water use are targeted and provided customized report to homeowner.
SYSTEM	UFW Reduction	The District will increase efforts to find and repair leaks in the distribution system and take other actions (such as meter replacement) to reduce water losses. A ten year program to reduce unaccounted for water by 3.0 percent is proposed for this measure.
IRR	Water Budgets	90% - 100% of all irrigators of landscapes with separate irrigation accounts would receive a monthly or bi-monthly irrigation water use budget.
COM, INS	Large Landscape Conservation Audits	All public and private irrigators of landscapes larger than one acre would be eligible for free landscape water audits upon request.
SF	Clothes Washer Rebate	Homeowners would be eligible to receive a rebate on a new water efficient clothes washer.
SF, New SF	Public Information Program	Public education would be used to raise awareness of other conservation measures available to customers. Programs could include poster contests, speakers to community groups, radio and television time, and printed educational material such as bill inserts, etc.
COM, INS	Commercial Water Audits	High water use accounts would be offered a free water audit that would evaluate ways for the business to save water and money.
SF	Single Family Residential ULF Toilet Rebate	Homeowners would be required to replace an existing high volume toilet with a 1.6 gallon per flush efficient toilet when name account changes.
RMF	Multi-Family Residential ULF Toilet Rebate	Homeowners would be required to replace an existing high volume toilet with a 1.6 gallon per flush efficient toilet when name account changes.
SF	Single Family Toilet Ordinance	A single family toilet ordinance to replace existing toilets.
MF	Multifamily Toilet Ordinance	A multifamily toilet ordinance to replace existing toilets.
Existing Customers SF	Rain-Sensor (shut off device) Retrofit on Irrigation Controllers	Agency pays for the $40 rain sensor, homeowner pays for the optional installation ($35).
Existing Customers: SF & MF	High Efficiency Toilet (HET)	Provide a $250 rebate or voucher for the installation of a high efficiency toilet (HET). HET are defined as any toilet to flush 20% less than an ultra-low flow toilet (ULFT) and include dual flush technology. Rebate amounts would reflect the incremental purchase cost.
Existing Customers: SF & Condo	Homeowner Landscaping and Irrigation Classes	Sponsor classes at stores where irrigation equipment is sold or other suitable venues on selection and installation of efficient plant material and irrigation equipment (drip irrigation, smart controllers, low volume sprinklers, etc.).
Existing Customers MF	Coin-Op Washing Machine Rebate	Provide a $400 rebate for efficient coin-op washing machines to existing apartment complexes over a certain size with a common laundry room.

Table 3-15 Conservation Measure Descriptions		
Customer Sector	Name of Measure	Description
Existing Customers SF, Condo, MF, CII, IRR	Financial Incentives/ Rebates for Irrigation Upgrades including Smart Irrigation Controllers	For SF, Condo, MF, CII, and IRR customers with landscape, provide for rebates towards the purchase and installation of selected types of irrigation equipment upgrade including low volume sprinkler heads, check valves, smart irrigation controllers. Rebate is $450 for residential accounts and up to $650 for mixed use accounts and up to $3,500 for dedicated irrigation accounts. Provide up to $450 for SF, and up to $3,500. Assume average rebate claimed equates to $1,500 for non-Residential accounts.
Existing Customers: CII	Hotel Retrofit (w/ financial assistance) - CII Existing	Following a free water audit, offer the hotel a rebate for equipment identified that would save water. Provide a rebate schedule for certain efficient equipment such as air-cooled ice machines, steamers, washers, cooling towers, and spray rinse valves.
Existing Customers: CII	CII Rebates - Replace inefficient water using equipment	Provide a rebate for a standard list of water efficient equipment. Included would be x-ray machines, icemakers, air-cooled ice machines, steamers, washers, spray valves, efficient dishwashers, replace once through cooling, add conductivity meters on cooling.
Existing Customers: CII	0.5 gal/flush urinals in existing buildings	Provide a $350 rebate for existing buildings to encourage installation of 0.5 gal/flush urinals rather than the current standard of 1.0 gal/flush models.
SF, Condo, MF, COM, INS	Install AMS and Leak Detection Customer Notification	Install advanced metering systems (AMS) and leak detection meters. A call or email will be placed to customers if there is a leak. Will be as automated as possible by a computer program, use 1 full time staff person. Cost will be approximately $100,000 per year.
New Customers: SF, Condo, RMF, COM, INS	Rain-sensor shut off device on irrigation controllers	Require-sensor or rain shut off devices with all new automatic irrigation system installations on new homes and buildings.
New Customers: SF, Condo, RMF, COM, INS	Smart Irrigation Controller	Require developers to provide the latest state of the art SMART irrigation controllers. These SMART controllers have on-site temperature sensors or rely on a signal from a central weather station that modifies irrigation times at least weekly.
New Customers: SF, Condo, RMF, COM, INS	High Efficiency Toilet (HET)	Require developers to install a high efficiency toilet (HET). HET are defined as any toilet to flush 20% less than an ULFT and include dual flush technology.
New Customers: SF, Condo, RMF, COM, INS	Dishwasher New Efficient	Require developers to install an efficient dishwasher (meeting certain water efficiency standards, such as gallons/load).
New Customers: SF, Condo, RMF, COM, INS	Clothes washing machines requirement for new residential	Building departments would be responsible to ensure that an efficient washer was installed before new home or building occupancy.
New Customers: SF, Condo, RMF, COM, INS	Hot Water on Demand	Require developers to equip new homes or buildings with a hot water on demand system or tankless hot water heaters, such as those made by Metland Systems and others. These systems use a pump placed under the sink to recycle water sitting in the hot water pipes.

Table 3-15
Conservation Measure Descriptions

Customer Sector	Name of Measure	Description
New Customers: SF, Condo, RMF, COM, INS	High efficiency faucets and showerheads	Require developers to install lavatory faucets that flow at no more than 1.5 gallons per minute (gpm), kitchen faucets at 2.2 gpm, showerheads at 2.0 gpm.
New Customers: SF, Condo, RMF, COM, INS	Landscape and irrigation requirements	Enforce a regulation that specifies that homes or buildings be landscaped according to Xeriscape principals, with appropriate irrigation systems. (Combines with Smart Controller listed above). Goal is overall 25% in irrigation water use (measure 2 and 9 combined).
New Customers: MF	Multi Family Submetering	Require all new multi-family units to provide submeters on individual units. To help reduce financial impacts on tenants, regulators would be adopted that specify acceptable methods of metering and billing.
New Customers: CII	Offer new accounts reduced connection fees for installing efficient process equipment for selected businesses (restaurants, laundry mat, food/groceries and hospital)	Offer reduced water and sewer connection fees to new facilities to install water efficient equipment in new facilities that goes above and beyond the building code requirements. Model program after Santa Rosa's BAT program.
New Customers: CII	0.5 gal/flush urinals in new buildings	Require that new buildings be fitted with 0.5 gal/flush urinals rather than the current standard of 1.0 gal/flush models.

NOTE: RSF = Residential Single Family, RMF = Residential Multi-Family, NRSF = New Residential Single Family, COM = Business, INS = Institutional, IND = Industrial

WEST YOST ASSOCIATES
Consulting Engineers



TECHNICAL MEMORANDUM

DATE: April 5, 2012 Project No.: 705-04-10-04.003

TO: John Ferons, Public Works Director, City of St. Helena

FROM: Jim Connell, R.C.E. #63052

REVIEWED BY: Gerry Nakano, R.C.E. #29524

SUBJECT: 2010 Water Supply Plan—Impacts of Recent Water Supply Changes

The purpose of this technical memorandum (TM) is to document the recent changes to the City of St. Helena's (City's) potable water demand and potable water supply in support of the City's General Plan Environmental Impact Report. This TM supplements and modifies the information contained in the 2010 Water Supply Plan (West Yost Associates, October 2010). Since the 2010 Water Supply Plan was developed, the City has undertaken three tasks that affect water supply and demand planning. The three tasks are:

Task 1. Re-negotiated the Napa water agreement

Task 2. Amended the Water Shortage Emergency portion of the City Code

Task 3. Set a planning policy re-defining the safe yield from the City's water supply sources

The first two tasks affect the City's water supply and demand balance and the third task impacts the availability of City supplies to serve demands, which would affect growth in the City. This TM will explore the impact that these three tasks have on water supply planning. To be clear, this TM addresses water demand and supply for the public City facilities only and does not address private groundwater wells, or private surface water supplies.

In addition, the City adopted new water rates in 2011. The new water rates have a higher tiered rate structure than the previous water rates and should help encourage water conservation, which would then reduce potable water demand.

To facilitate cross-referencing with the 2010 Water Supply Plan, this TM describes the updates in the same order as the 2010 Water Supply Plan:

- Water Demand
- Water Supplies
- Comparison of Supply and Demand

- Water Supply Strategies
- Conclusions and Recommendations

1.1 WATER DEMAND

The purpose of this section is to describe the City's estimated and projected potable water demand through two buildout scenarios presented in the draft General Plan Update.

The following topics were discussed in the 2010 Water Supply Plan:

- Recent Historical Water Demands
- Unaccounted For Water
- Land Use and Population Growth
- Per Capita Water Use
- Projected Water Demand
- Impact of City Water Shortage Emergency Phases
- State Senate Billx 7-7 Water Conservation (demand reduction through mandatory conservation)
- Projected Maximum Day Demand

Most of the topics are not affected by the new water shortage emergency code amendments (Task 2), and are only briefly re-iterated herein.

1.1.1 Recent Historical Water Demands

The recent historical metered water demands and unit water demands are discussed in Section 1.1.1 of the 2010 Water Supply Plan and not re-iterated here. This section was not affected by the City's recent work efforts.

1.1.2 Unaccounted For Water

The estimate of historical unaccounted for (UAF) water is discussed in Section 1.1.2 of the 2010 Water Supply Plan and not re-iterated here, except to indicate that historical UAF has been 14 percent to 15 percent of the total water produced, but has recently dropped to 12 percent, according to the City's Public Works Director. This recent reduction in UAF water may be due to the City's recent customer water meter upgrade program, which replaced the customer potable water meters with new meters and registers. Low level leaks are often only partially measured by water meters. The new registers include a feature that will indicate if water use does not stop for a given period of time. This feature has allowed water customers to identify and remove leaks on their side of the water meter, which has the duel effect of reducing potable water demand for that portion of the leak that was accounted for in the meter reading and reduces unaccounted for water for that portion of the leak that did not cause the meter to register. UAF water is any non-metered or non-accounted for water demand, and represents both loss of water supply and lost revenue. This water is lost mainly because of unauthorized or un-measured consumption, meter inaccuracies, and system leaks.

The City intends to reduce the UAF water to less than 10 percent of the total water supplied, a value that is close to average for a typical, well operated water system. A UAF value of 10 percent of total water supplied is the factor used in these demand projections.

1.1.3 Land Use and Population Growth

The land use and population growth estimates are presented in Section 1.1.3 of the 2010 Water Supply Plan and not re-iterated here. As in 2010, the City is contemplating two buildout scenarios: the "***Likely Buildout Scenario***" and the "***Full Buildout Scenario***". This section was not affected by the City's recent work efforts.

1.1.4 Per Capita Water Use

Recent potable water production, estimated population, and per capita water use are documented in Section 1.1.4 of the 2010 Water Supply Plan. This section was not affected by the City's recent work efforts.

1.1.5 Projected Water Demand

The projected water demand under the ***Likely Buildout Scenario*** and the ***Full Buildout Scenario*** is discussed in Section 1.1.5 of the 2010 Water Supply Plan and briefly re-iterated below, although this section was not affected by the City's recent work efforts.

1.1.5.1 Likely Buildout Scenario

The updated projected metered and total water demands for the ***Likely Buildout Scenario*** at several planning milestones are shown in Table 1-1 (Table 1-7 from the 2010 Water Supply Plan) As shown in Table 1-1, without water conservation measures, the metered water demand is projected to increase from 1,875 acre-feet per year (afy) to 2,116 afy by buildout, an increase of approximately 252 afy. This increase in metered water demand would require a total water supply of 2,350 afy by 2030 once a UAF water demand of 10 percent of total water supplied is added. Because the current UAF is greater than 10 percent, it is recommended that the City develop and execute a program of UAF reduction. Such programs usually include making sure all potable water system uses, whether revenue or non-revenue uses, are accounted for. Next, the City would identify and prioritize the areas of the distribution system that have the highest risk and highest likelihood of leaks (areas with a history of leakage, or older pipes in areas with high water pressure). Once likely areas are prioritized, the City would undertake a leak detection program (usually based on taking sound readings) to identify leaks in pipelines, which would then be repaired.

Table 1-1. Total Projected Water Use at Milestone Years – Likely Buildout Scenario, acre-feet per year (Table 1-7 from the 2010 Water Supply Plan)

Land Use	2008[a]	2010[b]	2020[b]	2030[b]
Residential	973	987	1,059	1,131
Commercial, Retail, Institutional	357	364	402	440
Industrial	149	149	149	149
Landscaping	83	83	83	83
Outside City Limits	313	313	313	313
Total and Projected Metered Water Demand	**1,875**	**1,897**	**2,007**	**2,116**
Unaccounted For Water (10 percent)	208	211	223	235
Total Projected Water Use	**2,080**	**2,110**	**2,230**	**2,350**

[a] Based on average Unit Water Demands in Table 1-1 of the 2010 Water Supply Plan and actual 2008 land use.
[b] Based on average Unit Water Demands in Table 1-1 of the 2010 Water Supply Plan and projected 2010, 2020, and 2030 land use for Likely Buildout Scenario.

1.1.5.2 Full Buildout Scenario

The updated projected metered and total water demands for the ***Full Buildout Scenario*** at several planning milestones are shown in Table 1-2 (Table 1-9 from the 2010 Water Supply Plan). As shown in Table 1-2, without water conservation measures, the metered water demand is projected to increase from 1,875 afy to 2,340 afy by buildout, an increase of approximately 465 afy. This increase in metered water demand would require a total water supply of 2,600 afy by 2030 once the UAF water demand is added.

Table 1-2. Total Projected Water Use at Milestone Years – Full Buildout Scenario, acre-feet per year (Table 1-9 from the 2010 Water Supply Plan)

Land Use	2008[a]	2010[b]	2020[b]	2030[b]
Residential	973	1,006	1,172	1,338
Commercial, Retail, Institutional	357	366	412	458
Industrial	149	149	149	149
Landscaping	83	83	83	83
Outside City Limits	313	313	313	313
Total Projected Metered Water Demand	**1,875**	**1,917**	**2,129**	**2,341**
Unaccounted For Water (10 percent)	208	213	237	260
Total Projected Water Use (rounded)	**2,080**	**2,130**	**2,370**	**2,600**

[a] Based on Unit Water Demands in Table 1-1 and actual 2008 land use.
[b] Based on Unit Water Demands in Table 1-1 and projected 2010, 2020, and 2030 land use for Full Buildout Scenario.

1.1.6 Impact of City Water Shortage Emergency Phases

The City has recently adopted amendments to its Water Shortage Emergency (WSE) code. The amendments create three WSE phases instead of the previous five phases. The intent of the amendments is to create WSE Phases that are less likely to be triggered and are more restrictive when triggered. The amended regulations are encoded in City Code Title 13.04, Article 2 Water Shortage Emergencies.

The City now has a worksheet to assist the Public Works Director in determining if water supplies are sufficient to meet demands, or if a Water Shortage Phase should be triggered.

In 2010, West Yost Associates (West Yost) reviewed the then current five Water Shortage Emergency Phases of Action and Triggers, and estimated the impact that each Water Shortage Phase would have on reducing total water demands. For this supplement to the Water Supply Study, West Yost repeated the analysis with the amended City Code and the three Water Shortage Emergency Phases of Action and Triggers.

The estimated impact of the City's current Water Shortage Emergency demand reduction measures on the total potable water demand at buildout of the ***Likely Buildout Scenario*** is shown in Table 1-3 (modified from Table 1-10 in the 2010 Water Supply Plan).

Table 1-3. Projected Effect of City Existing Water Shortage Emergency Phases, Year 2030 Likely Buildout Scenario (Modified from Table 1-10 from the 2010 Water Supply Plan)

Water Shortage Emergency Phase[a]	Estimated Demand Reduction, Percent	Estimated Percent of Normal Demand	Projected Demand in 2030, acre-feet per year[b]
No Shortage	0	100	2,350
I	10	90	2,115
II	25	75	1,763
III	37	63	1,481

[a] Based on current City Code Title 13.04, Article 2 Water Shortage Emergencies.
[b] Based on Likely Buildout Scenario.

The estimated impact of the City's current Water Shortage Emergency demand reduction measures on the total potable water demand at buildout of the ***Full Buildout Scenario*** is shown in Table 1-4 (modified from Table 1-11 in the 2010 Water Supply Plan).

Table 1-4. Projected Effect of City Existing Water Shortage Emergency Phases, Year 2030 Full Buildout Scenario (Modified from Table 1-11 from the 2010 Water Supply Plan)

Water Shortage Emergency Phase[a]	Estimated Demand Reduction, Percent	Estimated Percent of Normal Demand	Projected Demand in 2030, acre-feet per year[b]
No Shortage	0	100	2,600
I	10	90	2,340
II	25	75	1,950
III	37	63	1,638

[a] Based on current City Code Title 13.04, Article 2 Water Shortage Emergencies.
[b] Based on Full Buildout Scenario.

1.1.7 State Senate Billx 7-7 Water Conservation

The estimation of the impacts that Senate Billx 7-7 (SBx 7-7) would have on the City's water demand if it were required to comply are described in Section 1.1.7 of the 2010 Water Supply Plan. To re-iterate, the City is not required to comply with SBx 7-7 because it serves fewer than 3,000 customers and produces less than 3,000 acre-feet of water each year. However, reducing the per capita water demand would have the impact of increasing the sustainability of the water supply and is often considered a demonstration of good stewardship of natural resources.

SBx 7-7 provides four alternative methods to calculate the target per capita water demand (defined as the total water supply divided by the total service area population). The four methods are discussed in the 2010 Water Supply Study. If the City were required to base its potable water conservation targets on the requirements of SBx 7-7, West Yost would recommend the use of Method 1. With a projected service area population of 7,219 persons in 2020 and 7,654 persons in 2030 for the ***Likely Buildout Scenario***, and a per capita water demand of 227 gallons per capita per day (gpcd) (80 percent of historical average of 284 gpcd), the projected total annual potable water use would be reduced from 2,230 afy to 1,841 afy by 2020 and from 2,350 afy to **1,946 afy by 2030**, assuming buildout under the ***Likely Buildout Scenario***. Under the ***Full Buildout Scenario***, complying with Method 1 would reduce the projected total annual potable water use from 2,360 afy to 2,014 afy by 2020 and from 2,600 afy to 2,263 afy by 2030, because of greater projected population.

If the City were to hold development at the current level, and if it were subject to SBx 7-7, water demands would have to be reduced to approximately 1,715 afy (target per capita water demand of 227 gpcd x estimated service area population of 6,471 persons). The use of Lower Reservoir would count toward the 1,715 afy of total supply, but any use of recycled water would not, and serves to lower the per capita water demand.

1.1.8 Projected Maximum Day Demand

The City's historical and projected maximum day demand is discussed in Section 1.1.8 of the 2010 Water Supply Plan. The changes discussed in this TM do not affect the findings of the 2010 Water Supply Plan for this topic.

2.1 WATER SUPPLY

The purpose of this section is to describe the City's historical and projected potable water supply through buildout of the draft General Plan in 2030. This section addresses projected water supplies and current contractual agreements. Impacts of proposed policies, including limiting water demand to within the definition of safe yield, are discussed in Section 4 of this TM.

The current sources of potable water include Bell Canyon Reservoir, Napa Contract Water, and groundwater. The agreement with the City of Napa to provide potable water has recently been amended so that the City is guaranteed to receive 600 afy under all hydrologic conditions. Only the water supply components that are affected by the new Napa Water Agreement, which extends to 2035 and can be renewed based on renewal of the State Water Project contracts, are discussed herein.

Lower Reservoir has also been used as a source of non-potable water for landscape irrigation, and recycled water is a potential future source of non-potable water for landscape irrigation.

2.1.2 Bell Canyon Reservoir

Bell Creek (or Howell Creek in some records), as impounded in Bell Canyon Reservoir, has been the City's major water supply source for several decades. The historical and projected yield from Bell Canyon Reservoir is discussed in Section 2.1.2 of the 2010 Water Supply Plan and summarized below. This supply has not been affected by the City's recent work efforts.

The estimated Sustainable Yield is summarized in Table 2-1 (Table 2-3 from the 2010 Water Supply Plan).

Table 2-1. Estimated Sustainable Yield of Bell Canyon Reservoir (Table 2-3 of 2010 Water Supply Plan)

Condition	Minimum Rainfall, inches	Estimated Sustainable Yield[a], acre-feet per year	Notes
Wet Years	38.5	1,100	Corresponds to 40 percent Exceedence
Normal Year	32.7	1,000	Corresponds to 60 percent Exceedence
Below Normal Year	26.0	800	Corresponds to 82 percent Exceedence
Dry Year	22.0	600	Corresponds to 90 percent Exceedence
Critical Dry Year	10.4	500	Corresponds to 100 percent Exceedence

[a] Based on Sustainable Yield Reservoir Model described in Appendix B of the 2010 Water Supply Plan, rounded to the nearest 100 acre-feet.

The estimated Sustainable Yields, summarized in Table 2-1, include consideration of required bypass flows and the effects of evaporation, and therefore represents the supply available to the City.

2.1.3 City of Napa Water Agreement

The City has entered into and recently amended a water supply agreement with the City of Napa to supplement dry year weather supplies. The agreement took effect in 2006 and extends through the State Water Project contract duration at the end of 2035. This contract can be renewed pending renewal of the Napa Flood Control and Water Conservation District's State Water Project contract. This most recent (third) amendment to the water supply agreement was effective in late 2011 and has one tier of water availability, providing 600 afy under all hydrologic conditions, and available year-round. This is a significantly changed condition from the three-tiered (400, afy, 600 afy, and 800 afy) original agreement as modified by the first two amendments.

2.1.4 Groundwater

According to the Master Water Plan, the City's two groundwater supply wells, known as Stonebridge Wells 1 and 2, have a combined capacity of 650 gallons per minute, which could provide 1,050 afy of potable water per year if both wells could be operated continuously (24 hours per day, for 365 days). Operating any facility at 100 percent capacity on a continuous basis is not recommended. The City will need additional groundwater production capacity to meet water delivery requirements in dry years. This supply has not been affected by the City's recent work efforts.

City practice currently restricts the production from these wells to no more than 20 percent of the total demand, except in Phase II or Phase III water shortage emergencies. The groundwater wells have historically been operated to provide approximately 20 percent of the total potable water produced. The City also maintains wells for non-potable park and landseape irrigation, but their use is restricted to small areas, and is not included in this analysis. Also not included in this analysis is the pumpage from any private groundwater wells whether located inside or outside of City limits.

2.1.5 Lower Reservoir

The City currently uses Lower Reservoir to supply non-potable water to Robert Louis Stevenson Middle School for irrigation of a portion of the playing fields, and to Spring Mountain Winery to serve a portion of their non-potable water demands. According to the Master Water Plan, non-potable water deliveries have ranged from 14 to 19 acre-feet per year from 1996 through 2002. Recently (Fiseal Year 2002-2007) annual metered water use for the two Lower Reservoir water customers has been approximately 50 afy (total for the two customers). This supply has not been affected by the City's recent work efforts.

2.1.6 Recycled Water

In the future, it is the City's intent to be able to serve portions of its non-potable water demands, currently served through the potable water system, with highly treated wastewater (Title 22 tertiary, unrestricted reuse). This highly treated wastewater will become available as funding allows for construction of the necessary treatment/process facilities at the wastewater treatment plant and the associated transmission/distribution piping network.

The use of recycled water to offset potable demands is not included in the SBx 7-7 calculation of per capita water use; therefore, any volume of existing potable water use that the City can convert to recycled water use would further reduce the City's per capita potable water use. This supply has not been affected by the City's recent work efforts (amending the water supply agreement with Napa, re-structuring the water shortage emergency phases, and defining the safe yield of the water supply). The use of recycled water continues to not be included in the water supply planning assumptions at this time.

2.1.7 Current Water Supply Balance for Planning Purposes

The existing revised (to include the new Napa Water Agreement) potable water supply for planning purposes is shown in Table 2-2. The current groundwater use practice is to use groundwater up to 20 percent of the total potable water supply in most years, and 30 percent of the total water supply in Dry and Critically Dry Years (WSE Phase II and Phase III).

Table 2-2. Estimated Current Potable Water Supply[a], acre-feet per year (modified from Table 2-5 of the 2010 Water Supply Study)

Water Supply[a]	Wet Year (40 percent exceedence) No Water Shortage Emergency	Normal Year (60 percent exceedence) No Water Shortage Emergency	Below Normal Year (82 percent exceedence) Phase I WSE	Dry Year (90 percent exceedence) Phase II WSE	Critical Dry Year (100 percent exceedence) Phase III WSE
Bell Canyon Reservoir	1,100	1,000	800	600	500
Napa Water Agreement	600	600	600	600	600
Groundwater[a]	425	400	350	514	471
Total Potable Water Supply	2,125	2,000	1,750	1,714	1,571

[a] Assumes groundwater will be 20 percent of total supply in most years and 30 percent of total supply in Dry and Critical Dry Years.

It is interesting to note that the amended Napa Water Agreement results in a lower total water supply during Wet, Normal, and Below Normal Years and a greater water supply during Critical Dry Years than calculated in Table 2-5 of the 2010 Water Supply Plan because of changes to the Napa Water Agreement. Water supply during Dry Years does not change.

A comparison of available water supply and projected demand is discussed in Section 3.

2.1.8 Maximum Day Production Capacity

The maximum day production capacity is discussed in Section 2.1.8 of the Water Supply Plan. This capacity has not been affected by the City's recent work efforts.

3.1 COMPARISON OF SUPPLY AND DEMAND

The purpose of this section is to compare the potable water demand projected in Section 1 to the potable water supply described in Section 2, and to identify several possible measures that could be initiated to better match demand to available supply.

Specific water supply strategies that incorporate the measures described in this section to balance water demand and water supply are described in Section 4.

For purposes of this analysis, West Yost assumed a correlation between each City water shortage emergency phase and hydrologic condition. The assumed correlation is shown in Table 3-1.

Table 3-1. Assumed Correlation Between Hydrologic Condition and Water Shortage Emergency Phase (modified from Table 3-1 of the 2010 Water Supply Study)

Hydrologic Condition	Water Shortage Emergency Phase
Wet Years	No Shortage
Normal Year	No Shortage
Below Normal Year	I
Dry Year	II
Critical Dry Year	III

A comparison of projected total potable water demand without water conservation to the Normal Year water supply, based on the current groundwater use practice and the ***Likely Buildout Scenario*** is shown in Table 3-2 for several milestone years.

Table 3-2. Comparison of Normal Year Potable Water Demand and Supply at Milestone Years – Likely Buildout Scenario, acre-feet per year (modified from Table 3-2 of the 2010 Water Supply Study)

Land Use	2008	2010	2020	2030
Total Projected Water Use[a]	2,080	2,110	2,230	2,350
Total Projected Normal Year Water Supply[b]	2,000	2,000	2,000	2,000
Water Supply Surplus (Deficit)	(80)	(110)	(230)	(350)

[a] See Table 1-1.
[b] See Table 2-2.

The supply and demand comparison at buildout of the draft General Plan (2030) ***Likely Buildout Scenario*** is shown in Table 3-3 for several hydrologic conditions.

Table 3-3. Comparison of Potable Water Demand and Supply under Several Hydrologic Conditions – Buildout of Likely Buildout Scenario, acre-feet per year (modified from Table 3-3 of the 2010 Water Supply Study)

Water Supply[a]	Wet Year (40 percent exceedence) No Water Shortage Emergency	Normal Year (60 percent exceedence) No Water Shortage Emergency	Below Normal Year (82 percent exceedence) Phase I WSE	Dry Year (90 percent exceedence) Phase II WSE	Critical Dry Year (100 percent exceedence) Phase III WSE
Total Potable Water Demand[a]	2,350	2,350	2,115	1,763	1 481
Total Potable Water Supply[b]	2,125	2,000	1,750	1,714	1,571
Water Supply Surplus (Deficit)	(250)	(350)	(365)	(49)	90

[a] See Table 1-3.
[b] See Table 2-2.

As can be seen in Table 3-3, the Total Potable Water Supply, as documented in Table 2-2, is NOT capable of providing reliable supplies under all hydrologic conditions, except the Critical Dry Year, due to a combination of increased groundwater pumping and Phase III WSE demand management measures. As demands continue to rise through buildout of the ***Likely Buildout Scenario***, additional supplies, or additional conservation (or more aggressive demand management measures) will be required to eliminate the identified supply deficiency through buildout of the ***Likely Buildout Scenario***.

A comparison of projected total potable water demand without water conservation to the Normal Year water supply, based on the current groundwater use practice and the ***Full Buildout Scenario***, is shown in Table 3-4 for several milestone years.

Table 3-4. Comparison of Normal Year Potable Water Demand and Supply at Milestone Years – Full Buildout Scenario, acre-feet per year (modified from Table 3-4 of the 2010 Water Supply Study)

Land Use	2008	2010	2020	2030
Total Projected Water Use[a]	2,080	2,130	2,370	2,600
Total Projected Normal Year Water Supply[b]	2,000	2,000	2,000	2,000
Water Supply Surplus (Deficit)[c]	(80)	(130)	(370)	(600)

[a] Table 1-2.
[b] Table 2-2.

The supply and demand comparison at buildout of the draft General Plan ***Full Buildout Scenario*** is shown in Table 3-5 for several hydrologic conditions, using the same correlation between water shortage emergency phase and hydrologic condition shown in Table 3-1.

Table 3-5. Comparison of Potable Water Demand and Supply under Several Hydrologic Conditions – Buildout of Full Buildout Scenario, acre-feet per year (modified from Table 3-5 of the 2010 Water Supply Study)

Water Supply	Wet Year (40 percent exceedence) No Water Shortage Emergency	Normal Year (60 percent exceedence) No Water Shortage Emergency	Below Normal Year (82 percent exceedence) Phase I WSE	Dry Year (90 percent exceedence) Phase II WSE	Critical Dry Year (100 percent exceedence) Phase III WSE
Total Potable Water Demand[a]	2,600	2,600	2,340	1,950	1,638
Total Potable Water Supply[b]	2,125	2,000	1,750	1,714	1,571
Water Supply Surplus (Deficit)	(476)	(600)	(590)		(67)

[a] See Table 1-10.
[b] See Table 2-5.

As shown in Table 3-4 and Table 3-5, the City's current groundwater use practice of only providing 20 percent to 30 percent of the total potable water supply, coupled with the City's other water supply sources, cannot provide a reliable water supply for the ***Full Buildout Scenario.***

The deficit between the potable water supply and the potable water demand can be mitigated by some combination of the following three measures:

- Increasing surface water supply;
- Reducing potable water demand; and
- Increasing groundwater supply.

The potential for each mitigation measure is briefly described below.

3.1.1 Increasing Surface Water Supply

Possible methods to increase the City's surface water supply are discussed in Section 3.1.1 of the 2010 Water Supply Plan.

For purposes of this study, increasing the City's surface water supply is not included in the projected water supply, as the previously described options still apply, and continue to remain unviable due to a combination of the cost of increasing the capacity of Bell Canyon Reservoir coupled with concerns over the possible regulatory increase in downstream reservoir bypass flows/releases which could lead to a net decrease in supply availability from Bell Canyon; and, the uncertainty over whether increasing the contract water supply from Napa is possible.

3.1.2 Reducing Potable Water Demand

Possible methods to decrease the City's potable water demand are discussed in Section 3.1.2 of the 2010 Water Supply Plan, and these options all still apply. The Water Use Efficiency Recommendations discussed in the 2010 Water Supply Plan are listed below:

- Hire a full-time Water Conservation Coordinator;
- Modify rate structure to increase high tier rates;
- Update the new construction offset program;
- Fully develop the meter leak detection and monitoring program (this work has been completed as of this writing);
- Establish an Irrigation Advisory Service and Promote "Smart Irrigation Controllers;"
- Adopt requirements for "ultra-efficient" plumbing fixtures for new development and rebates to existing users;
- Provide Incentives for replacement of turf (New); and
- Provide Incentives for roof water catchment (New).

The City has increased its water rates, including the higher tiers (second bullet). The next step would be to establish water budgets for all potable water customers. This step is data and staff intensive to initiate, but has been shown to reduce potable water demands while maintaining water enterprise revenues. The water budget rate structure should not be attempted prior to filling the Water Conservation Coordinator position.

3.1.3 Increasing Groundwater Supply

Based upon currently available groundwater data, and historical groundwater level trends, it appears that the City could increase groundwater pumping by at least several hundred afy per year and not exceed the perennial yield of the basin. Increased use of groundwater would provide the water supply the City requires to decrease or eliminate its water supply deficiency. In 2005, West Yost provided an assessment of the groundwater under the City area and identified possible new well locations. The assessment concluded that the City's current seasonal groundwater pumping is "well within" the perennial yield of the overall groundwater basin; however, a perennial yield estimate was not developed. Additionally, the 2050 Napa Valley Water Resources Study compiled groundwater resource data from various sources, all of which indicate that, in the main Napa Valley Groundwater Basin, including the St. Helena area, groundwater levels have been stable over the period of record (1950 to 2005) and there is no indication that the perennial yield has been exceeded. The perennial yield (i.e annual basin recharge) of the main groundwater basin was estimated by several qualified hydrogeologists as being anywhere from 21,000 afy to almost 30,000 afy, with a volume in storage of over 200,000 acre-feet. Although only a portion of the total basin recharge and storage would be attributable to the immediate area around St. Helena, the City's long-term pumping average of 450 afy is not a significant draw on the groundwater basin.

The recent (February 2011) Napa County Comprehensive Groundwater Management Program re-iterates that groundwater levels in the main Napa Valley Groundwater Basin and in the St. Helena area have been stable over the period of record. The monitoring wells with the longest periods of record (roughly 1950 to 2010) are located north and south of the City limits.

City policies to further curtail groundwater use will further exacerbate the water supply deficit, unless paired with either an aggressive reduction in the potable water demand or increasing the available surface water supply.

The water supply strategies discussed in Section 4 provide specific opportunities for the City to evaluate the various water supply deficit reduction strategies, and balance demands and supplies under different hydrologic conditions.

3.1.4 Potable Water Production Capacity

The total potable water production capacity is discussed in Section 3.1.4 of the 2010 Water Supply Plan, and this discussion does not need to be updated.

4.1 WATER SUPPLY STRATEGIES

The purpose of this section is to describe water supply strategies that the City could adopt to ensure sufficient and reliable water supplies to meet current and future water demand needs. This section first describes the five water supply concept strategies, and then applies the strategies to the ***Likely Buildout Scenario*** and the ***Full Buildout Scenario***. The summary tables indicate the amount of groundwater that would need to be pumped under each strategy for the Normal Year hydrologic condition, as well as the long-term water conservation and short-term water conservation action plans that would be required to balance supply and demand. This section is updated from Section 4.1 of the 2010 Water Supply Plan to include the revised water supply and Water Shortage Emergency Phases (which includes and codifies the City's definition of "safe yield"), per the City's Safe Yield Committee's estimation of 1,950 afy as the "safe yield" of the current water supply. The 1993 General Plan and the Draft 2010 General Plan Update both limit development of new water demand to within the "safe yield" of the water supply. In 1993, the "safe yield" was calculated based on the actual historical average supply from Bell Canyon Reservoir, plus an estimated volume to be withdrawn from the new Stonebridge groundwater well. In 2010 and 2011, the City's Safe Yield Committee defined "safe yield" as the Dry Year water supply, and estimated that supply to be 1,950 afy. The City's definition of Safe Yield is less stringent than the 2010 Water Supply Plan's definition of Safe Yield, which is the Critical Dry Year water supply. The City's definition of Safe Yield is similar to the 2010 Water Supply Plan's definition of "Sustainable Yield". In general, the 2010 Water Supply Plan defines the Sustainable Yield as the long-term sustainable yield considering carryover storage under various hydrologic conditions. The City has selected the Dry Year hydrologic condition (90 percent exceedence) as the Safe Yield of the water supply.

4.1.1 Water Supply Strategy Concepts

The water supply strategies discussed in the 2010 Water Supply Plan and updated below present several points on a continuum between low water conservation action plans combined with more groundwater use than current practice, and high water conservation action plans combined with lower groundwater use than current practice. In addition, in response to the Safe Yield Committee's recommendation that development be restricted when the City's total water demand exceeds 1,950 afy, an additional point on the continuum limiting water demands to 1,950 afy is discussed.

The City can either select the amount of water conservation it will require the public to implement and determine the resulting groundwater use necessary to meet demands, or choose the level of desired groundwater pumping and determine the resulting required water conservation. Additional strategies that incorporate increased or decreased surface water supplies are not being considered at this time. Four concept-level water supply strategies are suggested for discussion purposes, plus the new definition of Safe Yield of 1,950 afy is included as a fifth strategy. Two of the strategies are "bookend" strategies that minimize (Strategy 1) or maximize (Strategy 4) water conservation efforts, but without changing the "look and feel" of the St. Helena landscape. These strategies have been analyzed for both the ***Likely Buildout Scenario*** and the ***Full Buildout Scenario***. Additional groundwater use or much more aggressive water conservation programs would be required under the ***Full Buildout Scenario***.

Strategy 1: Minimize Water Conservation (results in an average long-term groundwater pumping of 650 afy):

The first strategy would be to continue current City conservation activities and not initiate any new long-term water conservation programs. Therefore, to meet demands, the annual groundwater quantity pumped would have to be increased to eliminate Normal Year supply deficits for each analyzed buildout scenario. This strategy would require a total potable water supply of 2,350 afy in Normal Years for the ***Likely Buildout Scenario*** and 2,600 afy in Normal Years for the ***Full Buildout Scenario*** (see Tables 4-2 and 4-5 respectively).

Strategy 2: Hold Groundwater to Historical Average of 450 afy:

A second strategy would be to hold average groundwater use to the current (10 year average) groundwater use of 450 afy. This strategy would require a total potable water supply of 2,043 afy in Normal Years for the ***Likely Buildout Scenario*** and 2,005 afy in Normal Years for the ***Full Buildout Scenario*** (see Tables 4-2 and 4-5 respectively). Water conservation would be required under either buildout scenario, but less conservation would be required for the ***Likely Buildout Scenario*** than for the ***Full Buildout Scenario***.

Strategy 3: Hold Supply to 2008 Levels (results in a long-term average groundwater pumping of 481 afy):

A third strategy would be to initiate sufficient water conservation programs to keep the total potable water supply/demand to current (2008) levels (and keep each supply component at 2008 levels). This strategy would require a total potable water supply of 2,080 afy in Normal Years for both buildout scenarios. Water conservation would be required under either buildout scenario, but less conservation would be required for the ***Likely Buildout Scenario*** than for the ***Full Buildout Scenario*** (see Tables 4-2 and 4-5 respectively).

Strategy 4: Maximize Water Conservation (results in a long-term average groundwater pumping of 251 afy):

A fourth strategy would be to initiate sufficient water conservation programs to reduce the total potable water demand to the projected Normal Year surface water supply of 1,800 afy (based on the 2010 Normal Year water supply without using groundwater), thereby minimizing groundwater use. Although included in the summary tables, this strategy is not considered achievable for the ***Full Buildout Scenario,*** because it would require severe changes to the City landscape due to the extensive conservation and demand management programs that would have to be adopted and implemented to reduce demands to the available supplies without the use of groundwater (see Tables 4-2 and 4-5 respectively).

Strategy 5: Hold Water Supply to 1,950 afy, and keep the long-term average groundwater pumping to 450 afy:

A fifth strategy combines the concepts of some of the above strategies by limiting the total water supply to a set amount, similar to Strategy 3 and Strategy 4, except the volume is 1,950 afy instead of 2,080 afy (Strategy 3) or 1,800 afy (Strategy 4). Strategy 5 also requires the long-term groundwater pumping to not exceed the long-term historical average of 450 afy (as in Strategy 2). Although included in the summary tables, this strategy is not considered achievable for the ***Full Buildout Scenario,*** because it would require severe changes to the City landscape due to the extensive conservation and demand management programs that would have to be adopted and implemented to reduce demands to the available supplies without the use of groundwater (see Tables 4-2 and 4-5 respectively).

To develop a weighted average use of each water supply source under each of the water supply strategies over a variety of hydrologic conditions, West Yost applied the estimated frequency of occurrence of each hydrologic condition, discussed in Section 2 and shown in Table 4-1 (Table 4-1 from 2010 Water Supply Plan), to the five water supply strategies discussed above.

Table 4-1. Historical Frequency of Hydrologic Conditions (Table 4-1 in 2010 Water Supply Plan)

Hydrologic Condition	Exceedence, percent[a]	Frequency of Occurrence, percent[b]
Wet Year	40	40
Normal Year	60	20
Below Normal Year	82	22
Dry Year	90	8
Critical Dry Year	100	10
	Total	100

[a] Percent of the years that would have more precipitation than the hydrologic condition.
[b] To calculate a weighted average of annual groundwater use, any year drier than a "Dry Year", for example, is assumed to be a "Critically Dry Year" for planning purposes.

The impact of the City's Water Shortage Emergency Phases was also taken into consideration when estimating the weighted average use of each water supply source. As shown in Section 1 (Table 1-3 and Table 1-4), under the strictest Water Shortage Emergency Phases, the projected short-term water conservation measures are estimated to reduce potable water demand to less than 1,489 afy and 1,638 afy under the ***Likely Buildout Scenario*** and ***Full Buildout Scenario***, respectively.

4.1.2 Likely Buildout Scenario

The required water supply, long-term water conservation measures, and short-term demand reduction measures necessary to eliminate projected water supply deficits at buildout of the ***Likely Buildout Scenario*** are discussed in Section 4.1.2 of the 2010 Water Supply Study and updated below. **Each scenario assumes complete removal of the projected water supply deficit that was identified in Section 3.**

The Normal Year water supply and required long-term water conservation for 2030 for the five water supply strategies under the ***Likely Buildout Scenario*** are summarized in Table 4-2.

Table 4-2. Possible Normal Year Water Supply Strategies, Year 2030 Likely Buildout Scenarios, acre-feet per year[a] (Modified from Table 4-2 of 2010 Water Supply Plan)

Water Supply	Strategy 1A: Minimize Required Water Conservation (Likely)	Strategy 2A: Hold Groundwater Use to Historical Average	Strategy 3A: Hold Supply to 2008 Levels	Strategy 4A: Maximize Required Water Conservation	Strategy 5A: Hold Supply to 1,950 afy
Bell Canyon Reservoir	1,000	1,000	1,000	1,000	1,000
Napa Water Agreement	600	600	600	600	600
Groundwater	550	443	480	200	350
Total Potable Water Supply/Demand	**2,350**	**2,043**	**2,080**	**1,800**	**1,950**
Required Long-Term Water Conservation[b]	—	277	243	495	360

[a] See Section 4.1.1 for a discussion of each strategy.
[b] Required reduction in Metered Potable Water Demand, reduction in total water demand would include UAF water.

As the City initiates more stringent long-term water conservation measures, the ability to reduce water demand under short-term drought conditions is lessened considerably, a phenomenon known as "demand hardening." Applying the impact of the Water Shortage Emergency Phases shown in Table 1-3 to the five water supply strategies shown in Table 4-2 yields the projected required total potable water supply for the five water supply strategies under several hydrologic conditions shown in Table 4-3.

Table 4-3. Projected Required Potable Water Supply for Five Water Supply Strategies under Various Hydrologic Conditions, Year 2030 Likely Buildout Scenario, acre-feet per year[a] (Modified from Table 4-3 of 2010 Water Supply Plan)

Water Supply Strategy	Wet Year (40 percent exceedence) No Water Shortage Emergency	Normal Year (60 percent exceedence) No Water Shortage Emergency	Below Normal Year (82 percent exceedence) Phase I WSE	Dry Year (90 percent exceedence) Phase II WSE	Critical Dry Year (100 percent exceedence) Phase III WSE
Strategy 1A: Minimize Required Water Conservation (Likely)[b]	2,350	2,350	2,115	1,763	1,481
Strategy 2A: Hold Groundwater Use to Historical Average[c]	2,043	2,043	2,043	1,763	1,481
Strategy 3A: Hold Supply to 2010 Levels[c]	2,080	2,080	2,080	1,763	1,481
Strategy 4A: Maximize Required Water Conservation[c]	1,800	1,800	1,800	1,763	1,481
Strategy 5A: Hold Water Supply to 1,950 AFY[d]	1,950	1,950	1,950	1,950	1,950

[a] Values shown are the Normal Year water demands subjected to the City's codified water shortage emergency phase cut backs.
[b] See Table 1-10.
[c] Values are the lesser of Normal Year values in Table 4-2 or the Minimize Required Water Conservation (Likely) values in this table.
[d] As shown in Table 4-4, short-term demand reduction measures (aka Water Shortage Emergency Phases) are not necessary under this scenario.

The values from Table 4-3 were multiplied by the estimated Frequency of Occurrence in Table 4-1 , to develop weighted average water supply for each water supply/demand Strategy. The resulting estimated weighted average use of each water supply source, the required long-term water conservation, and the required short-term water conservation for the five water supply strategies is shown in Table 4-4.

Table 4-4. Weighted Average Water Supply for Five Water Supply Strategies over Several Hydrologic Conditions, Year 2030 Likely Buildout Scenario, acre-feet per year[a] (Modified from Table 4-4 of 2010 Water Supply Plan)

Water Supply	Strategy 1A: Minimize Required Water Conservation	Strategy 2A: Hold Groundwater Use to Historical Average	Strategy 3A: Hold Supply to 2008 Levels	Strategy 4A: Maximize Required Water Conservation	Strategy 5A: Hold Supply to 1,950 afy
Bell Canyon Reservoir	914	914	914	914	900
Napa Water Agreement	600	600	600	600	600
Groundwater Use	650	450	481	251	450
Total Weighted Average Water Supply	**2,164**	**1,964**	**1,995**	**1,765**	**1,950**
Long-Term Water Conservation[b]	—	277	243	495	360
Short-Term Demand Reduction Measures[c]	167	71	77	31	—[d]

[a] Assumes frequency of occurrence of hydrologic conditions shown in Table 3-8.
[b] Table 4-2.
[c] Weighted average reduction in total metered potable water demand based on a comparison of supply and demand for each hydrologic condition, and each water supply/demand strategy.
[d] No short-term demand management measures (aka Water Shortage Emergency Phases) are required; however, groundwater pumping during a Critically Dry Year would be 850 acre-feet.

The projected water supply under Strategy 5A, which is the City's preferred policy based on the "Safe Yield" definition of 1,950 afy, is shown in Table 4-4A for several hydrological conditions.

Table 4-4A. Calculation of Weighted Average Water Supply for Water Supply Strategy 5A over Several Hydrologic Conditions, Year 2030 Likely Buildout Scenario, acre-feet per year[a]

Water Supply	Bell Canyon Reservoir	Napa Water Agreement	Groundwater Use	Total Water Supply	Percent of Weighted Average
Wet Year (40 percent exceedence)	1,065	600	285	1,950	40
Normal Year (60 percent exceedence)	1,000	600	350	1,950	20
Below Normal Year (82 percent exceedence)	800	600	550	1,950	22
Dry Year (90 percent exceedence)	600	600	750	1,950	8
Critical Dry Year (100 percent exceedence)	500	600	850	1,950	10
Long-term Weighted Average	900	600	450	1,950	100

[a] Assumes frequency of occurrence of hydrologic conditions shown in Table 3-8.

The recent historical average groundwater use has been approximately 450 afy (2000-2009). One of the five water supply strategies discussed above (Strategy 4A) would result in a net reduction in groundwater use over the long-term, and two (Strategy 2A and Strategy 5A) are targeted to result in the same long-term average groundwater use. Strategy 5A is intended to reduce the need for Water Shortage Emergencies; however, Strategy 5A would result in long-term average groundwater use of over 23 percent of the total water supplied (450/1,950), which is in excess of the current City policy of limiting groundwater supply to 20 percent of the total supply except during a Phase II or greater Water Shortage Emergency.

4.1.3 Full Buildout Scenario

The required water supply, long-term water conservation measures, and short-term demand reduction measures necessary to eliminate projected water supply deficits at buildout of the ***Full Buildout Scenario*** are discussed below. **Each scenario assumes complete removal of the projected water supply deficit that was identified in Section 3.**

The Normal Year water supply and required long-term water conservation for 2030 for the five water supply strategies under the ***Full Buildout Scenario*** are summarized in Table 4-5.

Table 4-5. Possible Normal Year Water Supply Strategies, Year 2030 Full Buildout Scenario, acre-feet per year[a] (Modified from Table 4-5 of 2010 Water Supply Plan)

Water Supply	Strategy 1B: Minimize Required Water Conservation (Full)	Strategy 2B: Hold Groundwater Use to Historical Average	Strategy 3B: Hold Supply to 2008 Levels	Strategy 4B: Maximize Required Water Conservation	Strategy 5B: Hold Water Supply to 1,950 afy
Bell Canyon Reservoir	1,000	1,000	1,000	1,000	1,000
Napa Water Agreement	600	600	600	600	600
Groundwater	1,000	405	480	200	350
Total Potable Water Supply/Demand	**2,600**	2,005	**2,080**	**1,800**	**1,950**
Required Long-Term Water Conservation[b]	—	537[c]	468	720[c]	585[c]

[a] See Section 4.1.1 for a discussion of each strategy.
[b] Required reduction in Metered Potable Water Demand, reduction in total water demand would include unaccounted for water.
[c] This level of long-term water conservation is not considered to be achievable without mandating harsh changes to the City landscaping and other water use policies.

As the City initiates more stringent long-term water conservation measures, the ability to reduce water demand under short-term drought conditions is lessened considerably, a phenomenon known as "demand hardening". Applying the impact of the Water Shortage Emergency Phases shown in Table 1-4 to the five water supply strategies shown in Table 4-5 yields the projected total potable water demand for the five water supply strategies under several hydrologic conditions shown in Table 4-6.

Table 4-6. Projected Potable Water Supply for Five Water Supply Strategies under Various Hydrologic Conditions, Year 2030 Full Buildout Scenario, acre-feet[a]
(Modified from Table 4-6 of 2010 Water Supply Plan)

Water Supply Strategy	Wet Year (40 percent exceedence) No Water Shortage Emergency	Normal Year (60 percent exceedence) No Water Shortage Emergency	Below Normal Year (82 percent exceedence) Phase I WSE	Dry Year (90 percent exceedence) Phase II WSE	Critical Dry Year (100 percent exceedence) Phase III WSE
Minimize Required Water Conservation (Full)[b]	2,600	2,600	2,340	1,950	1,638
Hold Groundwater Use to Historical Average[c]	2,005	2,005	2,005	1,950	1,638
Hold Supply to 2008 Levels[c]	2,080	2,080	2,080	1,950	1,638
Maximize Required Water Conservation[c]	1,800	1,800	1,800	1,800	1,638
Hold Supply to 1,950 AFY[c]	1,950	1,950	1,950	1,950	1,950

[a] Values shown are the Normal Year water demands subjected to the City's codified water shortage emergency phase cut backs.
[b] See Table 1-4.
[c] Values are the lesser of Normal Year values in Table 4-5 or the Minimize Required Water Conservation (Full) values in this table.

The values from Table 4-6 were multiplied by the estimated Frequency of Occurrence in Table 4-1 to develop weighted average water supply for each water supply/demand Strategy. The resulting estimated weighted average use of each water supply source, the required long-term water conservation, and the required short-term water conservation for the five water supply strategies is shown in Table 4-7.

Table 4-7. Weighted Average Water Supply for Five Water Supply Strategies over Several Hydrologic Conditions, Year 2030 Full Buildout Scenario, acre-feet per year[a] (Modified from Table 4-7 of 2010 Water Supply Plan)

Water Supply	Strategy 1B: Minimize Required Water Conservation (Full)	Strategy 2B: Hold Groundwater Use to Historical Average	Strategy 3B: Hold Supply to 2008 Levels	Strategy 4B: Maximize Required Water Conservation	Strategy 5B: Hold Supply to 1,950 afy
Bell Canyon Reservoir	914	914	914	914	900
Napa Water Agreement	600	600	600	600	600
Groundwater Use	881	450	511	270	450
Total Weighted Average Water Supply	**2,395**	**1,964**	**2,025**	**1,784**	**1,950**
Long-Term Water Conservation[b]	—	535[c]	468	720[c]	585[c]
Short-Term Demand Reduction Measures[d]	185	37	49	15	—(d)

[a] Assumes frequency of occurrence of hydrologic conditions shown in Table 3-8.
[b] Table 4-2.
[c] This level of long-term water conservation is not considered to be achievable without mandating extremely harsh changes to the City landscaping.
[d] Weighted average reduction in total metered potable water demand based on a comparison of supply and demand for each hydrologic condition, and each water supply/demand strategy.
[e] No short-term demand management measures (aka Water Shortage Emergency Phases) are required; however, groundwater pumping during a Critically Dry Year would be 850 acre-feet.

The recent historical average groundwater use has been approximately 450 afy (2000-2009). One of the five water supply strategies discussed above (Strategy 4B) would result in a net reduction in groundwater use over the long-term, and two (Strategy 2B and Strategy 5B) are targeted to result in the same long-term average groundwater use.

As with the ***Likely Buildout Scenario***, Strategy 5B in the ***Full Buildout Scenario*** results in a lower groundwater use than in recent history, assuming full use of Bell Canyon Reservoir.

Recommended short term actions are described in Section 5.

5.1 CONCLUSIONS AND RECOMMENDATIONS

The comparison of the projected water demand to the projected water supply, described above, indicates that the City is currently facing water supply shortages under the current operations unless the water demand and water supply are brought into balance. The City policy makers will have to decide what combination of water conservation, acquiring additional surface water from the City of Napa (if possible), expansion of Bell Canyon Reservoir (very expensive), and groundwater use City customers are willing to accept, achieve, and finance to balance existing and future supplies and demands. Under the ***Likely Buildout Scenario***, required water conservation ranges from zero (Strategy 1A) to 495 afy (Strategy 4A). Water conservation of approximately 277 afy under Strategy 2A and 360 afy under Strategy 5A would be required to prevent an increase in groundwater use over the historical average use of 450 afy. The City's current definition of "safe yield" targets Strategy 5A (limiting groundwater pumpage to the long-term historical maximum and limiting total water demand to 1,950 afy) for water supply planning purposes. These conservation measures were previously identified in 2007 and documented in the 2010 Water Supply Study.

All strategies assume the City can pump sufficient groundwater during dry years and fully draw down Bell Canyon Reservoir when required operationally to serve the reduced demands, consistent with the City's Water Shortage Emergency Phases. To accomplish this, the City must increase its seasonal groundwater peaking capacity.

The top recommended actions that the City must approve in the short-term if conservation is to be used to reduce demands and to prevent an increase in groundwater use are:

- Hire a Water Conservation Coordinator;
- Modify and adopt a water rate structure that will ensure adequate program funding while encouraging water conservation by accounting for reduced water consumption in the base water rate and providing incentives to reduce water use; and/or
- Increase groundwater production reliability and peaking capacity.

The City's desire to keep total water supply to within the current definition of "safe yield" of 1,950 afy is reflected in Strategy 5A and Strategy 5B, discussed above. Strategy 5A limits long-term average groundwater pumping to the historical average of 450 afy and requires 360 afy of water conservation.

The long-term water conservation of 360 afy required to keep total supply less than 1,950 afy under the ***Likely Buildout Scenario*** is less than the value of 495 afy, which was identified in 2007 and in 2010 as the likely maximum achievable water conservation without changing the look and feel of St. Helena.

The long-term water conservation of 585 afy required to keep total supply less than 1,950 afy under the ***Full Buildout Scenario*** is greater than the value of 495 afy, which was identified in 2007 and in 2010 as the likely maximum achievable water conservation without changing the look and feel of St. Helena. Therefore, the City would either have to adopt a water conservation program that alters the look and feel of St. Helena, identified as not acceptable by City Council in 2007, or pump groundwater in excess of the long-term average of 450 afy, which was also identified as unacceptable by City Council.

The long-term groundwater pumping and required water conservation of the ten water supply strategies are shown in Table 4-8.

As indicated above, the City would find it extremely difficult to implement any long-term water conservation programs without a full time water conservation coordinator on staff, and an appropriate water rate structure. The City's recently adopted water rate structure (effective July 2011), with steeper tiered rates, will likely encourage some water conservation. Whether the water conservation accomplished will be persist or will be sufficient to achieve the ***Likely Buildout Scenario*** remains to be seen. A water budget-based rate structure will likely be needed to achieve the water conservation goals identified above. Such a rate structure requires the assignment of water budgets for every water customer, a task that almost certainly requires a Water Conservation Coordinator.

The City should explore any opportunity to increase the production capacity (and volume, if possible) of the supplemental water supplies available from the City of Napa, and increase its groundwater pumping capacity to provide increased seasonal reliability.

Table 4-8. Weighted Average Water Supply for Ten Water Supply Strategies over Several Hydrologic Conditions, Year 2030, acre-feet per year (From Tables 4-4 and 4-7 of this TM)

Water Supply	Total Weighted Average Water Supply	Weighted Average Groundwater Pumpage	Required Long-Term Water Conservation(b)	Notes
Likely Buildout Scenario (Total Projected Demand of 2,350 acre-feet per year)				
Strategy 1A: Minimize Required Water Conservation (Likely)	2,164	650	—	Requires groundwater pumping in excess of long-term average Does not require water conservation
Strategy 2A: Hold Groundwater Use to Historical Average	1 964	450	277	Same groundwater pumping as historical average. Water conservation of 13 percent of projected demand.
Strategy 3A: Hold Supply to 2008 Levels	1 995	481	243	Slightly more groundwater pumping than historical average. Water conservation of 12 percent of projected demand.
Strategy 4A: Maximize Required Water Conservation	1 765	251	495	Groundwater pumping would be less than long-term average. Water conservation at perceived maximum (23 percent of projected demand) without affecting look and feel of City.
Strategy 5A: Hold Supply to 1,950 afy	1 950	450	360	Same groundwater pumping as historical average. Water conservation of 17 percent of projected demand.
Full Buildout Scenario (Total Projected Demand of 2,600 acre-feet per year)				
Strategy 1B: Minimize Required Water Conservation (Full)	2,395	881	—	Requires groundwater pumping in excess of long-term average. Does not require water conservation.
Strategy 2B: Hold Groundwater Use to Historical Average	1,964	450	535	Same groundwater pumping as historical average. Water conservation of 23 percent of projected demand (not considered achievable without affecting look and feel of City).
Strategy 3B: Hold Supply to 2008 Levels	2,025	511	468	Slightly more groundwater pumping than historical average. Water conservation of 20 percent of projected demand.
Strategy 4B: Maximize Required Water Conservation	1,784	270	720	Groundwater pumping would be less than long-term average. Water conservation of 31 percent of projected demand (not considered achievable without affecting look and feel of City).
Strategy 5B: Hold Supply to 1,950 afy	1 950	450	585	Same groundwater pumping as historical average. Water conservation of 25 percent of projected demand (not considered achievable without affecting look and feel of City).

EPA
United States
Environmental Protection
Agency

EPA 841-F-03-003

Protecting Water Quality *from* URBAN RUNOFF

Clean Water Is Everybody's Business

In urban and suburban areas, much of the land surface is covered by buildings and pavement, which do not allow rain and snowmelt to soak into the ground. Instead, most developed areas rely on storm drains to carry large amounts of runoff from roofs and paved areas to nearby waterways. The stormwater runoff carries pollutants such as oil, dirt, chemicals, and lawn fertilizers directly to streams and rivers, where they seriously harm water quality. To protect surface water quality and groundwater resources, development should be designed and built to minimize increases in runoff.

The most recent National Water Quality Inventory reports that runoff from urbanized areas is the leading source of water quality impairments to surveyed estuaries and the third-largest source of impairments to surveyed lakes.

Did you know that because of impervious surfaces like pavement and rooftops, a typical city block generates more than 5 times more runoff than a woodland area of the same size?

How Urbanized Areas Affect Water Quality

Increased Runoff

The porous and varied terrain of natural landscapes like forests, wetlands, and grasslands traps rainwater and snowmelt and allows them to filter slowly into the ground. In contrast, impervious (nonporous) surfaces like roads, parking lots, and rooftops prevent rain and snowmelt from infiltrating, or soaking, into the ground. Most of the rainfall and snowmelt remains above the surface, where it runs off rapidly in unnaturally large amounts.

Storm sewer systems concentrate runoff into smooth, straight conduits. This runoff gathers speed and erosional power as it travels underground. When this runoff leaves the storm drains and empties into a stream, its excessive volume and power blast out streambanks, damaging streamside vegetation and wiping out aquatic habitat. These increased storm flows carry sediment loads from construction sites and other denuded surfaces and eroded streambanks. They often carry higher water temperatures from streets, roof tops, and parking lots, which are harmful to the health and reproduction of aquatic life.

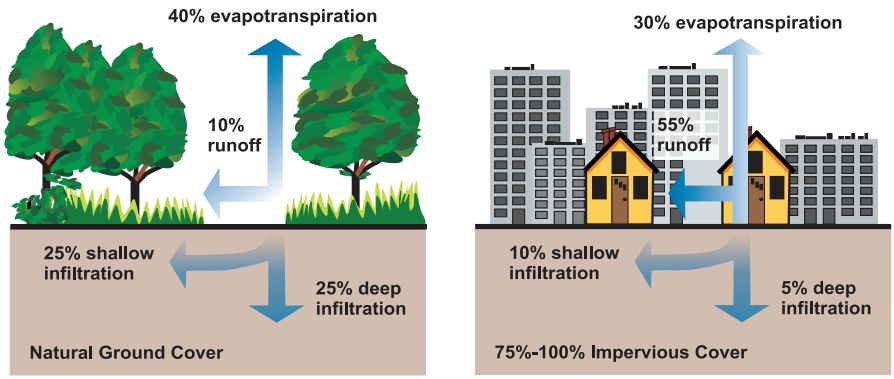
The loss of infiltration from urbanization may also cause profound groundwater changes. Although urbanization leads to great increases in flooding during and immediately after wet weather, in many instances it results in lower stream flows during dry weather. Many native fish and other aquatic life cannot survive when these conditions prevail.

Increased Pollutant Loads

Urbanization increases the variety and amount of pollutants carried into streams, rivers, and lakes. The pollutants include:

- Sediment
- Oil, grease, and toxic chemicals from motor vehicles
- Pesticides and nutrients from lawns and gardens
- Viruses, bacteria, and nutrients from pet waste and failing septic systems
- Road salts
- Heavy metals from roof shingles, motor vehicles, and other sources
- Thermal pollution from dark impervious surfaces such as streets and rooftops

These pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water supplies, and make recreational areas unsafe and unpleasant.



Relationship between impervious cover and surface runoff. Impervious cover in a watershed results in increased surface runoff. As little as 10 percent impervious cover in a watershed can result in stream degradation.

Managing Urban Runoff

What Homeowners Can Do

To decrease polluted runoff from paved surfaces, households can develop alternatives to areas traditionally covered by impervious surfaces. Porous pavement materials are available for driveways and sidewalks, and native vegetation and mulch can replace high maintenance grass lawns. Homeowners can use fertilizers sparingly and sweep driveways, sidewalks, and roads instead of using a hose. Instead of disposing of yard waste, they can use the materials to start a compost pile. And homeowners can learn to use Integrated Pest Management (IPM) to reduce dependence on harmful pesticides.

In addition, households can prevent polluted runoff by picking up after pets and using, storing, and disposing of chemicals properly. Drivers should check their cars for leaks and recycle their motor oil and antifreeze when these fluids are changed. Drivers can also avoid impacts from car wash runoff (e.g., detergents, grime, etc.) by using car wash facilities that do not generate runoff. Households served by septic systems should have them professionally inspected and pumped every 3 to 5 years. They should also practice water conservation measures to extend the life of their septic systems.

Controlling Impacts from New Development

Developers and city planners should attempt to control the volume of runoff from new development by using low impact development, structural controls, and pollution prevention strategies. Low impact development includes measures that conserve natural areas (particularly sensitive hydrologic areas like riparian buffers and infiltrable soils); reduce development impacts; and reduce site runoff rates by maximizing surface roughness, infiltration opportunities, and flow paths.

Controlling Impacts from Existing Development

Controlling runoff from existing urban areas is often more costly than controlling runoff from new developments. Economic efficiencies are often realized through approaches that target "hot spots" of runoff pollution or have multiple benefits, such as high-efficiency street sweeping (which addresses aesthetics, road safety, and water quality). Urban planners and others responsible for managing urban and suburban areas can first identify and implement pollution prevention strategies and examine source control opportunities. They should seek out priority pollutant reduction opportunities, then protect natural areas that help control runoff, and finally begin ecological restoration and retrofit activities to clean up degraded water bodies. Local governments are encouraged to take lead roles in public education efforts through public signage, storm drain marking, pollution prevention outreach campaigns, and partnerships with citizen groups and businesses. Citizens can help prioritize the clean-up strategies, volunteer to become involved in restoration efforts, and mark storm drains with approved "don't dump" messages.



Related Publications

Turn Your Home into a Stormwater Pollution Solution!
www.epa.gov/nps

This web site links to an EPA homeowner's guide to healthy habits for clean water that provides tips for better vehicle and garage care, lawn and garden techniques, home improvement, pet care, and more.

National Management Measures to Control Nonpoint Source Pollution from Urban Areas
www.epa.gov/owow/nps/urbanmm

This technical guidance and reference document is useful to local, state, and tribal managers in implementing management programs for polluted runoff. Contains information on the best available, economically achievable means of reducing pollution of surface waters and groundwater from urban areas.

Onsite Wastewater Treatment System Resources
www.epa.gov/owm/onsite

This web site contains the latest brochures and other resources from EPA for managing onsite wastewater treatment systems (OWTS) such as conventional septic systems and alternative decentralized systems. These resources provide basic information to help individual homeowners, as well as detailed, up-to-date technical guidance of interest to local and state health departments.

Low Impact Development Center
www.lowimpactdevelopment.org

This center provides information on protecting the environment and water resources through integrated site design techniques that are intended to replicate preexisting hydrologic site conditions.

Stormwater Manager's Resource Center (SMRC)
www.stormwatercenter.net

Created and maintained by the Center for Watershed Protection, this resource center is designed specifically for stormwater practitioners, local government officials, and others that need technical assistance on stormwater management issues.

Strategies: Community Responses to Runoff Pollution
www.nrdc.org/water/pollution/storm/stoinx.asp

The Natural Resources Defense Council developed this interactive web document to explore some of the most effective strategies that communities are using around the nation to control urban runoff pollution. The document is also available in print form and as an interactive CD-ROM.

For More Information

U.S. Environmental Protection Agency
Nonpoint Source Control Branch (4503T)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
www.epa.gov/nps

February 2003

Response to Response to Comments: Prepared by John Milliken

Inadequate Analysis and Flawed Findings in FEIR Section I: Hydrology and Water Quality

The less than significant finding (LTS) in the FEIR concerning water quality and potential harm to the habitat of the endangered species in the adjacent Napa River is completely without merit. The EIR insufficiently identifies and fails to provide a level of analysis of the significant impacts of polluted runoff, increased storm water volumes, and diminished re-charging of the underlying aquifer (affecting summer stream flows) that will be caused by the project. Not only are the significance of these impacts ignored, corresponding mitigations to lessen their effects are not proposed either.

The credibility of the entire EIR process is in question if you agree with the presumption that an 87 unit development, located in a flood plain, with acres and acres of impervious surfaces (roads, driveways, parking lots, walkways, roofs, patios, utility pads, etc.), will not have any significant impact on water quality, groundwater recharging, or the amount of runoff generated by the project. The likelihood of significant impacts to water quality and harm to protected species is even more pronounced if the cumulative effects over many years are considered. Not identifying cumulative impacts to hydrology and water quality is another serious failure in this FEIR.

Instead of identifying significant impacts and proposing mitigations, the FEIR spontaneously claims that, *"it was abundantly clear that potential impacts to aquatic resources that could potentially result from water quality or runoff flow caused by the project would be insignificant and, therefore, not a significant impact to aquatic resources on, adjacent to, or downstream of the project, including to fish, fish habitat, or fish movement."* This claim was made in spite of a 6 page report to the contrary prepared by a fisheries biologist expert, Jeff Hagar, who was commenting on the inadequacies of the DEIR. Instead of heeding Mr. Hagar's meticulously researched and documented analysis, the FEIR took a pass on his findings and deflected them all away by claiming that the project will have to apply for an EPA NPEDS (National Pollutant Discharge Elimination System) permit and this will mitigate everything. Interestingly, Table III-1, Required Discretionary and Ministerial Permits and Approvals, from the DEIR does not even list a NPEDS permit.

A General NPED Construction Permit's scope applies only to storm water runoff during a project's construction phase and is an important protection for water quality. However, there are no impacts identified in the FEIR concerning Hydrology and Water Quality post construction singularly or cumulatively. And if there are no impacts identified, there are certainly no mitigations offered either. As it turns out, this is a common theme of both the DEIR and FEIR. The analysis of the DEIR was pre-occupied with the environmental impacts of the construction phase of the project and tended to ignore/neglect the post construction and cumulative impacts of the project, another example of improper CEQA mandated analysis.

So what types of mitigations could have been proposed by a proper analysis? Quite a few, if you had just perused the EPA's brochure on the impacts of Urban Development Guidelines. Somehow this readily available information was ignored or not even considered in both the DEIR and FEIR. Which leads one to ponder the competence of the firm that was hired to prepare both of these reports.

Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the

ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Urbanization increases the variety and amount of pollutants carried into our nation's waters. In urban and suburban areas, much of the land surface is covered by buildings, pavement and compacted landscapes. These surfaces do not allow rain and snow melt to soak into the ground which greatly increases the volume and velocity of stormwater runoff. In addition to these habitat-destroying impacts, pollutants from urban runoff include:

- Sediment
- Oil, grease and toxic chemicals from motor vehicles
- Pesticides and nutrients from lawns and gardens
- Viruses, bacteria and nutrients from pet waste and failing septic systems
- Road salts
- Heavy metals from roof shingles, motor vehicles and other sources
- Thermal pollution from impervious surfaces such as streets and rooftops

These pollutants can harm fish and wildlife populations, kill native vegetation, foul drinking water, and make recreational areas unsafe and unpleasant

Controlling Impacts from New Development

Developers and city planners should attempt to control the volume of runoff from new development by using low impact development, structural controls, and pollution prevention strategies. Low impact development includes measures that conserve natural areas (particularly sensitive hydrologic areas like riparian buffers and infiltrable soils); reduce development impacts; and reduce site runoff rates by maximizing surface roughness, infiltration opportunities, and flow paths.

As stated in the DEIR, permit approval is not a substitute for thorough and complete environmental review. From the DEIR:

E. DISCRETIONARY ACTIONS

It is anticipated that this EIR will provide environmental review for all discretionary approvals and actions necessary for the proposed project. A number of permits and approvals would be required before the development of the project could proceed. As Lead Agency for the proposed project, the City of St. Helena would be responsible for the majority of approvals required for development. A list of required permits and approvals that may be required by the City and other agencies includes, without limitation, those provided in Table III-1.

The FEIR does NOT provide environmental review for the discretionary approval and actions necessary for a NPEDS permit.

Given that the project site is located on the floodway of a river that has been designated as impaired for endangered fish species, a thorough EIR analysis, that strictly follows CEQA guidelines, is even more of an imperative. It would surely be a mistake to rely on solely NPEDS permitting standards in such an environmentally sensitive area. The project site is so close to the impaired river that options for improving water quality are extremely limited. Quite simply, polluted high sediment runoff from the acres and acres of impervious surfaces will enter the gravity operated storm water basin and then exit directly into the impaired river. Although it is predicted that storm water handling facilities will have the capacity to handle storm water flows from the project, there is no denying that the level of water pollutants and quantity of runoff into the river from the project will be far greater than pre-project levels. The DEIR refers to studies of sediment TMDL being developed with the goal of reducing sediment discharges into sensitive fish spawning areas. However, these studies are ongoing and TMDLs have not yet been established. Until they are, the FEIR should not assume that the issuing of a NPEDS permit will reduce project water quality to less than significant. This is best summed up by the fisheries biologist, Jeff Hagar:

> The City needs to analyze the contribution of this project to cumulative effects of ongoing development and past habitat degradation. The effects of this project on habitat conditions in the Napa River occur within the context of efforts by multiple entities to reverse these trends and adverse effects on protected steelhead should be mitigated to less than significant levels.

This comment brings up another shortcoming of the FEIR, there are no comments in regard to the DEIR from other government and private stakeholders working to restore endangered fish habitat just south of the project. Should not there have been comments solicited from California Coastal Conservancy, U.S. Army Corps of Engineers, Napa County Resource Conservation District, California Fish and Game, California Water Quality Control Board, and a group of 23 private property owners with property that borders the Rutherford Reach, the 4.5 mile stretch of the Napa River between St. Helena and Oakville? Were these entities ever contacted and asked to comment on the DEIR and allowed to express concerns about the projects impacts on their environmental restoration efforts just to the south?

As the lead agency responsible for producing an EIR that will adequately inform government decision makers as well as the public, the City of St. Helena should instruct the EIR consulting firm to re-evaluate the preparation of the Hunter Development EIR and recirculate a document that meets the standards established by CEQA. The deficiencies of the FEIR concerning Hydrology and Water Quality documented above are just one of the many areas of this FEIR that provide inadequate and incomplete analysis of the project's impacts on environmental quality.

From: Cindy Tzafopoulos
To: Noah Housh
Subject: FW: Hunter EIR comments
Date: Thursday, April 12, 2018 4:37:06 PM

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: ann@nieman.org [mailto:ann@nieman.org]
Sent: Thursday, April 12, 2018 4:36 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>; Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Cc: ann@nieman.org
Subject: Hunter EIR comments

Hi Cindy – please add these questions to the EIR

Hope all is well. Weird weather, right? From 80 degrees to rain storms and 45 degrees. What season is this?

Cheers,
Ann

Question #1
How will this project affect the St Helena city groundwater wells at the Stonebridge locations? The project plan states it will provide all the landscaping water for 87 houses' lawns, flowers, bushes, gardens, carwashes, and other watering uses. The number could be 20-40 units higher if the project includes regulated affordable housing. Since the well is located next to the Napa River upstream from the City of St Helena wells that supply our community with water, what mapping will be conducted to determine if the aquifers are connected? If they are connected, then drawing large amounts of water from the same groundwater source needs to be assessed so it does not deplete the City wells supply. Who will conduct the mapping? How many groundwater data points will be included in any mapping exercise? Will it be a sufficient number to adequately determine that the Hunter well is on an aquifer that is separated from the city aquifer? This question must be answered accurately, because the city relies on the groundwater

from these 2 wells as a critical source of water in times of drought when Bell Canyon is depleted. (Example – the drought resulting in exposure of large portions of the bottom of the Bell Canyon reservoir.

Question #2:
The project area is in a low lying wet area on the historic floodplain for this part of the Napa River. It has flooded numerous times over the last 20-30 years. Even in non-flood years, large portions have remained wet during the summers, to the point that vine growth and production was hampered due to the wet soils. Presently, this area is covered with standing water during and after rains with water depths often 10-12 inches deep. The project will add millions of gallons (25 acre feet) of landscaping water annually to an area that has never been irrigated. Will the addition of paved surfaces, construction pads, streets and structures cause compaction of the soils/subsoils in the area? Will this cause subsidence or instability of structures in and around the project area over time? Will subsidence cause new unknown flooding issues?

Question #3:
There is an existing subsoil study on the project area that shows what is considered to be the profile of a historic pond, which is typical in areas proximal to meandering rivers. Since the area is a known liquefaction zone in an earthquake prone location, and soils of this type can be unstable, how will this affect the safety of the homes and the structural integrity of the levee in an earthquake or major flood?

From: Tim Nieman
To: Cindy Tzafopoulos; Noah Housh; Mark Prestwich
Subject: Scoping comments on Hunter EIR
Date: Thursday, April 12, 2018 1:37:08 PM

I'd like to submit the following comments for the Scoping of the Hunter EIR

Groundwater usage on the site

The estimates of historical groundwater usage on the site need to be redone. The previous EIR made some highly questionable assumptions about historical groundwater usage, leading to an estimate of pre-flood-project groundwater demand on the site of 22 AF. There are two errors in the consultant's methodology rendering this estimate much too high.

1. The consultant assumed that all of the vineyards on the site were historically irrigated. There is little need to irrigate this wet vineyard and there is no evidence that there has ever been an irrigation system on the site, so the assumption that the well was used to irrigate the entire site is unfounded. There are no remnants of piping or any other irrigation components currently. And, vintners adjacent to the site who have lived here for decades do not recall there ever being such a system. The property is adjacent to the river and is one of the wettest vineyard locations in the valley. There is little need to irrigate there. Adjacent vineyards which are updip and drier are all dry farmed. If the assumption is to be made that irrigation once existed for the entire vineyard, it is incumbent upon the consultants to prove that such a system existed.
2. The consultant assumed vineyard irrigation rates from the Oakville area, a much drier area farther from the Napa River. Even if this area was ever irrigated, Oakville irrigation rates are too high. Again, this is a wet vineyard which would need water only rarely in the driest of years, if at all.

Therefore, historical groundwater pumping on the site was likely localized, sporadic and minimal. The actual usage would be a small fraction of the 22 AF. What are the new estimates of historical production? What data are used to justify those estimates?

Impacts on the Napa River, including fish

The existing groundwater well on the site is only hundreds of feet from the Napa River. If the aquifer being accessed is at all connected to the river, then the well is drawing down from the Napa River, impacting river flows and fish habitat. What is the connection to the Napa River? How much is the impact on river flow from pumping on the site at different rates? A groundwater hydrology study should be undertaken to determine the connection to the river.

Impacts on City Groundwater Supply Wells

The existing groundwater well on the site is updip of City water supply wells and the proposed levels of use could impact City wells. Is it the same aquifer? How would pumping on the site affect groundwater levels in the City wells, at different rates? A groundwater hydrology study should be undertaken to determine if there is a connection to the City's groundwater supply wells and the potential for drawdown of those wells.

From: Vickie Bradshaw
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: Hunter EIR Scoping Comments
Date: Thursday, April 12, 2018 9:20:20 AM

Cindy-

Below are my comments regarding the scope of the Hunter EIR.

1. The EIR for the Hunter Project cannot be done until it is conclusively determined whether or not the Hunter Project qualifies for the 40% affordable housing benefits, including priority in water and sewer connections, use of prior year surplus units from the Growth Management System (GMS), etc. The reason for this is that the environmental impact is completely different if the benefits are applied to the project than if they are not applied. An example is that if the project qualifies under the inclusive housing and affordable housing ordinances, then the entire project can be completed in 2 years, according to the developer. If the project does not qualify, then the Hunter Project could take up to 10 years to complete, assuming very few, if any other houses are built in St. Helena during that timeframe because the project would be limited to the annual 9 units allowed under the GMS. It isn't hard to see that the environmental impacts are quite different under these two scenarios.

Before the EIR begins, it has to be determined if the Project qualifies for such benefits or not. This decision cannot run on parallel tracks with the EIR and then come together at the end, as Noah Housh suggested at the neighborhood scoping meeting last month. For the EIR to be accurate, the EIR consultants must know what scenario applies before the EIR begins. And, in cases like this, it does matter to CEQA if the housing is market rate or affordable because the priority benefits derived from hitting a 40% affordable housing rate under City ordinances changes that environmental analysis. In this case, it is not the affordability of the housing that affects the CEQA analysis, but the priority benefits given by the City and/or the state that changes the impact on the environment from building this project.

The prior Hunter Project EIR inappropriately assumed (without confirming) that the Hunter Project would qualify for the priority benefits stemming from the project complying with the inclusive housing and affordable housing ordinances at the 40% rate. That assumption cannot be part of the current EIR process because it likely will make the EIR inaccurate.

If the developer does not want to show to the satisfaction of the City Council that their current proposal completely meets all of the City's inclusive and affordable housing requirements to qualify for the 40% priority benefits, then the EIR should be done without giving any credit for any of those benefits before the EIR is started. At the very least this would change the environmental analysis from a two-year project to a potential ten-year project with ongoing environmental impacts.

If the EIR assumes the project will qualify for the 40% rate and if it is later determined that the current project cannot meet the inclusive housing and affordable housing ordinance requirements without resubmitting a tentative map, then the City would be in the position of looking at yet another Hunter EIR exercise. It would make more sense to make that determination now.

2. The Hunter Project EIR has to take into consideration the cumulative impacts of the 17-acre

Hunter Project, along with the 24-acres of Key Opportunity Sites (sites 1, 2, and 6 on page 134 of the Housing Element Needs Assessment), which begins about 3 blocks from the Hunter Project and extends south across Pope Street. These cumulative sites will significantly impact surrounding streets and the Pope Street bridge. Such cumulative effects will undoubtedly impact the environment and have to be taken into consideration in the Hunter Project EIR.

3. The Hunter Project EIR needs to consider the environmental impacts resulting from a potential levee failure. CA Government Code §65302(g)(2)(A)(vii-viii) requires that St. Helena include a levee failure map in its General Plan Update to show areas that would be inundated in the event of a levee failure. It will be important to have such an inundation map to show the environmental difference between the situations where the land behind the levee is undeveloped, as it is now, and the situation where the land behind the levee is covered over with asphalt and houses, which is a situation where there would be significantly less permeable land for flood waters to be absorbed. The environmental differences between these two situations would likely be significant.

Of additional environmental interest is that fact that the area closest to the Napa River where the levee is located is considered a high liquefaction susceptibility area (Figure 4.K-2 in the General Plan Update) and liquefaction is a well-known and significant cause of levee failure.

4. The EIR for the Hunter Project has to assume the project can be built out to the maximum density allowed resulting from any density bonuses provided under city ordinances and state law, even assuming the current project does not now show such a density bonus in the "deemed complete" tentative map. The current owner and/or developer could decide after an EIR is approved to sell the property and the new owners could apply for the density bonuses prior to seeking building permits. At that point it would be too late for the EIR to take into consideration the increased housing units, population, cars and other environmental impacts because the EIR would already have been completed and approved.

Thank you for your consideration, Vickie Bradshaw

Victoria Bradshaw
California Strategies, LLC
One Embarcadero, Suite 1060
San Francisco, CA 94111
(415) 705-5276

980 9th Street, Suite 2000
Sacramento, CA 95814
(916) 266-4575

From: Noah Housh
To: "Chuck Vondra"
Cc: mprestwich@cityofsthelena.com
Subject: RE: Hunter NOP Electronic Notification
Date: Wednesday, March 07, 2018 10:07:00 AM
Attachments: image001.png

Hi Chuck,

Thank you for taking the time to provide your input on the EIR and project.

City staff and project consultants will ensure that the review process fully vets the proposed project and meets all requirements of the law.

Further, I will be sure to keep you informed of all steps in the review process.

Thanks again,

NOAH HOUSH
PLANNING & COMMUNITY IMPROVEMENT DIRECTOR
City of St. Helena | Planning & Community Improvement Department
1480 Main Street | St. Helena, CA 94574
Direct: (707) 968-2659 | NHoush@cityofsthelena.org | http://cityofsthelena.org/planning

From: Chuck Vondra [mailto:chuck@com-strat.com]
Sent: Tuesday, March 06, 2018 5:35 PM
To: Noah Housh
Cc: mprestwich@cityofsthelena.com; CityCouncil
Subject: RE: Hunter NOP Electronic Notification

Hello Noah,

Thanks for hosting the meeting last week. As I mentioned at the meeting, kicking off the EIR seems very premature and a waste of time and money.

1. The applicant is still formulating and the City still reviewing the affordable housing component. How can we comment on something that is incomplete, and has not been reviewed by the city?
2. As was brought up by Planning Commissioner Grace Kistner, our municipal code requires that in order to qualify for density bonuses (without which this project will never get built) the project needs 20% AFU for sale. This will almost certainly require a revised subdivision map, and likely a brand new subdivision application. It seemed to me that the developer has not thought this project out very well as is making it up as he goes along. With this understanding

an EIR at this juncture makes no sense.

3. This project is extremely unpopular by a majority of residents and a hasty ill-planned EIR process will most certainly be vigorously challenged. Why not pause and let the developer get his plans together first, it is not fair to ask the community to weigh on a moving target.

Sincerely,

Chuck Vondra – Principal, Sr. Consultant
Bus: 707-963-5418 E-Mail Chuck@Com-Strat.com Cell: 707-815-6355
1176 Starr Avenue, St. Helena, CA 94574
www.Com-Strat.com



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From: Noah Housh [mailto:NHoush@cityofsthelena.org]
Sent: Tuesday, March 6, 2018 5:18 PM
To: Noah Housh <NHoush@cityofsthelena.org>
Subject: Hunter NOP Electronic Notification

Information Only; Please Do Not Reply All

Greetings,

At the recently held neighborhood meeting for the Hunter Residential Subdivision, you provided your email contact information indicating you would like to be notified of future project activities.

Attached please find the formal Notice of Preparation initiating the Environmental Impact Review (EIR) process for this project.

As was identified at the neighborhood meeting, a scoping meeting for the EIR is scheduled for Monday, March 12, 2018, from 6:00 – 7:30 pm at the St Helena Fire Department (1480 Main Street). This meeting will provide an opportunity for individuals to speak directly to the California Environmental Quality Act (CEQA) consultants regarding the scope of the EIR analysis.

Alternatively, if you are unable to attend this meeting, please feel free to provide your written comments to me (electronically or hard copy) any time before April 9, 2018, to ensure they are considered in the EIR analysis. My contact information is provided in the notice, and in the signature below

After the initial analysis is completed, a draft EIR will be published for a 45-day public review and

comment period, during which the public will have an additional opportunity to comment on the environmental analysis and resulting document. This is tentatively scheduled to occur in late spring or early summer, 2018.

These comments will then be used to finalize the document making modifications or expanding the analysis, as appropriate. Further, a response to each comment will be provided in the Final draft EIR for the project, which will then be taken before the Planning Commission for review and action at a public hearing tentatively proposed to be held in late summer or early fall of 2018.

Please forward this message to anyone you feel may be interested in the Hunter Residential Subdivision EIR process. Thank you for your attention to this matter.

NOAH HOUSH
PLANNING & COMMUNITY IMPROVEMENT DIRECTOR
City of St. Helena | Planning & Community Improvement Department
1480 Main Street | St. Helena, CA 94574
Direct: (707) 968-2659 | NHoush@cityofsthelena.org | http://cityofsthelena.org/planning

From:	Cindy Tzafopoulos
To:	Noah Housh
Subject:	FW:
Date:	Thursday, April 12, 2018 4:20:13 PM
Attachments:	541c_93_GP_Policies_9.4.4._&_9.4.5.png image001.png image002.png image004.png image005.png image006.png

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Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: Wendell Laidley [mailto:wlaidley3@gmail.com]
Sent: Thursday, April 12, 2018 4:17 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject:

Cindy,

The first photos are showing up now. Can you tell me if you receive this with the first 7 photos in it?

Just hit reply if you would. Thanks.

Wendell

> Dear Cindy,
>
> Please consider these comments regarding the scope of the Hunter EIR.
>
> An earlier EIR dismissed flood risk for the Hunter Property behind the levee as "less than significant" as shown below ...

LETTER C4
Ron Amoroso
June 18, 2012

C4-1 This is an introductory comment. See Response to Comment C4-2 addressing the specific comments detailed in Mr. Amoroso's letter.

C4-2 While liability issues are not a subject that CEQA addresses, the Draft EIR does go into considerable detail regarding the potential for the levee to be overtopped or fail (see Draft EIR Impact HYD-4 starting on page 242).

With the acceptance of the Flood Protection Project and the revision of the Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map, FEMA has indicated that the project site has an acceptable level of protection from the 100-year flood event. This 100-year level of protection is the standard of significance that is specified by the CEQA Guidelines to determine if a potential flooding impact is significant or less than significant. In this case, the potential flooding impact, under CEQA, is less than significant.

That citation reports the "potential flooding impact, ***under CEQA***, is less than significant."

With due respect to all, I consider the flood risk behind the levee and its potential consequences to be substantial, and ask that the flood risk be thoroughly studied so St. Helena residents and taxpayers do not become liable for damages occurred on that property when the levee alignment violated St. Helena's own 1993 General Plan, which contained this provision ...

Goals, Policies and Standards

Guiding Policies

9.4.1 New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.

9.4.2 If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.

9.4.3 Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

9.4.4 Grading and earth filling within the designated 100-year floodway should not be permitted except for public streets or bridges.

9.4.5 Encroachments into the 100-year floodway should not result in any increase in flood levels during the occurrence of the base flood discharge.

... that "grading and earth filling within the designated 100-year floodway should not be permitted."

Unfortunately the Vineyard Valley development was developed directly atop the floodway to the Napa River, as shown on these photographs ...



and from the east side of the River ...



These photos show that the floodwater trapped behind the Vineyard Valley cinder block wall did not overtop the riverbank, but instead drained naturally from the watershed northwest of Vineyard Valley, toward the historic floodway now blocked by Vineyard Valley.

Disruption of that historic natural floodway caused both floods in 1986 and 1995 that caused over $100 Million as documented by City Manager Johansson in his Project Summary report to Assemblywoman Noreen Evans and Senator Pat Wiggins ...

Project Summary Sheet

Project Name: City of St. Helena Flood Protection and Flood Corridor Restoration Project

Tracking No: 200784107

Location: City of St. Helena County; Napa, CA

County: Napa

Project Sponsor: City of St. Helena

Point of Contact: Bert Johansson, (707) 967-2792

Co-applicant(s): None

Assembly District: #7 Noreen Evans **Senate District**: #2 Pat Wiggins

Project Summary: The City of St. Helena Flood Protection and Flood Corridor Restoration Project will protect 468 existing mobile homes, single-family dwellings, and low-income multifamily units from flood damage caused by the Napa River overflow through the incorporated City of St. Helena in Napa County. This multi-objective project will provide flood damage reduction through restoration and re-establishment of the natural floodplain along the project creek frontage; construction of set back levees and overflow basins for transitory storage; and the re-creation and restoration of a natural floodway corridor. It will create more than 8 acres of high-value riparian forest and shoreline restoration for terrestrial and fish habitat on the Napa River, which is listed by the EPA as an impaired waterway and by National Marine Fisheries Service as an important steelhead and salmon recovery tributary of the San Francisco Bay Estuary. In addition, the project will allow residents to view and access this reach of the Napa River,

which currently cannot be accessed.

The project addresses Flood Protection Corridor Program Goals by:

- Floodplain Terrace at more than 8 acres, the new terrace will stretch alongside the Napa River. This terrace will provide a wider area for passage of floodwaters and also provide riparian habitat for rare and common species.
- Shoreline Restoration Approximately 600 feet of existing bank protection riprap and wire gabion at the Vineyard Valley Mobile Home Park (VVMHP) will be removed and the shoreline restored, improving habitat for steelhead, California freshwater shrimp, and critical habitat for the California red-legged frog, as well as for common species.
- Levee A new setback levee will be constructed.
- Removal of Mobile Homes Approximately 17 mobile homes have been removed to make room for a wider floodway corridor.

Project Summary
City of St. Helena Flood Protection and Flood Corridor Restoration Project
Page 2

- Floodwall/Bank Stabilization A new setback floodwall will be constructed to surround the remaining homes within the Vineyard Valley Mobile Home Park. Up to 300 feet of bioengineered and/or structural bank stabilization would be placed near the confluence of the Napa River and Sulphur Creek to protect a portion of the VVMHP floodwall.
- Stormwater Management for Water Quality. A detention basin and pumping facility will be placed inboard of the new levee and northwest of the existing VVMHP floodwall. The two existing storm drains will be diverted into this basin and the two existing storm drain outfalls into the Napa River will be abandoned. A drainage swale will run along the outboard edge of the new levee to filter area stormwater before entering the Napa River. Water quality will be improved as unfiltered storm water passes through the detention basin and the vegetated swale in the terrace.
- Vegetation Management At the southeastern end of the project area, riparian vegetation will be managed in an area referred to as "Element C" to protect critical environmental habitat and improve flood storage capacity upstream of the Pope Street Bridge.
- Public Trail An interpretive pedestrian path will be included in the design of Terrace B to provide public access where no public access currently exists.
- Utility Relocations/Modifications Water, sanitary sewer, gas, electrical, telephone, and cable TV utilities will be disconnected and removed in the areas of home removal for a wider flood corridor in this currently constrained and incised reach of the Napa River.

Flood Benefits: The floods of 1986 and 1995 caused complete flooding at Vineyard Valley Mobile Home Park (VVMHP); Hunts Grove Apartments; and the City's wastewater treatment plant. Estimated damages were more than $50 million in each event. The Project will increase critical transitory storage through the dedication of parcel 31 (14) acres to permanent flood corridor, the purchase and relocation of the mobile homes along the bank of Napa River and the resulting excavation and restoration of the floodplain terrace and the construction of set back levees. This transitory storage increase allows 100-year water surface elevations to be significantly reduced by 1.5 feet from current conditions without inducing either upstream or downstream flooding.

Engineers know as basic safety practice not to obstruct floodplains, as confirmed below in St. Helena's 1993 General Plan ...

Goals, Policies and Standards

Guiding Policies

9.4.1 New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.

9.4.2 If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.

9.4.3 Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

9.4.4 Grading and earth filling within the designated 100-year floodway should not be permitted except for public streets or bridges.

9.4.5 Encroachments into the 100-year floodway should not result in any increase in flood levels during the occurrence of the base flood discharge.

Unfortunately that basic practice was ignored in the levee alignment, which bisects the very floodplain that caused the 1986 and 1995 floods that caused over $100 Million as reported above by former City Manager Bert Johansson.

After the 1986 flood, in his letter of August 14, 1986, to developer McDonnell, then City Engineer Jack Meade warned Mr. McDonnell against reconstructing Vineyard Valley on its floodway blocking site ...

August 14, 1986

Vineyard Valley Mobile Homes
270 Pope Street
St. Helena, California 94574

Attention: Mr R. H. McDonnell

RE: Flood Wall

Dear Mr. McDonnell

This letter is in regards to your building permit application for a Flood Wall filed by your contractor Mr. Jinks.

It is my understanding from your design engineer, Mr. Giorgi, the purpose of this wall is to replace a fence which was washed out and damaged in the February 1986 flood. It is also my understanding the proposed Flood Wall is on the same location and extent as the washed out fence.

The City cannot guarantee or assure you that the Flood Wall will achieve its intended purpose. The review of the plans and the issuance of a building permit does not provide you with any type of warranty either directly or implied that the construction of the wall will accomplish its design purpose. Only your design engineer can provide you any type of assurances that the Flood Wall will function as intended.

You are hereby put on notice that the construction of the Flood Wall may have possible adverse effects on other property owners either upstream or downstream. The construction of the Flood Wall may create off-site flood hazards to other properties. Prior to construction, your design engineer should thoroughly study and evaluate the possible effects this Flood Wall will have on other properties.

Vineyard Valley Mobile Homes
August 14, 1986
Page 2

By acceptance of the building permit for the Flood Wall, you shall assume full responsibility for any liability occurring from the construction of the Flood Wall and hold the City of St. Helena harmless for any liability and provide full indemnification to the City of St. Helena.

Sincerely,

Jack M. Meade, P.E.
City Engineer

JMM/kaw

cc: Acting City Administrator
City Attorney
Building Inspector
Philips and Giorgi

... and in his response to that letter, Professional Engineer Gerald R. Giorgi expressly alerted the landowner that he should "count on being sued" should another flood occur and neighbors be damaged, for "whatever reason" ...

Gentlemen:

We have just received a copy of Mr. Meade's letter to you dated August 14th, 1986 regarding the proposed flood wall.

As you know and as it is understood by Mr. Meade, the new wall merely replaces the substandard barrier that failed in the 1986 flood. Mr. Meade states that "construction of the flood wall may create off-site flood hazards to other properties." We fail to understand how replacing a timber wall that was intended to act as a barrier with a masonry wall presents any new off-site flood hazards that did not already exist. The alternative of letting the river flow through your project would be amusing if not so serious. We are more concerned with the stockpiling of fill N/W of your project in what appears to be within the flood plan boundaries.

As discussed, if your project should flood again it will occur at the levee adjacent to the river. We understand that raising this levee could indeed adversely impact off-site properties and it would merely move the weak link to the Sulphur Creek boundary.

We understand your urgency in proceeding with construction as the risk of losing millions of dollars in homes and potential loss of life is real. However, should another flood occur and neighbors are damaged, for whatever reason, you can count on being sued. Again we recommend you consult with an expert in hydrology to confirm what we all believe to be true. It would be a very cheap form of insurance. Please call if you require assistance in this matter.

Very Truly Yours,

Gerald R. Giorgi, P.E.

CRG/js

cc: Charles F. Philips
Jack H. Meade, P.E.

1541 THIRD ST. NAPA, CALIFORNIA 94559 (707) 252-6588

It is unfortunate the General Plan guidelines the professional engineers recommendations were ignored, but when Measure A was passed in 1998, residents of Vineyard Valley, fearing the future flood warned by engineer Giorgi, fought assertively to have their flood protection upgraded to avoid the next damaging flood. Vineyard Valley residents were comforted by the inclusion of this Measure A set-aside to fund flood protection for St. Helena ...



In December 2008, residents sought to preserve the floodplain by suggesting this upgrade to

the extant cinder block wall erected after Vineyard Valley's flood in 1986 to flood standard, along Vineyard Valley's north property line ...

Unfortunately the residents were ignored and the levee alignment now cordons off a major component of the natural floodplain, with obvious flood risk increases by obstructing the floodplain.

The residents proposed the remaining floodplain be preserved as a public riverbank park, but advocates of the ill-designed levee across the floodplain won the argument and Vineyard Valley flood protection was approved across the very floodplain that had flooded Vineyard Valley so badly in 1986 and 1995.

When Vineyard Valley residents asked why the levee had to obstruct the floodplain instead of upgrading the cinder block wall along their north property line, and they were told upgraded floodwall around Vineyard Valley and Hunter's Grove "would not work."



As an engineer myself, I can only conclude the levee alignment was built across the floodplain to protect developer Hunter's property at public expense, and the sacrifice of a large portion of the historic floodplain.

UC Davis Engineering Professor Nicholas Pinter wrote after completing a site inspection that he found our levee a "field of dreams levee" as he wrote in this report. City management may want to inquire of Professor Pinter as to his opinion of the wisdom of permitting housing development behind the levee. I personally trust Professor Pinter significantly than I trust the engineers who dangerously aligned our levee right through the middle of our floodplain.

Thank you for your consideration.

Wendell Laidley

st. Helena

From: David Wilkinson
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: Hunter Project-ERI Scoping Input
Date: Thursday, April 12, 2018 4:11:07 PM

To the City Clerk, St. Helena, et al,

This note is a submission in response to the request for input on the Hunter Property Development EIR scoping exercise.

As you may be aware my home is located somewhat at ground zero of this proposed development and the results of the EIR impacts me very directly and those of my immediate neighbors and the greater St. Helena community dramatically. The EIR, which seems to be evolving with considerable thought, does seem to be predicated on some larger issues that are being relegated to past decisions that do not appear to be as well thought out and that is concerning to me, substantially.

I am relatively new to the community and while attempting to discover what has been a very long process in developing this property there are more questions raised than answered. I would consider myself pro-development but with the caveat that any development is very well thought out, vetted intensely, and evolved with the best practices for the whole community/City in its considerations and approvals. I am pro-development, and not a developer. But I know instinctively when something is not of the potential standard that the community needs and deserves. The very few illustrations of this development that I have seen are of the poorest creative quality that I could imagine and certainly do not seem to fit any, even minimal, urban plan for our City although I have made some efforts to discover what that may actually entail. As I stated in one of the public meetings I am somewhat baffled by the rush to move a poorly defined project forward without much more discovery.

These comments are somewhat outside the bounds of the Scoping Request but the Discovery process is directly related to that Request. I have heard of my neighbors concerns, and they are ground zero concerns, and whole community concerns of mine as well in relation to traffic, water, resources, noise, costs, liability, and impact on every aspect of the future of this City that I am quickly coming to value and appreciate deeply.

Somewhat disconcerting is the revelation that a previous EIR contained information which is to be transported into the new EIR without review. I am particularly concerned with the whole process of developing the levee and its viability particularly relative to the news of so many levees and similar structures in Houston, New Orleans and elsewhere failing when they were supposed to be certified ‘100 year flood’ capable. If this levee fails who is responsible for the destruction that will devastate so many in this community? Who pays for those types of catastrophes? I would ask that this issue not be swept under the proverbial rug and be added,

in-depth, to the scope of the EIR work.

My thanks for your work and the commitment from every one of our councilors, City Staff and Executive and Counsel, the Mayor and all of those tasked with this EIR work and they all contribute to our future which is bright indeed.

David G. Wilkinson
704 Hunt Avenue
St. Helena, CA.
94574

1.415.608.5790
david@twgexperiential.com

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Ron Naines

Email: rnaines@hotmail.com

Address: 10 Laguna Seca ct

Organization: Vineyard Valley

☑ I would like to receive future environmental notices via email.

Please provide us with your written comments on the NOP by **April 9, 2018.** Comments on the NOP may be sent to:

Noah Housh, Planning and Community Improvement Director
City of St. Helena, Planning & Community Improvement Department
1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

You may attach additional pages to this form and/or you may submit your written comments separately. Written comments on the scope of the EIR will be acknowledged in the Draft EIR and will be considered in preparation of the document.

This Hunter Subdivision SHOULD NOT BE BUILT!! Below are reasons why:

① Disrupting the newly completed flood control project. Landscaping, water drainage run off, sewer expansion (affecting directly where I live) and grading elevations DIRECTLY affect this the current flood control project. (one does not have to be a rocket scientist to see that!)

② The massive traffic that Hunter Subdivision will create. Have any of you "planners" notice the (over)

jammed roads from Pope st. bridge to Main and points beyond? There is no bypass at Saint Helena (like Yountville), so what is next. MORE SIGNALS?? And what about parking?

(3) Resources - water and sewer facilities are tight now. So what "source" does the Hunter Subdivision draw from... well H2O & water recycle via 2-3 engineered filters? Nope - looks like a connection to our main sewer down Paseo Grande... NOT ACCEPTIBLE?

(4) Does the city "planners" and Hunter Subdivision have "plans" for a second high school and grade schools? Never heard a peep --- so degrade our local education by packing the classrooms to a unbearable population. Just how far can this go? Economic and social problems will just accelerate. City services and police and fire capabilities will be strained to the breaking point --- I've been here 27 years now - what changes?!

(5) Soil liquefaction, catch basins, flood wall and levee failure all loom as potential problems without a study - a COMPLETE study - by FEMA and EPA. So where is it??

(6) In my 73 years I have seen the changes development brings and not always positive: look at Sausalito, Honolulu, San Blas, Santa Cruz and so forth. BEFORE building a Hunter Subdivision plan the water / sewer / roads / schools / city services BEFORE building (don't forget EPA & FEMA studies).

(7) Conclusion: since we cannot vote on this upcoming mess I suppose we have to live with YOUR decision - MY decision? If flooded or other catastrophy I will SUE the hell out of you as a final project in life!

7

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Carla C. Holm

Email: hdmhouse@yahoo.com.

Address: 8 San Juan Court, St. Helena, CA 94574

Organization: Vineyard Valley Mobile Home Park + Vineyard Valley Home Owner's Association

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City of St. Helena, Planning & Community Improvement Department
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St. Helena, CA 94574
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1. Concerned about water run-off into the river after heavy rains and water flow from the Dam into the river. Also more run-off into the park.
2. "Big" impact of sewer lines connecting to our sewer lines, causing bigger problems. Our lines are about 40 yrs. old.
3. The flood project has held for Vineyard Valley, but with 85 new homes this could fail badly. The flood walls and run-off basin may not hold and spill into our Park.
4. The need for land fill up to road level could eventually erode and could flow towards V.V. over the years.

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Rosalie and Paul Blumberg

Email: rosapaul@att.net

Address: 2 San Ardo Court

Organization: California Teacher's retirement association

☑ I would like to receive future environmental notices via email.

Please provide us with your written comments on the NOP by **April 9, 2018.** Comments on the NOP may be sent to:

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1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

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My husband and I have been residents of St. Helena for eighteen years and have enjoyed the safety and security of living in the Vineyard Valley Senior Park. Our manufactured home faces the Napa River. Since the flood plan included the building of a wall, we were imposed upon by the transportation of dirt back and forth close to the front of our house. The large and intrusive machines and equipment were a necessary part of the construction. If the flood wall is undermined, our home could threatened.

Another important concern is the increased water

usage by the Hunter subdivision. Since we already are rationed in the dry season to use our outside bushes and trees, I can't imagine how much greater the problems will become).

Last but not least, the sewer project down Paseo Grande (our main road entering and leaving) could seriously impact our accessibility in case of emergency situations such as last summer's fire threat.

Please consider these important impacts on the lives of so many including those of our elderly people.

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Barbara & Thomas Bingenheimer

Email: barbara.st.helena@gmail.com

Address: 9 Los Robles Ct, St. Helena, CA 94574

Organization: _____

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City of St. Helena, Planning & Community Improvement Department
1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

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1. What seems most obvious, overall Environmental Impact including but not limited to: Sewer/sanitary overflow potential; long-range (surface area) potential flooding increase to Vineyard Valley; ACOE project & preserve and new development itself.
(1-B) In consideration of these threats, developer should be required to provide a minimum of $250,000 flood insurance for EACH homeowner within Vineyard Valley MHP, as well as sewage liability riders, with agreed upon minimum $ policies. Flood insurance liability coverage would also be in the event of flooding from ANY source: i.e.: Storm water drainage, other run-off/broken lines, etc. Current flood plain plan does NOT support further growth. Should be FEMA certified BEFORE any consideration.

2. Environmental Impact to traffic, roads, utility maintenance. Access/Egress/Overall traffic flow.
3. Access in Emergency/Evacuation. Pratt St. Bridge/access has not been re-opened already less evacuation routes. More housing of this magnitude (any multi-unit development) should not be considered until current evac access is updated and improved substantially - especially for any growth consideration. Some cost deferred to Developer.
4. Does any development contribute financially to a long-term contract to support expanded Emergency/fire/police services?
5. Impact/Enviro Study regarding water flow direction, to current homes/flood plain.
6. Traffic Safety Study.
7. Road and deferred (sidewalks, lights, etc.) cost of maintenance - short + long-Term.
8. Additional Bridge development: W/a study on engineering, property + safety costs included.
9. Cost of Flooding to City, Individuals (Agent: Developer carries Flood Liability Insurance for existing neighborhoods). Long-Term!
10. All these health and safety concerns are significant. And these are before even addressing the obvious concern regarding the value of the aesthetics we enjoy as a community and the daily use of this community (as a whole) of the beautiful trail and natural preserve being considered. The only real long-Term Benefactors of such a proposal is the financial gain of the developer(s). At what cost to those of us who live here; those who will have to pay in natural beauty and spiritual connection now — and financially in the future. Traffic will be intolerable. The sense of this small Hamlet's pride in our love of the natural blessings here diminished more. The potential for possible disasters increased.

So the question becomes "who are you serving if you give consideration to approving a development the community at large vigorously opposes."

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Diane Baer & Kenneth G. Young

Email: bart.young@comcast.net

Address: 12 DEL RIO COURT

Organization: Vineyard Valley resident

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City of St. Helena, Planning & Community Improvement Department
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Email: NHoush@cityofsthelena.org

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My major concern is the impact on the Flood Project. The Levee in particular as well as the drainage pumps and drainage ponds that get pumped back into the river. Plus the density of the homes will provide a strain on water and sewage resources. The impact on the peacefulness and security of Vineyard Valley will be most unpleasant. Please relocate the Hunter Project to another part of St. Helena.

I am also concerned about the Peace and Quiet of

Vineyard Valley. Along with increased traffic and the impact on our privacy.

Thank you,

Diane J Bass

Kenneth G Young

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Suzanne James

Email: sdayjames@earthlink.net

Address: 32 Redondo Ct - Vineyard Valley

Organization: _____

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City of St. Helena, Planning & Community Improvement Department
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St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

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I have grave concerns related to the proposed plans for the Hunter project adjacent to Vineyard Valley.
1) My major concern has to do with density: 85 units at 2-3 persons/unit = 170-255 people added to our small community of @ 5000. Each will likely have a car - are 170-255 parking spaces provided. This will lead to a lot more congestion on roads that are already congested! Please consider # units so as to have ↓ density.
2) Issues with water and sewer use going thru our community here in VV which already overflows during storms
3) Access is eluding for emergency vehicles.

4) If flooded again cities and taxpayers are on the hook.

5) potential levee failure

6) Undermining of the very expensive flood walls

7) City maintenance of the catch basins, Napa River flowing thru this area, and levee.

8) River and levee walks remain open to public

9) Tree and landscape between the properties as visitors will be impacted.

10) Elevation of these houses will be well above ground level - the impact to the existing flood plain needs to be studied.

11) Would like to see additional land devoted to affordable housing, which I regard as our community greatest need, not more McMansions.

12) My hope is that the EIR will take these issues seriously and examine carefully for practicality and impact. I believe is that this project needs to be compressed to perhaps 1/2 the proposed units and even then. I quit my teeth as this will affect our VV community the most.

Thank you for your kind consideration of my deeply held concerns.

— Lynne James

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: HERMAN G. DINGESS

Email: CHIPD352@COMCAST.NET

Address: 17 DEL RIO CT.

Organization: _____

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Please provide us with your written comments on the NOP by **April 9, 2018.** Comments on the NOP may be sent to:

Noah Housh, Planning and Community Improvement Director
City of St. Helena, Planning & Community Improvement Department
1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

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1. DOES ANYBODY LOOK BEYOND St. HELENA TO UNDERSTAND THE TRAFFIC WHICH IS GOING TO INCREASE W/DEVELOPMENT OF NEW RESORTS IN CALISTOGA.
2. SEPTIC SYSTEM TO BE CONNECTED W/VINEYARD VALLEY? WE ALREADY HAVE SEWAGE PUMPED ON OCCASION – REALLY NOT MORE?
3. RETRO FITTING HOMES IN St. HELENA TO ACCOMODATE NON POTABLE WELL WATER - ONLY IF DEVELOPER PAYS totally FOR THIS BRIGHT IDEA. ABSOLUTELY NO COST TO St. HELENA CITY OR RESIDENCE
4. IF THE PROPERTY IS TO BE USED, PLEASE MAKE A PARKING LOT FOR OVER FLOW OF HUNTERS COVE RESIDENTS, LETS BE PRACTICAL INSTEAD OF GREEDY.
5. AS I don't BELIEVE ANYONE REALLY CARES but VINEYARD

Valley is AN OVER 55 Community so PEACE AND quiet is one of the basics for this Kind of Community. I know the impact on those with fixed incomes does not stir much with those Looking to MAKE A SCORE, it DOES CREATE UNREST to SENIORS. PLEASE BE ADVISED on this subject

into EIR - Hunter Project
Addison

City of St Helena, City Hall
Received
APR 10 2018
1480 Main St.
St Helena, CA 94574

Water/Floodings

1) In case of flooding will the city be responsible for damaged homes since there is higher risk of flooding in this area - (more likely with climate change)

2) Noise

During construction how will the project be monitored for noise levels to not go above an acceptable level? Will an acceptable level be determined before project begins? Who will monitor this and how often? What hours will no construction be allowed? Weekends?

Fire

3) With increase of new homeowners, will the Volunteer Fire Dept be able to continue or will we have to discontinue it and have fully paid fire dept? If so, what will increase of cost be to each resident in town?

Housing

4) Will the Hunter project increase ~~for~~ need for worker housing: more teachers, firefighters, City staff etc.

Air Quality

5.) Traffic/CARS

What higher levels of green house gas emissions are expected ~~by~~ for St. Helena as a result of this project being built? How many new trees will be planted to accomodate for this increase?

Will new trees be larger more mature trees? (Young sedlings take years to mature)

Will native trees be planted such as Blue Oak etc ~~to better~~ since they are drought tolerant? Also require little maintainence.

6) Safe + accessible Bicycle + Walking Paths

How many new walking/running/bicycling paths will be added so new homeowners can walk, ~~and~~ bicycle or run downtown? Large trees with canopies providing shade need to near paths. With hotter summer days, shade should be a must.

Combined with expected increase of tourist visiting winery event centers year around, are there enough roads in St. Helena to handle daily residential drivers as well as tourists, buses + trucks? Will we need more

7) Stop lights + intersections ?

If so, will developer pay for necessary infrastructure improvements/additions - ?

8) Viewsheds

what viewsheds are being destroyed by Hunter project? Should new homes be limited to 1 story? Should homes be planned to NOT block views from other residents as much as possible?

9) Parks Open Space

How much open space will eastside of town be losing with Hunter Project? Are there areas near Hunter project that will be designated for new parks or Open Space?

10) River Protection

How will riparian area near Napa River be protected from pesticide or toxic runoff? (from lawns, gardens, garages etc)

11) Water Conservation

What measures will city take to implement a water conservation plan that is on-going year-round for residents + wineries? What proof or evidence does city have to show our town is capable of supplying residents + businesses enough WATER for reasonable quality of life on a daily basis for next 10-30 years?

DO WE HAVE ENOUGH WATER FOR HUNTER PROJECT? SHOW ME!

12) Parking

Will there be adequate parking for all homeowners & those living in apartments or affordable housing?

What steps will be taken to make sure there isn't massive overflow of parking into other neighborhoods?

Will parking rules, laws, be monitored on an on-going basis?

13) Staff at City Hall

Will increase of town's population require more staff at City Hall in regards to maintaining, monitoring & parking, safety, air-quality etc? If so, what cost will be passed on to residents?

Hunter EIR

4/9/17

Once this project is built what will happen to the trail? I currently use that trail to walk my dog with my kids almost every day, and I don't want to see it go. I live down the street from the trail and there isn't anything else like it within walking distance from my house.

Sam Hilger

HUNTER ENVIRONMENTAL REPORT QUESTION

THIS PROJET IS HUGE. HOW MANY NEW PEOPLE WILL BE ADDED IN SAINT HELENA?

WILL THERE BE MORE POLICE AND FIRE? I HEARD WE COULD LOSE THE VOLUNTEER FIRE DEPARTMENT GUYS BECAUSE THE CITY WOULD BE TOO BIG. IS THAT TRUE? HOW WILL TAX PAYERS GET FIRE SERVICE? WHO WILL COVER THE COST OF PAID FIREMEN?

DO THE AFFORDABLE SUBSIDIZED APARTMENTS (AND HOUSES) PAY PROPERTY TAXES? WILL MY TAXES GO UP?

WHAT ABOUT POLICE? DO TAXPAYERS HAVE TO PAY FOR MORE POLICE? DO WE NEED MORE POLICE WITH ALL THESE NEW PEOPLE?

WHY ARE WE LETTING SOMEBODY PLOW DOWN THE VINYARDS? WE ARE SUPPOSED TO BE ALL ABOUT AGRICULTURE. HOW MUCH VINYARD WILL BE PLOWED OVER? WE USED TO CARE ABOUT FARMING. WHEN THE VINYARDS ARE GONE, WE'RE JUST ANOTHER CITY LIKE NAPA AND SANTA ROSA. HOW CAN THAT BE REPLACED? WHAT'S THE PLAN FOR THAT?

TONY CASTELLI

Noah Housh

From: Mariam Hansen <wartuhi@comcast.net>
Sent: Saturday, March 31, 2018 10:23 AM
To: Noah Housh
Subject: Comments on the Hunter Project EIR:

Comments on the Hunter Project EIR:

A crucial component of the EIR must be the effect of adding 87 new hookups to the St. Helena water system. This must not be considered for this project alone. Approved projects and new proposals would add an estimated 650 new residents to town—all east of Main Street. Add these:

Castellucci project Pope Street: 51 homes
Castellucci 14 acre vineyard on Pope: winery, house, and apartments on the west side of College Avenue.
684 McCorkle Townhomes (Brenkle Court) 8 units approved and started
632 McCorkle Apartments 8 units approved and started
Turley Flats Apartment on Pope at Main- 8 units approved and started
Montessori Middle School 25 students
Komes Custom Crush Facility 890 Dowdell Lane, La Fata Street 120,000 gallons
Redmond Winery Conversion (Dowdell Lane) 24,000 gallons/year winery uses + commercial kitchen
Farmstead Resort 1000 Mills Lane 65 hotel units
Source: http://cityofsthelena.org/planning/project/pl18-008-567-pope-st-castellucci-winery-design-review-use-permit

It would be irresponsible to strain the St. Helena water supply further. California is getting drier. Consider these quotes from the newspaper:

The Mercury News 2-21-18:

"Amid one of California's driest winters in modern history, state water regulators on Tuesday met in Sacramento to consider making permanent the water-wasting rules that were in effect during the last drought — rules that would carry fines of up to $500 per violation."

Quotes from the St. Helena Star of 2-15-2018:

The council also approved contracts to install equipment measuring how much water the city diverts from Bell Creek, and to conduct studies that will lay the groundwork for a permanent bypass plan within the next 12 to 18 months. The interim plan approved Tuesday requires the city to bypass more water from the reservoir to the creek between Nov. 15 and April 15. The city's permit already prohibits the city from storing water that enters the reservoir between April 16 and Nov. 14. .....The new flows would only affect

the city's water supply during drought years…. Galbraith cautioned that the reservoir is "not in happy condition" amidst an unusually dry rainy season. It was at only 58.9 percent of full capacity as of Monday….. The city's 600 acre-foot Napa water contract "basically replaced the water that we used to take from Bell Canyon until we came into compliance with our state permits," Galbraith said…."That's a heck of a hit we've already taken to Bell Canyon, and I just don't see that the city can risk any further material hit to Bell Canyon without significant interruption of economic life here in St. Helena," he said.

Quotes from the St. Helena Star of 3-29-18

"In late February, with the reservoir hovering below 60 percent, city officials warned of water restrictions that could include a drought surcharge for ratepayers. Permits prohibit the city from capturing any rain that falls between April 15 and Nov. 15 in Bell Canyon reservoir. "the 2017-2018 rainfall year is still only about two-thirds of normal." "If the reservoir does run low, the city could theoretically ramp up production from its other two water sources: the Stonebridge wells near the Pope Street bridge and water pumped in from Napa. However, while St. Helena has the option of buying an additional 200 acre-feet a year from Napa on top of the usual 600 acre-feet, it's questionable whether the pipes and pumps that connect the two water systems could actually deliver that much water, Mayor Alan Galbraith said."

Parking: At noon on a weekday it is almost impossible to find a parking space, even in the large Safeway and Sunshine parking lots. This is true at other times as well. If we add 650 new residents to the east side of St. Helena residents will not be able find parking to do their grocery shopping.

Garbage: Where will all the garbage do when Clover Flat landfill is full? Fire debris has already taken 3 years off the useful life of the landfill.

Thank you for the invitation to respond to this matter.

Mariam Hansen

5 San Lucas Court

St. Helena

Noah Housh

From: Cindy Tzafopoulos
Sent: Tuesday, April 10, 2018 3:13 PM
To: Noah Housh
Cc: Xinia Gamero
Subject: FW: Hunter Project

FYI

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: sandra barros [mailto:sbarroswinegeek@hotmail.com]
Sent: Tuesday, April 10, 2018 2:59 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter Project

Hello City Clerk's Office.

I have lived in St. Helena for over 14 years, and have concerns over the Hunter Project that I would like to voice and have addressed.
The first concern is with all the projected houses to be built. Where are the plans for the streets, and housing? If there are to be "low cost" housing to be included, my understanding is there is nothing to stop me, or anyone else from buying one, and either using it for a weekend home, or renting it out at market value, which is ridiculously high here.
I live off of Voorhees Circle where there are some state regulated housing units on part of that circle. I have no problem with those units and their regulations, since they are mandated by the state, and encourage ownership to people who would not be able to buy anything in St. Helena any other way. But since the "low cost" housing that is being proposed, has no protection, how are those units going to serve the people who would like to live and work in St. Helena that can't afford a $600,000 condo or a 1.5 million dollar 2 bedroom house?
Another concern is since the housing is supposed to go behind the levy, and if it fails, the city of St. Helena is responsible for damages, law suits, etc. If we are so hurting for money, why would we put ourselves in the middle of that storm? Levys do fail, and we have no guarantee that they won't.
I work at a place that was built 3 years ago, and we have had 3 leaks in the sewer pipes, closing the bathrooms, and flooding the parking lot. I know that it's not a levy, but it is an example of new construction that is faulty.

I also have concerns with all the new streets and sidewalks, and flooding. Drainage on a flood plain is always problematic, and with not much dirt to soak up the water, I see that as a potential problem in a heavy rainy season.
Also, the citizens of St. Helena use that beautiful walk past the library down to the river, which is one of the few open areas that we can walk with or without our dogs, legally. That walk would be sorely missed by a huge part of the population.
And then there is the additional traffic. All the people living there, if they work in St. Helena, are retired, or use it as a second home, want to shop in Napa where many people shop now, and will drive within town. They will all filter out from the same roads onto Hwy. 29. The signal will be backed up with traffic during the peak times, making turning onto Hwy. 29 even more difficult than it is now.

Thank you addressing these concerns of mine.

Sandra Barros

Noah Housh

From: Henry Gundling <henry.gundling@gmail.com>
Sent: Monday, April 02, 2018 9:44 AM
To: Alan Galbraith; Peter White; Paul Dohring; Mary Koberstein; Geoff Ellsworth
Cc: Mark Prestwich; Noah Housh; Grace Kistner
Subject: Hunter Project

April 2, 2018

Dear Council Members,

It was approximately ten years ago that the Hunter Project first came to my attention through a newspaper article in the "Star". That same week my wife and I received an alarming notice from the City of Saint Helena announcing Phase II water restrictions due to drought, even though the real drought was still some years in the future.

Hunter is back again, and is just as unwanted a proposal today as it was then, because of our water constraints, and because of a host of other, widely discussed concerns.

The developer has done his darndest to slap copious low-income housing lipstick on this high-end pig, but the reality is that it promises major impacts for Saint Helena residents in exchange for minor affordable housing benefits, particularly when one considers the additional personnel that will be needed to support the projected increase in overall population caused by the huge project.

Some years ago, in the interest of protecting our disappearing agricultural communities, the Association of Bay Area Governments (ABAG) wisely reduced the burden of new housing for rural Bay Area communities. As a consequence, and thanks to new low-income housing projects like McCorkle and Turley, Saint Helena's Regional Housing Need Allocation (RHNA) is largely satisfied for some years to come.

Nevertheless, there remains an acute shortage of affordable, workforce housing. To the extent new housing is built, it should focus laser-like on workforce and low-income housing, NOT large developments offering expensive homes unaffordable to our workforce, and creating the need for even more workforce. We need more Turley's and McCorkle's, as close as possible to downtown services, transportation and schools, and maybe even on the west side of the tracks to foster integration.

Saint Helena is at the same crossroads reached by Vail and Aspen fifteen years ago. Because of wise planning, policies, and forward thinking, Aspen reportedly continues to be a real town, with real people, and with service clubs, churches and bars filled with locals. Vail chose a different path. Its workers suffer long, grinding commutes to run the town's businesses and provide its services, and the bars are largely filled with out of state visitors.

We don't need Hunter. We urgently need creative strategies to be Aspen, not Vail.

Thank you for your commitment and sacrifice for our fair city.

Henry Gundling

Noah Housh

From: Carroll Cotten <carrollcotten@comcast.net>
Sent: Saturday, April 07, 2018 9:51 AM
To: Noah Housh
Cc: vineyardvalleymhp@gmail.com
Subject: Hunter Subdivision Project

Thank you for providing opportunities for public response to the proposed Hunter project.

Regarding EIR concerns, this proposed project raises many red flags. The following are the primary ones that concern us:

1. The potential negative impact on the efficiency and safety provisions of the existing flood control construction,

which now provides excellent, proven flood protection. Are you consulting with FEMA and the Army Corps of

Engineers regarding this issue?

2. Inevitable increased auto traffic on nearby Adams, Starr, Pope and Main Streets, which are already experiencing

excesses at various times. Can the Pope Street Bridge handle the additional traffic?

3. If the project lacks adequate parking (a minimum of two spaces per household), this will create a huge on-street

parking excess like Starr has now.

4. Is there sufficient water available to support the Hunter project, knowing we have rationed water for SH residents

in the past and can anticipate doing so in the future?

Regarding the larger issue of new construction for the improvement of St. Helena, we understand the primary community benefit the Hunter project would bring is more affordable work force housing, apparently limited to the 25 units now designated low income. City revenues will not be significantly increased by Hunter project property taxes. Whereas, the Adams Street property slated for some future development has great potential for significantly increased

city revenue. So, it is imperative to know how the Hunter project will impact the Adams Street planning and development.

Carroll and Ellen Cotten

1 Del Rio Court

Saint Helena CA 94574

Noah Housh

From: Kathleen Forni <kforni.syar@gmail.com>
Sent: Monday, April 09, 2018 2:30 PM
To: Noah Housh; Chuck Vondra
Subject: EIR and NOP for Hunter Project

Mr. Housh,
I have lived in St Helena for 38 years and my husband was born here. We are so disappointed in the drive for growth that our Planning Committee exhibits. We just came off 5 years of drought with only 1 year of decent rain and you are looking at allowing 85+ new housing units in the Hunter Project. Where are you going to get the water?
We were subject to water rationing for several years and allowed our lawns to die in order to be good citizens. So far this year, I believe Napa Valley Basin has under 20" of rainfall. I believe it is irresponsible of the Committee to approve any development of this size based on the water issue alone.
Then we have the traffic on Starr and Pope Street. Already the cars speed down Starr and at least one boy was hit by a car when he was leaving Harvest Lane on his bicycle. When 85 new homeowners are added to the equation, you should expect to have a greater problem.
Unless there is a new source of water and new streets leading out of St. Helena to Highway 29 and Silverado Trail, we believe this project should be denied.
Sincerely,
Mike and Kathleen Forni
610 Harvest Lane
St. Helena, CA

April 9, 2018

Noah Housh

Planning and Community Improvement Director City of St. Helena

1480 Main St., St. Helena, CA. 94574

Dear Mr. Housh,

I have a few concerns that I want to be sure are addressed in the EIR for the development of the Hunter subdivision located just north of Vineyard Valley Mobile Home Park where I live.

1. Is that property higher than Vineyard Valley and will construction of homes involve raising them 18 inches from ground level?
2. Will drains be positioned in a manner to direct run off from storms and sprinklers away from Vineyard Valley?
3. Can sewer lines be directed toward and connected to those on Adams instead of flowing through the main street of Paseo Grande in Vineyard Valley?
4. Was the retention basin located in the flood control project basin designed to accommodate the proposed construction of 87 homes? This needs to be verified in the EIR of the flood project.
5. Was the construction of 87 homes considered when the EIR for the flood project was written? This factor also needs to be found in the EIR for the flood control project.

I know that one of the basic principles when building the flood project was that it would not cause flooding upstream or downstream of Vineyard Valley. It must be a basic principle designed and engineered into the Hunter subdivision that the building of those homes will not cause flooding anywhere including Vineyard Valley, Hunts Grove and all the surrounding residential areas. I would like to see a FEMA consultant look at their plans and determine if the building of these 87 homes will affect the flood plain designation as it now stands.

Finally, I think it is much too early to even start an EIR. The Hunter company has not submitted final plans but only loosely defined plot maps. They should be required to have more completed plans before an EIR is begun.

Thank you for your consideration and for passing this on to the appropriate firm who will be writing the EIR.

Priscilla J. Dell

25 San Juan Court

St. Helena, CA. 94574

Noah Housh

From: kamccreedy@gmail.com
Sent: Thursday, April 12, 2018 8:27 PM
To: Noah Housh
Cc: Shelly DiFede
Subject: Hunter subdivision project

Dear Mr. Noah House and all it may concern,

I am a current resident of the Vineyard Valley residential community directly adjacent to the proposed Hunter Subdivision.

Please see the "below list of concerns" that I along with my husband and many neighbors have regarding this proposal.

I would appreciate an in-depth re-evaluation of our concerns in all of these areas.

In addition to the aforementioned items...please address concerns about wildlife areas within the city limits. I have witnessed a bobcat along the river, blue herons, egrets, lots of hawks (even a pair of mating hawks in the oak trees along the back wall of Vineyard Valley).
I am seeing less and less cyotes, squirrels, birds, ducks and skunks.
It is rare to see any deer at all within the city limits and even within Napa County.
The wildlife used to be a very special part of our small town, making hiking and biking, walking a very special experience.

Please take this into consideration with any planning for any reason our very fragile wildlife corridor.

I would also propose any development for low income to be just that....low income....not a high end Subdivision with a few low income units built to get special zoning consideration.

Thank you for your consideration of these comments.

Sincerely,
Kathleen and John McCreedy,
11 Los Robles Court
Saint Helena, CA 94574
(Saint Helena resident for 17 years).
Kamccreedy@gmail.com
707.280.1278

*****With the Hunter Subdivision Development just north of Vineyard Valley we are being positioned to accept a very large new neighbor. As the scoping for the environmental impact (EIR) is now in process, these next 25 days provides you a unique opportunity to ***have your voice heard.***

Public Comment is being requested right now. You can speak up on concerns that you have and help shape this project or perhaps send it back to the drawing board. We have assembled here a few concerns that we and others have, related to this 85+ units of housing being proposed. Please take a moment and express your

concerns and bring them to the office or deliver them directly to the city via email or regular mail. Here's your chance to influence beautiful St Helena and its future direction on the Hunter Subdivision Development! Please respond. (See attached response document)

Thank you

Comments and concerns expressed in initial meetings

- Sewer expansion/ sanitary overflow during the rain....as this new project will connect to our main sewer right down Paseo Grande (this concern confirmed with city engineering)
- Storm water drainage run off
- Emergency road access and river walk trail impact
- Tree and landscape between the properties as vistas will be diminished
- City services capacities in police and fire support
- True FEMA certified current Integration/impact with the flood plain plan in place
- Elevation of these houses will be well above ground level, the impact to the existing flood plain needs to be studied.
- Grading elevations and water flow direction could influence more run-off in our direction
- Traffic (Star Avenue and Pope Street)
- Traffic safety with increases surface street traffic
- Bridge development besides Pope Street

Other concerns expressed at the first 2 meetings

- If flooded again the cities and taxpayers on the hook
- Soil liquefaction
- Levee failure
- Undermining of the flood wall
- City Maintenance of the catch basins and levee
- Parking
- Vistas

Noah Housh

From: Cindy Tzafopoulos
Sent: Friday, April 13, 2018 5:44 AM
To: Noah Housh
Subject: Fwd: EIR Issues. Please put into the report

Sent from my iPhone

Begin forwarded message:

From: AnnMarie Whaylen <amwhaylen@yahoo.com>
Date: April 12, 2018 at 10:30:50 PM PDT
To: "cityclerk@cityofsthelena.org" <cityclerk@cityofsthelena.org>
Subject: EIR Issues. Please put into the report

Thank you for including my comments. It's late in the day, but I think it's still ok since the deadline is today from what I heard. I hope I am not too late. This seems like a terrible thing to do to Saint Helena.
I jog on the walkway that runs between the vineyards down to the Napa River. It's beautiful and I don't have to worry about cars, bikes, skateboards or running too close to pedestrians on the narrow sidewalks in town. There are tons of birds and wildlife all over the place. I see hawks, owls, doves, woodpeckers, starling swarms, in this area. What birds migrate through this big open area? Do they use this for migration, food, breeding, nesting? Where will they be pushed to, because this is an area right near a water source. This kind of remote quiet place seems like a perfect place for a bird habitat. There are plenty of food options like insects, rodents, fish, frogs and other tasty treats for these gorgeous birds. Will someone study this to make sure they are not chased away and how will they be affected. And what about the other animals that come to that area to eat and drink? Someone said they saw 2 river otters near the Pope Street bridge. What will happen when this is just a big subdivision?

I work in the wine industry like many of us in Napa Valley and Saint Helena. This will destroy agricultural land where vineyards are growing grapes for wine that is so important to our economy and is a big part of Saint Helenas history. The NY Times published a new study that shows the US is losing two acres of farmland every minute which is the fastest decline in US history. They state the loss has been where some of the country's best fruit farms are being replaced by houses. Isn't there a protection for farmland in St Helena? Most people I talk to support farming here.

Thank you.
Annmarie Whaylen

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 6:53 PM
To: Noah Housh
Subject: Fwd:

Sent from my iPhone

Begin forwarded message:

From: Christine Hernandez <chernandezsmith@yahoo.com>
Date: April 12, 2018 at 6:28:44 PM PDT
To: "cityclerk@cityofsthelena.org" <cityclerk@cityofsthelena.org>

Sorry for the late entry but I hope you can still get this in.

These are questions about the project that we don't like at all.

1. My aunt lives in Vineyard Valley and loves being near the wide open space where the flooding used to occur. She sits and enjoys the breezes that from that area that cools down the mobile home park and brings her fresh air. She thinks she was told that the new houses will be many feet above the tops of the mobile homes, which would block all of the breeze and all of the view. She is also worried that it will be noisy and ruin the quiet peaceful environment that is there now. What will happen to the fresh air, cooling breeze, noise, and her love of the stars in the night when this project is built? If this project is built what will the final height of the houses be compared to the mobile homes in the park? How will they affect air flow, privacy, noise, and night lighting? How will that change those things? Is it fair to build houses so close and so high that it changes everything?
2. When the flood project was built, she dropped her expensive flood insurance because the City said the levee protected her. Bottom line then, if the levee breaks, will the flooding at her mobile home be different, like worse or better, than it is now with nothing built there?
3. If this housing causes more flooding than the amount of flooding without it there, who will pay for the damages to her property? Who will determine what caused the flooding, especially since she was told she did not have to worry about flooding anymore by the city?

Thank you,
Carlos Hernandez

From:	Sandra Lowry
To:	Cindy.Tzafopoulos
Cc:	Noah.Housh; Mark.Prestwich
Subject:	HUNTER EIR
Date:	Thursday, April 12, 2018 4:48:17 PM

Gentlemen,

I am writing on behalf of my husband, Cecil Lowry, and myself. Our address is 1175 Starr Avenue and we moved here in July, 1997. We are opposed to yet another development near our home on Starr Avenue.

The EIR should look carefully at traffic and parking. More developments mean more cars and trucks coming and going and where will they park? Already our neighborhood is impacted by overflow trucks and automobiles from the Hunts Grove residents parking up and down Starr and Meadowcreek Circle. We are additionally impacted by speeding vehicles up and down Starr at all times of the day and night, making crossing the street to visit a neighbor a hazard. The crosswalk at Starr and Meadowcreek Circle is basically ignored. Most importantly, all the traffic comes to a dead stop on Pope Street because of the Pope Street bridge. I believe the last EIR decided traffic was an unmitigable issue.

The EIR must look at the Hunter Project in terms of water consumption. Previous EIR study suggested a water neutrality by installing low flush toilets. Is this a joke? More people means more water use in common sense terms.

The proposed development will have many of the homes built behind the levee, in an area at serious risk of liquification, not to mention flooding, a disaster waiting to happen.

Thank you for listening. Sandra Lowry

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 4:37 PM
To: Noah Housh
Subject: FW: Hunter EIR comments

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: ann@nieman.org [mailto:ann@nieman.org]
Sent: Thursday, April 12, 2018 4:36 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>; Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Cc: ann@nieman.org
Subject: Hunter EIR comments

Hi Cindy – please add these questions to the EIR

Hope all is well. Weird weather, right? From 80 degrees to rain storms and 45 degrees. What season is this? ☺

Cheers,
Ann

Question #1
How will this project affect the St Helena city groundwater wells at the Stonebridge locations? The project plan states it will provide all the landscaping water for 87 houses' lawns, flowers, bushes, gardens, carwashes, and other watering uses. The number could be 20-40 units higher if the project includes regulated affordable housing. Since the well is located next to the Napa River upstream from the City of St Helena wells that supply our community with water, what mapping will be conducted to determine if the aquifers are connected? If they are connected, then drawing large amounts of water from the same groundwater source needs to be assessed so it does not deplete the City wells supply. Who will conduct the mapping? How many groundwater data points will be included in any mapping exercise? Will it be a sufficient number to adequately determine that the Hunter well is on an aquifer that is separated from the city aquifer? This question must be answered accurately, because the city relies on the groundwater from these 2 wells as a critical source of water in times of drought when Bell Canyon is depleted. (Example – the drought resulting in exposure of large portions of the bottom of the Bell Canyon reservoir.

Question #2:

The project area is in a low lying wet area on the historic floodplain for this part of the Napa River. It has flooded numerous times over the last 20-30 years. Even in non-flood years, large portions have remained wet during the summers, to the point that vine growth and production was hampered due to the wet soils. Presently, this area is covered with standing water during and after rains with water depths often 10-12 inches deep. The project will add millions of gallons (25 acre feet) of landscaping water annually to an area that has never been irrigated. Will the addition of paved surfaces, construction pads, streets and structures cause compaction of the soils/subsoils in the area? Will this cause subsidence or instability of structures in and around the project area over time? Will subsidence cause new unknown flooding issues?

Question #3:
There is an existing subsoil study on the project area that shows what is considered to be the profile of a historic pond, which is typical in areas proximal to meandering rivers. Since the area is a known liquefaction zone in an earthquake prone location, and soils of this type can be unstable, how will this affect the safety of the homes and the structural integrity of the levee in an earthquake or major flood?

Noah Housh

From: Patty Simons <patricia.simons.ps@gmail.com>
Sent: Thursday, April 12, 2018 4:35 PM
To: Noah Housh; Cindy Tzafopoulos
Subject: Hunter Project

Dear Mr. Housh,

My husband and I were at the first meeting at the fire house where the Hunter project manager presented the project and I was also at the second meeting in early April at the fire house. Many residents of St. Helena spoke about their Hunter project concerns regarding traffic, parking, water, open space, police and fire services, etc.

I wanted to add my two cents telling you that my husband and I have the same concerns as the people who spoke. I didn't want to waste everyone's time repeating what you already heard so I am sending a note. Unfortunately, we have been gone for the past month (due to a family emergency) so I hope you get this before the next meeting.

Kind regards,
Patty and Don Simons
831 Signorelli Circle
pattysimons@comcast.net
desimons05@comcast.net
707-967-0382 home

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 3:46 PM
To: Noah Housh
Subject: FW: Hunter Project

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

-----Original Message-----
From: Tishna Pastrama [mailto:pastrama@sbcglobal.net]
Sent: Thursday, April 12, 2018 3:30 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter Project

The walkway to the river connects us with nature. There is no place like it in St. Helena. If this is next to a busy street or housing, how can you mitigate that loss?

Sent from my iPhone

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 3:44 PM
To: Noah Housh
Subject: FW: Comments and Issues for the Hunter Environmental Impact Report

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: contact@shregp.org [mailto:contact@shregp.org]
Sent: Thursday, April 12, 2018 2:18 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Cc: Mark Prestwich <MPrestwich@cityofsthelena.org>
Subject: Comments and Issues for the Hunter Environmental Impact Report

City of St Helena - the St Helena Residents for an Equitable General Plan respectfully submit these comments gathered from our group about the scope of the Hunter Subdivision EIR.

Parks: We have too few parks for all of the people that live here already. We are way below what the parks national number should be per capita. What will the parks ratio be when this project is built to the maximum number, including the density bonus? Since there is no information on the number of bedrooms or bathrooms, how will the number of new residents be determined so we will know how many people will be added to the parks we already have?

Impact on Adjacent Vineyards: What impact could occur in the soils and crops in the adjacent vineyards if homeowners use pesticides, such as RoundUp, or fertilizers on their lawns?

Impact on River: What will the impact on the Napa River be when hundreds of people move in next to it? Runoff from lawns, noise, runoff from oil from the streets, human activity affecting river wildlife, etc.

River Trail: If this trail and open area surrounded by vineyards and open space is paved or is next to a roadway, what will be available to the public to replace this natural trail paid for by the public?

Recreational Space: There are high numbers of multi-family and high occupancy housing in the vicinity such as Hunts Grove, Woodbridge, Edwards St, Church St, Monte Vista, Brown St, McCorkle, Vineyard Valley, Stonebridge, Peppertree, Mariposa, etc. There is extremely limited open space for recreation of any kind in this area. With the exception of Meilly Park, there is no public space other than the nature trail from the terminus of Adams to the Napa River. How will this loss of critical public space (the river trail)

accessible to all of these high density developments impact their ability to access public recreational space? How will that be mitigated? What will replace it? How will lower income and multi-family residents be able to access public open space and nature?

Safety: How will the safety of pedestrians be impacted when the extension of Adams is connected to Starr, particularly at the Hunt/Starr intersection?

Thank you,

SHREGP

Noah Housh

From: Krystine Smith <krysmith@mail.com>
Sent: Thursday, April 12, 2018 3:21 PM
To: Cindy Tzafopoulos; Noah Housh
Subject: Hunter Subdivision EIR

I am submitting the questions below for the Hunter EIR

1. The taxpayers paid for a recreational trail to be included as part of the flood project. St Helenans use that recreational trail from the end of Adams to the Napa River all of the time. If this area for walking, jogging, dogs and enjoying peace and quiet includes an Adams St extension or housing, and is no longer a peaceful environment for the public to enjoy, how will that be mitigated? What will replace it?
2. How will the lights from this project affect the night sky for everyone in the area, including the nearby hillsides?

best,
Krys Smith

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 1:55 PM
To: Noah Housh
Subject: FW: Hunter EIR comments

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: Jonathan Newsome [mailto:jjjnewsome@gmail.com]
Sent: Thursday, April 12, 2018 1:49 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter EIR comments

City Clerk - please distribute as needed.

Here are a few comments about the Hunter EIR. The first two I sent back in December, plus I added a couple more.

1. In the Transportation section, all of the scenarios should start with Existing conditions, which means no access to the trail on Pratt. There are no plans/funds to fix that bridge at this time that I know of, so we must assume that that defines Existing. The Pope Street bridge is under additional stress from no Pratt access and the Hunter EIR should address how a new development will further stress that situation.

2. Understanding of extreme weather events has increased in the last six years since the old EIR was started. It is clear that FEMA maps that do not include climate change are inadequate. The new EIR should incorporate consideration of the all too common extreme weather events which will increase flood risk. How will climate change be incorporated and how does it change flood maps and flood risk?

3. We walk down the trail that leads to the Napa River almost every day at different times. We see birds, rabbits, hear bullfrogs and crickets, etc. This area is teeming with wildlife and probably serves as a watering hole and food source to countless wildlife species. How will the paving of this area, nighttime lighting, and addition of hundreds of cars and humans impact the wildlife that lives in the area or migrates through? Which species will be impacted and how? What research will be conducted to determine this?

4. What is the air quality for the surrounding neighborhoods during the project construction? Some of us have respiratory issues, and we want to know how long and how seriously our air quality environment will be impacted. Please be specific on the types and quantities of impact.

5. How much traffic on Starr, Hunt, Pope, and Adams will be added? How many cars will the project add specifically, and how will this be counted since there is no information on housing types?

Thanks,
J. Newsome

Noah Housh

From: Tim Nieman <tim@nieman.org>
Sent: Thursday, April 12, 2018 1:37 PM
To: Cindy Tzafopoulos; Noah Housh; Mark Prestwich
Subject: Scoping comments on Hunter EIR

I'd like to submit the following comments for the Scoping of the Hunter EIR

Groundwater usage on the site
The estimates of historical groundwater usage on the site need to be redone. The previous EIR made some highly questionable assumptions about historical groundwater usage, leading to an estimate of pre-flood-project groundwater demand on the site of 22 AF. There are two errors in the consultant's methodology rendering this estimate much too high.

1. The consultant assumed that all of the vineyards on the site were historically irrigated. There is little need to irrigate this wet vineyard and there is no evidence that there has ever been an irrigation system on the site, so the assumption that the well was used to irrigate the entire site is unfounded. There are no remnants of piping or any other irrigation components currently. And, vintners adjacent to the site who have lived here for decades do not recall there ever being such a system. The property is adjacent to the river and is one of the wettest vineyard locations in the valley. There is little need to irrigate there. Adjacent vineyards which are updip and drier are all dry farmed. If the assumption is to be made that irrigation once existed for the entire vineyard, it is incumbent upon the consultants to prove that such a system existed.
2. The consultant assumed vineyard irrigation rates from the Oakville area, a much drier area farther from the Napa River. Even if this area was ever irrigated, Oakville irrigation rates are too high. Again, this is a wet vineyard which would need water only rarely in the driest of years, if at all.

Therefore, historical groundwater pumping on the site was likely localized, sporadic and minimal. The actual usage would be a small fraction of the 22 AF. What are the new estimates of historical production? What data are used to justify those estimates?

Impacts on the Napa River, including fish
The existing groundwater well on the site is only hundreds of feet from the Napa River. If the aquifer being accessed is at all connected to the river, then the well is drawing down from the Napa River, impacting river flows and fish habitat. What is the connection to the Napa River? How much is the impact on river flow from pumping on the site at different rates? A groundwater hydrology study should be undertaken to determine the connection to the river.

Impacts on City Groundwater Supply Wells
The existing groundwater well on the site is updip of City water supply wells and the proposed levels of use could impact City wells. Is it the same aquifer? How would pumping on the site affect groundwater levels in the City wells, at different rates? A groundwater hydrology study should be undertaken to determine if there is a connection to the City's groundwater supply wells and the potential for drawdown of those wells.

Noah Housh

From: Mark Prestwich
Sent: Thursday, April 12, 2018 2:49 PM
To: Noah Housh
Subject: FW: Comments and Issues for the Hunter Environmental Impact Report

FYI

From: contact@shregp.org <contact@shregp.org>
Sent: Thursday, April 12, 2018 2:18 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Cc: Mark Prestwich <MPrestwich@cityofsthelena.org>
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Safety: How will the safety of pedestrians be impacted when the extension of Adams is connected to Starr, particularly at the Hunt/Starr intersection?

Thank you,

SHREGP

Noah Housh

From: David Wilkinson <david@twgexperiential.com>
Sent: Thursday, April 12, 2018 4:11 PM
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: Hunter Project-ERI Scoping Input

To the City Clerk, St. Helena, et al,

This note is a submission in response to the request for input on the Hunter Property Development EIR scoping exercise.

As you may be aware my home is located somewhat at ground zero of this proposed development and the results of the EIR impacts me very directly and those of my immediate neighbors and the greater St. Helena community dramatically. The EIR, which seems to be evolving with considerable thought, does seem to be predicated on some larger issues that are being relegated to past decisions that do not appear to be as well thought out and that is concerning to me, substantially.

I am relatively new to the community and while attempting to discover what has been a very long process in developing this property there are more questions raised than answered. I would consider myself pro-development but with the caveat that any development is very well thought out, vetted intensely, and evolved with the best practices for the whole community/City in its considerations and approvals. I am pro-development, and not a developer. But I know instinctively when something is not of the potential standard that the community needs and deserves. The very few illustrations of this development that I have seen are of the poorest creative quality that I could imagine and certainly do not seem to fit any, even minimal, urban plan for our City although I have made some efforts to discover what that may actually entail. As I stated in one of the public meetings I am somewhat baffled by the rush to move a poorly defined project forward without much more discovery.

These comments are somewhat outside the bounds of the Scoping Request but the Discovery process is directly related to that Request. I have heard of my neighbors concerns, and they are ground zero concerns, and whole community concerns of mine as well in relation to traffic, water, resources, noise, costs, liability, and impact on every aspect of the future of this City that I am quickly coming to value and appreciate deeply.

Somewhat disconcerting is the revelation that a previous EIR contained information which is to be transported into the new EIR without review. I am particularly concerned with the whole process of developing the levee and its viability particularly relative to the news of so many levees and similar structures in Houston, New Orleans and elsewhere failing when they were supposed to be certified '100 year flood' capable. If this levee fails who is responsible for the destruction that will devastate so many in this community? Who pays for those types of catastrophes? I would ask that this issue not be swept under the proverbial rug and be added, in-depth, to the scope of the EIR work.

My thanks for your work and the commitment from every one of our councilors, City Staff and Executive and Counsel, the Mayor and all of those tasked with this EIR work and they all contribute to our future which is bright indeed.

David G. Wilkinson
704 Hunt Avenue
St. Helena, CA.
94574

1.415.608.5790
david@twgexperiential.com

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 4:20 PM
To: Noah Housh
Subject: FW:

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: Wendell Laidley [mailto:wlaidley3@gmail.com]
Sent: Thursday, April 12, 2018 4:17 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject:

Cindy,

The first photos are showing up now. Can you tell me if you receive this with the first 7 photos in it?

Just hit reply if you would. Thanks.

Wendell

Dear Cindy,

Please consider these comments regarding the scope of the Hunter EIR.

An earlier EIR dismissed flood risk for the Hunter Property behind the levee as "less than significant" as shown below ...

LETTER C4
Ron Amoroso
June 18, 2012

C4-1 This is an introductory comment. See Response to Comment C4-2 addressing the specific comments detailed in Mr. Amoroso's letter.

C4-2 While liability issues are not a subject that CEQA addresses, the Draft EIR does go into considerable detail regarding the potential for the levee to be overtopped or fail (see Draft EIR Impact HYD-4 starting on page 242).

With the acceptance of the Flood Protection Project and the revision of the Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map, FEMA has indicated that the project site has an acceptable level of protection from the 100-year flood event. This 100-year level of protection is the standard of significance that is specified by the CEQA Guidelines to determine if a potential flooding impact is significant or less than significant. In this case, the potential flooding impact, under CEQA, is less than significant.

That citation reports the "potential flooding impact, ***under CEQA***, is less than significant."

With due respect to all, I consider the flood risk behind the levee and its potential consequences to be substantial, and ask that the flood risk be thoroughly studied so St. Helena residents and taxpayers do not become liable for damages occurred on that property when the levee alignment violated St. Helena's own 1993 General Plan, which contained this provision ...

Goals, Policies and Standards

Guiding Policies

9.4.1 New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.

9.4.2 If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.

9.4.3 Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

9.4.4 Grading and earth filling within the designated 100-year floodway should not be permitted except for public streets or bridges.

9.4.5 Encroachments into the 100-year floodway should not result in any increase in flood levels during the occurrence of the base flood discharge.

... that "grading and earth filling within the designated 100-year floodway should not be permitted."

Unfortunately the Vineyard Valley development was developed directly atop the floodway to the Napa River, as shown on these photographs ...



3

and from the east side of the River ...



These photos show that the floodwater trapped behind the Vineyard Valley cinder block wall did not overtop the riverbank, but instead drained naturally from the watershed northwest of Vineyard Valley, toward the historic floodway now blocked by Vineyard Valley.

Disruption of that historic natural floodway caused both floods in 1986 and 1995 that caused over $100 Million as documented by City Manager Johansson in his Project Summary report to Assemblywoman Noreen Evans and Senator Pat Wiggins ...

Project Summary Sheet

Project Name: City of St. Helena Flood Protection and Flood Corridor Restoration Project

Tracking No: 200784107

Location: City of St. Helena County: Napa, CA

County: Napa

Project Sponsor: City of St. Helena

Point of Contact: Bert Johansson, (707) 967-2792

Co-applicant(s): None

Assembly District: #7 Noreen Evans **Senate District**: #2 Pat Wiggins

Project Summary: The City of St. Helena Flood Protection and Flood Corridor Restoration Project will protect 468 existing mobile homes, single-family dwellings, and low-income multifamily units from flood damage caused by the Napa River overflow through the incorporated City of St. Helena in Napa County. This multi-objective project will provide flood damage reduction through restoration and re-establishment of the natural floodplain along the project creek frontage; construction of set back levees and overflow basins for transitory storage; and the re-creation and restoration of a natural floodway corridor. It will create more than 8 acres of high-value riparian forest and shoreline restoration for terrestrial and fish habitat on the Napa River, which is listed by the EPA as an impaired waterway and by National Marine Fisheries Service as an important steelhead and salmon recovery tributary of the San Francisco Bay Estuary. In addition, the project will allow residents to view and access this reach of the Napa River, which currently cannot be accessed.

The project addresses Flood Protection Corridor Program Goals by:

- Floodplain Terrace at more than 8 acres, the new terrace will stretch alongside the Napa River. This terrace will provide a wider area for passage of floodwaters and also provide riparian habitat for rare and common species.
- Shoreline Restoration Approximately 600 feet of existing bank protection riprap and wire gabion at the Vineyard Valley Mobile Home Park (VVMHP) will be removed and the shoreline restored, improving habitat for steelhead, California freshwater shrimp, and critical habitat for the California red-legged frog, as well as for common species.
- Levee A new setback levee will be constructed.
- Removal of Mobile Homes Approximately 17 mobile homes have been removed to make room for a wider floodway corridor.

- Floodwall/Bank Stabilization A new setback floodwall will be constructed to surround the remaining homes within the Vineyard Valley Mobile Home Park. Up to 300 feet of bioengineered and/or structural bank stabilization would be placed near the confluence of the Napa River and Sulphur Creek to protect a portion of the VVMHP floodwall.
- Stormwater Management for Water Quality. A detention basin and pumping facility will be placed inboard of the new levee and northwest of the existing VVMHP floodwall. The two existing storm drains will be diverted into this basin and the two existing storm drain outfalls into the Napa River will be abandoned. A drainage swale will run along the outboard edge of the new levee to filter area stormwater before entering the Napa River. Water quality will be improved as unfiltered storm water passes through the detention basin and the vegetated swale in the terrace.
- Vegetation Management At the southeastern end of the project area, riparian

Engineers know as basic safety practice not to obstruct floodplains, as confirmed below in St. Helena's 1993 General Plan ...

Goals, Policies and Standards

Guiding Policies

9.4.1 New development should provide adequate drainage improvements to handle generated storm runoff from the site to the nearest major watershed. The watersheds include York Creek, Sulphur Creek and the Napa River.

9.4.2 If a City storm drain is available, the developer should participate in the funding to the extent it benefits the development.

9.4.3 Extension of existing downstream drains which have adequate capacity should be completed at the developer's expense with future reimbursement for oversizing costs at the time of connection by others.

9.4.4 Grading and earth filling within the designated 100-year floodway should not be permitted except for public streets or bridges.

9.4.5 Encroachments into the 100-year floodway should not result in any increase in flood levels during the occurrence of the base flood discharge.

Unfortunately that basic practice was ignored in the levee alignment, which bisects the very floodplain that caused the 1986 and 1995 floods that caused over $100 Million as reported above by former City Manager Bert Johansson.

After the 1986 flood, in his letter of August 14, 1986, to developer McDonnell, then City Engineer Jack Meade warned Mr. McDonnell against reconstructing Vineyard Valley on its floodway blocking site ...

August 14, 1986

Vineyard Valley Mobile Homes
270 Pope Street
St. Helena, California 94574

Attention Mr R H McDonnell

RE: Flood Wall

Dear Mr. McDonnell

This letter is in regards to your building permit application for a Flood Wall filed by your contractor Mr. Jinks.

It is my understanding from your design engineer, Mr. Giorgi, the purpose of this wall is to replace a fence which was washed out and damaged in the February 1986 flood. It is also my understanding the proposed Flood Wall is on the same location and extent as the washed out fence.

The City cannot guarantee or assure you that the Flood Wall will achieve its intended purpose. The review of the plans and the issuance of a building permit does not provide you with any type of warranty either directly or implied that the construction of the wall will accomplish its design purpose. Only your design engineer can provide you any type of assurances that the Flood Wall will function as intended.

You are hereby put on notice that the construction of the Flood Wall may have possible adverse effects on other property owners either upstream or downstream. The construction of the Flood Wall may create off-site flood hazards to other properties. Prior to construction, your design engineer should thoroughly study and evaluate the possible effects this Flood Wall will have on other properties.

By acceptance of the building permit for the Flood Wall, you shall assume full responsibility for any liability occurring from the construction of the Flood Wall and hold the City of St. Helena harmless for any liability and provide full indemnification to the City of St. Helena.

Sincerely,

Jack M. Meade, P.E.
City Engineer

JMM/kmw

cc: Acting City Administrator
City Attorney
Building Inspector
Philips and Giorgi

... and in his response to that letter, Professional Engineer Gerald R. Giorgi expressly alerted the landowner that he should "count on being sued" should another flood occur and neighbors be damaged, for "whatever reason" ...

Gentlemen:

We have just received a copy of Mr. Meade's letter to you dated August 14th, 1996 regarding the proposed flood wall.

As you know and as it is understood by Mr. Meade, the new wall merely replaces the substandard barrier that failed in the 1986 flood. Mr. Meade states that "construction of the flood wall may create off-site flood hazards to other properties." We fail to understand how replacing a timber wall that was intended to act as a barrier with a masonry wall presents any new off-site flood hazards that did not already exist. The alternative of letting the river flow through your project would be amusing if not so serious. We are more concerned with the stockpiling of fill NW of your project in what appears to be within the flood plain boundaries.

As discussed, if your project should flood again it will occur at the levee adjacent to the river. We understand that raising this levee could indeed adversely impact off-site properties and it would merely move the weak link to the Sulphur Creek boundary.

We understand your urgency in proceeding with construction as the risk of losing millions of dollars in homes and potential loss of life is real. However, should another flood occur and neighbors are damaged, for whatever reason, you can count on being sued. Again we recommend you consult with an expert in hydrology to confirm what we all believe to be true. It would be a very cheap form of insurance. Please call if you require assistance in this matter.

Very Truly Yours,

Gerald R. Giorgi, P.E.

GRG:/jo

cc: Charles F. Philips
Jack H. Meade, P.E.

1541 THIRD ST. NAPA, CALIFORNIA 94559 (707) 252-6588

It is unfortunate the General Plan guidelines the professional engineers recommendations were ignored, but when Measure A was passed in 1998, residents of Vineyard Valley, fearing the future flood warned by engineer Giorgi, fought assertively to have their flood protection upgraded to avoid the next damaging flood. Vineyard Valley residents were comforted by the inclusion of this Measure A set-aside to fund flood protection for St. Helena ...

In December 2008, residents sought to preserve the floodplain by suggesting this upgrade to the extant cinder block wall erected after Vineyard Valley's flood in 1986 to flood standard, along Vineyard Valley's north property line ...

Unfortunately the residents were ignored and the levee alignment now cordons off a major component of the natural floodplain, with obvious flood risk increases by obstructing the floodplain.

The residents proposed the remaining floodplain be preserved as a public riverbank park, but advocates of the ill-designed levee across the floodplain won the argument and Vineyard Valley flood protection was approved across the very floodplain that had flooded Vineyard Valley so badly in 1986 and 1995.

When Vineyard Valley residents asked why the levee had to obstruct the floodplain instead of upgrading the cinder block wall along their north property line, and they were told upgraded floodwall around Vineyard Valley and Hunter's Grove "would not work."



As an engineer myself, I can only conclude the levee alignment was built across the floodplain to protect developer Hunter's property at public expense, and the sacrifice of a large portion of the historic floodplain.

UC Davis Engineering Professor Nicholas Pinter wrote after completing a site inspection that he found our levee a "field of dreams levee" as he wrote in this report. City management may want to inquire of Professor Pinter as to his opinion of the wisdom of permitting housing development behind the levee. I personally trust Professor Pinter significantly than I trust the engineers who dangerously aligned our levee right through the middle of our floodplain.

Thank you for your consideration.

Wendell Laidley
st. Helena

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 11:10 AM
To: Noah Housh
Subject: FW: Hunter EIR Comment

FYI

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: Angela Zivkovic [mailto:angziv@gmail.com]
Sent: Thursday, April 12, 2018 9:28 AM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter EIR Comment

Dear City Council,

I am writing regarding the EIR for the Hunter Project. As a resident of Saint Helena for over 10 years, and as a mother of two young children, and as someone who intends to live here permanently I have concerns regarding the Hunter Project.

First and foremost, I and my family, and many other families from all over town, use the open space and walking path that would become housing under the proposed plan. As this is the only open public space that is not privately owned in town, this is the only opportunity for the residents of this town to recreate and stay healthy and enjoy the beauty of where we live. We walk our dog on the path almost every day and we see dozens of families, of all different socioeconomic backgrounds, using the open space to enjoy some fresh air. This is a fundamental human right to have access to open space that is afforded nowadays even to farmed poultry!

Second, much of the space that would be designated for housing is either on or much too close to the wildlife and habitat preservation areas near the levy and the river. It is our duty to preserve the natural heritage of this beautiful space that we have inherited from our predecessors, whatever little of it there is left. We have to ask ourselves what is more important to us: to allow a man who took a gamble on whether this land would ever be allowed to be built on to go ahead and build, or to put our own values and needs as a community above the personal profits of one individual. Again, as someone who actively uses this open space on a nearly daily basis, I can attest to the fact that the habitat and wildlife preservation efforts in this area are working. I keep my dog out of the space and we respect and observe the animals and plants that live there. There are ducks, geese, many

small birds, rabbits, frogs, and an entire ecosystem that lives and breathes there that we need to protect for future generations to enjoy.

There are a host of other reasons including traffic, water, safety, air quality, noise, loss of property values, and even crowding in schools, that are all also huge concerns for me and my family with this project.

My questions are the following:

1) Why do we actually need to develop this land? Ever. Where does it say that this city must grow in size? As a biologist I understand very well that everything has its limits. The only things in nature that continue to grow and expand without limits are things like cancerous tumors. This city is limited on the east and west sides by natural geological formations: the hills on the west and the river and hills on the east. There is an ideal size for the city of Saint Helena that will maximize all of the values that we all appreciate and that are the reasons why we live here. And we should actively work to maintain and protect that size without allowing expansion and growth when it does not make sense, as in this case, where growth and expansion would result in the loss of irreplaceable open space that is absolutely crucial to the welfare of the citizens of this town.

2) Who stands to benefit the most from this housing development? The developer and a hundred people who will be able to buy homes to live here? And what about the rest of the 5,000+ citizens of the town? We, and the wildlife in the protected habitats living in the area, would be the losers in this. And honestly, I see no upside whatsoever.

I am firmly committed to opposing this development in every way I can in order to preserve and protect the little bit of open space left in this town. On behalf of my myself and my children, I urge you to take these important concerns into consideration.

Sincerely,
Angela Zivkovic, PhD
Resident, St. Helena
(530) 574-9043
angziv@gmail.com

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 11:11 AM
To: Noah Housh
Subject: FW: Hunter EIR Scoping Comments

FYI

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Direct 707-968-2742 | Fax 707-963-7748
ctzafopoulos@cityofsthelena.org
www.cityofsthelena.org

From: John Kelly [mailto:johnpatrickkelly@yahoo.com]
Sent: Thursday, April 12, 2018 10:13 AM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter EIR Scoping Comments

Hello,
In regards to the Hunter EIR scoping, I request that the EIR examine the risk of flooding in the nearby neighborhoods. The levee was built with the understanding that if it were topped or breached, the very land that Hunter wants to build on would act as a drainage buffer to reduce the likelihood of flooding at Hunt's Grove, Starr Ave, Vineyard Valley, etc. In other words, building on the Hunter property would create flood risk for nearby neighborhoods. This will immediately increase insurance costs for those neighborhoods (which would likely result in lawsuits against the city, possibly class action) and, eventually, crippling judgments against the city if/when the levee is topped or breached.

Thanks,
John P Kelly
1178 Starr Ave
St Helena

Noah Housh

From: John Milliken <jmzin@comcast.net>
Sent: Thursday, April 12, 2018 11:14 AM
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: Hunter EIR Scoping Comments
Attachments: C001 SENT Hunter Comment Ltr.pdf; NPS_Urban-facts_final.pdf; Response to Response.docx

Hunter EIR Scoping Comments 4/12/18

Please find listed below areas that should be included in the scope of the new EIR. In addition, I have attached comments from a CEQA Attorney and my own comments prepared in response to the original DEIR. Also attached is an informational report prepared by the EPA that reviews how to protect water quality from Urban Runoff. These attachments detail many of the shortcomings of the original DEIR and I would like them included for consideration for the scoping of the new EIR.

Design, Implementation and Administration of the Affordable Units
It will be very difficult to conduct a thorough EIR that subscribes to CEQA standards until the design, implementation, and administration of the affordable housing components are fully understood. How and who is going to build them? Will they have to built before the market rate houses? How large will they be and how many occupants will they have. How many bedrooms, bathrooms, and parking spaces will there be? Are they going to be rentals or owner occupied? Will the multi-family units need zoning variances or conditional permits? Will the 10 lots with Granny units be deed restricted or under the control of the owner? What mechanisms are in place to ensure that the 10 granny units are indeed made available as affordable and when will they be built. If the project qualifies for a density bonus by right, should the EIR anticipate this and factor in the potential impact of additional units? All of this should be explained and understood BEFORE the EIR is started so that there are no surprises that could derail this second attempt at completing an EIR for this project. It is one thing to draw boxes on a sub-division map and designate them as affordable for development concessions. It is quite another to adequately explain how this will all work within the parameters of existing regulations and requirements. And, without this information, preparing an informed EIR will be incredibly difficult.

Design and Implementation of a controlled intersection at the Pope Street Bridge and Silverado Trail
Well after the completion of the last DEIR, the applicant claimed they had new information and that they would submit a design and pay for this intersection (along with approval from the County) to mitigate traffic impacts. Will information on how this will be accomplished (or is even practical) be provided BEFORE the start of the new EIR?

Plans for mitigating loss of State Designated Prime Agricultural Land
Well after the completion of the last DEIR, the applicant claimed that they had new information for a plan for offsetting the loss of Prime Agricultural Land. Will this information be provided BEFORE the start of the new EIR?

Impacts of Traffic Through Neighborhoods
Beyond traffic count studies, will the new EIR take into account traffic that will utilize the Adams and Starr extensions to circumvent traffic delays on the Silverado Trail and Highway 29. The advent of apps like Waze and Google Maps will re-direct increasing amounts of traffic through neighborhoods. Residents of Hunts Grove will now have to cross a busy intersection upon exiting their development. This is a particular concern for the safety of children and pedestrians who now do not face crossing a street in order to walk to/from school or shopping.

Loss of open space and safe access to the Napa River Walk for pedestrians and dog walkers

Once Starr is extended to meet Adams, residents and visitors who currently use the undeveloped city owned lot to access the River walk will be faced with sharing their walk with traffic and parked cars to reach the walk. This will be a significant danger to children and dog walkers.

John Milliken
jmzin@comcast.net
707-963-8134 (Office) 707-486-4266 (Mobile\Text)
1256 Hudson Ave.
St. Helena, CA 94574

Noah Housh

From: Cindy Tzafopoulos
Sent: Thursday, April 12, 2018 1:55 PM
To: Noah Housh
Subject: FW: Hunter EIR comments

Thank you,

Cindy Tzafopoulos
City Clerk
City of St. Helena
1480 Main Street
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From: Jonathan Newsome [mailto:jjjnewsome@gmail.com]
Sent: Thursday, April 12, 2018 1:49 PM
To: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: Hunter EIR comments

City Clerk - please distribute as needed.

Here are a few comments about the Hunter EIR. The first two I sent back in December, plus I added a couple more.

1. In the Transportation section, all of the scenarios should start with Existing conditions, which means no access to the trail on Pratt. There are no plans/funds to fix that bridge at this time that I know of, so we must assume that that defines Existing. The Pope Street bridge is under additional stress from no Pratt access and the Hunter EIR should address how a new development will further stress that situation.

2. Understanding of extreme weather events has increased in the last six years since the old EIR was started. It is clear that FEMA maps that do not include climate change are inadequate. The new EIR should incorporate consideration of the all too common extreme weather events which will increase flood risk. How will climate change be incorporated and how does it change flood maps and flood risk?

3. We walk down the trail that leads to the Napa River almost every day at different times. We see birds, rabbits, hear bullfrogs and crickets, etc. This area is teeming with wildlife and probably serves as a watering hole and food source to countless wildlife species. How will the paving of this area, nighttime lighting, and addition of hundreds of cars and humans impact the wildlife that lives in the area or migrates through? Which species will be impacted and how? What research will be conducted to determine this?

4. What is the air quality for the surrounding neighborhoods during the project construction? Some of us have respiratory issues, and we want to know how long and how seriously our air quality environment will be impacted. Please be specific on the types and quantities of impact.

5. How much traffic on Starr, Hunt, Pope, and Adams will be added? How many cars will the project add specifically, and how will this be counted since there is no information on housing types?

Thanks,
J. Newsome

Noah Housh

From: Vickie Bradshaw <vbradshaw@calstrat.com>
Sent: Thursday, April 12, 2018 9:20 AM
To: Cindy Tzafopoulos
Cc: Noah Housh; Mark Prestwich
Subject: Hunter EIR Scoping Comments

Cindy-

Below are my comments regarding the scope of the Hunter EIR.

1. The EIR for the Hunter Project cannot be done until it is conclusively determined whether or not the Hunter Project qualifies for the 40% affordable housing benefits, including priority in water and sewer connections, use of prior year surplus units from the Growth Management System (GMS), etc. The reason for this is that the environmental impact is completely different if the benefits are applied to the project than if they are not applied. An example is that if the project qualifies under the inclusive housing and affordable housing ordinances, then the entire project can be completed in 2 years, according to the developer. If the project does not qualify, then the Hunter Project could take up to 10 years to complete, assuming very few, if any other houses are built in St. Helena during that timeframe because the project would be limited to the annual 9 units allowed under the GMS. It isn't hard to see that the environmental impacts are quite different under these two scenarios.

Before the EIR begins, it has to be determined if the Project qualifies for such benefits or not. This decision cannot run on parallel tracks with the EIR and then come together at the end, as Noah Housh suggested at the neighborhood scoping meeting last month. For the EIR to be accurate, the EIR consultants must know what scenario applies before the EIR begins. And, in cases like this, it does matter to CEQA if the housing is market rate or affordable because the priority benefits derived from hitting a 40% affordable housing rate under City ordinances changes that environmental analysis. In this case, it is not the affordability of the housing that affects the CEQA analysis, but the priority benefits given by the City and/or the state that changes the impact on the environment from building this project.

The prior Hunter Project EIR inappropriately assumed (without confirming) that the Hunter Project would qualify for the priority benefits stemming from the project complying with the inclusive housing and affordable housing ordinances at the 40% rate. That assumption cannot be part of the current EIR process because it likely will make the EIR inaccurate.

If the developer does not want to show to the satisfaction of the City Council that their current proposal completely meets all of the City's inclusive and affordable housing requirements to qualify for the 40% priority benefits, then the EIR should be done without giving any credit for any of those benefits before the EIR is started. At the very least this would change the environmental analysis from a two-year project to a potential ten-year project with ongoing environmental impacts.

If the EIR assumes the project will qualify for the 40% rate and if it is later determined that the current project cannot meet the inclusive housing and affordable housing ordinance requirements without resubmitting a tentative map, then the City would be in the position of looking at yet another Hunter EIR exercise. It would make more sense to make that determination now.

2. The Hunter Project EIR has to take into consideration the cumulative impacts of the 17-acre Hunter Project, along with the 24-acres of Key Opportunity Sites (sites 1, 2, and 6 on page 134 of the Housing Element Needs Assessment), which begins about 3 blocks from the Hunter Project and extends south across Pope Street. These cumulative sites will significantly impact surrounding streets and the Pope Street bridge. Such cumulative effects will undoubtedly impact the environment and have to be taken into consideration in the Hunter Project EIR.

3. The Hunter Project EIR needs to consider the environmental impacts resulting from a potential levee failure. CA Government Code §65302(g)(2)(A)(vii-viii) requires that St. Helena include a levee failure map in its General Plan Update to show areas that would be inundated in the event of a levee failure. It will be important to have such an inundation map to show the environmental difference between the situations where the land behind the levee is undeveloped, as it is now, and the situation where the land behind the levee is covered over with asphalt and houses, which is a situation where there would be significantly less permeable land for flood waters to be absorbed. The environmental differences between these two situations would likely be significant.

Of additional environmental interest is that fact that the area closest to the Napa River where the levee is located is considered a high liquefaction susceptibility area (Figure 4.K-2 in the General Plan Update) and liquefaction is a well-known and significant cause of levee failure.

4. The EIR for the Hunter Project has to assume the project can be built out to the maximum density allowed resulting from any density bonuses provided under city ordinances and state law, even assuming the current project does not now show such a density bonus in the "deemed complete" tentative map. The current owner and/or developer could decide after an EIR is approved to sell the property and the new owners could apply for the density bonuses prior to seeking building permits. At that point it would be too late for the EIR to take into consideration the increased housing units, population, cars and other environmental impacts because the EIR would already have been completed and approved.

Thank you for your consideration, Vickie Bradshaw

Victoria Bradshaw
California Strategies, LLC
One Embarcadero, Suite 1060
San Francisco, CA 94111
(415) 705-5276

980 9th Street, Suite 2000
Sacramento, CA 95814
(916) 266-4575

April 5, 2018

Hunter E.I.R.

City of St Helena, City Hall
Received
APR 06 2018

~~January 30, 2018~~

To the City of St. Helena- RE: the new Hunter EIR:

1480 Main St.
St Helena, CA 94574

In 1997, I was selected by Friends of the Napa River to sit on the Committee appointed by St. Helena's City Council to decide the best way to spend our portion of Measure A funds which were to be used to minimize the risk of flooding on Napa River and Sulphur Creek inside City Limits, with the **requirement** that any alterations would be carried out within a "Living River" context, assuring that any changes would enhance the river's environmental health while benefiting us.

While most municipalities along the river (especially the City of Napa) made an honest effort to abide by the "Living River" requirement, the St. Helena Committee that took on this task was corrupt through and through, and no one other than I gave even a pretense of paying attention to "Living River" principles. It was an appalling experience for me. The fix was in from the beginning, and among the proposals that were floated was a cynical rerouting of Napa River above Pope Street bridge that would leave the riparian woodland intact for the moment, but was deliberately designed to erode and destroy both banks and all the riparian trees and habitat over a period of a few years. I made enough of a stink about that cynical plan that it was eventually dropped from consideration, but sadly nothing better was put forward.

In an attempt to get the Committee to understand what the implications of their proposals would be for people living downstream and the survival of Pope Street Bridge, I personally funded through Friends of the Napa River a brief study by the highly regarded hydrology experts Philip Williams and Associates, which we gave to the St. Helena Measure A Committee so they could begin to understand the downstream impacts above Pope Street Bridge and to the bridge itself if they did one or another of their plans. Williams' mapping of flow patterns revealed great downstream risks involving the plan they settled on: the building of a long, riverside levee that cut off a huge, undeveloped, low-lying area that accommodated flood water every time there was a major rain event and took pressure off the area just above the bridge. As I recall, I spent $20,000 on the Phil Williams study that gave the Committee basic prognostications that would help them understand the implications of what they were proposing; but to my knowledge, that study was completely ignored by every member of the Committee and the highly paid consultants as well. That's when I washed my hands of the crooked Committee and its phony "Living River" process and quit in disgust.

If anyone had genuinely cared, I was prepared to further fund Philip Williams to assure a legitimate "Living River" solution was developed, as **required** by Measure A, which, as you may recall, passed with more than the necessary two thirds majority of the county's vote! This "super majority" made the "Living River" provision a **mandatory** aspect of whatever alterations were carried out using Measure A funds, as opposed to a simple majority vote that could be given little more than lip service.

St. Helena's actual alteration: the huge, lengthy levee which destroyed many acres of our priceless existing floodplain, was in complete violation of both common sense and the "Living River" mandate. It was done for no reason but to destroy an existing, critically important and legally protected floodplain in order to turn all that low land into a huge housing development in the most unsuitable possible location. Now, during flood events, the changed river flow below the levee is destroying the once-stable bank just above Pope Street Bridge. A beautiful, historic mansion- I think it is 2240 Pope Street- is already being put at serious risk of toppling into Napa River as the high bank there is rapidly collapsing. This massive erosion, which will soon destroy the great old estate that existed safely there for more than a century, is a direct result of the changed flow dynamics caused by the levee's elimination of the flood plain that existed just above it. **I believe the City is directly liable for the upcoming destruction of that property!** The destructive, illegal levee, along with Hunter's proposed development that is bound to flood, has got to go **NOW!** This is all the product of a corrupt enterprise between a past Council, City staff and Hunter.

Peter Mennen PO Box 421 St. Helena CA 94574 707-963-1170

CCs- Chuck Vondra, John Milliken, and the affected property owners Pope Street

11

City of St. Helena
"We will conduct city affairs on behalf of our citizens using an open and creative process."

1480 Main Street
St. Helena, CA 94574
Phone: (707) 967-2792
Fax: (707) 963-7748

www.cityofsthelena.org

February 25, 2016

Mr. Peter Mennen
P.O. Box 421
Saint Helena, CA 94574

Dear Peter,

I wanted to let you know that I received the materials you delivered to City Hall on January 28, 2016 related to the Flood Control Project.

I know this was and continues to be a controversial project for the citizens of St. Helena. My goal in hiring a forensic accountant is to review the revenues and expenditures related to all the projects in an effort to ensure all the funds are accounted for and were properly spent in accordance with contractual obligations. Although the scope of the review does not include engineering, environmental or other aspects of the projects, I will add your documents to the file and make them assessable to the forensic accountant.

Sincerely,

Jennifer Phillips
City Manager

Wed, Feb 10, 1904 3:37 AM

From: Big Ricki <bigricki@earthlink.net>
Date: Wednesday, February 10, 1904 3:37 AM
Subject: Flood control Technical Report

Peter Mennen
PO Box 421
St. Helena CA
94574
March 15, 2002

Mike Praul, City Engineer
City of St. Helena
1480 main Street
St. Helena CA 94574

Dear Mr. Praul:

I was one of those selected to participate in the proposed design of a flood control project to be carried out using "Measure A" money that would reduce the impact of flooding on the community of St. Helena. As a bit of history, Measure A was passed by the voters of Napa County as a method of achieving flood control in ways that would be considerate of the biological integrity of the Napa River, as opposed to a flood control design proposed by the Army Corps of Engineers, which was rejected by the citizens of Napa County because it was destructive to river values.

A county wide community group which named itself "Friends of the Napa River" pulled together and began an extraordinary effort to rethink the way in which flood control could be designed so that the Napa River would benefit from sophisticated flood control methods that would help the river regain some of its former behavior in the days before we hedged it in and destroyed its ability to spread out into a flood plain during heavy rain events. This would be done in ways sensitive to the ecological values of napa River. This Measure A funding came to pass by a two thirds vote of the county because of the incredible work Friends of the Napa River did to educate county citizens of the way in which flood control could be handled in ways that would improve the beauty and functionality of napa river, which as you know has been declarted an impaired waterway by Congress, due to the many damaging alterations we have wreaked upon the river in the past hundred years.

I was selected to as a participant in the St. Helena process to represent the vision of Friends of Napa River, to assure the local plan would incorporate the standards for flood control that were integral to any project that would be put forward. After all, a river-friendly design was the whole impetus for Friends of the Napa River to do the extraordinary work that made measure A come to pass.

Regrettably, I found myself marginalized as the planning process went on, and I can recall at least one specific incident where i was told the concept of retaining a tree-lined riparian corridor along the river bank would be an impossible, and then later I learned this devestating concept was built into the design with the justification that, since i had not objected to it, Friends of the River must think it was okay. Toward the end, i was not even notified of upcoming meetings of the St. Helena flood design group, much less invited to participate in the role of a "Friends of the Napa River" advisor. I only learned after the fact that a meeting had taken place, when someone questioned me about why I was no longer attending.

Finally, after the committee agreed upon a proposed design without even an opportunity for "Friends of the Napa River" to have me participating in the proposal that went forward to the city, you were kind enough to give me a copy of the plan. I sent that copy to "Friends of the Napa River," who made the attached comments and sent thaem back to you on February 22, 2002. I am writing this letter just so that I can have some input into the process now, having been excluded in a manner I believe is illegal, and thus depriving "Friends of the Napa River" to have any legitimate input, or even an opportunity to review, the proposal before it was submitted to the St. Helena City Council. Since I

Wed, Feb 10, 1904 3:37 AM

as selected as an official member of the committee, specifically to represent the interests of the "living river" concept that drove the passage of measure A in the first place, this whole process strikes me as bogus.

And not surprisingly, the fundamental design vision of all the possible proposals for flood reduction in St. Helena is antithetical to any kind of living river vision. In each of the possible projects, the riparian corridor along the river is utterly sacrificed, destroying any number of critical aspects of the living river vision. there are many mature and even landmark-sized, "heritage" trees within St. Helena city limits along the Napa River which, I am only now told, will be deliberately left in a narrow, eroding ridge between the current rivercourse and a new floodplain beyond the existing riparian corridor. I am informed that it is understood and expected that the entire riparian stand along both banks of the Napa River within St. Helena city limits will be destroyed over a short period of time as the river cuts into the banks and causes all those trees to come crashing down, leaving nothing of their shade protection for the river all along the banks of the river. In their place will be a great, vacant swath of little or no biological value, at a terrible price to the river. This is a mockery of the real measure A, which was to enhance the river's values as a part of flood control, not destroy them.

Also, a multitude of other benefits, beyond the loss of all their beauty to all of us citizens, will be lost. Many of those trees are mature oaks, whose wildlife value cannot be overestimated. they are the lynchy-pin of biological integrity along the river, and most of them already have been lost to human development. To deliberately destroy these last precious corridors of mature oaks and complex vegetation is intolerable and unacceptable. It is in direct defiance of the driving concept of Measure A. It makes our plan a farce. Just for your improved understanding of the value of oaks, I am including a copy of an excellent book on the complexity and value of oak trees entitled "The Life of an Oak." It was produced by the California Oak Foundation, with major funding from, among others, the Mennen Environmental Foundation. Perhaps you and others will gain some perspective on what you are attempting to throw away.

Measure A was not passed so that a few interest groups in Napa County could benefit at the expense of tremendous tax costs to the rest of us and the sacrifice of the Napa River. It was not put forward so that local politicians could make a lot of hay on its back by corraling a clot of special interest votes and make self-serving claims on campaign literature when they ran for larger office. Measure A had far loftier goals of spending our tax money to benefit both people and the Napa River, and that is the Initiative we as a county passed. St. Helena's Measure A oversight committee has unconscionably distorted the very heart of the "lving river" intent of the measure whose county tax money they (we?) were expected to spend in an appropriate way.

The Mennen Environmental Foundation has purchased acreage on Sulphur Creek to restore in a manner that will benefit flood control and biological values. Our expert evaluators have proposed solutions that are diametrically opposed to the proposal being forwarded to the City of St. Helena by the oversight committee. I absolutely wash my hands of the disgraceful and shameful set of proposals that "my" committee has certified for your consideration and acceptance. I am appalled. I am certain Friends of the Napa River would not touch these proposals with a ten foot pole. They are a joke- a slap in the face to everyone who put his/her heart and soul into bringing Measure A to fruition.

Sincerely,

Peter Mennen

Peter Mennen

CCs: Friends of the Napa River
St. Helena City Council

STAFF REPORT

APPROVED FOR
CITY COUNCIL AGENDA
DATE: 3/7/02
CITY MGR:

The envelope says the city mailed this on 3-8-02 Never received this material until after 3-12-02! P.M. I could not comment by 3-12-02

DATE: March 12, 2002

TO: City Council

FROM: Myke Praul, City Engineer MP

RE: Clarification of Council Direction on Comprehensive Flood Study Environmental Impact Report

Cc: City Manager

BACKGROUND:

The environmental consultant for the Comprehensive Flood Study, CDM, has initiated the public input process to facilitate preparation of the draft environment impact report. At the Council meeting initiating this process, the Council directed staff to analyze three plans; the no action plan, the Minimum Plan and the Enhanced Minimum Plan. In response to a question by a member of the public, the Council also directed staff to analyze a plan that combined the extension of Adams Street with the Minimum Plan. Staff now presents the results of that analysis and requests clarification of the Council's prior direction.

DISCUSSION/ANALYSIS:

As the Council recalls, the Enhanced Minimum Plan (EMP) was a compromise alternative between the Maximum Plan (MaP) and the Minimum Plan (MiP). The MaP reduced the 100-year water surface elevation (WSE) 3.1 feet at the Hunt's Grove Apartments but required the relocation of 60 homes within the Vineyard Valley Mobile Home Park (Park). It included a fill area to the north of the Park on which the relocated homes would be placed. The MiP reduced the WSE 1.6 feet at the same location with the elimination of 17 spaces and loss of approximately 7 to 8 existing homes. The existing floodwall would have to be raised approximately 3.5 feet or a new levee constructed to the north of the wall at the same elevation. The EMP was developed as a compromise to the two distinctly different plans. It would reduce the WSE 2.4 feet and includes the relocation of 29 homes to the vineyard area north of the Park which would be flood proofed by the roadway embankment of an extension of Adams Street. The Council asked what is the feasibility of combining the Adams Street extension with the MiP.

MBK has computed the hydraulic benefits of a plan that would include the Adams Street extension but with the river terracing of the same area as the MiP, or the loss of 17 spaces within the Park. The resulting reduction of the 100-year WSE is about the same as the MiP, which is one foot less than the EMP. The elevation of the roadway embankment would need to be the same height as the levee north of the floodwall or about 3.5 feet above the elevation of the existing wall, a foot higher than the EMP.

Staff and the consultants believe that the environmental impacts of this revised alternative would be somewhere between the EMP and the MiP. While it would require a larger footprint than the

MiP, the structural elements would be very similar with impacts to the Park residents also being very similar as the MiP.

IMPACT:

Further analysis of this hybrid alternative will take additional time and funding. At the last Council meeting, representatives from the VVMHP Homeowners Association presented a petition in support of the EMP, which was signed by approximately 90% of the residents of the Park. The revised alternative would still eliminate some homes in the Park where the EMP would not.

FISCAL IMPACT:

Staff will return to Council at the meeting of March 26, 2002 to discuss the current financial status of the study and bring recommendations to extend the consultant agreements with the funding requests necessary to complete the study. Confirming the above direction will reduce the amount of analysis required for the EIR.

ALTERNATIVES:

1. Confirm prior direction to staff and the consultants to analyze the No Action, Minimum and Enhanced Minimum Plans through the EIR process.

2. Direct staff and the consultants to include a fourth alternative for further environmental analysis that combines the Minimum Plan with the Adams street extension.

RECOMMENDED COUNCIL ACTION:

Staff recommends that the Council confirm the prior direction to staff and consultants to analyze the No Action, Minimum and Enhanced Minimum Plan through the environmental review process.

ATTACHMENTS/EXHIBITS

None.

00147

I did not receive this until after 3-12-02 P.M. I could not comment by 3-12-02.

Mayor : Ken Slavens
Vice-Mayor: Frank Toller
City Council: Joe Potter
Bill Savidge
Sampson Bowers

AGENDA
REGULAR MEETING
ST. HELENA CITY COUNCIL
CARNEGIE BUILDING COUNCIL CHAMBERS
1360 OAK AVENUE, ST. HELENA
MARCH 12, 2002
6:45 P.M. CLOSED SESSION
7:00 P.M. REGULAR SESSION

Prior to the meeting the public may review available information at City Hall or at the George and Elsie Wood Public Library.

A person who is dissatisfied with a decision of the City Council may have the right to a review of the decision by a Court. The City of St. Helena has adopted California Code of Civil Procedures Section 1094.6, which generally limits to ninety (90) days the time within which a decision of the City Council may be judicially challenged. If a person challenges a decision in Court, he or she may be limited to raising only those issues that were raised at the Public Hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to, the Public Hearing.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact City Hall, (707) 967-2792. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting (28 CFR35.102-35.104 ADA Title II). However, City staff will attempt to assist at any time with accessibility. The City Clerk has equipment to assist those with a hearing impairment.

The City Council will convene in Open Session at the stated time, but will then adjourn to any Closed Sessions(s) listed on the agenda. The Council will reconvene in Public Session at 7:00 p.m. at that time, if appropriate, any actions taken during the preceding Closed Session will be announced. If necessary, the Council may reconvene in Closed Session to continue discussion of listed items following the completion of other business.
****

I. 6:45 P.M. CLOSED SESSION
7:00 P.M. OPEN SESSION

Conference with City Negotiator – City Manager
Negotiations with Unrepresented Employees (Department Heads)
and St. Helena Employees Association (SHEA)
Brown Act: 54957.6

PLEDGE OF ALLEGIANCE

1. **ROLL CALL**

2. **APPROVAL OF MINUTES** – January 29, 2002 and February 26, 2002

3. **REPORTS BY STAFF AND CITY COUNCIL:** Reports by staff and/or Councilmembers on items of general interest or action taken during Closed Session. Brief questions for clarification may be posed and answered, and Councilmembers may request that items be placed on a future agenda. Except under certain circumstances, the Brown Act prohibits any other discussion or action by the City Council.

4. **PUBLIC FORUM:** An opportunity for the public to directly address the Council on items of interest to the public not on the agenda. Any person addressing the Council is subject to the requirement of providing his or her name and address, and limiting comments to five minutes. Because of restrictions imposed by the Brown Act, the Council may not engage in substantive discussion, nor take action on matters not described on the agenda.

5. **PRESENTATIONS AND PUBLIC RECOGNITIONS**

   - Presentation by Jill Pahl, Upper Valley Agency Waste Management, Re: Solid Waste Rate Adjustments

II. CONSENT ITEMS: Members of the Council or the public may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions.

6. Planning Commission Actions of March 5, 2002 *Recommended Action:* Approve

7. Accounts Payable and Payroll *Recommended Action:* Approve

8. Resolution Approving Hanging of a Banner Across Main Street Promoting the Calistoga Education Foundation Spring Benefit Auction *Recommended Action:* Adopt

9. Park and Recreation Minutes of February 25, 2002 *Recommended Action:* Note & File

10. Report from City Manager Re: City's Emergency Managers Attending Integrated Emergency Management Course (IEMC) *Recommended Action:* Note and File

11. Resolution Establishing a Voluntary Contribution Check-off Program by Supporting "Action for Better Cities" (ABC) *Recommended Action:* Adopt

12. Resolution Accepting Offsite Improvements by Robert & Katherine States Burke Trust at 2995 Spring Street and Authorization to File Notice of Completion
Recommended Action: Adopt

13. Resolution Authorizing a Professional Services Agreement with Oswald Engineer Associates for Design, Environmental Review and Permitting of the Recycled Water Project
Recommended Action: Adopt

14. Resolution Approving a Budget Appropriation for the Purchase of a Street Sweeper
Recommended Action: Adopt

III. PUBLIC HEARINGS (Since Public Hearings do not begin before 8:00 p.m., Scheduled Matters listed below may be considered before that time.)

15. City Council Appeal of Planning Commission Approval of Request of the Wine Service Co-op for a Tentative Parcel Map to Divide an Existing 7.8 Acre Parcel Located at 1150 Dowdell Lane, on the East and West Side of Fountain Avenue between Dowdell Lane and Mills Lane, into Two Parcels of 5.9 Acres and 1.9 Acres with an Offer of Dedication for Land for the Future Extension of Fountain Street and Realignment of Mills Lane (APN 009-660-003) (Exempt from CEQA) (Planning Director)

16. Request of Julian Inman, Representing Jack and Diana Varozza, to Rezone Property from A-20: Twenty Acre Agriculture to A-20: HP: Twenty Acre Agriculture with a Historic Preservation Overlay. The Application also Includes a Request for a Use Permit and Design Review to Refurbish a Historic Winery Building and to Operate a 20,000 Gallon Small Winery at 514 Pratt Avenue (Planning Director)

17. City Council Preliminary Review of Proposed General Plan Amendment Pursuant to Chapter 26 of the St. Helena Municipal Code as Initiated by Kevin Twohey to Process an Application to Change the Land Use Designation for the Property Located at 738 Main Street from Office to Service Commercial to Allow the Operation of Whiting Nursery on the Project Site (Planning Director)

IV. SCHEDULED MATTERS (Since Public Hearings do not begin before 8:00 p.m., Scheduled Matters listed below may be considered before that time.)

18. Request for Direction Re: Environmental Review of Comprehensive Flood Study (Public Works Director)

19. City Council Discussion of Modifications to Bed and Breakfasts Ordinance (Planning Director)

20. City Council Discussion of Moratorium on Small Winery Applications (Planning Director)

21. Request for Reconsideration of Council Action of February 26, 2002 Regarding Request of Peter Story for a Use Permit and Design Review at 100 Pratt Avenue (Councilmember Bowers)

V. ADJOURNMENT

The next Regular City Council meeting is scheduled for March 26, 2002 at 7:00 p.m. in the Carnegie Building. This agenda was posted at City Hall, 1480 Main Street, St. Helena, California, at 3:00 p.m., Friday, March 8, 2002.

Delia Guijosa, City Clerk

Hi Peter,

We went on site
+ had these concerns!

Chris

967-8158

Friends of the Napa River

68 Coombs St. Bldg B • Napa, CA 94559
Phone (707) 254-8520 • Fax (707) 254-8547
napariv@aol.com • www.napanet.net/fonr

February 22, 2002

Myke Praul, City Engineer
City of St. Helena
1480 Main Street
St. Helena, CA 94574

Re: **Napa River Near St. Helena Technical Report for Hydraulic Analysis Results Prepared by: MBK as of November 27, 2001**

Dear Mr. Praul:

Friends of the Napa River would like to comment on the Technical Report by MBK in response to Scoping for an EIR pursuant to CEQA requirements. We appreciate the opportunity to provide early information through the public process to a Measure A project that must comply with the ***'Living River Guidelines'*** approved by the voters of Napa County.

The Technical Report lists three different plans to the St. Helena Flood Control project:
A. The "Non-Structural Plan" (NSP)
B. The "Minimum Plan" (MP)
C. The "Enhanced Minimum Plan" (EMP)
D. The "Maximum Plan" (MxP)

Friends of the Napa River have serious concerns and many questions with the plans B, C and D. We find the "Non-Structural Plan" the least intrusive and most in line with the 'Living River Guide Lines.'

To better understand the implications of the other plans, we would like the following questions answered and documents provided for public review:

1. The massive excavations of plans MP and MxP will create islands in the Napa River riparian corridor. Questions:
    a. Is this compliant with the 'Living River Guidelines'?
    b. How many native Valley Oak trees will be lost?
    c. How much riparian vegetation will be removed from the banks and the bed of the Napa River? What is the re-vegetation plan? What is the maintenance cost?
    d. How much erosion will occur in tons/year?
    e. What will this do to anadromous spawning gravel down stream?
    f. How will this change the bank and channel of the Napa River?

g. What are the upstream and downstream erosion effects?
h. How will the loss of riparian vegetation and riparian function effect temperature in the Napa River?
i. How high will the temperatures get in the Napa River during the hot summer months due to loss of riparian vegetation?
j. When is it expected that the riparian cover is recovered / rebuild?

2. The initial excavations in plans MP and MxP seem to be enormous. Questions:
   a. What is the number of cubic yards (or tons) of excavation material?
   b. What is the destination of the spoil/other material resulting from excavation?
   c. Will the City of St. Helena be creating new housing locations with the excavated material and cane Measure A money be used for this?
   d. Would such new housing locations be growth inducing?

3. There will be cut down areas in the riparian zone (called flood terraces). Questions:
   a. How much aggradation will occur in the new excavated area?
   b. How many tons per year of sediment excavation/maintenance will need to be done?
   c. Where will the maintenance spoils/sediment be disposed?
   d. How will new riparian vegetation be protected in this area?
   e. What are the maintenance costs associated with this?

4. Could you provide the public with a map that shows the existing flood plain and the existing floodway?

5. What will the increased stream velocity be in the Pope Street Area?

6. In MP and MxP, steep bank formation will be creating a step-function. Questions:
   a. What is the associated erosion factor to this change in banks of the Napa River?
   b. What are the costs of maintenance of these banks and where will the money come from when Measure A money sunsets?
   c. Is this compliant with Measure A 'Living River Guidelines'?

7. What is the upstream flooding impact of the proposed Adams street extension and causeway?

8. Please detail the effects any of the plans would have on Sulphur Creek.

Sincerely

Bernhard Krevet
President, Friends of the Napa River

Fri, Jan 8, 1904 9:10 AM

From: Big Ricki <bigricki@earthlink.net>
Date: Friday, January 8, 1904 9:09 AM
Subject: Flood control Technical Report

Peter Mennen
PO Box 421
St. Helena CA
94574
March 15, 2002

Mike Praul, City Engineer
City of St. Helena
1480 main Street
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Fri, Jan 8, 1904 9:10 AM

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And not surprisingly, the fundamental design vision of all the possible proposals for flood reduction in St. Helena is antithetical to any kind of "Living River" vision. In each of the possible projects, the riparian corridor along the river is utterly sacrificed, destroying any number of critical aspects of the living river vision. There are many mature and even landmark-sized, "heritage" trees within St. Helena city limits along the Napa River which, I am only now told, will be deliberately left in a narrow, eroding ridge between the current rivercourse and a new floodplain beyond the existing riparian corridor. I am informed that it is understood and expected that the entire riparian stand along both banks of the Napa River within St. Helena city limits will be destroyed over a short period of time as the river cuts into the banks and causes all those trees to come crashing down, leaving nothing of their shade protection for the river all along both banks of the river. In their place will be a great, vacant swath of little or no biological value, at a terrible price to the river. This is a mockery of the real measure A, which was to enhance the river's values as a part of flood control, not destroy them.

Also, a multitude of other benefits, beyond the loss of all their beauty to all of us citizens, will be lost. Many of those trees are mature oaks, whose wildlife value cannot be overestimated. they are the lynch-pin of biological integrity along the river, and most of them beyond the river bank already have been lost to human development. To deliberately destroy these last precious corridors of mature oaks and complex vegetation is intolerable and unacceptable. It is in direct defiance of the driving concept of Measure A. It makes our plan a farce. Just for your improved understanding of the value of oaks, I am including a copy of an excellent book on the complexity and value of oak trees entitled "The Life of an Oak." It was produced by the California Oak Foundation, with major funding from, among others, the Mennen Environmental Foundation. Perhaps you and others will gain some perspective on what you are attempting to throw away.

Measure A was not passed so that a few interest groups in Napa County could benefit at the expense of tremendous tax costs to the rest of us and the sacrifice of the Napa River. It was not put forward so that local politicians could make a lot of hay on its back by corraling a clot of special interest votes and make self-serving claims on campaign literature when they ran for larger office. Measure A had far loftier goals of spending our tax money to benefit both people and the Napa River, and that is the Initiative we as a county passed. St. Helena's Measure A oversight committee has unconscionably distorted the very heart of the "lving river" intent of the measure whose county tax money they (we?) were expected to spend in an appropriate way.

The Mennen Environmental Foundation has purchased acreage on Sulphur Creek to restore in a manner that will benefit flood control and biological values. Our expert evaluators have proposed solutions that are diametrically opposed to the proposal being forwarded to the City of St. Helena by the oversight committee. I absolutely wash my hands of the disgraceful and shameful set of proposals that "my" committee has certified for your consideration and acceptance. I am appalled. I am certain Friends of the Napa River would not touch these proposals with a ten foot pole. They are a joke- a slap in the face to everyone who put his/her heart and soul into bringing Measure A to fruition.

Sincerely,

Peter Mennen

CCs: Friends of the Napa River
St. Helena City Council

Note dated march 25, 2002. There is an inaccurate statement in the above letter, which I did not catch because I did not proofread the letter before running it over to the City shortly before City hall closed for the night on 3/15/02. In the above letter, I should have said I was told during a meeting of the oversight committee that it would not be appropriate to plant shrubbery in the riparian

Friends of the Napa River

The Landmarks Building
1026 First Street • Napa, CA 94559
Phone (707) 255-8646 • Fax (707) 255-2164

10/5/97

St. Helena Planning Commission
St. Helena, CA 94574

RE: Napa River Bridge Alternatives

Dear Commissioners:

Friends of the Napa River, as you know, is concerned that community action today safeguard the long-term health of the Napa River. Specifically, we are concerned that the placement of the new Pope Street bridge to cross the Napa River will have significant impacts on river stability and of great concern to St. Helena's dense build-out along the river, have an impact on flooding. We acknowledge the need for a new bridge and perhaps the impacts will only be positive, but it is better to ask the questions now rather than later.

The Alternative A is of particular concern as the abutment for the West side of the bridge is in the floodway of the Napa River, possibly backing the water up in an area where there are many variables to consider, not the least of which is residential. The abutment on the West side sits on Stonebridge Park, a park that carries flood waters at times. Placing a cement dam there would force water elsewhere. The bridge would have to be longer with a causeway to allow the passage for that water in an area that seems ill suited for it.

Alternative A has other problems associated with the troubled area it would be placed into: that is the confluence of Sulphur Creek and the Napa River, and upstream from the historic Pope Street Bridge that is a constriction in the river. It is not yet known what the cumulative effect of the increased flow and velocity of the stormwater runoff from the new developments along Sulphur Creek is going to be during heavy rains.

We have briefly consulted an hydraulic engineer who has done a complete computer analysis of the Napa River at that very point and would be able to plug in the variables to make sure Alternative A would not have the problems it does appear to have and to compare them with the other alternatives. He suggested that bridges have backflow problems that have to be considered carefully. We have learned in our education about river systems that you can not tell how things are until the numbers are run. On page 19 of your report you suggest the hydraulic scour evaluation would be conducted during the final design phase of the project. Suppose at that time the numbers don't come out well for Alternative A? Why not do the modeling now so the citizens can see what the options are and rest assured there will be no additional flooding or scouring problems with any of the alternatives? This would allow them to support a more informed decision.

We are enclosing the name and address of the engineer who has the computer model of this stretch of the river.

Respectfully submitted,

Dear Peter -
Please call me
Num # 255-8762
[illegible]

Friends of the Napa River

Address of Philip Williams & Associates
c/o Vince Neary, Pier 35-The Embarcadero
San Francisco, CA 94133

Environmental Impact Report (EIR) Process Overview

1. Notice of Preparation (NOP) released for 30-days
2. Scoping Meeting Occurs within 30-day NOP Comment Period
3. EIR Draft is written
4. Notice of Completion (NOC) and Notice of Availability (NOA) issued to begin 45-day draft EIR public review period.
5. Comments are compiled and organized for response.
6. Response to Comments drafted and any needed revisions to EIR are made.
7. Public Hearing (could be specific to EIR or include EIR and Project Action)
    7. a. EIR Certification, Project Decision, CEQA findings, Statement of Overriding Consideration Considerations
8. Notice of Determination

Mandatory Elements of CEQA Review

Aesthetics	Agriculture and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Geology /Soils
Greenhouse Gas Emissions	Hazards & Hazardous Materials	Hydrology / Water Quality
Land Use / Planning	Mineral Resources	Noise
Population / Housing	Public Services	Recreation
Transportation/Traffic	Utilities / Service Systems	Mandatory Findings of Significance

I DO NOT THINK IT HAS BEEN FAIR TO THE DEVELOPER TO TAKE SO MUCH TIME TO DECIDE TO ALLOW THIS PROJECT TO PROCEED. YOU CAN GO FASTER. IT MAKES THE COSTS TO THIS DEVELOPER UNFAIRLY TOO HIGH.
I URGE A SPEEDY OK.
SUPPORT THIS WORTHY PROJECT.

The City of St Helena does not discriminate on the basis of disability in the admissions or access to, or treatment of or employment in, its programs or activities. Requests for alternate formats may be made by contacting (707) 968-2659.

JOAN CARLBERG WESTGATE
1520 PINE ST. #.

HUNTER SUBDIVISION PROJECT

ENVIRONMENTAL IMPACT REPORT (EIR) NOTICE OF PREPARATION (NOP)

COMMENT FORM

Please provide the following information if you wish to receive a Notice of Availability of the Draft EIR and to document the author of comments received. Thank you.

Name: Jan Flynn

Email: bluebird4879@gmail.com

Address: 30 Redondo Ct., St. Helena

Organization:

☑ I would like to receive future environmental notices via email. bluebird4879@gmail.com

Please provide us with your written comments on the NOP by **April 9, 2018.** Comments on the NOP may be sent to:

Noah Housh, Planning and Community Improvement Director
City of St. Helena, Planning & Community Improvement Department
1480 Main Street
St. Helena, CA 94574
Email: NHoush@cityofsthelena.org

You may attach additional pages to this form and/or you may submit your written comments separately. Written comments on the scope of the EIR will be acknowledged in the Draft EIR and will be considered in preparation of the document.

Major concerns for EIR consideration:
- Noise
* - loss of vital recreation resource ("river walk")
- Water — flood water & runoff
- sewers
- impact on schools & public services
* - traffic - esp. impact on Pope St. Bridge

NOTES

Calculation of the Land Evaluation (LE) Score

Part 1. Land Capability Classification (LCC) Score:

(1) Determine the total acreage of the project.
(2) Determine the soil types within the project area and enter them in **Column A** of the **Land Evaluation Worksheet** provided on page 2-A.
(3) Calculate the total acres of each soil type and enter the amounts in **Column B**.
(4) Divide the acres of each soil type (**Column B**) by the total acreage to determine the proportion of each soil type present. Enter the proportion of each soil type in **Column C**.
(5) Determine the LCC for each soil type from the applicable Soil Survey and enter it in **Column D**.
(6) From the LCC Scoring Table below, determine the point rating corresponding to the LCC for each soil type and enter it in **Column E**.

LCC Scoring Table

LCC Class	I	IIe	IIs,w	IIIe	IIIs,w	IVe	IVs,w	V	VI	VII	VIII
Points	100	90	80	70	60	50	40	30	20	10	0

(7) Multiply the proportion of each soil type (**Column C**) by the point score (**Column E**) and enter the resulting scores in **Column F**.
(8) Sum the LCC scores in **Column F**.
(9) Enter the LCC score in box <1> of the **Final LESA Score Sheet** on page 10-A.

Part 2. Storie Index Score:

(1) Determine the Storie Index rating for each soil type and enter it in **Column G**.
(2) Multiply the proportion of each soil type (**Column C**) by the Storie Index rating (**Column G**) and enter the scores in **Column H**.
(3) Sum the Storie Index scores in **Column H** to gain the Storie Index Score.
(4) Enter the Storie Index Score in box <2> of the **Final LESA Score Sheet** on page 10-A.

Land Evaluation Worksheet

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
104	3.596	0.22	IIw-2	80	17.84	63	13.86
105	8.588	0.53	IIw-2	80	42.56	58	30.74
118	3.394	0.21	IIw-2	80	16.8	70	14.7
124	0.566	0.04	IVs-4	40	1.4	46	1.84
Totals	16.14	(Must Sum to 1.0)		***LCC Total Score***	78.6	***Storie Index Total Score***	61.14

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
	3.596		
	8.588		
	3.394		
			0.566
Total Acres	10.578		0.566
Project Size Scores	30		0

Highest Project Size Score 30

Updated 2011

NOTES

Calculation of the Site Assessment (SA) Score

Part 1. Project Size Score:.

(1) Using **Site Assessment Worksheet 1** provided on page 2-A, enter the acreage of each soil type from **Column B** in the **Column - I, J or K** - that corresponds to the LCC for that soil. (Note: While the Project Size Score is a component of the Site Assessment calculations, the score sheet is an extension of data collected in the Land Evaluation Worksheet, and is therefore displayed beside it).
(2) Sum **Column I** to determine the total amount of class I and II soils on the project site.
(3) Sum **Column J** to determine the total amount of class III soils on the project site.
(4) Sum **Column K** to determine the total amount of class IV and lower soils on the project site.
(5) Compare the total score for each LCC group in the Project Size Scoring Table below and determine which group receives the highest score.

Project Size Scoring Table

Class I or II		**Class III**		**Class IV or Lower**	
Acreage	Points	Acreage	Points	Acreage	Points
>80	100	>160	100	>320	100
60-79	90	120-159	90	240-319	80
40-59	80	80-119	80	160-239	60
20-39	50	60-79	70	100-159	40
10-19	30	40-59	60	40-99	20
10<	0	20-39	30	40<	0
		10-19	10		
		10<	0		

(6) Enter the **Project Size Score** (the highest score from the three LCC categories) in box <3> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Part 2. Water Resource Availability Score:

(1) Determine the type(s) of irrigation present on the project site, including a determination of whether there is dryland agricultural activity as well.

(2) Divide the site into portions according to the type or types of irrigation or dryland cropping that is available in each portion. Enter this information in **Column B** of **Site Assessment Worksheet 2. - Water Resources Availability**.

(3) Determine the proportion of the total site represented for each portion identified, and enter this information in **Column C**.

(4) Using the Water Resources Availability Scoring Table, identify the option that is most applicable for each portion, based upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. Enter the applicable Water Resource Availability Score into **Column D**.

(5) Multiply the Water Resource Availability Score for each portion by the proportion of the project area it represents to determine the weighted score for each portion in **Column E**.

(6) Sum the scores for all portions to determine the project's total Water Resources Availability Score

(7) Enter the Water Resource Availability Score in box <4> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	On-site well	0.4	100	40
2	Not irrigated	0.6	20	12
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	52

Updated 2011

Water Resource Availability Scoring Table

Option	Non-Drought Years			Drought Years			WATER RESOURCE SCORE
	RESTRICTIONS			RESTRICTIONS			
	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	Irrigated Production Feasible?	Physical Restrictions ?	Economic Restrictions ?	
1	YES	NO	NO	YES	NO	NO	100
2	YES	NO	NO	YES	NO	YES	95
3	YES	NO	YES	YES	NO	YES	90
4	YES	NO	NO	YES	YES	NO	85
5	YES	NO	NO	YES	YES	YES	80
6	YES	YES	NO	YES	YES	NO	75
7	YES	YES	YES	YES	YES	YES	65
8	YES	NO	NO	NO	-- --	-- --	50
9	YES	NO	YES	NO	-- --	-- --	45
10	YES	YES	NO	NO	-- --	-- --	35
11	YES	YES	YES	NO	-- --	-- --	30
12	Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years						25
13	Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years)						20
14	Neither irrigated nor dryland production feasible						0

Updated 2011

NOTES

Part 3. Surrounding Agricultural Land Use Score:

(1) Calculate the project's Zone of Influence (ZOI) as follows:
(a) a rectangle is drawn around the project such that the rectangle is the smallest that can completely encompass the project area.
(b) a second rectangle is then drawn which extends one quarter mile on all sides beyond the first rectangle.
(c) The ZOI includes all parcels that are contained within or are intersected by the second rectangle, less the area of the project itself.
(2) Sum the area of all parcels to determine the total acreage of the ZOI.
(3) Determine which parcels are in agricultural use and sum the areas of these parcels
(4) Divide the area in agriculture found in step (3) by the total area of the ZOI found in step (2) to determine the percent of the ZOI that is in agricultural use.
(5) Determine the Surrounding Agricultural Land Score utilizing the Surrounding Agricultural Land Scoring Table below.

Surrounding Agricultural Land Scoring Table

Percent of ZOI in Agriculture	Surrounding Agricultural Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

(5) Enter the Surrounding Agricultural Land Score in box <5> of the **Final LESA Score Sheet** on page 10-A.

Site Assessment Worksheet 3.
Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
418.5	178.34	86.96	42.96	20.78	10	0

Updated 2011

NOTES

Part 4. Protected Resource Lands Score:

The Protected Resource Lands scoring relies upon the same Zone of Influence information gathered in Part 3, and figures are entered in Site Assessment Worksheet 3, which combines the surrounding agricultural and protected lands calculations.

(1) Use the total area of the ZOI calculated in Part 3. for the Surrounding Agricultural Land Use score.
(2) Sum the area of those parcels within the ZOI that are protected resource lands, as defined in the California Agricultural LESA Guidelines.
(3) Divide the area that is determined to be protected in Step (2) by the total acreage of the ZOI to determine the percentage of the surrounding area that is under resource protection.
(4) Determine the Surrounding Protected Resource Land Score utilizing the Surrounding Protected Resource Land Scoring Table below.

Surrounding Protected Resource Land Scoring Table

Percent of ZOI Protected	Protected Resource Land Score
90-100	100
80-89	90
75-79	80
70-74	70
65-69	60
60-64	50
55-59	40
50-54	30
45-49	20
40-44	10
<40	0

(5) Enter the Protected Resource Land score in box <6> of the **Final LESA Score Sheet** on page 10-A.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

(1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
(2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
(3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
(4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 78.6	0.25	19.7
Storie Index	<2> 61.14	0.25	15.3
LE Subtotal		***0.50***	**35.0**
SA Factors			
Project Size	<3> 30	0.15	4.5
Water Resource Availability	<4> 52	0.15	7.8
Surrounding Agricultural Land	<5> 10	0.15	1.5
Protected Resource Land	<6> 0	0.05	0.0
SA Subtotal		***0.50***	**13.8**
		Final LESA Score	**48.8**

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

Average Annual Daily Criteria Pollutant Emissions

Hunter Subdivision Project

Unmitigated Construction tons

Year	ROG	Nox	PM10 exh	PM2.5 exh
2023	0.2271	1.577	0.0722	0.0675
2024	0.1352	0.00929	0.00046	0.00046
	0.2544	1.0927	0.0469	0.0441
2025	0.1602	1.3947	0.0552	0.052
2026	0.3227	0.1578	0.00631	0.00596
	0.2447	1.015	0.0403	0.0379
2027	0.244	1.0137	0.0403	0.0379
2028	0.2074	0.9791	0.036	0.0344
Total	**1.7957**	**7.23929**	**0.29767**	**0.28022**

Unmitigated Construction average lbs/day

Year	ROG	Nox	PM10 exh	PM2.5 exh
Total	**3.1**	**12.7**	**0.5**	**0.5**

Construction Duration: 1142 days Total Duration

Phase 1			
Site Preparation	3/20/2023	3/31/2023	10 days
Grading	4/1/2023	4/28/2023	20 days
Paving	4/29/2023	5/26/2023	20 days
Building Construction	5/27/2023	12/22/2023	150 days
Architectural Coating	12/23/2023	1/19/2024	20 days
Phase 2			
Building Construction	3/18/2024	10/11/2024	150 days
Architectural Coating	10/12/2024	11/8/2024	20 days
Phase 3			
Building Construction	3/17/2025	1/30/2026	230 days
Architectural Coating	1/31/2026	2/25/2026	18 days
Phase 4			
Building Construction	3/23/2026	10/16/2026	150 days
Architectural Coating	10/17/2026	11/11/2026	18 days

Phase 5			
Building Construction	3/22/2027	10/15/2027	150 days
Architectural Coating	10/16/2027	11/10/2027	18 days
Phase 6			
Building Construction	3/20/2028	10/13/2028	150 days
Architectural Coating	10/14/2028	11/8/2028	18 days
			1142 days

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:32 AM

Hunter Subdivision Project - First Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2271	1.5770	1.7270	3.2700e-003	0.1977	0.0722	0.2698	0.0946	0.0675	0.1621	0.0000	286.2994	286.2994	0.0633	0.0000	287.8816
2024	0.1352	9.2900e-003	0.0152	3.0000e-005	6.5000e-004	4.6000e-004	1.1100e-003	1.7000e-004	4.6000e-004	6.3000e-004	0.0000	2.3984	2.3984	1.2000e-004	0.0000	2.4014
Maximum	**0.2271**	**1.5770**	**1.7270**	**3.2700e-003**	**0.1977**	**0.0722**	**0.2698**	**0.0946**	**0.0675**	**0.1621**	**0.0000**	**286.2994**	**286.2994**	**0.0633**	**0.0000**	**287.8816**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2271	1.5770	1.7270	3.2700e-003	0.1120	0.0722	0.1841	0.0488	0.0675	0.1162	0.0000	286.2991	286.2991	0.0633	0.0000	287.8814
2024	0.1352	9.2900e-003	0.0152	3.0000e-005	6.5000e-004	4.6000e-004	1.1100e-003	1.7000e-004	4.6000e-004	6.3000e-004	0.0000	2.3984	2.3984	1.2000e-004	0.0000	2.4014
Maximum	**0.2271**	**1.5770**	**1.7270**	**3.2700e-003**	**0.1120**	**0.0722**	**0.1841**	**0.0488**	**0.0675**	**0.1162**	**0.0000**	**286.2991**	**286.2991**	**0.0633**	**0.0000**	**287.8814**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**43.22**	**0.00**	**31.64**	**48.37**	**0.00**	**28.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0903**	**6.3300e-003**	**0.0967**	**0.0497**	**5.8200e-003**	**0.0555**	**0.0000**	**16.7254**	**16.7254**	**5.4100e-003**	**0.0000**	**16.8606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497
Total	**2.8000e-004**	**1.8000e-004**	**1.9700e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5494**	**0.5494**	**1.0000e-005**	**0.0000**	**0.5497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	**0.0133**	**0.1376**	**0.0912**	**1.9000e-004**	**0.0407**	**6.3300e-003**	**0.0470**	**0.0223**	**5.8200e-003**	**0.0282**	**0.0000**	**16.7253**	**16.7253**	**5.4100e-003**	**0.0000**	**16.8606**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497
Total	**2.8000e-004**	**1.8000e-004**	**1.9700e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5494**	**0.5494**	**1.0000e-005**	**0.0000**	**0.5497**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004		7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	**0.0171**	**0.1794**	**0.1475**	**3.0000e-004**	**0.0655**	**7.7500e-003**	**0.0733**	**0.0337**	**7.1300e-003**	**0.0408**	**0.0000**	**26.0606**	**26.0606**	**8.4300e-003**	**0.0000**	**26.2713**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.5800e-003	4.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4962	0.4962	2.0000e-005	0.0000	0.4967
Worker	6.2000e-004	4.0000e-004	4.3700e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2208	1.2208	3.0000e-005	0.0000	1.2215
Total	**6.7000e-004**	**1.9800e-003**	**4.8200e-003**	**2.0000e-005**	**1.7100e-003**	**1.0000e-005**	**1.7200e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.7169**	**1.7169**	**5.0000e-005**	**0.0000**	**1.7182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004		7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	**0.0171**	**0.1794**	**0.1475**	**3.0000e-004**	**0.0295**	**7.7500e-003**	**0.0372**	**0.0152**	**7.1300e-003**	**0.0223**	**0.0000**	**26.0606**	**26.0606**	**8.4300e-003**	**0.0000**	**26.2713**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.5800e-003	4.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4962	0.4962	2.0000e-005	0.0000	0.4967
Worker	6.2000e-004	4.0000e-004	4.3700e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2208	1.2208	3.0000e-005	0.0000	1.2215
Total	**6.7000e-004**	**1.9800e-003**	**4.8200e-003**	**2.0000e-005**	**1.7100e-003**	**1.0000e-005**	**1.7200e-003**	**4.6000e-004**	**1.0000e-005**	**4.7000e-004**	**0.0000**	**1.7169**	**1.7169**	**5.0000e-005**	**0.0000**	**1.7182**

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0175**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161
Total	**4.6000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9156**	**0.9156**	**2.0000e-005**	**0.0000**	**0.9161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0175**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161
Total	**4.6000e-004**	**3.0000e-004**	**3.2800e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9156**	**0.9156**	**2.0000e-005**	**0.0000**	**0.9161**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875
Total	**0.1180**	**1.0789**	**1.2183**	**2.0200e-003**		**0.0525**	**0.0525**		**0.0494**	**0.0494**	**0.0000**	**173.8536**	**173.8536**	**0.0414**	**0.0000**	**174.8875**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9400e-003	0.0652	0.0187	2.1000e-004	5.4100e-003	8.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6400e-003	0.0000	20.4667	20.4667	9.3000e-004	0.0000	20.4899
Worker	0.0127	8.2500e-003	0.0902	2.8000e-004	0.0326	2.1000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	25.1783	25.1783	5.6000e-004	0.0000	25.1924
Total	**0.0147**	**0.0735**	**0.1089**	**4.9000e-004**	**0.0380**	**2.9000e-004**	**0.0383**	**0.0102**	**2.6000e-004**	**0.0105**	**0.0000**	**45.6450**	**45.6450**	**1.4900e-003**	**0.0000**	**45.6823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873
Total	**0.1180**	**1.0789**	**1.2183**	**2.0200e-003**		**0.0525**	**0.0525**		**0.0494**	**0.0494**	**0.0000**	**173.8534**	**173.8534**	**0.0414**	**0.0000**	**174.8873**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9400e-003	0.0652	0.0187	2.1000e-004	5.4100e-003	8.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6400e-003	0.0000	20.4667	20.4667	9.3000e-004	0.0000	20.4899
Worker	0.0127	8.2500e-003	0.0902	2.8000e-004	0.0326	2.1000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	25.1783	25.1783	5.6000e-004	0.0000	25.1924
Total	**0.0147**	**0.0735**	**0.1089**	**4.9000e-004**	**0.0380**	**2.9000e-004**	**0.0383**	**0.0102**	**2.6000e-004**	**0.0105**	**0.0000**	**45.6450**	**45.6450**	**1.4900e-003**	**0.0000**	**45.6823**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0450**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680
Total	**8.0000e-005**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1679**	**0.1679**	**0.0000**	**0.0000**	**0.1680**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	**0.0450**	**3.2600e-003**	**4.5300e-003**	**1.0000e-005**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680
Total	**8.0000e-005**	**6.0000e-005**	**6.0000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1679**	**0.1679**	**0.0000**	**0.0000**	**0.1680**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3600e-003	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176
Total	**0.1349**	**9.1400e-003**	**0.0136**	**2.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.1000e-004**	**0.0000**	**1.9176**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837
Total	**2.4000e-004**	**1.5000e-004**	**1.6600e-003**	**1.0000e-005**	**6.5000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.4835**	**0.4835**	**1.0000e-005**	**0.0000**	**0.4837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3600e-003	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176
Total	**0.1349**	**9.1400e-003**	**0.0136**	**2.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**1.9149**	**1.9149**	**1.1000e-004**	**0.0000**	**1.9176**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837
Total	**2.4000e-004**	**1.5000e-004**	**1.6600e-003**	**1.0000e-005**	**6.5000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.4835**	**0.4835**	**1.0000e-005**	**0.0000**	**0.4837**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:35 AM

Hunter Subdivision Project - First Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	18.0361	27.5558	18.6698	0.0394	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088
2024	18.0228	1.2362	2.0497	3.7300e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	357.4378	357.4378	0.0174	0.0000	357.8735
Maximum	**18.0361**	**27.5558**	**18.6698**	**0.0394**	**18.2141**	**1.2669**	**19.4811**	**9.9699**	**1.1656**	**11.1355**	**0.0000**	**3,816.8229**	**3,816.8229**	**1.1954**	**0.0000**	**3,846.7088**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	18.0361	27.5558	18.6698	0.0394	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088
2024	18.0228	1.2362	2.0497	3.7300e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	357.4378	357.4378	0.0174	0.0000	357.8735
Maximum	**18.0361**	**27.5558**	**18.6698**	**0.0394**	**8.2777**	**1.2669**	**9.5446**	**4.5080**	**1.1656**	**5.6736**	**0.0000**	**3,816.8229**	**3,816.8229**	**1.1954**	**0.0000**	**3,846.7088**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.28**	**0.00**	**50.61**	**54.65**	**0.00**	**48.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870
Total	**0.0583**	**0.0317**	**0.4255**	**1.3000e-003**	**0.1479**	**9.0000e-004**	**0.1488**	**0.0392**	**8.3000e-004**	**0.0401**		**129.5148**	**129.5148**	**2.8900e-003**		**129.5870**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.1298**	**1.2660**	**9.3958**	**4.4688**	**1.1647**	**5.6336**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870
Total	**0.0583**	**0.0317**	**0.4255**	**1.3000e-003**	**0.1479**	**9.0000e-004**	**0.1488**	**0.0392**	**8.3000e-004**	**0.0401**		**129.5148**	**129.5148**	**2.8900e-003**		**129.5870**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5523**	**0.7749**	**7.3273**	**3.3675**	**0.7129**	**4.0804**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6000e-003	0.1568	0.0427	5.2000e-004	0.0135	1.8000e-004	0.0137	3.8900e-003	1.7000e-004	4.0700e-003		55.2560	55.2560	2.4000e-003		55.3159
Worker	0.0648	0.0352	0.4727	1.4400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		143.9053	143.9053	3.2100e-003		143.9855
Total	**0.0694**	**0.1919**	**0.5154**	**1.9600e-003**	**0.1778**	**1.1800e-003**	**0.1790**	**0.0475**	**1.0900e-003**	**0.0486**		**199.1613**	**199.1613**	**5.6100e-003**		**199.3014**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**2.9486**	**0.7749**	**3.7235**	**1.5154**	**0.7129**	**2.2283**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.6000e-003	0.1568	0.0427	5.2000e-004	0.0135	1.8000e-004	0.0137	3.8900e-003	1.7000e-004	4.0700e-003		55.2560	55.2560	2.4000e-003		55.3159
Worker	0.0648	0.0352	0.4727	1.4400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		143.9053	143.9053	3.2100e-003		143.9855
Total	**0.0694**	**0.1919**	**0.5154**	**1.9600e-003**	**0.1778**	**1.1800e-003**	**0.1790**	**0.0475**	**1.0900e-003**	**0.0486**		**199.1613**	**199.1613**	**5.6100e-003**		**199.3014**

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7532**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891
Total	**0.0486**	**0.0264**	**0.3546**	**1.0800e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**107.9290**	**107.9290**	**2.4100e-003**		**107.9891**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7532**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891
Total	**0.0486**	**0.0264**	**0.3546**	**1.0800e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**107.9290**	**107.9290**	**2.4100e-003**		**107.9891**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0253	0.8621	0.2348	2.8700e-003	0.0744	9.9000e-004	0.0754	0.0214	9.5000e-004	0.0224		303.9081	303.9081	0.0132		304.2374
Worker	0.1782	0.0967	1.3000	3.9700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		395.7396	395.7396	8.8200e-003		395.9602
Total	**0.2035**	**0.9588**	**1.5348**	**6.8400e-003**	**0.5262**	**3.7500e-003**	**0.5300**	**0.1413**	**3.4900e-003**	**0.1447**		**699.6476**	**699.6476**	**0.0220**		**700.1976**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0253	0.8621	0.2348	2.8700e-003	0.0744	9.9000e-004	0.0754	0.0214	9.5000e-004	0.0224		303.9081	303.9081	0.0132		304.2374
Worker	0.1782	0.0967	1.3000	3.9700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		395.7396	395.7396	8.8200e-003		395.9602
Total	**0.2035**	**0.9588**	**1.5348**	**6.8400e-003**	**0.5262**	**3.7500e-003**	**0.5300**	**0.1413**	**3.4900e-003**	**0.1447**		**699.6476**	**699.6476**	**0.0220**		**700.1976**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**18.0005**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920
Total	**0.0357**	**0.0193**	**0.2600**	**7.9000e-004**	**0.0904**	**5.5000e-004**	**0.0909**	**0.0240**	**5.1000e-004**	**0.0245**		**79.1479**	**79.1479**	**1.7600e-003**		**79.1920**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**18.0005**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920
Total	**0.0357**	**0.0193**	**0.2600**	**7.9000e-004**	**0.0904**	**5.5000e-004**	**0.0909**	**0.0240**	**5.1000e-004**	**0.0245**		**79.1479**	**79.1479**	**1.7600e-003**		**79.1920**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**17.9896**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	**0.0332**	**0.0174**	**0.2396**	**7.6000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**75.9897**	**75.9897**	**1.5800e-003**		**76.0292**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**17.9896**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	**0.0332**	**0.0174**	**0.2396**	**7.6000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**75.9897**	**75.9897**	**1.5800e-003**		**76.0292**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:36 AM

Hunter Subdivision Project - First Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	18.0380	27.5643	18.6514	0.0393	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874
2024	18.0246	1.2408	2.0386	3.6800e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	351.7373	351.7373	0.0173	0.0000	352.1706
Maximum	**18.0380**	**27.5643**	**18.6514**	**0.0393**	**18.2141**	**1.2669**	**19.4811**	**9.9699**	**1.1656**	**11.1355**	**0.0000**	**3,807.1056**	**3,807.1056**	**1.1953**	**0.0000**	**3,836.9874**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	18.0380	27.5643	18.6514	0.0393	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874
2024	18.0246	1.2408	2.0386	3.6800e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	351.7373	351.7373	0.0173	0.0000	352.1706
Maximum	**18.0380**	**27.5643**	**18.6514**	**0.0393**	**8.2777**	**1.2669**	**9.5446**	**4.5080**	**1.1656**	**5.6736**	**0.0000**	**3,807.1056**	**3,807.1056**	**1.1953**	**0.0000**	**3,836.9874**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.28**	**0.00**	**50.61**	**54.65**	**0.00**	**48.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655
Total	**0.0614**	**0.0402**	**0.4071**	**1.2000e-003**	**0.1479**	**9.0000e-004**	**0.1488**	**0.0392**	**8.3000e-004**	**0.0401**		**119.7975**	**119.7975**	**2.7200e-003**		**119.8655**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**8.1298**	**1.2660**	**9.3958**	**4.4688**	**1.1647**	**5.6336**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655
Total	**0.0614**	**0.0402**	**0.4071**	**1.2000e-003**	**0.1479**	**9.0000e-004**	**0.1488**	**0.0392**	**8.3000e-004**	**0.0401**		**119.7975**	**119.7975**	**2.7200e-003**		**119.8655**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5523**	**0.7749**	**7.3273**	**3.3675**	**0.7129**	**4.0804**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9000e-003	0.1578	0.0487	5.1000e-004	0.0135	1.9000e-004	0.0137	3.8900e-003	1.8000e-004	4.0700e-003		53.9148	53.9148	2.5900e-003		53.9796
Worker	0.0682	0.0446	0.4524	1.3400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		133.1084	133.1084	3.0200e-003		133.1839
Total	**0.0731**	**0.2024**	**0.5011**	**1.8500e-003**	**0.1778**	**1.1900e-003**	**0.1790**	**0.0475**	**1.1000e-003**	**0.0486**		**187.0231**	**187.0231**	**5.6100e-003**		**187.1635**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**2.9486**	**0.7749**	**3.7235**	**1.5154**	**0.7129**	**2.2283**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.9000e-003	0.1578	0.0487	5.1000e-004	0.0135	1.9000e-004	0.0137	3.8900e-003	1.8000e-004	4.0700e-003		53.9148	53.9148	2.5900e-003		53.9796
Worker	0.0682	0.0446	0.4524	1.3400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		133.1084	133.1084	3.0200e-003		133.1839
Total	**0.0731**	**0.2024**	**0.5011**	**1.8500e-003**	**0.1778**	**1.1900e-003**	**0.1790**	**0.0475**	**1.1000e-003**	**0.0486**		**187.0231**	**187.0231**	**5.6100e-003**		**187.1635**

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7532**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880
Total	**0.0511**	**0.0335**	**0.3393**	**1.0000e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**99.8313**	**99.8313**	**2.2700e-003**		**99.8880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7532**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880
Total	**0.0511**	**0.0335**	**0.3393**	**1.0000e-003**	**0.1232**	**7.5000e-004**	**0.1240**	**0.0327**	**6.9000e-004**	**0.0334**		**99.8313**	**99.8313**	**2.2700e-003**		**99.8880**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0270	0.8679	0.2680	2.8000e-003	0.0744	1.0400e-003	0.0754	0.0214	1.0000e-003	0.0224		296.5311	296.5311	0.0143		296.8876
Worker	0.1875	0.1227	1.2440	3.6700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		366.0480	366.0480	8.3100e-003		366.2558
Total	**0.2145**	**0.9906**	**1.5120**	**6.4700e-003**	**0.5262**	**3.8000e-003**	**0.5300**	**0.1413**	**3.5400e-003**	**0.1448**		**662.5791**	**662.5791**	**0.0226**		**663.1434**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0270	0.8679	0.2680	2.8000e-003	0.0744	1.0400e-003	0.0754	0.0214	1.0000e-003	0.0224		296.5311	296.5311	0.0143		296.8876
Worker	0.1875	0.1227	1.2440	3.6700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		366.0480	366.0480	8.3100e-003		366.2558
Total	**0.2145**	**0.9906**	**1.5120**	**6.4700e-003**	**0.5262**	**3.8000e-003**	**0.5300**	**0.1413**	**3.5400e-003**	**0.1448**		**662.5791**	**662.5791**	**0.0226**		**663.1434**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**18.0005**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512
Total	**0.0375**	**0.0245**	**0.2488**	**7.3000e-004**	**0.0904**	**5.5000e-004**	**0.0909**	**0.0240**	**5.1000e-004**	**0.0245**		**73.2096**	**73.2096**	**1.6600e-003**		**73.2512**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**18.0005**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512
Total	**0.0375**	**0.0245**	**0.2488**	**7.3000e-004**	**0.0904**	**5.5000e-004**	**0.0909**	**0.0240**	**5.1000e-004**	**0.0245**		**73.2096**	**73.2096**	**1.6600e-003**		**73.2512**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**17.9896**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	**0.0350**	**0.0220**	**0.2284**	**7.1000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**70.2892**	**70.2892**	**1.4800e-003**		**70.3263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**17.9896**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	**0.0350**	**0.0220**	**0.2284**	**7.1000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**70.2892**	**70.2892**	**1.4800e-003**		**70.3263**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Second Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6110	221.6110	0.0427	0.0000	222.6788
Maximum	**0.2544**	**1.0927**	**1.3333**	**2.5400e-003**	**0.0389**	**0.0469**	**0.0858**	**0.0105**	**0.0441**	**0.0546**	**0.0000**	**221.6110**	**221.6110**	**0.0427**	**0.0000**	**222.6788**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6108	221.6108	0.0427	0.0000	222.6786
Maximum	**0.2544**	**1.0927**	**1.3333**	**2.5400e-003**	**0.0389**	**0.0469**	**0.0858**	**0.0105**	**0.0441**	**0.0546**	**0.0000**	**221.6108**	**221.6108**	**0.0427**	**0.0000**	**222.6786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8868	173.8868	0.0411	0.0000	174.9148
Total	**0.1104**	**1.0083**	**1.2125**	**2.0200e-003**		**0.0460**	**0.0460**		**0.0433**	**0.0433**	**0.0000**	**173.8868**	**173.8868**	**0.0411**	**0.0000**	**174.9148**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8600e-003	0.0646	0.0175	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.3524	20.3524	9.3000e-004	0.0000	20.3757
Worker	0.0119	7.4200e-003	0.0829	2.7000e-004	0.0326	2.0000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	24.1739	24.1739	5.0000e-004	0.0000	24.1865
Total	**0.0138**	**0.0720**	**0.1005**	**4.8000e-004**	**0.0380**	**2.7000e-004**	**0.0383**	**0.0102**	**2.6000e-004**	**0.0105**	**0.0000**	**44.5263**	**44.5263**	**1.4300e-003**	**0.0000**	**44.5622**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8866	173.8866	0.0411	0.0000	174.9146
Total	**0.1104**	**1.0083**	**1.2125**	**2.0200e-003**		**0.0460**	**0.0460**		**0.0433**	**0.0433**	**0.0000**	**173.8866**	**173.8866**	**0.0411**	**0.0000**	**174.9146**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8600e-003	0.0646	0.0175	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.3524	20.3524	9.3000e-004	0.0000	20.3757
Worker	0.0119	7.4200e-003	0.0829	2.7000e-004	0.0326	2.0000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	24.1739	24.1739	5.0000e-004	0.0000	24.1865
Total	**0.0138**	**0.0720**	**0.1005**	**4.8000e-004**	**0.0380**	**2.7000e-004**	**0.0383**	**0.0102**	**2.6000e-004**	**0.0105**	**0.0000**	**44.5263**	**44.5263**	**1.4300e-003**	**0.0000**	**44.5622**

3.3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.1299**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450
Total	**3.2000e-004**	**2.0000e-004**	**2.2100e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**0.6446**	**0.6446**	**1.0000e-005**	**0.0000**	**0.6450**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.1299**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450
Total	**3.2000e-004**	**2.0000e-004**	**2.2100e-003**	**1.0000e-005**	**8.7000e-004**	**1.0000e-005**	**8.7000e-004**	**2.3000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**0.6446**	**0.6446**	**1.0000e-005**	**0.0000**	**0.6450**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Second Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

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tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866
Maximum	**13.0257**	**14.3844**	**17.5847**	**0.0336**	**0.5262**	**0.6170**	**1.1432**	**0.1413**	**0.5803**	**0.7216**	**0.0000**	**3,237.8502**	**3,237.8502**	**0.6255**	**0.0000**	**3,253.4866**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866
Maximum	**13.0257**	**14.3844**	**17.5847**	**0.0336**	**0.5262**	**0.6170**	**1.1432**	**0.1413**	**0.5803**	**0.7216**	**0.0000**	**3,237.8502**	**3,237.8502**	**0.6255**	**0.0000**	**3,253.4866**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0242	0.8537	0.2199	2.8500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.3000e-004	0.0224		302.2028	302.2028	0.0132		302.5328
Worker	0.1661	0.0869	1.1980	3.8100e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		379.9485	379.9485	7.9000e-003		380.1461
Total	**0.1904**	**0.9406**	**1.4178**	**6.6600e-003**	**0.5262**	**3.6700e-003**	**0.5299**	**0.1413**	**3.4000e-003**	**0.1447**		**682.1513**	**682.1513**	**0.0211**		**682.6789**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0242	0.8537	0.2199	2.8500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.3000e-004	0.0224		302.2028	302.2028	0.0132		302.5328
Worker	0.1661	0.0869	1.1980	3.8100e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		379.9485	379.9485	7.9000e-003		380.1461
Total	**0.1904**	**0.9406**	**1.4178**	**6.6600e-003**	**0.5262**	**3.6700e-003**	**0.5299**	**0.1413**	**3.4000e-003**	**0.1447**		**682.1513**	**682.1513**	**0.0211**		**682.6789**

3.3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**12.9925**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	**0.0332**	**0.0174**	**0.2396**	**7.6000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**75.9897**	**75.9897**	**1.5800e-003**		**76.0292**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**12.9925**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	**0.0332**	**0.0174**	**0.2396**	**7.6000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**75.9897**	**75.9897**	**1.5800e-003**		**76.0292**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:47 AM

Hunter Subdivision Project - Second Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.0333	3,202.0333	0.6261	0.0000	3,217.6849
Maximum	**13.0275**	**14.4132**	**17.5599**	**0.0333**	**0.5262**	**0.6170**	**1.1432**	**0.1413**	**0.5804**	**0.7216**	**0.0000**	**3,202.0333**	**3,202.0333**	**0.6261**	**0.0000**	**3,217.6849**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.0333	3,202.0333	0.6261	0.0000	3,217.6849
Maximum	**13.0275**	**14.4132**	**17.5599**	**0.0333**	**0.5262**	**0.6170**	**1.1432**	**0.1413**	**0.5804**	**0.7216**	**0.0000**	**3,202.0333**	**3,202.0333**	**0.6261**	**0.0000**	**3,217.6849**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0258	0.8592	0.2510	2.7800e-003	0.0744	1.0200e-003	0.0754	0.0214	9.7000e-004	0.0224		294.8883	294.8883	0.0143		295.2457
Worker	0.1752	0.1102	1.1422	3.5300e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		351.4462	351.4462	7.4200e-003		351.6316
Total	**0.2010**	**0.9694**	**1.3931**	**6.3100e-003**	**0.5262**	**3.7100e-003**	**0.5299**	**0.1413**	**3.4400e-003**	**0.1447**		**646.3344**	**646.3344**	**0.0217**		**646.8772**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0258	0.8592	0.2510	2.7800e-003	0.0744	1.0200e-003	0.0754	0.0214	9.7000e-004	0.0224		294.8883	294.8883	0.0143		295.2457
Worker	0.1752	0.1102	1.1422	3.5300e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		351.4462	351.4462	7.4200e-003		351.6316
Total	**0.2010**	**0.9694**	**1.3931**	**6.3100e-003**	**0.5262**	**3.7100e-003**	**0.5299**	**0.1413**	**3.4400e-003**	**0.1447**		**646.3344**	**646.3344**	**0.0217**		**646.8772**

3.3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**12.9925**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	**0.0350**	**0.0220**	**0.2284**	**7.1000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**70.2892**	**70.2892**	**1.4800e-003**		**70.3263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**12.9925**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	**0.0350**	**0.0220**	**0.2284**	**7.1000e-004**	**0.0904**	**5.4000e-004**	**0.0909**	**0.0240**	**4.9000e-004**	**0.0245**		**70.2892**	**70.2892**	**1.4800e-003**		**70.3263**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Third Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.1602	1.3948	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4078	301.4078	0.0586	0.0000	302.8735
2026	0.3227	0.1578	0.2076	4.0000e-004	6.3600e-003	6.3100e-003	0.0127	1.7100e-003	5.9600e-003	7.6700e-003	0.0000	34.5691	34.5691	6.3300e-003	0.0000	34.7274
Maximum	**0.3227**	**1.3948**	**1.8018**	**3.4500e-003**	**0.0527**	**0.0552**	**0.1079**	**0.0142**	**0.0520**	**0.0662**	**0.0000**	**301.4078**	**301.4078**	**0.0586**	**0.0000**	**302.8735**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.1602	1.3947	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4075	301.4075	0.0586	0.0000	302.8732
2026	0.3227	0.1578	0.2076	4.0000e-004	6.3600e-003	6.3100e-003	0.0127	1.7100e-003	5.9600e-003	7.6700e-003	0.0000	34.5691	34.5691	6.3300e-003	0.0000	34.7273
Maximum	**0.3227**	**1.3947**	**1.8018**	**3.4500e-003**	**0.0527**	**0.0552**	**0.1079**	**0.0142**	**0.0520**	**0.0662**	**0.0000**	**301.4075**	**301.4075**	**0.0586**	**0.0000**	**302.8732**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1962	241.1962	0.0567	0.0000	242.6137
Total	**0.1422**	**1.2969**	**1.6728**	**2.8000e-003**		**0.0549**	**0.0549**		**0.0516**	**0.0516**	**0.0000**	**241.1962**	**241.1962**	**0.0567**	**0.0000**	**242.6137**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0886	0.0231	2.9000e-004	7.5000e-003	1.0000e-004	7.6000e-003	2.1700e-003	1.0000e-004	2.2700e-003	0.0000	28.0672	28.0672	1.3000e-003	0.0000	28.0997
Worker	0.0155	9.3000e-003	0.1059	3.6000e-004	0.0452	2.7000e-004	0.0455	0.0120	2.5000e-004	0.0123	0.0000	32.1444	32.1444	6.3000e-004	0.0000	32.1601
Total	**0.0180**	**0.0979**	**0.1290**	**6.5000e-004**	**0.0527**	**3.7000e-004**	**0.0531**	**0.0142**	**3.5000e-004**	**0.0146**	**0.0000**	**60.2115**	**60.2115**	**1.9300e-003**	**0.0000**	**60.2598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1959	241.1959	0.0567	0.0000	242.6134
Total	**0.1422**	**1.2969**	**1.6728**	**2.8000e-003**		**0.0549**	**0.0549**		**0.0516**	**0.0516**	**0.0000**	**241.1959**	**241.1959**	**0.0567**	**0.0000**	**242.6134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e-003	0.0886	0.0231	2.9000e-004	7.5000e-003	1.0000e-004	7.6000e-003	2.1700e-003	1.0000e-004	2.2700e-003	0.0000	28.0672	28.0672	1.3000e-003	0.0000	28.0997
Worker	0.0155	9.3000e-003	0.1059	3.6000e-004	0.0452	2.7000e-004	0.0455	0.0120	2.5000e-004	0.0123	0.0000	32.1444	32.1444	6.3000e-004	0.0000	32.1601
Total	**0.0180**	**0.0979**	**0.1290**	**6.5000e-004**	**0.0527**	**3.7000e-004**	**0.0531**	**0.0142**	**3.5000e-004**	**0.0146**	**0.0000**	**60.2115**	**60.2115**	**1.9300e-003**	**0.0000**	**60.2598**

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6611
Total	**0.0150**	**0.1372**	**0.1769**	**3.0000e-004**		**5.8000e-003**	**5.8000e-003**		**5.4600e-003**	**5.4600e-003**	**0.0000**	**25.5111**	**25.5111**	**6.0000e-003**	**0.0000**	**25.6611**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	9.2700e-003	2.3400e-003	3.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	2.9533	2.9533	1.4000e-004	0.0000	2.9568
Worker	1.5400e-003	9.0000e-004	0.0104	4.0000e-005	4.7800e-003	3.0000e-005	4.8100e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	3.2714	3.2714	6.0000e-005	0.0000	3.2729
Total	**1.7900e-003**	**0.0102**	**0.0127**	**7.0000e-005**	**5.5700e-003**	**4.0000e-005**	**5.6100e-003**	**1.5000e-003**	**4.0000e-005**	**1.5400e-003**	**0.0000**	**6.2247**	**6.2247**	**2.0000e-004**	**0.0000**	**6.2297**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6610
Total	**0.0150**	**0.1372**	**0.1769**	**3.0000e-004**		**5.8000e-003**	**5.8000e-003**		**5.4600e-003**	**5.4600e-003**	**0.0000**	**25.5111**	**25.5111**	**6.0000e-003**	**0.0000**	**25.6610**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	9.2700e-003	2.3400e-003	3.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	2.9533	2.9533	1.4000e-004	0.0000	2.9568
Worker	1.5400e-003	9.0000e-004	0.0104	4.0000e-005	4.7800e-003	3.0000e-005	4.8100e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	3.2714	3.2714	6.0000e-005	0.0000	3.2729
Total	**1.7900e-003**	**0.0102**	**0.0127**	**7.0000e-005**	**5.5700e-003**	**4.0000e-005**	**5.6100e-003**	**1.5000e-003**	**4.0000e-005**	**1.5400e-003**	**0.0000**	**6.2247**	**6.2247**	**2.0000e-004**	**0.0000**	**6.2297**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.3056**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	**2.5000e-004**	**1.5000e-004**	**1.7000e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5353**	**0.5353**	**1.0000e-005**	**0.0000**	**0.5356**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.3056**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	**2.5000e-004**	**1.5000e-004**	**1.7000e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5353**	**0.5353**	**1.0000e-005**	**0.0000**	**0.5356**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Third Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.
Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

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Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	1.5466	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.3495	3,221.3495	0.6214	0.0000	3,236.8839
2026	33.9894	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	**33.9894**	**13.3933**	**17.3981**	**0.0334**	**0.5262**	**0.5312**	**1.0574**	**0.1413**	**0.4996**	**0.6409**	**0.0000**	**3,221.3495**	**3,221.3495**	**0.6214**	**0.0000**	**3,236.8839**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	1.5466	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.3495	3,221.3495	0.6214	0.0000	3,236.8839
2026	33.9894	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	**33.9894**	**13.3933**	**17.3981**	**0.0334**	**0.5262**	**0.5312**	**1.0574**	**0.1413**	**0.4996**	**0.6409**	**0.0000**	**3,221.3495**	**3,221.3495**	**0.6214**	**0.0000**	**3,236.8839**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.8450	0.2088	2.8300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		300.5382	300.5382	0.0133		300.8708
Worker	0.1558	0.0786	1.1046	3.6500e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		364.3369	364.3369	7.1200e-003		364.5150
Total	**0.1792**	**0.9236**	**1.3135**	**6.4800e-003**	**0.5262**	**3.5900e-003**	**0.5298**	**0.1413**	**3.3400e-003**	**0.1446**		**664.8751**	**664.8751**	**0.0204**		**665.3858**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.8450	0.2088	2.8300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		300.5382	300.5382	0.0133		300.8708
Worker	0.1558	0.0786	1.1046	3.6500e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		364.3369	364.3369	7.1200e-003		364.5150
Total	**0.1792**	**0.9236**	**1.3135**	**6.4800e-003**	**0.5262**	**3.5900e-003**	**0.5298**	**0.1413**	**3.3400e-003**	**0.1446**		**664.8751**	**664.8751**	**0.0204**		**665.3858**

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	**0.1694**	**0.9075**	**1.2252**	**6.3400e-003**	**0.5262**	**3.4900e-003**	**0.5297**	**0.1413**	**3.2500e-003**	**0.1445**		**649.5491**	**649.5491**	**0.0198**		**650.0448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	**0.1694**	**0.9075**	**1.2252**	**6.3400e-003**	**0.5262**	**3.4900e-003**	**0.5297**	**0.1413**	**3.2500e-003**	**0.1445**		**649.5491**	**649.5491**	**0.0198**		**650.0448**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.7892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**33.9600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	**0.0294**	**0.0143**	**0.2050**	**7.0000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**70.1133**	**70.1133**	**1.2900e-003**		**70.1456**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.7892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**33.9600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	**0.0294**	**0.0143**	**0.2050**	**7.0000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**70.1133**	**70.1133**	**1.2900e-003**		**70.1456**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 10:01 AM

Hunter Subdivision Project - Third Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	1.5568	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.7662	3,186.7662	0.6220	0.0000	3,202.3170
2026	33.9911	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	**33.9911**	**13.4194**	**17.3733**	**0.0331**	**0.5262**	**0.5312**	**1.0574**	**0.1413**	**0.4996**	**0.6409**	**0.0000**	**3,186.7662**	**3,186.7662**	**0.6220**	**0.0000**	**3,202.3170**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	1.5568	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.7662	3,186.7662	0.6220	0.0000	3,202.3170
2026	33.9911	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	**33.9911**	**13.4194**	**17.3733**	**0.0331**	**0.5262**	**0.5312**	**1.0574**	**0.1413**	**0.4996**	**0.6409**	**0.0000**	**3,186.7662**	**3,186.7662**	**0.6220**	**0.0000**	**3,202.3170**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0249	0.8501	0.2383	2.7600e-003	0.0744	1.0000e-003	0.0754	0.0214	9.6000e-004	0.0224		293.2796	293.2796	0.0144		293.6400
Worker	0.1645	0.0996	1.0503	3.3800e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		337.0123	337.0123	6.6600e-003		337.1789
Total	**0.1894**	**0.9497**	**1.2887**	**6.1400e-003**	**0.5262**	**3.6300e-003**	**0.5299**	**0.1413**	**3.3800e-003**	**0.1446**		**630.2919**	**630.2919**	**0.0211**		**630.8189**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0249	0.8501	0.2383	2.7600e-003	0.0744	1.0000e-003	0.0754	0.0214	9.6000e-004	0.0224		293.2796	293.2796	0.0144		293.6400
Worker	0.1645	0.0996	1.0503	3.3800e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		337.0123	337.0123	6.6600e-003		337.1789
Total	**0.1894**	**0.9497**	**1.2887**	**6.1400e-003**	**0.5262**	**3.6300e-003**	**0.5299**	**0.1413**	**3.3800e-003**	**0.1446**		**630.2919**	**630.2919**	**0.0211**		**630.8189**

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	**0.1795**	**0.9314**	**1.2005**	**6.0000e-003**	**0.5262**	**3.5300e-003**	**0.5298**	**0.1413**	**3.2900e-003**	**0.1446**		**616.0477**	**616.0477**	**0.0205**		**616.5607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	**0.1795**	**0.9314**	**1.2005**	**6.0000e-003**	**0.5262**	**3.5300e-003**	**0.5298**	**0.1413**	**3.2900e-003**	**0.1446**		**616.0477**	**616.0477**	**0.0205**		**616.5607**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.7892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**33.9600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	**0.0311**	**0.0182**	**0.1945**	**6.5000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**64.8545**	**64.8545**	**1.2100e-003**		**64.8846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.7892					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**33.9600**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	**0.0311**	**0.0182**	**0.1945**	**6.5000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**64.8545**	**64.8545**	**1.2100e-003**		**64.8846**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 10:30 AM

Hunter Subdivision Project - Fourth Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2140	219.2140	0.0424	0.0000	220.2734
Maximum	**0.2447**	**1.0150**	**1.3110**	**2.5100e-003**	**0.0388**	**0.0403**	**0.0791**	**0.0104**	**0.0379**	**0.0484**	**0.0000**	**219.2140**	**219.2140**	**0.0424**	**0.0000**	**220.2734**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2138	219.2138	0.0424	0.0000	220.2732
Maximum	**0.2447**	**1.0150**	**1.3110**	**2.5100e-003**	**0.0388**	**0.0403**	**0.0791**	**0.0104**	**0.0379**	**0.0484**	**0.0000**	**219.2138**	**219.2138**	**0.0424**	**0.0000**	**220.2732**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618
Total	**0.1026**	**0.9352**	**1.2064**	**2.0200e-003**		**0.0396**	**0.0396**		**0.0372**	**0.0372**	**0.0000**	**173.9396**	**173.9396**	**0.0409**	**0.0000**	**174.9618**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7400e-003	0.0632	0.0160	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.1364	20.1364	9.4000e-004	0.0000	20.1600
Worker	0.0105	6.1100e-003	0.0708	2.5000e-004	0.0326	1.9000e-004	0.0328	8.6700e-003	1.8000e-004	8.8500e-003	0.0000	22.3047	22.3047	4.1000e-004	0.0000	22.3150
Total	**0.0123**	**0.0693**	**0.0867**	**4.6000e-004**	**0.0380**	**2.6000e-004**	**0.0383**	**0.0102**	**2.5000e-004**	**0.0105**	**0.0000**	**42.4411**	**42.4411**	**1.3500e-003**	**0.0000**	**42.4750**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616
Total	**0.1026**	**0.9352**	**1.2064**	**2.0200e-003**		**0.0396**	**0.0396**		**0.0372**	**0.0372**	**0.0000**	**173.9394**	**173.9394**	**0.0409**	**0.0000**	**174.9616**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7400e-003	0.0632	0.0160	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.1364	20.1364	9.4000e-004	0.0000	20.1600
Worker	0.0105	6.1100e-003	0.0708	2.5000e-004	0.0326	1.9000e-004	0.0328	8.6700e-003	1.8000e-004	8.8500e-003	0.0000	22.3047	22.3047	4.1000e-004	0.0000	22.3150
Total	**0.0123**	**0.0693**	**0.0867**	**4.6000e-004**	**0.0380**	**2.6000e-004**	**0.0383**	**0.0102**	**2.5000e-004**	**0.0105**	**0.0000**	**42.4411**	**42.4411**	**1.3500e-003**	**0.0000**	**42.4750**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1297**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	**2.5000e-004**	**1.5000e-004**	**1.7000e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5353**	**0.5353**	**1.0000e-005**	**0.0000**	**0.5356**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1297**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	**2.5000e-004**	**1.5000e-004**	**1.7000e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5353**	**0.5353**	**1.0000e-005**	**0.0000**	**0.5356**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Fourth Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	**14.4355**	**13.3772**	**17.3098**	**0.0333**	**0.5262**	**0.5311**	**1.0573**	**0.1413**	**0.4995**	**0.6408**	**0.0000**	**3,206.0234**	**3,206.0234**	**0.6208**	**0.0000**	**3,221.5429**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	**14.4355**	**13.3772**	**17.3098**	**0.0333**	**0.5262**	**0.5311**	**1.0573**	**0.1413**	**0.4995**	**0.6408**	**0.0000**	**3,206.0234**	**3,206.0234**	**0.6208**	**0.0000**	**3,221.5429**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	**0.1694**	**0.9075**	**1.2252**	**6.3400e-003**	**0.5262**	**3.4900e-003**	**0.5297**	**0.1413**	**3.2500e-003**	**0.1445**		**649.5491**	**649.5491**	**0.0198**		**650.0448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	**0.1694**	**0.9075**	**1.2252**	**6.3400e-003**	**0.5262**	**3.4900e-003**	**0.5297**	**0.1413**	**3.2500e-003**	**0.1445**		**649.5491**	**649.5491**	**0.0198**		**650.0448**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	**0.0294**	**0.0143**	**0.2050**	**7.0000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**70.1133**	**70.1133**	**1.2900e-003**		**70.1456**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	**0.0294**	**0.0143**	**0.2050**	**7.0000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**70.1133**	**70.1133**	**1.2900e-003**		**70.1456**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Fourth Year

Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	**14.4372**	**13.4010**	**17.2851**	**0.0330**	**0.5262**	**0.5311**	**1.0573**	**0.1413**	**0.4995**	**0.6408**	**0.0000**	**3,172.5221**	**3,172.5221**	**0.6215**	**0.0000**	**3,188.0588**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	**14.4372**	**13.4010**	**17.2851**	**0.0330**	**0.5262**	**0.5311**	**1.0573**	**0.1413**	**0.4995**	**0.6408**	**0.0000**	**3,172.5221**	**3,172.5221**	**0.6215**	**0.0000**	**3,188.0588**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	**0.1795**	**0.9314**	**1.2005**	**6.0000e-003**	**0.5262**	**3.5300e-003**	**0.5298**	**0.1413**	**3.2900e-003**	**0.1446**		**616.0477**	**616.0477**	**0.0205**		**616.5607**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	**0.1795**	**0.9314**	**1.2005**	**6.0000e-003**	**0.5262**	**3.5300e-003**	**0.5298**	**0.1413**	**3.2900e-003**	**0.1446**		**616.0477**	**616.0477**	**0.0205**		**616.5607**

3.3 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	**0.0311**	**0.0182**	**0.1945**	**6.5000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**64.8545**	**64.8545**	**1.2100e-003**		**64.8846**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	**0.0311**	**0.0182**	**0.1945**	**6.5000e-004**	**0.0904**	**5.1000e-004**	**0.0909**	**0.0240**	**4.7000e-004**	**0.0244**		**64.8545**	**64.8545**	**1.2100e-003**		**64.8846**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Fifth Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3155	218.3155	0.0423	0.0000	219.3740
Maximum	**0.2440**	**1.0137**	**1.3052**	**2.5000e-003**	**0.0388**	**0.0403**	**0.0791**	**0.0104**	**0.0379**	**0.0484**	**0.0000**	**218.3155**	**218.3155**	**0.0423**	**0.0000**	**219.3740**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3153	218.3153	0.0423	0.0000	219.3738
Maximum	**0.2440**	**1.0137**	**1.3052**	**2.5000e-003**	**0.0388**	**0.0403**	**0.0791**	**0.0104**	**0.0379**	**0.0484**	**0.0000**	**218.3153**	**218.3153**	**0.0423**	**0.0000**	**219.3738**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618
Total	**0.1026**	**0.9352**	**1.2064**	**2.0200e-003**		**0.0396**	**0.0396**		**0.0372**	**0.0372**	**0.0000**	**173.9396**	**173.9396**	**0.0409**	**0.0000**	**174.9618**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6900e-003	0.0625	0.0153	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.0365	20.0365	9.5000e-004	0.0000	20.0601
Worker	9.9000e-003	5.5700e-003	0.0657	2.4000e-004	0.0326	1.8000e-004	0.0328	8.6700e-003	1.7000e-004	8.8400e-003	0.0000	21.5249	21.5249	3.7000e-004	0.0000	21.5342
Total	**0.0116**	**0.0680**	**0.0810**	**4.5000e-004**	**0.0380**	**2.5000e-004**	**0.0383**	**0.0102**	**2.4000e-004**	**0.0105**	**0.0000**	**41.5614**	**41.5614**	**1.3200e-003**	**0.0000**	**41.5944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616
Total	**0.1026**	**0.9352**	**1.2064**	**2.0200e-003**		**0.0396**	**0.0396**		**0.0372**	**0.0372**	**0.0000**	**173.9394**	**173.9394**	**0.0409**	**0.0000**	**174.9616**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6900e-003	0.0625	0.0153	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.0365	20.0365	9.5000e-004	0.0000	20.0601
Worker	9.9000e-003	5.5700e-003	0.0657	2.4000e-004	0.0326	1.8000e-004	0.0328	8.6700e-003	1.7000e-004	8.8400e-003	0.0000	21.5249	21.5249	3.7000e-004	0.0000	21.5342
Total	**0.0116**	**0.0680**	**0.0810**	**4.5000e-004**	**0.0380**	**2.5000e-004**	**0.0383**	**0.0102**	**2.4000e-004**	**0.0105**	**0.0000**	**41.5614**	**41.5614**	**1.3200e-003**	**0.0000**	**41.5944**

3.3 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1297**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168
Total	**2.4000e-004**	**1.3000e-004**	**1.5800e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5166**	**0.5166**	**1.0000e-005**	**0.0000**	**0.5168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.1297**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168
Total	**2.4000e-004**	**1.3000e-004**	**1.5800e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5166**	**0.5166**	**1.0000e-005**	**0.0000**	**0.5168**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 10:40 AM

Hunter Subdivision Project - Fifth Year

Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

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Trips and VMT - Assumed same trips for construction of all res dwelling units.

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004
Maximum	**14.4337**	**13.3612**	**17.2299**	**0.0332**	**0.5262**	**0.5309**	**1.0571**	**0.1413**	**0.4994**	**0.6406**	**0.0000**	**3,192.2951**	**3,192.2951**	**0.6202**	**0.0000**	**3,207.8004**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004
Maximum	**14.4337**	**13.3612**	**17.2299**	**0.0332**	**0.5262**	**0.5309**	**1.0571**	**0.1413**	**0.4994**	**0.6406**	**0.0000**	**3,192.2951**	**3,192.2951**	**0.6202**	**0.0000**	**3,207.8004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0220	0.8263	0.1922	2.8000e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		297.4972	297.4972	0.0134		297.8323
Worker	0.1380	0.0653	0.9530	3.3900e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		338.3236	338.3236	5.8600e-003		338.4700
Total	**0.1600**	**0.8916**	**1.1452**	**6.1900e-003**	**0.5262**	**3.3500e-003**	**0.5296**	**0.1413**	**3.1200e-003**	**0.1444**		**635.8208**	**635.8208**	**0.0193**		**636.3023**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0220	0.8263	0.1922	2.8000e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		297.4972	297.4972	0.0134		297.8323
Worker	0.1380	0.0653	0.9530	3.3900e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		338.3236	338.3236	5.8600e-003		338.4700
Total	**0.1600**	**0.8916**	**1.1452**	**6.1900e-003**	**0.5262**	**3.3500e-003**	**0.5296**	**0.1413**	**3.1200e-003**	**0.1444**		**635.8208**	**635.8208**	**0.0193**		**636.3023**

3.3 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940
Total	**0.0276**	**0.0131**	**0.1906**	**6.8000e-004**	**0.0904**	**4.8000e-004**	**0.0909**	**0.0240**	**4.5000e-004**	**0.0244**		**67.6647**	**67.6647**	**1.1700e-003**		**67.6940**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940
Total	**0.0276**	**0.0131**	**0.1906**	**6.8000e-004**	**0.0904**	**4.8000e-004**	**0.0909**	**0.0240**	**4.5000e-004**	**0.0244**		**67.6647**	**67.6647**	**1.1700e-003**		**67.6940**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 10:42 AM

Hunter Subdivision Project - Fifth Year

Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611
Maximum	**14.4354**	**13.3830**	**17.2053**	**0.0328**	**0.5262**	**0.5309**	**1.0572**	**0.1413**	**0.4994**	**0.6407**	**0.0000**	**3,159.7378**	**3,159.7378**	**0.6209**	**0.0000**	**3,175.2611**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611
Maximum	**14.4354**	**13.3830**	**17.2053**	**0.0328**	**0.5262**	**0.5309**	**1.0572**	**0.1413**	**0.4994**	**0.6407**	**0.0000**	**3,159.7378**	**3,159.7378**	**0.6209**	**0.0000**	**3,175.2611**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.8306	0.2193	2.7300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		290.3305	290.3305	0.0145		290.6939
Worker	0.1465	0.0827	0.9013	3.1400e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		312.9329	312.9329	5.4500e-003		313.0691
Total	**0.1698**	**0.9133**	**1.1206**	**5.8700e-003**	**0.5262**	**3.3800e-003**	**0.5296**	**0.1413**	**3.1500e-003**	**0.1444**		**603.2634**	**603.2634**	**0.0200**		**603.7630**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0234	0.8306	0.2193	2.7300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		290.3305	290.3305	0.0145		290.6939
Worker	0.1465	0.0827	0.9013	3.1400e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		312.9329	312.9329	5.4500e-003		313.0691
Total	**0.1698**	**0.9133**	**1.1206**	**5.8700e-003**	**0.5262**	**3.3800e-003**	**0.5296**	**0.1413**	**3.1500e-003**	**0.1444**		**603.2634**	**603.2634**	**0.0200**		**603.7630**

3.3 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138
Total	**0.0293**	**0.0166**	**0.1803**	**6.3000e-004**	**0.0904**	**4.8000e-004**	**0.0909**	**0.0240**	**4.5000e-004**	**0.0244**		**62.5866**	**62.5866**	**1.0900e-003**		**62.6138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**14.4061**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138
Total	**0.0293**	**0.0166**	**0.1803**	**6.3000e-004**	**0.0904**	**4.8000e-004**	**0.0909**	**0.0240**	**4.5000e-004**	**0.0244**		**62.5866**	**62.5866**	**1.0900e-003**		**62.6138**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Sixth Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2028	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3906	199.3906	0.0300	0.0000	200.1405
Maximum	**0.2074**	**0.9791**	**1.1444**	**2.3500e-003**	**0.0388**	**0.0360**	**0.0747**	**0.0104**	**0.0344**	**0.0449**	**0.0000**	**199.3906**	**199.3906**	**0.0300**	**0.0000**	**200.1405**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2028	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3905	199.3905	0.0300	0.0000	200.1403
Maximum	**0.2074**	**0.9791**	**1.1444**	**2.3500e-003**	**0.0388**	**0.0360**	**0.0747**	**0.0104**	**0.0344**	**0.0449**	**0.0000**	**199.3905**	**199.3905**	**0.0300**	**0.0000**	**200.1403**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8015	155.8015	0.0286	0.0000	156.5158
Total	**0.1117**	**0.9018**	**1.0505**	**1.8800e-003**		**0.0353**	**0.0353**		**0.0337**	**0.0337**	**0.0000**	**155.8015**	**155.8015**	**0.0286**	**0.0000**	**156.5158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6400e-003	0.0618	0.0148	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	19.9543	19.9543	9.5000e-004	0.0000	19.9779
Worker	9.2400e-003	5.0900e-003	0.0612	2.3000e-004	0.0326	1.7000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	20.8369	20.8369	3.4000e-004	0.0000	20.8454
Total	**0.0109**	**0.0669**	**0.0761**	**4.4000e-004**	**0.0380**	**2.4000e-004**	**0.0382**	**0.0102**	**2.2000e-004**	**0.0105**	**0.0000**	**40.7911**	**40.7911**	**1.2900e-003**	**0.0000**	**40.8233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8013	155.8013	0.0286	0.0000	156.5156
Total	**0.1117**	**0.9018**	**1.0505**	**1.8800e-003**		**0.0353**	**0.0353**		**0.0337**	**0.0337**	**0.0000**	**155.8013**	**155.8013**	**0.0286**	**0.0000**	**156.5156**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6400e-003	0.0618	0.0148	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	19.9543	19.9543	9.5000e-004	0.0000	19.9779
Worker	9.2400e-003	5.0900e-003	0.0612	2.3000e-004	0.0326	1.7000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	20.8369	20.8369	3.4000e-004	0.0000	20.8454
Total	**0.0109**	**0.0669**	**0.0761**	**4.4000e-004**	**0.0380**	**2.4000e-004**	**0.0382**	**0.0102**	**2.2000e-004**	**0.0105**	**0.0000**	**40.7911**	**40.7911**	**1.2900e-003**	**0.0000**	**40.8233**

3.3 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.0846**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003
Total	**2.2000e-004**	**1.2000e-004**	**1.4700e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5001**	**0.5001**	**1.0000e-005**	**0.0000**	**0.5003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	**0.0846**	**0.0103**	**0.0163**	**3.0000e-005**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.3000e-004**	**0.0000**	**2.3011**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003
Total	**2.2000e-004**	**1.2000e-004**	**1.4700e-003**	**1.0000e-005**	**7.8000e-004**	**0.0000**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5001**	**0.5001**	**1.0000e-005**	**0.0000**	**0.5003**

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Sixth Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2028	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599
Maximum	**9.4261**	**12.9011**	**15.0836**	**0.0311**	**0.5262**	**0.4731**	**0.9994**	**0.1413**	**0.4527**	**0.5940**	**0.0000**	**2,913.6918**	**2,913.6918**	**0.4387**	**0.0000**	**2,924.6599**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2028	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599
Maximum	**9.4261**	**12.9011**	**15.0836**	**0.0311**	**0.5262**	**0.4731**	**0.9994**	**0.1413**	**0.4527**	**0.5940**	**0.0000**	**2,913.6918**	**2,913.6918**	**0.4387**	**0.0000**	**2,924.6599**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0214	0.8181	0.1860	2.7900e-003	0.0744	9.1000e-004	0.0753	0.0214	8.7000e-004	0.0223		296.2728	296.2728	0.0134		296.6085
Worker	0.1288	0.0597	0.8904	3.2800e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		327.5292	327.5292	5.3400e-003		327.6628
Total	**0.1502**	**0.8778**	**1.0764**	**6.0700e-003**	**0.5262**	**3.1500e-003**	**0.5294**	**0.1413**	**2.9400e-003**	**0.1442**		**623.8020**	**623.8020**	**0.0188**		**624.2712**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0214	0.8181	0.1860	2.7900e-003	0.0744	9.1000e-004	0.0753	0.0214	8.7000e-004	0.0223		296.2728	296.2728	0.0134		296.6085
Worker	0.1288	0.0597	0.8904	3.2800e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		327.5292	327.5292	5.3400e-003		327.6628
Total	**0.1502**	**0.8778**	**1.0764**	**6.0700e-003**	**0.5262**	**3.1500e-003**	**0.5294**	**0.1413**	**2.9400e-003**	**0.1442**		**623.8020**	**623.8020**	**0.0188**		**624.2712**

3.3 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**9.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326
Total	**0.0258**	**0.0119**	**0.1781**	**6.6000e-004**	**0.0904**	**4.5000e-004**	**0.0908**	**0.0240**	**4.1000e-004**	**0.0244**		**65.5058**	**65.5058**	**1.0700e-003**		**65.5326**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**9.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326
Total	**0.0258**	**0.0119**	**0.1781**	**6.6000e-004**	**0.0904**	**4.5000e-004**	**0.0908**	**0.0240**	**4.1000e-004**	**0.0244**		**65.5058**	**65.5058**	**1.0700e-003**		**65.5326**

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Hunter Subdivision Project - Sixth Year

Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2028	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9482
Maximum	**9.4277**	**12.9211**	**15.0594**	**0.0308**	**0.5262**	**0.4731**	**0.9994**	**0.1413**	**0.4528**	**0.5940**	**0.0000**	**2,881.9613**	**2,881.9613**	**0.4395**	**0.0000**	**2,892.9482**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2028	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9481
Maximum	**9.4277**	**12.9211**	**15.0594**	**0.0308**	**0.5262**	**0.4731**	**0.9994**	**0.1413**	**0.4528**	**0.5940**	**0.0000**	**2,881.9613**	**2,881.9613**	**0.4395**	**0.0000**	**2,892.9481**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0227	0.8222	0.2122	2.7200e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		289.1444	289.1444	0.0146		289.5084
Worker	0.1369	0.0756	0.8399	3.0400e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		302.9271	302.9271	4.9600e-003		303.0511
Total	**0.1597**	**0.8978**	**1.0522**	**5.7600e-003**	**0.5262**	**3.1700e-003**	**0.5294**	**0.1413**	**2.9600e-003**	**0.1442**		**592.0714**	**592.0714**	**0.0195**		**592.5595**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0227	0.8222	0.2122	2.7200e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		289.1444	289.1444	0.0146		289.5084
Worker	0.1369	0.0756	0.8399	3.0400e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		302.9271	302.9271	4.9600e-003		303.0511
Total	**0.1597**	**0.8978**	**1.0522**	**5.7600e-003**	**0.5262**	**3.1700e-003**	**0.5294**	**0.1413**	**2.9600e-003**	**0.1442**		**592.0714**	**592.0714**	**0.0195**		**592.5595**

3.3 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**9.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102
Total	**0.0274**	**0.0151**	**0.1680**	**6.1000e-004**	**0.0904**	**4.5000e-004**	**0.0908**	**0.0240**	**4.1000e-004**	**0.0244**		**60.5854**	**60.5854**	**9.9000e-004**		**60.6102**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.2294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**9.4003**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102
Total	**0.0274**	**0.0151**	**0.1680**	**6.1000e-004**	**0.0904**	**4.5000e-004**	**0.0908**	**0.0240**	**4.1000e-004**	**0.0244**		**60.5854**	**60.5854**	**9.9000e-004**		**60.6102**

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Hunter Subdivision Project
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	11.00	Dwelling Unit	0.00	11,000.00	27
Condo/Townhouse	25.00	Dwelling Unit	3.40	25,000.00	62
Single Family Housing	51.00	Dwelling Unit	13.40	91,800.00	126

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD. Adjusted intensity factors based on PG&E 2020 Corporate Responsibility and Sustainability Report, 206 lb CO2/MWh.
Land Use - 87 units including 51 single family homes, 11 granny flats, and 25 multi family residential units. Updated population per City of St Helna avg household size from BayAreaCensus.
Vehicle Trips - Updated trip generation per traffic report (Dudek).

Woodstoves - No woodstoves or hearths.

Area Coating -

Energy Use - Adjusted T24 energy intensities to meet 2019 T24 standards. Single-family savings are 4% of electricity and 9% of gas. MF savings are 2% and 5%.

Water And Wastewater - Indoor water consumption updated per Preliminary Water Calculations Technical Memorandum (RSA).

Solid Waste - Default rates used.

Construction Off-road Equipment Mitigation - Implement fugitive dust reduction measures - water twice daily.

Mobile Land Use Mitigation - Project would implement a pedestrian network on and off-site, project site is approximately 0.4 mi from VINE transit.

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	T24E	365.68	351.05
tblEnergyUse	T24E	249.32	244.33
tblEnergyUse	T24E	325.76	312.73
tblEnergyUse	T24NG	7,043.85	6,409.90
tblEnergyUse	T24NG	15,568.01	14,789.61
tblEnergyUse	T24NG	25,910.09	23,578.18
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.65	11.00
tblFireplaces	NumberGas	3.75	25.00
tblFireplaces	NumberGas	12.75	51.00
tblFireplaces	NumberNoFireplace	0.44	0.00
tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
tblLandUse	LotAcreage	0.69	0.00
tblLandUse	LotAcreage	1.56	3.40

tblLandUse	LotAcreage	16.56	13.40
tblLandUse	Population	31.00	27.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	146.00	126.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	10.00	11.00
tblTripsAndVMT	WorkerTripNumber	45.00	55.00
tblTripsAndVMT	WorkerTripNumber	9.00	11.00
tblVehicleTrips	ST_TR	7.16	8.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	9.56
tblVehicleTrips	ST_TR	9.91	9.56
tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	8.31
tblVehicleTrips	SU_TR	8.62	8.31
tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	716,694.28	1,711,778.00
tblWater	IndoorWaterUseRate	1,628,850.64	1,275,310.00
tblWater	IndoorWaterUseRate	3,322,855.31	3,492,027.00
tblWater	OutdoorWaterUseRate	71,488.88	0.00
tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Energy	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	157.0326	157.0326	9.6600e-003	3.4700e-003	158.3081
Mobile	0.1372	0.8389	1.5198	6.6300e-003	0.6772	4.6400e-003	0.6818	0.1816	4.3300e-003	0.1859	0.0000	614.0446	614.0446	0.0232	0.0000	614.6256
Waste						0.0000	0.0000		0.0000	0.0000	14.1058	0.0000	14.1058	0.8336	0.0000	34.9466
Water						0.0000	0.0000		0.0000	0.0000	2.0555	4.4446	6.5001	0.2118	5.1100e-003	13.3179
Total	**0.7572**	**0.9440**	**2.2068**	**7.2800e-003**	**0.6772**	**0.0161**	**0.6933**	**0.1816**	**0.0158**	**0.1974**	**16.1614**	**787.4379**	**803.5993**	**1.0795**	**8.7800e-003**	**833.2042**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Energy	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	157.0326	157.0326	9.6600e-003	3.4700e-003	158.3081
Mobile	0.1315	0.8003	1.3874	5.9200e-003	0.5973	4.1700e-003	0.6015	0.1602	3.8900e-003	0.1641	0.0000	548.6616	548.6616	0.0216	0.0000	549.2007
Waste						0.0000	0.0000		0.0000	0.0000	14.1058	0.0000	14.1058	0.8336	0.0000	34.9466
Water						0.0000	0.0000		0.0000	0.0000	1.6444	3.5557	5.2001	0.1694	4.0900e-003	10.6543
Total	**0.7514**	**0.9055**	**2.0743**	**6.5700e-003**	**0.5973**	**0.0157**	**0.6129**	**0.1602**	**0.0154**	**0.1755**	**15.7503**	**721.1661**	**736.9163**	**1.0355**	**7.7600e-003**	**765.1158**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.76**	**4.08**	**6.00**	**9.75**	**11.80**	**2.92**	**11.59**	**11.80**	**2.78**	**11.08**	**2.54**	**8.42**	**8.30**	**4.08**	**11.62**	**8.17**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1315	0.8003	1.3874	5.9200e-003	0.5973	4.1700e-003	0.6015	0.1602	3.8900e-003	0.1641	0.0000	548.6616	548.6616	0.0216	0.0000	549.2007
Unmitigated	0.1372	0.8389	1.5198	6.6300e-003	0.6772	4.6400e-003	0.6818	0.1816	4.3300e-003	0.1859	0.0000	614.0446	614.0446	0.0232	0.0000	614.6256

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.7224	54.7224	7.7000e-003	1.5900e-003	55.3899
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.7224	54.7224	7.7000e-003	1.5900e-003	55.3899
NaturalGas Mitigated	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8800e-003	102.9182
NaturalGas Unmitigated	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8800e-003	102.9182

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	105214	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6146	5.6146	1.1000e-004	1.0000e-004	5.6480
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	448615	2.4200e-003	0.0207	8.8000e-003	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.9398	23.9398	4.6000e-004	4.4000e-004	24.0821
Single Family Housing	1.36339e+006	7.3500e-003	0.0628	0.0267	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	72.7558	72.7558	1.3900e-003	1.3300e-003	73.1882
Total		**0.0103**	**0.0883**	**0.0376**	**5.6000e-004**		**7.1400e-003**	**7.1400e-003**		**7.1400e-003**	**7.1400e-003**	**0.0000**	**102.3102**	**102.3102**	**1.9600e-003**	**1.8700e-003**	**102.9182**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	105214	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6146	5.6146	1.1000e-004	1.0000e-004	5.6480
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	448615	2.4200e-003	0.0207	8.8000e-003	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.9398	23.9398	4.6000e-004	4.4000e-004	24.0821
Single Family Housing	1.36339e+006	7.3500e-003	0.0628	0.0267	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	72.7558	72.7558	1.3900e-003	1.3300e-003	73.1882
Total		**0.0103**	**0.0883**	**0.0376**	**5.6000e-004**		**7.1400e-003**	**7.1400e-003**		**7.1400e-003**	**7.1400e-003**	**0.0000**	**102.3102**	**102.3102**	**1.9600e-003**	**1.8700e-003**	**102.9182**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47675.9	4.4548	6.3000e-004	1.3000e-004	4.5092
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	126011	11.7745	1.6600e-003	3.4000e-004	11.9181
Single Family Housing	411955	38.4930	5.4200e-003	1.1200e-003	38.9626
Total		**54.7223**	**7.7100e-003**	**1.5900e-003**	**55.3899**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47675.9	4.4548	6.3000e-004	1.3000e-004	4.5092
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	126011	11.7745	1.6600e-003	3.4000e-004	11.9181
Single Family Housing	411955	38.4930	5.4200e-003	1.1200e-003	38.9626
Total		**54.7223**	**7.7100e-003**	**1.5900e-003**	**55.3899**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Unmitigated	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1000e-003	9.3800e-003	3.9900e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.8610	10.8610	2.1000e-004	2.0000e-004	10.9256
Landscaping	0.0194	7.4300e-003	0.6454	3.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	1.0552	1.0552	1.0100e-003	0.0000	1.0805
Total	**0.6096**	**0.0168**	**0.6494**	**9.0000e-005**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**11.9162**	**11.9162**	**1.2200e-003**	**2.0000e-004**	**12.0060**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1000e-003	9.3800e-003	3.9900e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.8610	10.8610	2.1000e-004	2.0000e-004	10.9256
Landscaping	0.0194	7.4300e-003	0.6454	3.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	1.0552	1.0552	1.0100e-003	0.0000	1.0805
Total	**0.6096**	**0.0168**	**0.6494**	**9.0000e-005**		**4.3400e-003**	**4.3400e-003**		**4.3400e-003**	**4.3400e-003**	**0.0000**	**11.9162**	**11.9162**	**1.2200e-003**	**2.0000e-004**	**12.0060**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.2001	0.1694	4.0900e-003	10.6543
Unmitigated	6.5001	0.2118	5.1100e-003	13.3179

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.71178 / 0.451829	1.5563	0.0559	1.3500e-003	3.3556
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.27531 / 1.02688	1.3852	0.0417	1.0100e-003	2.7285
Single Family Housing	3.49203 / 2.09484	3.5585	0.1141	2.7600e-003	7.2338
Total		**6.5001**	**0.2117**	**5.1200e-003**	**13.3179**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36942 / 0.361463	1.2451	0.0447	1.0800e-003	2.6845
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.02025 / 0.821507	1.1082	0.0334	8.1000e-004	2.1828
Single Family Housing	2.79362 / 1.67588	2.8468	0.0913	2.2100e-003	5.7870
Total		**5.2001**	**0.1694**	**4.1000e-003**	**10.6543**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.1058	0.8336	0.0000	34.9466
Unmitigated	14.1058	0.8336	0.0000	34.9466

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.06	1.0271	0.0607	0.0000	2.5447
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Condo/Townhouse	11.5	2.3344	0.1380	0.0000	5.7834
Single Family Housing	52.92	10.7423	0.6349	0.0000	26.6136
Total		**14.1058**	**0.8336**	**0.0000**	**34.9466**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.06	1.0271	0.0607	0.0000	2.5447
City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Condo/Townhouse	11.5	2.3344	0.1380	0.0000	5.7834
Single Family Housing	52.92	10.7423	0.6349	0.0000	26.6136
Total		**14.1058**	**0.8336**	**0.0000**	**34.9466**

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Date: 3/3/2021 4:09 PM

Hunter Subdivision Project
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	11.00	Dwelling Unit	0.00	11,000.00	27
Condo/Townhouse	25.00	Dwelling Unit	3.40	25,000.00	62
Single Family Housing	51.00	Dwelling Unit	13.40	91,800.00	126

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD. Adjusted intensity factors based on PG&E 2020 Corporate Responsibility and Sustainability Report, 206 lb CO2/MWh.

Land Use - 87 units including 51 single family homes, 11 granny flats, and 25 multi family residential units. Updated population per City of St Helna avg household size from BayAreaCensus.

Vehicle Trips - Updated trip generation per traffic report (Dudek).

Woodstoves - No woodstoves or hearths.

Energy Use - Adjusted T24 energy intensities to meet 2019 T24 standards. Single-family savings are 4% of electricity and 9% of gas. MF savings are

Water And Wastewater - Indoor water consumption updated per Preliminary Water Calculations Technical Memorandum (RSA).

Solid Waste - Default rates used.

Construction Off-road Equipment Mitigation - Implement fugitive dust reduction measures - water twice daily.

Mobile Land Use Mitigation - Project would implement a pedestrian network on and off-site, project site is approximately 0.4 mi from VINE transit.

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance.

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tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	T24E	365.68	351.05
tblEnergyUse	T24E	249.32	244.33
tblEnergyUse	T24E	325.76	312.73
tblEnergyUse	T24NG	7,043.85	6,409.90
tblEnergyUse	T24NG	15,568.01	14,789.61
tblEnergyUse	T24NG	25,910.09	23,578.18
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.65	11.00
tblFireplaces	NumberGas	3.75	25.00
tblFireplaces	NumberGas	12.75	51.00
tblFireplaces	NumberNoFireplace	0.44	0.00
tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
tblLandUse	LotAcreage	0.69	0.00
tblLandUse	LotAcreage	1.56	3.40
tblLandUse	LotAcreage	16.56	13.40
tblLandUse	Population	31.00	27.00

tblLandUse	Population	72.00	62.00
tblLandUse	Population	146.00	126.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	10.00	11.00
tblTripsAndVMT	WorkerTripNumber	45.00	55.00
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tblVehicleTrips	ST_TR	7.16	8.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	9.56
tblVehicleTrips	ST_TR	9.91	9.56
tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
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tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
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tblWater	OutdoorWaterUseRate	71,488.88	0.00
tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.9034	4.6791	8.9312	0.0396	4.0054	0.0264	4.0317	1.0707	0.0246	1.0953		4,040.2928	4,040.2928	0.1442		4,043.8974
Total	**4.6004**	**6.9295**	**17.0245**	**0.0538**	**4.0054**	**0.2414**	**4.2468**	**1.0707**	**0.2397**	**1.3104**	**0.0000**	**6,820.5888**	**6,820.5888**	**0.2096**	**0.0507**	**6,840.9479**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.8702	4.4730	8.0927	0.0354	3.5327	0.0237	3.5565	0.9444	0.0221	0.9665		3,609.9826	3,609.9826	0.1334		3,613.3170
Total	**4.5672**	**6.7234**	**16.1860**	**0.0496**	**3.5327**	**0.2388**	**3.7715**	**0.9444**	**0.2372**	**1.1815**	**0.0000**	**6,390.2786**	**6,390.2786**	**0.1988**	**0.0507**	**6,410.3675**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.72**	**2.97**	**4.93**	**7.86**	**11.80**	**1.10**	**11.19**	**11.80**	**1.04**	**9.83**	**0.00**	**6.31**	**6.31**	**5.15**	**0.00**	**6.29**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8702	4.4730	8.0927	0.0354	3.5327	0.0237	3.5565	0.9444	0.0221	0.9665		3,609.9826	3,609.9826	0.1334		3,613.3170
Unmitigated	0.9034	4.6791	8.9312	0.0396	4.0054	0.0264	4.0317	1.0707	0.0246	1.0953		4,040.2928	4,040.2928	0.1442		4,043.8974

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
NaturalGas Unmitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	288.257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1229.08	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3735.32	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		**0.0566**	**0.4841**	**0.2060**	**3.0900e-003**		**0.0391**	**0.0391**		**0.0391**	**0.0391**		**617.9601**	**617.9601**	**0.0118**	**0.0113**	**621.6324**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.288257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.22908	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3.73532	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		**0.0566**	**0.4841**	**0.2060**	**3.0900e-003**		**0.0391**	**0.0391**		**0.0391**	**0.0391**		**617.9601**	**617.9601**	**0.0118**	**0.0113**	**621.6324**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Unmitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	**3.6403**	**1.7663**	**7.8873**	**0.0111**		**0.1759**	**0.1759**		**0.1759**	**0.1759**	**0.0000**	**2,162.3358**	**2,162.3358**	**0.0536**	**0.0394**	**2,175.4181**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	**3.6403**	**1.7663**	**7.8873**	**0.0111**		**0.1759**	**0.1759**		**0.1759**	**0.1759**	**0.0000**	**2,162.3358**	**2,162.3358**	**0.0536**	**0.0394**	**2,175.4181**

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 4:18 PM

Hunter Subdivision Project
Napa County, Winter

1.0 Project Characteristics

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Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
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tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
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tblLandUse	LotAcreage	16.56	13.40
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tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	8.31
tblVehicleTrips	SU_TR	8.62	8.31
tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
tblVehicleTrips	WD_TR	9.52	9.44
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tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
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Unmitigated Operational

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Category	lb/day										lb/day					
Area	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.7591	4.8337	9.1529	0.0373	4.0054	0.0265	4.0319	1.0707	0.0247	1.0954		3,808.8609	3,808.8609	0.1513		3,812.6424
Total	**4.4561**	**7.0841**	**17.2462**	**0.0516**	**4.0054**	**0.2416**	**4.2469**	**1.0707**	**0.2398**	**1.3105**	**0.0000**	**6,589.1569**	**6,589.1569**	**0.2167**	**0.0507**	**6,609.6929**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.7258	4.6049	8.3922	0.0333	3.5327	0.0239	3.5566	0.9444	0.0223	0.9666		3,401.1067	3,401.1067	0.1407		3,404.6248
Total	**4.4228**	**6.8552**	**16.4854**	**0.0476**	**3.5327**	**0.2389**	**3.7717**	**0.9444**	**0.2373**	**1.1817**	**0.0000**	**6,181.4027**	**6,181.4027**	**0.2061**	**0.0507**	**6,201.6753**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.75**	**3.23**	**4.41**	**7.78**	**11.80**	**1.10**	**11.19**	**11.80**	**1.03**	**9.83**	**0.00**	**6.19**	**6.19**	**4.86**	**0.00**	**6.17**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7258	4.6049	8.3922	0.0333	3.5327	0.0239	3.5566	0.9444	0.0223	0.9666		3,401.1067	3,401.1067	0.1407		3,404.6248
Unmitigated	0.7591	4.8337	9.1529	0.0373	4.0054	0.0265	4.0319	1.0707	0.0247	1.0954		3,808.8609	3,808.8609	0.1513		3,812.6424

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
NaturalGas Unmitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	288.257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1229.08	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3735.32	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		**0.0566**	**0.4841**	**0.2060**	**3.0900e-003**		**0.0391**	**0.0391**		**0.0391**	**0.0391**		**617.9601**	**617.9601**	**0.0118**	**0.0113**	**621.6324**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	0.288257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.22908	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3.73532	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		**0.0566**	**0.4841**	**0.2060**	**3.0900e-003**		**0.0391**	**0.0391**		**0.0391**	**0.0391**		**617.9601**	**617.9601**	**0.0118**	**0.0113**	**621.6324**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Unmitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	**3.6403**	**1.7663**	**7.8873**	**0.0111**		**0.1759**	**0.1759**		**0.1759**	**0.1759**	**0.0000**	**2,162.3358**	**2,162.3358**	**0.0536**	**0.0394**	**2,175.4181**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	**3.6403**	**1.7663**	**7.8873**	**0.0111**		**0.1759**	**0.1759**		**0.1759**	**0.1759**	**0.0000**	**2,162.3358**	**2,162.3358**	**0.0536**	**0.0394**	**2,175.4181**

Hunter Subdivision - Construction

Phase 1

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Site Preparation	Rubber Tired Dozers	3
Site Preparation	Tractors/Loaders/Backhoes	4
Grading	Excavators	2
Grading	Graders	1
Grading	Rubber Tired Dozers	1
Grading	Scrapers	2
Grading	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
Paving	Paving Equipment	2
Paving	Rollers	2
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Site Preparation	7	16.73
Grading	8	26.06
Paving	6	20.03
Building Construction	9	173.85
Architectural Coating	1	2.55

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	180	0.55

Grading	400	1.22
Paving	300	0.92
Building Construction	8,250	25.18
Architectural Coating	220	0.65

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	0	0.00
Grading	40	0.50
Paving	0	0.00
Building Construction	1,650	20.47
Architectural Coating	0	0.00

Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	0	0.00
Grading	0	0.00
Paving	0	0.00
Building Construction	0	0.00
Architectural Coating	0	0.00

Phase 2

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	9	173.89
Architectural Coating	1	2.55

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	8,250	24.17
Architectural Coating	220	0.64

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	1,650	20.35
Architectural Coating	0	0.00

Phase 3

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)

Building Construction	9	266.71
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	12,650	35.42
Architectural Coating	198	0.54

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	2,530	31.02
Architectural Coating	0	0.00

Phase 4

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	9	173.94
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	8,250	22.30
Architectural Coating	198	0.54

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	1,650	20.14
Architectural Coating	0	0.00

Phase 5

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	9	173.94
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	8,250	21.52
Architectural Coating	198	0.52

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	1,650	20.04
Architectural Coating	0	0.00

Phase 6

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	2
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	1
Building Construction	Welders	3
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	8	155.80
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	8,250	20.84
Architectural Coating	198	0.50

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	1,650	19.95
Architectural Coating	0	0.00

Total For All Phases

	Hours of Equipmment Use	Equipment CO2 (MT)
Site Preparation	560	16.73
Grading	1,280	26.06
Paving	960	20.03
Building Construction	65,440	1,118.13
Architectural Coating	672	12.54
Total	**68,912**	**1,193**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
8	10	240	
8	10	320	**560**
8	20	320	
8	20	160	
8	20	160	
8	20	320	
8	20	320	**1,280**
8	20	320	
8	20	320	
8	20	320	**960**
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	**10,200**
6	20	120	**120**
	Total	**13,120**	

Kg/CO2/Gallon	Gallons
10.21	1,638.13
10.21	2,552.46
10.21	1,961.49
10.21	17,027.76
10.21	250.07
Total	**23,429.90**

Kg/CO2/Gallon	Gallons
8.78	62.57

8.78	139.04
8.78	104.28
8.78	2,867.69
8.78	74.19
Total	**3,247.78**

Kg/CO2/Gallon	Gallons
10.21	0.00
10.21	48.60
10.21	0.00
10.21	2,004.57
10.21	0.00
Total	**2,053.17**

Kg/CO2/Gallon	Gallons
10.21	0.00
10.21	0.00
10.21	0.00
10.21	0.00
10.21	0.00
Total	**0.00**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	**10,200**
6	20	120	**120**

	Total	**10,320**

Kg/CO2/Gallon	Gallons
10.21	17,031.03
10.21	250.08
Total	**17,281.11**

Kg/CO2/Gallon	Gallons
8.78	2,753.29
8.78	73.42
Total	**2,826.71**

Kg/CO2/Gallon	Gallons
10.21	1,993.38
10.21	0.00
Total	**1,993.38**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
7	230	1,610	
8	230	5,520	
8	230	1,840	
7	230	4,830	
8	230	1,840	**15,640**
6	18	108	**108**
	Total	**15,748**	

Kg/CO2/Gallon	Gallons

10.21	26,122.14
10.21	225.06
Total	**26,347.20**

Kg/CO2/Gallon	Gallons
8.78	4,033.69
8.78	60.97
Total	**4,094.66**

Kg/CO2/Gallon	Gallons
10.21	3,038.25
10.21	0.00
Total	**3,038.25**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	**10,200**
6	18	108	**108**
	Total	**10,308**	

Kg/CO2/Gallon	Gallons
10.21	17,036.18
10.21	225.06
Total	**17,261.24**

Kg/CO2/Gallon	Gallons
8.78	2,540.40
8.78	60.97
Total	**2,601.37**

Kg/CO2/Gallon	Gallons
10.21	1,972.22
10.21	0.00
Total	**1,972.22**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	**10,200**
6	18	108	**108**
	Total	**10,308**	

Kg/CO2/Gallon	Gallons
10.21	17,036.18
10.21	225.06
Total	**17,261.24**

Kg/CO2/Gallon	Gallons
8.78	2,451.58
8.78	58.84

Total	**2,510.42**

Kg/CO2/Gallon	Gallons
10.21	1,962.44
10.21	0.00
Total	**1,962.44**

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
8	150	1,200	
7	150	2,100	
8	150	1,200	
6	150	900	
8	150	3,600	**9,000**
6	18	108	**108**
	Total	**9,108**	

Kg/CO2/Gallon	Gallons
10.21	15,259.70
10.21	225.06
Total	**15,484.76**

Kg/CO2/Gallon	Gallons
8.78	2,373.22
8.78	56.96
Total	**2,430.18**

Kg/CO2/Gallon	Gallons
10.21	1,954.39
10.21	0.00
Total	**1,954.39**

Equipment Gallons	Worker Trips	Worker CO2 (MT)	Worker Gallons	Vendor Trips	Vendor CO2 (MT)
1,638.13	180	0.55	62.57	0	0.00
2,552.46	400	1.22	139.04	40	0.50
1,961.49	300	0.92	104.28	0	0.00
109,512.98	53,900	149.43	17,019.87	10,780	131.97
1,400.40	1,232	3.38	385.34	0	0.00
117,065.46	**56,012**	**156**	**17,711.12**	**10,820**	**132**

Vendor Gallons
0.00
48.60
0.00
12,925.25
0.00
12,973.85

Hunter Subdivision - Operations

Natural Gas Consumption

Land Use	kBTU/yr	Therms
Apartment Low Rise	105,214.00	1,052.14
Condo/Townhouse	448,615.00	4,486.15
Single-Family Housing	1,363,390.00	13,633.90
Total kBTU	**1,917,219.00**	19,172.19
Total Therms	**19,172.19**	

1,917,219,000.00 BTU
1 Therm 100,000 BTU
19,172.19 Total Therms

lda	ldt1	ldt2	mdv	ldh1	ldh2	mhd	hhd	obus	ubus	mcy	sbus	mh
0.609162	0.038894	0.1786	0.101308	0.013823	0.005356	0.016956	0.024628	0.001928	0.001823	0.005807	0.000764	0.00095

0.928914
0.071086

Mobile Source Fuel Consumption - Operation

Fuel	Vehicle CO2 (MT)	Kg/CO2/Gallon	Gallons
Gasoline	510.16	8.78	58,104.81
Diesel	39.04	10.21	3,823.75
		Total	**61,928.56**

California's Consumption of Petroleum Over Construction Period

78,600,000 gallons per day
89,761,200,000.00
0.09%

Phase 1			
Site Preparation	3/20/2023	3/31/2023	10 days
Grading	4/1/2023	4/28/2023	20 days
Paving	4/29/2023	5/26/2023	20 days
Building Construction	5/27/2023	12/22/2023	150 days
Architectural Coating	12/23/2023	1/19/2024	20 days
Phase 2			
Building Construction	3/18/2024	10/11/2024	150 days
Architectural Coating	10/12/2024	11/8/2024	20 days
Phase 3			
Building Construction	3/17/2025	1/30/2026	230 days
Architectural Coating	1/31/2026	2/25/2026	18 days
Phase 4			
Building Construction	3/23/2026	10/16/2026	150 days
Architectural Coating	10/17/2026	11/11/2026	18 days
Phase 5			
Building Construction	3/22/2027	10/15/2027	150 days
Architectural Coating	10/16/2027	11/10/2027	18 days
Phase 6			
Building Construction	3/20/2028	10/13/2028	150 days
Architectural Coating	10/14/2028	11/8/2028	18 days
			1142

WETLAND DELINEATION
FOR THE
±16-ACRE HUNTER-ST. HELENA PROPERTY

ST. HELENA, NAPA COUNTY, CALIFORNIA

Prepared on behalf of:

Blackman Consulting
1224 St. Helen Avenue
Santa Rosa, California 95404
Contact: Ken Blackman

Prepared by:

north fork associates
110 Maple Street, Auburn, California 95603
(530) 887-8500

September 12, 2006

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Appendix C. Wetland Delineation Map
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WETLAND DELINEATION
FOR THE
±16-ACRE HUNTER-ST. HELENA PROJECT

INTRODUCTION

North Fork Associates conducted a wetland delineation for the approximately 16-acre Hunter-St. Helena project site. The project site is located west of Pope Street between State Highway 29 and the Silverado Trail in St. Helena, Napa County, California. The project site is situated within the Carne Humana land grant, Township 8 north, and Range 5 west (Figure 1). Approximate coordinates of the center of the site are 38°30'40.44" north and 122°27'50.55" west. Assessor's Parcel Number (APN) 009-030-020-000 comprises the project site.

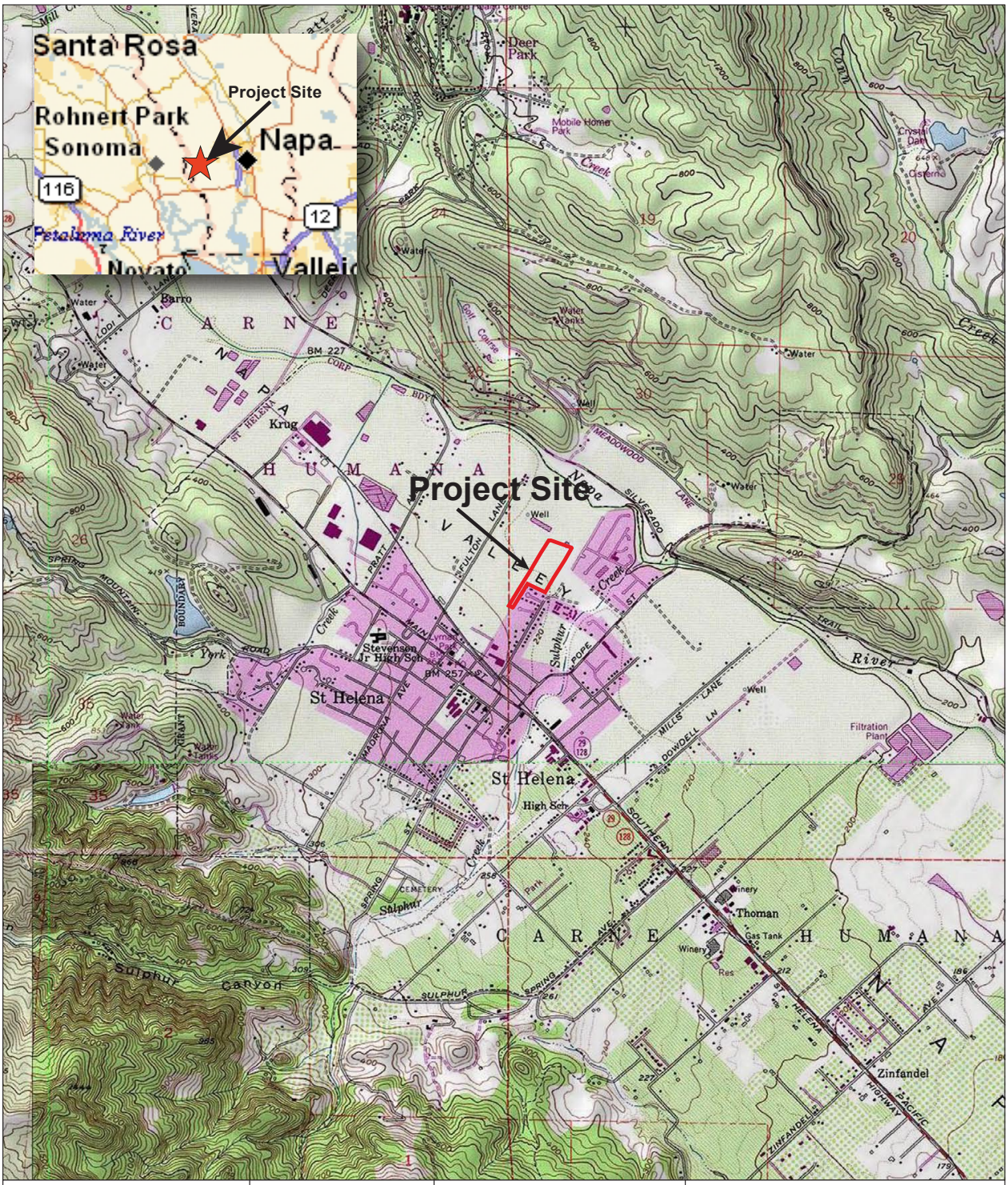
The property sits in the Napa Valley, approximately 800 feet southwest of the Napa River, at approximately 220 feet in elevation. The site is essentially flat with a very slight slope down to the north. Active grape production occurs on the majority of the property and a dirt road runs along the western boundary. The property is surrounded by agricultural (grapes) and residential land uses (Figure 2).

Directions: From San Francisco, take Interstate 80 east towards Oakland. After approximately 31 miles, take the State Highway 37 exit towards Napa. After approximately 2 miles, take State Highway 29 towards Downtown Vallejo/Napa. Continue on State Highway 29 north for approximately 28 miles to St. Helena. Take a right on Pope Street and a left on Starr Avenue. Starr Avenue dead-ends. The project site is to the west (approximately 100 feet from the end of Starr Avenue).

CONTACT INFORMATION

Property Owner:
Dennis R. Hunter
P.O. Box 9069
Santa Rosa, California 95405
Phone: (707) 579-1007
Mobile: (707) 481-7801

Delineator:
North Fork Associates
110 Maple Street, Suite 100
Auburn, California 95603
Phone: (530) 887-8500
Fax: (530) 887-1250
Contact: Erin Gottschalk



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NOTES:
Base map: St. Helena, CA, USGS
7.5 minute topographic quadrangle

Figure 1

SITE & VICINITY MAP
Hunter-St. Helena
St. Helena, Napa County, California



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±

0 50 100 200

Scale in Feet

NOTES: Date of Photo: August 29, 2006

Figure 2

Aerial Map

Hunter-St. Helena

St. Helena, Napa County, California

METHODS

Waters of the United States were delineated on July 17, 2006 by Erin Gottschalk (Associate Biologist). The delineation was conducted according to the 1987 Corps Manual (Environmental Laboratory 1987). Several soil pits were dug, and information about vegetation, soils, and hydrology was recorded on four of them. Data sheets are located in Appendix A.

Information on soils was taken from the Napa County soil survey (USDA, NRCS 1978). In the field, a Munsell Color (2000) chart was used to determine moist soil colors.

Common plant names are used in this document. Appendix B is a list of plants observed during the delineation, along with the scientific name and wetland status of each species. Scientific names follow *The Jepson Manual* (Hickman 1993), as updated by the Jepson Interchange, an online database maintained by the University of California and the Jepson Herbaria. The wetland status for species observed was taken from Reed (1988).

A Trimble GeoXT global positioning system (GPS) was used to obtain location information about data points, wetland areas, and other pertinent features. The GPS data were corrected in the office using the nearest available base station. The GPS data was then overlaid on a 2002 aerial photograph in ArcGIS to create the wetland delineation map in Appendix C. Appendix D contains a CD ROM with the electronic files in ArcView shape format.

RESULTS

Climate and Weather

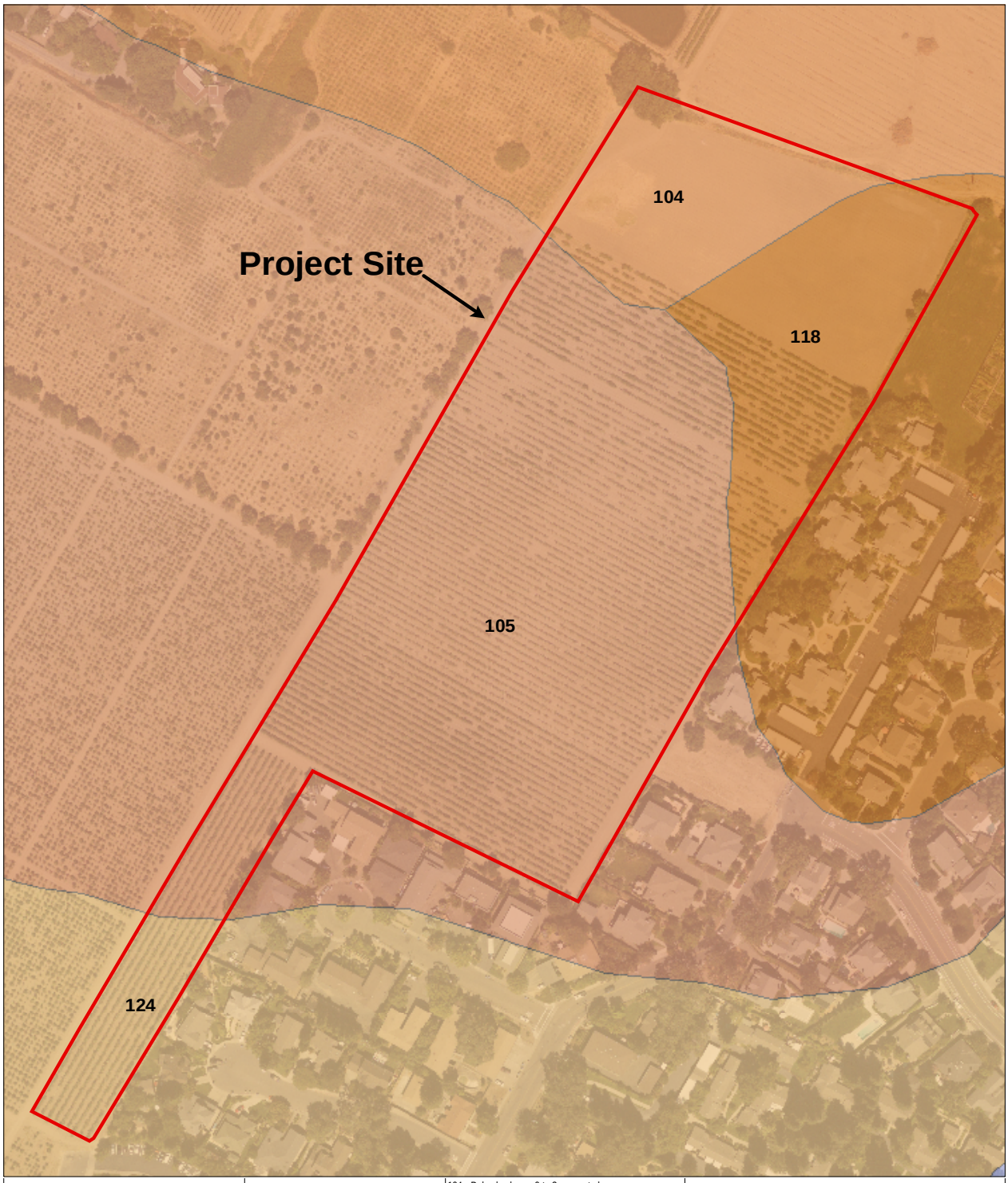
Roughly 35 inches of rain fall annually in St. Helena, and most falls between October and April. The late winter and early spring of 2006 produced substantially above normal rainfall; however, June and July were relatively dry with below normal rainfall. The average maximum temperature for St. Helena in July is 89.7°F. During the field survey for this wetland delineation, the temperatures rose over 100°F.

Soils

Four soil units have been mapped on the project site (Figure 3):

- Bale clay loam, 0 to 2 percent slopes
- Bale clay loam, 2 to 5 percent slopes
- Cole silt loam, 0 to 2 percent slopes
- Cortina very gravely loam, 0 to 5 percent slopes

Bale soils are Cumulic Ultic Haploxerolls formed in stratified, gravelly, and sandy alluvium from mixed sources. They are on nearly level to gently sloping alluvial fans and terraces. Moist A-horizon chromas are between 1 and 2. Bale soils are somewhat poorly drained with moderate permeability. Some areas supporting Bale soils have a water table within four feet of the surface and are ponded for short periods in the winter. Bale clay loam, 0 to 2 percent slopes, is considered a hydric soil by the Natural Resources Conservation Service.



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±

0 50 100 200

Scale in Feet

104 - Bale clay loam, 0 to 2 percent slopes
105 - Bale clay loam, 2 to 5 percent slopes
118 - Cole silt loam, 0 to 2 percent slopes
124 - Cortina very gravelly loam, 0 to 5 percent slopes

NOTES: Date of Photo: August 29, 2006

Figure 3

Soil Map

Hunter-St. Helena

St. Helena, Napa County, California

Cole soils are Pachic Argixerolls formed in alluvium from mixed sources. These soils are on river terraces, basins, flood plains, or on alluvial fans. Moist A-horizon chromas are between 1 and 3. Cole soils are somewhat poorly drained with slow permeability. Many areas supporting Cole soils have been artificially drained or have drainage altered by gullying. Cole silt loam, 0 to 2 percent slopes, is considered a hydric soil by the Natural Resources Conservation Service.

Cortina soils are Typic Xerofluvents formed in gravelly alluvium from mixed rock sources. They are very deep, somewhat excessively drained soils on alluvial fans and floodplains. Moist A-horizon chromas range between 1 and 3. Cortina soils have rapid permeability. Cortina very gravely loam, 0 to 5 percent slopes, is considered a hydric soil by the Natural Resources Conservation Service.

Hydrology

Hydrology within the study area is driven by precipitation and storm water and irrigation runoff. The site is essentially flat with a very slight slope down to the north. Two vegetated ditches occur along the north and northeastern property boundaries. These ditches carry storm water and irrigation runoff. The ditches likely tie in with the existing storm drainage system and/or drain into Sulphur Creek (a tributary to the Napa River) or the Napa River. The Napa River is located approximately 800 feet northeast of the property. Sulphur Creek is located approximately 900 feet southeast. The Napa River travels south through the Napa Valley and in Vallejo it empties into the San Pablo Bay.

Vegetation

The property supports a vineyard in active agricultural production. The dominant plant species on the property is cultivated grape. Other than the grapes, the ground supports mostly no vegetation due to the regular disking and weed removal. Sparse ruderal vegetation adapted to disturbance occurs scattered throughout the property. Species include field hedge-parsley, bindweed, spotted spurge, alkali mallow, fluellin, and prickly lettuce. Scattered hyssop loosestrife occurs under the grape vines.

The very northern portion of the property does not support rows of grapes. Currently the majority of this area supports disked fields (refer to Figure 4 for a photograph of this area); only a small area adjacent to the dirt road is not regularly disked. According to the vineyard manager, this small area is the grape loading area and is not disked in order to maintain a firm level ground for the grape bins and trucks.

Please note that the northeastern corner of the property used to support a detention feature (which was used for irrigation); however, the detention feature has since been removed as part of the onsite agricultural activities as it was no longer needed for irrigation. This area is now part of the disked field.

A large valley oak occurs in the very northwestern corner of the property. A few smaller valley oaks and red and arroyo willows occur along the eastern property boundary. The vegetation within the ditches is described in the following section.

Waters of the United States

One category of waters of the United States has been mapped on the project site: ditch. Table 1 is an acreage summary of the ditches on the property, and Figure 4 shows representative examples. The wetland delineation map is included in Appendix C.



Looking east from northwest corner of property.



Ditch-1



Ditch - 2



Close-up of vegetaton in Ditch-1.

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Photo Date: July 16, 2006

Figure 4

SITE PHOTOS
Hunter-St.Helena
St. Helena, Napa County, California

Table 1
Waters of the United States

Type	Acreage
Other Waters:	
Ditch	0.10
Ditch-1	(0.08)
Ditch-2	(0.02)
Total Waters of the United States	**0.10**

Ditch

Ditch-1 travels along the northern site boundary, from the northwest to the northeast property corners. A portion of the ditch is located within a 30-foot long 36-inch culvert as it travels under the dirt road. Ditch-1 is seven feet wide at ordinary high water mark. This larger ditch is visible on aerial photos and apparently carries irrigation and storm water runoff from the surrounding properties and drains into Sulphur Creek or the Napa River. Vegetation within Ditch-1 includes cattail, pennyroyal, curly dock, annual beard grass, water plantain, and narrow-leaved willow.

Ditch-2 is located along the eastern property boundary. It is a smaller ditch, 1 to 3 feet wide at ordinary high water mark. Ditch-2 may be receiving the majority of its water as runoff from the irrigated soccer field located just to the east of the property. Ditch-1 connects with Ditch-2 and with a 24-inch drop-culvert and may drain into both of these features. Vegetation within Ditch-1 includes tall flatsedge, curlydock, bristly ox-tongue, pennyroyal, blackberry, bindweed, and hyssop loosestrife.

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Appendix A
Wetland Data Sheets

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ROUTINE WETLAND DETERMINATION FORM

Project/Site:	Hunter-St. Helena	Sample Point:	1
Applicant/Owner:	Ken Blackman/Dennis Hunter	State:	California
Investigator:	E. Gottschalk	County:	Napa
Date:	July 16, 2006	S/T/R:	Carne Humana land grant/T8N/ R5W
		Quad:	St. Helena
		Veg Type:	vegetated ditch

Do normal circumstances exist on the site?	☒ **Yes**	☐ **No**
Is the site substantially disturbed (atypical situation)?	☐ **Yes**	☒ **No**
Is the site a potential problem area? (Explain)	☐ **Yes**	☒ **No**

VEGETATION

Dominant Plant Species	% Cover	Status	Non-Dominant Plant Species	% Cover	Status
Polypogon monspeliensis	35	FACW+	*Rumex crispus*	10	FACW-
Cyperus eragrostis	20	FACW	*Xanthium strumarium*	5	FAC+
Typha sp.	20	OBL	*Lolium multiflorum*	5	FAC*
			Mentha pulegium	10	OBL
			Alisma plantago-aquatica	5	OBL

Percentage of dominant species that are OBL, FACW, or FAC: 100%

Remarks: Vegetated ditch. Apparently water remains in the ditch for a period of time after it flows through.

Hydrophytic Vegetation Present: ☒ YES ☐ NO

HYDROLOGY

Is it the growing season? ☒ Yes ☐ No

Inundated? ☐ Yes ☒ No Saturated? ☐ Yes ☒ No

Depth of standing or flowing water: ____

Depth to standing water in pit: ____

Dept to saturation: ____

Primary Indicators:

- ☐ Inundated
- ☐ Saturated in Upper 12"
- ☐ Water Marks/Drift Lines
- ☒ Sediment Deposit
- ☐ Algal Matting
- ☐ Drainage Patterns in Wetlands

Secondary Indicators

- ☐ Oxidized Root Channels in Upper 12"
- ☒ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ Fac Neutral test
- ☐ Other

Remarks: Ordinary high water mark is 7 feet.

Wetland Hydrology Present? ☒ YES ☐ NO

SOILS

Map Unit Name (Series/Phase): Cole silt loam, 0 to 2 percent slopes
Taxonomy (Subgroup): _Pachic Argixerolls
Drainage: _somewhat poor Permeability: slow

Horizon	Depth Inches	Matrix Color	Texture	Redoximorphic Features		
				Abundance/ Size/Contrast	Type	Color
A	10	10 YR 2/1.5	loamy		Faint mottles	

Matches soil description: ☒ Yes ☐ No

Hydric soil indicators:

- ☐ Histosol
- ☐ Sulfur odor
- ☐ Aquic moisture regime
- ☐ Reducing conditions
- ☐ Gleyed or low-chroma (1 or less) matrix
- ☒ Matrix chroma of 2 or less with redox features
- ☐ Mn or Fe concretions or nodules
- ☐ Redox depletions
- ☐ High organic content on surface of sandy soils
- ☐ Organic streaking in sandy soils
- ☒ Listed on a Hydric soils list
- ☐ Other

Remarks: Few faint mottles.

Hydric Soils Present? ☒ YES ☐ NO

WATERS OF THE U.S. DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No

Remarks: Vegetated ditch

Is the point in a wetland? ☐ Yes ☒ No
Is the point in other waters? ☒ Yes ☐ No

Redoximorphic Feature Abbreviations:

Abundance
- F - few
- C - common
- M – many

Size:
- 1 - fine (<2 mm)
- 2 – medium (2-5 mm)
- 3 – coarse (5-20 mm)
- 4 – very coarse (20-75 mm)
- 5 – extremely coarse >76 mm)

Contrast
- f - faint
- d - distinct
- p - prominent

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ROUTINE WETLAND DETERMINATION FORM

Project/Site:	Hunter-St. Helena	Sample Point:	2
Applicant/Owner:	Ken Blackman/Dennis Hunter	State:	California
Investigator:	E. Gottschalk	County:	Napa
Date:	July 16, 2006	S/T/R:	Carne Humana land grant/T8N/R5W
		Quad:	St. Helena
		Veg Type:	disked

Do normal circumstances exist on the site?	☐ **Yes**	☒ **No**
Is the site substantially disturbed (atypical situation)?	☒ **Yes**	☐ **No**
Is the site a potential problem area? (Explain)	☐ **Yes**	☒ **No**

VEGETATION

Dominant Plant Species	% Cover	Status	Non-Dominant Plant Species	% Cover	Status

Percentage of dominant species that are OBL, FACW, or FAC: 0%

Remarks: Atypical situation: Disked as part of the ongoing agricultural production on the property and vegetation not present. Pieces of vegetation found appear to be Vicia sativa (FACU) and Bromus hordeaceus (FACU-) (upland vegetation).

Hydrophytic Vegetation Present: ☐ YES ☒ NO

HYDROLOGY

Is it the growing season? ☒ Yes ☐ No

Inundated? ☐ Yes ☒ No Saturated? ☐ Yes ☒ No

Depth of standing or flowing water: ____
Depth to standing water in pit: ____
Dept to saturation: ____

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12"
- ☐ Water Marks/Drift Lines
- ☐ Sediment Deposit
- ☐ Algal Matting
- ☐ Drainage Patterns in Wetlands

Secondary Indicators
- ☐ Oxidized Root Channels in Upper 12"
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ Fac Neutral test
- ☐ Other

Remarks: No hydrology indicators.

Wetland Hydrology Present? ☐ YES ☒ NO

SOILS

Map Unit Name (Series/Phase): Cole silt loam, 0 to 2 percent slopes
Taxonomy (Subgroup): _Pachic Argixerolls
Drainage: _somewhat poor Permeability: slow

Horizon	Depth Inches	Matrix Color	Texture	Redoximorphic Features		
				Abundance/ Size/Contrast	Type	Color
A	10	10 YR 3/2	loamy		mottles/concretions	

Matches soil description: ☒ Yes ☐ No

Hydric soil indicators:

- ☐ Histosol
- ☐ Sulfur odor
- ☐ Aquic moisture regime
- ☐ Reducing conditions
- ☐ Gleyed or low-chroma (1 or less) matrix
- ☒ Matrix chroma of 2 or less with redox features
- ☒ Mn or Fe concretions or nodules
- ☐ Redox depletions
- ☐ High organic content on surface of sandy soils
- ☐ Organic streaking in sandy soils
- ☒ Listed on a Hydric soils list
- ☐ Other

Remarks: Mottles and concretions present. Datapoint is in location of former detention feature. Soil is likely relic of this former detention feature that was used for irrigation purposes. It was removed because no longer needed for irrigation as part of normal agricultural practices.

Hydric Soils Present? ☒ YES ☐ NO

WATERS OF THE U.S. DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☒ No
Wetland Hydrology Present?	☐ Yes	☒ No
Hydric Soils Present?	☒ Yes	☐ No

Remarks: Upland comparison point.

Is the point in a wetland?	☐ Yes	☒ No
Is the point in other waters?	☐ Yes	☒ No

Redoximorphic Feature Abbreviations:

Abundance
- F - few
- C - common
- M – many

Size:
- 1 - fine (<2 mm)
- 2 – medium (2-5 mm)
- 3 – coarse (5-20 mm)
- 4 – very coarse (20-75 mm)
- 5 – extremely coarse >76 mm)

Contrast
- f - faint
- d - distinct
- p - prominent

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ROUTINE WETLAND DETERMINATION FORM

Project/Site:	Hunter-St. Helena	Sample Point:	3
Applicant/Owner:	Ken Blackman/Dennis Hunter	State:	California
Investigator:	E. Gottschalk	County:	Napa
Date:	July 16, 2006	S/T/R:	Carne Humana land grant/T8N/R5W
		Quad:	St. Helena
		Veg Type:	vegetated ditch

Do normal circumstances exist on the site?	☒ **Yes**	☐ **No**
Is the site substantially disturbed (atypical situation)?	☐ **Yes**	☒ **No**
Is the site a potential problem area? (Explain)	☐ **Yes**	☒ **No**

VEGETATION

Dominant Plant Species	% Cover	Status	Non-Dominant Plant Species	% Cover	Status
Cyperus eragrostis	50	FACW	*Picris echioides*	10	FAC
Rumex crispus	50	FACW-	*Mentha pulegium*	10	OBL
			Epilobium ciliatum	5	FACW
			Rubus discolor	5	FACW*
			Polypogon monspeliensis	5	FACW+
			Convolvulus arvensis	5	--

Percentage of dominant species that are OBL, FACW, or FAC: 100%

Remarks: Non-dominants also include Lythrum hyssopifolium (5%).
Vegetated ditch. Apparently water remains in the ditch for a period of time after it flows through.

Hydrophytic Vegetation Present: ☒ YES ☐ NO

HYDROLOGY

Is it the growing season? ☒ Yes ☐ No
Inundated? ☐ Yes ☒ No Saturated? ☐ Yes ☒ No

Depth of standing or flowing water: ____
Depth to standing water in pit: ____
Dept to saturation: ____

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12"
- ☐ Water Marks/Drift Lines
- ☒ Sediment Deposit
- ☐ Algal Matting
- ☐ Drainage Patterns in Wetlands

Secondary Indicators
- ☐ Oxidized Root Channels in Upper 12"
- ☒ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ Fac Neutral test
- ☐ Other

Remarks: Ordinary high water mark ranges between 1 and 3 feet. Likely receiving water from adjacent irrigated soccer field.

Wetland Hydrology Present? ☒ YES ☐ NO

SOILS

Map Unit Name (Series/Phase): Cole silt loam, 0 to 2 percent slopes
Taxonomy (Subgroup): Pachic Argixerolls
Drainage: somewhat poor Permeability: slow

Horizon	Depth Inches	Matrix Color	Texture	Redoximorphic Features		
				Abundance/ Size/Contrast	Type	Color
A	10	10 YR 2/2	loamy		Faint mottles	

Matches soil description: ☒ Yes ☐ No

Hydric soil indicators:

- ☐ Histosol
- ☐ Sulfur odor
- ☐ Aquic moisture regime
- ☐ Reducing conditions
- ☐ Gleyed or low-chroma (1 or less) matrix
- ☒ Matrix chroma of 2 or less with redox features
- ☐ Mn or Fe concretions or nodules
- ☐ Redox depletions
- ☐ High organic content on surface of sandy soils
- ☐ Organic streaking in sandy soils
- ☒ Listed on a Hydric soils list
- ☐ Other

Remarks: Few faint mottles.

Hydric Soils Present? ☒ YES ☐ NO

WATERS OF THE U.S. DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes	☐ No
Wetland Hydrology Present?	☒ Yes	☐ No
Hydric Soils Present?	☒ Yes	☐ No

Remarks: Vegetated ditch

Is the point in a wetland?	☐ Yes	☒ No
Is the point in other waters?	☒ Yes	☐ No

Redoximorphic Feature Abbreviations:

Abundance
- F - few
- C - common
- M – many

Size:
- 1 - fine (<2 mm)
- 2 – medium (2-5 mm)
- 3 – coarse (5-20 mm)
- 4 – very coarse (20-75 mm)
- 5 – extremely coarse >76 mm)

Contrast
- f - faint
- d - distinct
- p - prominent

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ROUTINE WETLAND DETERMINATION FORM

Project/Site:	Hunter-St. Helena	Sample Point:	4
Applicant/Owner:	Ken Blackman/Dennis Hunter	State:	California
Investigator:	E. Gottschalk	County:	Napa
Date:	July 16, 2006	S/T/R:	Carne Humana land grant/T8N/R5W
		Quad:	St. Helena
		Veg Type:	ruderal

Do normal circumstances exist on the site?	☒ **Yes**	☐ **No**
Is the site substantially disturbed (atypical situation)?	☐ **Yes**	☒ **No**
Is the site a potential problem area? (Explain)	☐ **Yes**	☒ **No**

VEGETATION

Dominant Plant Species	% Cover	Status	Non-Dominant Plant Species	% Cover	Status
Picris echioides	30	FAC	*Polypogon monspeliensis*	10	FACW+
Convolvulus arvensis	30	--	*Lythrum hyssopifolium*	5	FACW
Bromus hordeaceus	20	FACU-	*Vicia sativa*	5	FACU

Percentage of dominant species that are OBL, FACW, or FAC: 33%

Remarks: Approximately 25 to 50 percent bare ground.

Hydrophytic Vegetation Present: ☐ YES ☒ NO

HYDROLOGY

Is it the growing season? ☒ Yes ☐ No

Inundated? ☐ Yes ☒ No Saturated? ☐ Yes ☒ No

Depth of standing or flowing water: ____
Depth to standing water in pit: ____
Dept to saturation: ____

Primary Indicators:
- ☐ Inundated
- ☐ Saturated in Upper 12"
- ☐ Water Marks/Drift Lines
- ☐ Sediment Deposit
- ☐ Algal Matting
- ☐ Drainage Patterns in Wetlands

Secondary Indicators
- ☐ Oxidized Root Channels in Upper 12"
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ Fac Neutral test
- ☐ Other

Remarks: No hydrology indicators.

Wetland Hydrology Present? ☐ YES ☒ NO

SOILS

Map Unit Name (Series/Phase): Bale clay loam, 0 to 2 percent slopes
Taxonomy (Subgroup): Cumulic Ultic Haploxerolls
Drainage: somewhat poor Permeability: moderate

Horizon	Depth Inches	Matrix Color	Texture	Redoximorphic Features		
				Abundance/ Size/Contrast	Type	Color
A	10	10 YR 3/2	loamy		None	

Matches soil description: ☒ Yes ☐ No

Hydric soil indicators:

- ☐ Histosol
- ☐ Sulfur odor
- ☐ Aquic moisture regime
- ☐ Reducing conditions
- ☐ Gleyed or low-chroma (1 or less) matrix
- ☐ Matrix chroma of 2 or less with redox features
- ☐ Mn or Fe concretions or nodules
- ☐ Redox depletions
- ☐ High organic content on surface of sandy soils
- ☐ Organic streaking in sandy soils
- ☒ Listed on a Hydric soils list
- ☐ Other

Remarks: No redoximorphic features.

Hydric Soils Present? ☒ YES ☐ NO

WATERS OF THE U.S. DETERMINATION

Hydrophytic Vegetation Present?	☐ Yes	☒ No
Wetland Hydrology Present?	☐ Yes	☒ No
Hydric Soils Present?	☒ Yes	☐ No

Remarks: Datapoint is located within a small area that is not disked in the northern portion of the property, adjacent to the dirt road. According to the vineyard manager, this area is not disked to maintain a firm loading area for the grape trucks and bins.

Is the point in a wetland?	☐ Yes	☒ No
Is the point in other waters?	☐ Yes	☒ No

Redoximorphic Feature Abbreviations:

Abundance
- F - few
- C - common
- M – many

Size:
- 1 - fine (<2 mm)
- 2 – medium (2-5 mm)
- 3 – coarse (5-20 mm)
- 4 – very coarse (20-75 mm)
- 5 – extremely coarse >76 mm)

Contrast
- f - faint
- d - distinct
- p - prominent

Appendix B
Wetland Status of Plant Species Observed During Surveys

Plants Observed on the Hunter-St.Helena Property July 2006

Common Name	Taxon	Wetland Status
Alkali mallow	*Malvella leprosa*	FAC*
Annual beard grass	*Polypogon monspeliensis*	FACW+
Arroyo willow	*Salix lasiolepis*	FACW
Bermuda grass	*Cynodon dactylon*	FAC
Bindweed	*Convolvulus arvensis*	-
Black mustard	*Brassica nigra*	-
Bristly ox-tongue	*Picris echioides*	FAC
Broad-leaf filaree	*Erodium botrys*	-
Cattail	*Typha sp.*	OBL
Cocklebur	*Xanthium strumarium*	FAC+
Common groundsel	*Senecio vulgaris*	NI*
Common purslane	*Portulaca oleracea*	FAC
Common velvet grass	*Holcus lanatus*	FAC
Common vetch	*Vicia sativa*	FACU
Coyote brush	*Baccharis pilularis*	-
Creeping spikerush	*Eleocharis macrostachya*	OBL
Cultivated grape	*Vitis vinifera*	-
Curly dock	*Rumex crispus*	FACW-
Cut-leaf geranium	*Geranium dissectum*	-
Dallis grass	*Paspalum dilatatum*	FAC
Field hedge-parsley	*Torilis arvensis*	-
Fluellin	*Kickxia elatine*	-
Foxtail barley	*Hordeum murinum*	-
Hairy crabgrass	*Digitaria sanguinalis*	FACU
Himalayan blackberry	*Rubus discolor*	FACW*
Hyssop loosestrife	*Lythrum hyssopifolium*	FACW
Italian ryegrass	*Lolium multiflorum*	FAC*
Narrow-leaved willow	*Salix exigua*	OBL
Oat	*Avena sp.*	-
Pennyroyal	*Mentha pulegium*	OBL
Prickly lettuce	*Lactuca serriola*	FAC
Red willow	*Salix laevigata*	FACW+
Ripgut grass	*Bromus diandrus*	-
Ruby sand-spurrey	*Spergularia rubra*	FAC-
Soft chess	*Bromus hordeaceus*	FACU-
Spiny clotbur	*Xanthium spinosum*	FAC+
Spotted spurge	*Chamaesyce maculata*	FACU*
Summer cottonweed	*Epilobium brachycarpum*	-

Common Name	Taxon	Wetland Status
Tall flatsedge	*Cyperus eragrostis*	FACW
Toad rush	*Juncus bufonius*	FACW+
Valley oak	*Quercus lobata*	FAC*
Velvet-leaf	*Abutilon theophrasti*	NI
Water plantain	*Alisma plantago-aquatica*	OBL
Wild radish	*Raphanus sativus*	-

Appendix C
Wetland Delineation Map



PREPARED BY:

north fork associates

110 Maple St
Auburn, CA 95603
(530) 887-8500

PREPARED FOR:

Blackman Consulting
1224 St. Helen Avenue
Santa Rosa, CA 95404
(707) 526-2782
Contact: Ken Blackman

DRAWN BY: E. Douglas
DELINEATORS: E. Gottschalk
DATE OF FIELDWORK: July 16, 2006

USACE REGULATORY FILE#: TBD
VERIFIED BY: TBD
DATE OF VERIFICATION: TBD

REVISIONS

DATE	DESCRIPTION	BY

WATERS OF THE UNITED STATES

WATERS	ACREAGE
Ditch	0.10
Ditch - 1	0.08
Ditch - 2	0.02
TOTAL	0.10

NOTES:
1. Aerial photograph provided by Geoimagery. Date of photo: August 29, 2006
2. The boundaries and jurisdictional status of all waters shown on this map are preliminary and subject to verification by the U.S. Army Corps of Engineers, San Francisco District.

APPENDIX C

WETLAND DELINEATION MAP

Hunter-St. Helena

St. Helena, Napa County, CA
September 12, 2006

Project Site Boundary (±16 Acres)
Wetland Data Point
Upland Data Point
Culvert

0 50 100 200 Feet
Scale 1:1,200

Appendix D
GIS Files

GIS Files are provided to the Corps and are available upon request.

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

JUL 18 2008

Regulatory Division

SUBJECT: File Number 400151N

RECEIVED
JUL 23 2008
NFA

Ms. Erin Gottschalk
North Fork Associates
110 Maple Street, Suite 100
Auburn, California 95603

Dear Ms. Gottschalk:

This letter is written in response to your submittal requesting confirmation of the extent of Corps of Engineers jurisdiction at a 16-acre property known as the, "Hunter-St. Helena Project Site. The property is located west of Pope Street between State Highway 29 and the Silverado Trail in St. Helena, Napa County, California, (APN 009-030-020).

Enclosed is a map showing the extent and location of Corps of Engineers jurisdiction. We have based this jurisdictional delineation on the current conditions on the site as verified during a site visit performed by our staff on January 29, 2008. A change in those conditions may also change the extent of our jurisdiction. This jurisdictional delineation will expire in five years from the date of this letter. However, if there has been a change in circumstances that affects the extent of Corps jurisdiction, a revision may be completed before that date. Since your delineation information was received before June 5, 2007, the effective date of the official interagency guidance interpreting the Supreme Court decision, Rapanos v. United States, 126 S. Ct. 2208 (2006), the Corps did not apply this guidance to the delineation in rendering this jurisdictional determination.

All proposed discharges of dredged or fill material into waters of the United States must be authorized by the Corps of Engineers pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands..

You are advised that the Corps has established an Administrative Appeal Process, as described in 33 C.F.R. Part 331 (65 Fed. Reg. 16,486; March 28, 2000), and outlined in the enclosed flowchart and "Notification of Administrative Appeal Options, Process, and Request for Appeal" form (NAO-RFA). If you do not intend to accept the approved jurisdictional determination, you may elect to provide new information to the District Engineer for reconsideration or submit a completed NAO-RFA form to the Division Engineer to initiate the appeal process. You will relinquish all rights to appeal, unless the Corps receives new information or a completed NAO-RFA form within sixty (60) days of the date of the NAO-RFA.

Should you have any questions regarding this matter, please call David Wickens of our Regulatory Division at (415) 503-6787. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at http://per2.nwp.usace.army.mil/survey.html.

Sincerely,

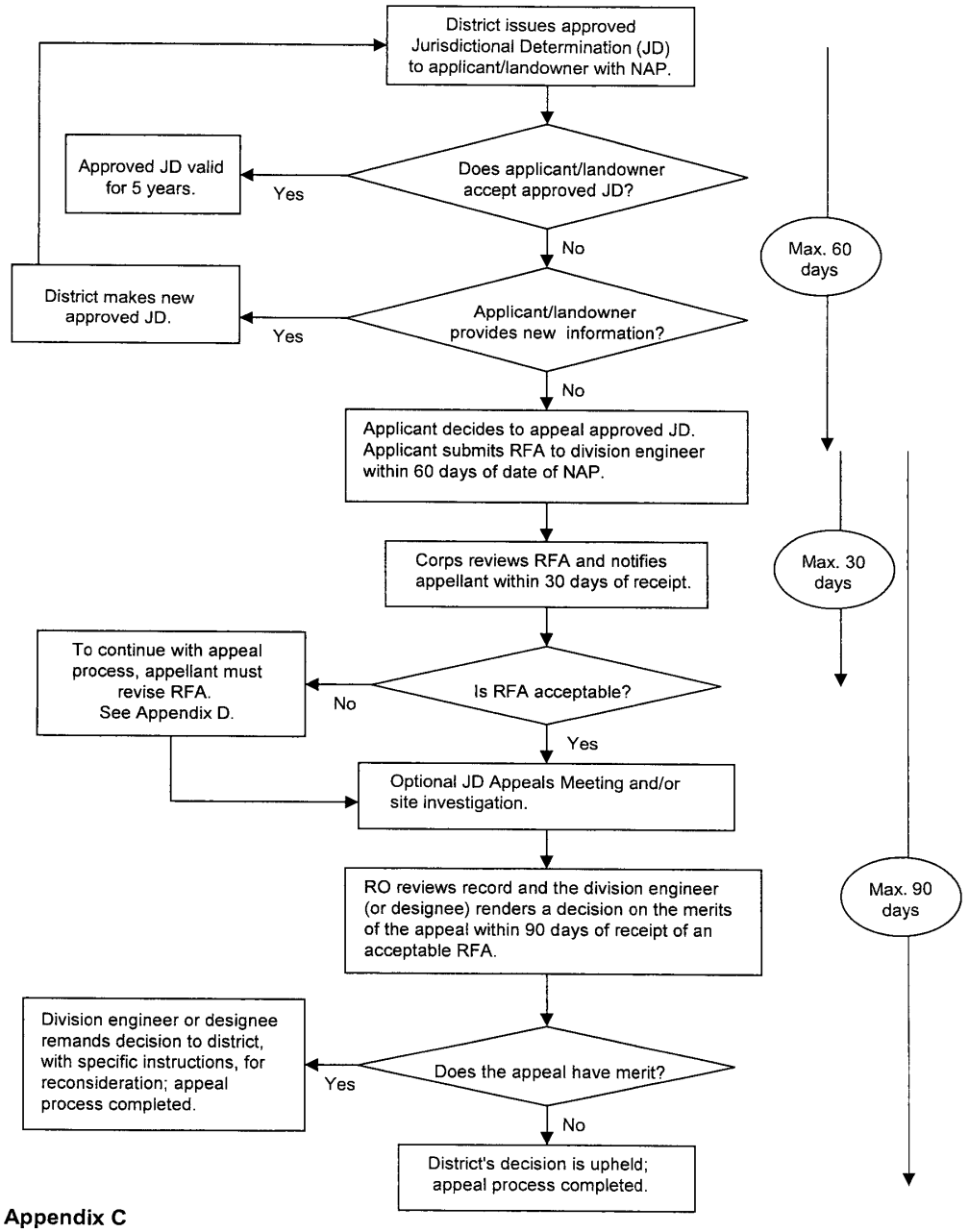
Jane M. Hicks
Chief, Regulatory Division

Enclosures

Copy Furnished

CA RWQCB, Santa Rosa, CA
Dennis R. Hunter

Administrative Appeal Process for Approved Jurisdictional Determinations



Appendix C

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL		
Applicant: Dennis R. Hunter	File Number: 400151N	Date: July 18, 2008
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	FINAL PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps Regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the initial proffered permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this Notice and return the Notice to the DISTRICT Engineer. Your objections must be received by the DISTRICT Engineer within 60 days of the date of this Notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your Notice, the DISTRICT Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT Engineer will send you a final proffered permit for your reconsideration, as indicated in Section B below.

B: FINAL PROFFERED PERMIT: You may accept or decline/appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the final proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this Notice and sending the form to the DIVISION (not District) Engineer (address on reverse). This Notice must be received by the DIVISION (not District) Engineer within 60 days of the date of this Notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this Notice and sending the Notice to the DIVISION (not District) Engineer (address on reverse). This Notice must be received by the DIVISION (not District) Engineer within 60 days of the date of this Notice.

D: APPROVED JURISDICTIONAL DETERMINATION (JD): You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this Notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this Notice and sending the Notice to the DIVISION (not District) Engineer (address on reverse). This Notice must be received by the DIVISION Engineer within 60 days of the date of this Notice. JD appeals based on NEW information must be submitted to the DISTRICT Engineer within 60 days of the date of this Notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION (JD): You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps District for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT, FINAL PROFFERED PERMIT, PERMIT DENIAL, or JURISDICTIONAL DETERMINATION

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this Notice to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record; the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the Review Officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact: Jane Hicks, Regulatory Branch Chief U.S. Army Corps of Engineers, San Francisco District 1455 Market Street, San Francisco, CA 94103-1398 Tel.: (415)503-6771 Fax: (415) 503-6690	If you only have questions regarding the appeal process you may also contact: Douglas R. Pomeroy, Appeal Review Officer U.S. Army Corps of Engineers, South Pacific Division 1455 Market Street, San Francisco, CA 94103-1399 Tel.: (415)503-6574 Fax: (415) 503-6647

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of Appellant or Agent	Date:	Telephone Number:

wra
ENVIRONMENTAL CONSULTANTS

September 15, 2015

Ms Carla Violet
Urban Planning Partners, Inc.
350 Frank H Ogawa Plaza
Oakland, CA 94612

RE: Hunter Subdivision Project, St. Helena, CA

Dear Ms Violet:

At your request, WRA, Inc. made a site visit to the proposed Hunter Subdivision Project (Subdivision) in St. Helena (Figure 1) on March 20, 2015 for the purpose of reviewing existing conditions of the property where the Subdivision is proposed to be constructed and also to review an additional site at the intersection of Silverado Trail and Pope Street (Intersection) where new signalization is proposed in association with the Subdivision project. WRA previously prepared biological resources review of the Subdivision project in 2012, and this letter report provides updated information to augment that report. Also included in this letter is biological resources information for the area at the Intersection site that may be impacted by improvements related to changes in traffic signalization at the Intersection site.

A. Updated Biological Resource Assessment Information, Hunter Subdivision Site

A site visit was conducted on March 20, 2015 by WRA staff in order to observe existing conditions of the property where the Subdivision has been proposed and compare to the conditions existing at the time the biological resources were assessed in 2012. The Subdivision property was found to be in a similar condition in 2015 as it was in 2012, with only maintenance work (e.g., mowing) conducted in the interim to control fuel loading (vegetation). There was no construction or other soil disturbances detected and it was determined the site conditions were comparable to conditions observed in 2012. The project description for the subdivision has not been changed and, therefore, potential impacts and evaluation completed in 2012 were reviewed in order to determine if results and conclusions then had changed and needed revision in 2015.

A list of special-status plant and wildlife species with potential to be present on the property or in proximity to it in the surrounding area was prepared for the 2012 biological assessment. This list was compared with current 2015 species information in data bases including the California Natural Diversity Data Base and California Native Plant Society Plant Inventory in order to determine if the status of species had changed or if species should be added to or removed from the list since 2012. The following information provides special-status species updated information:

2169-G East Francisco Blvd., San Rafael, CA 94901 (415) 454-8868 tel (415) 454-0129 fax info@wra-ca.com www.wra-ca.com

A.1. Plants

A total of 30 special-status plants were included in the 2012 list that had the potential for being in the region of the Subdivision site and had basic habitat or occurrence requirements that would allow plants to potentially be present. All of the plants were rated in 2012 as being Not Present or Unlikely to be present because specific factors needed to support many of the plants were not present on the site and also because the project site had been recently graded and disturbed; therefore, the probability that any of the special-status plants would be present was very low.

In 2015 the site conditions were observed to have not changed substantially since 2012. The site had been maintained in essentially the same condition and no new habitat types had been created or lost and no soil movement was detected. A review of the most recent list of plants potentially present (May 2015, see Attachment 1) indicates that the species having the potential to be present are essentially the same as 2012, however a few changes have been reported as shown in Figure 2. Despite these changes, re-evaluation indicates that the conclusions reached in 2012 are still valid in 2015 for the Subdivision portion of the Project (see discussion for the added Intersection site of the Project below).

A.2. Wildlife

In 2012, 28 special-status species of wildlife were identified as being potentially present in the area of the Subdivision site, including in adjacent areas and in proximity to the site such that they potentially could be impacted by development. Because wildlife have the capability of moving around, they generally are evaluated within a wider area and involving habitats that may occur in surrounding areas. A review of the recent listing of special-status species potentially present indicates that the same species still have the potential to be present and that new occurrences have been reported as shown in Figure 3. Evaluation of the species and potential impacts that could be caused by development indicates that the conclusions reached in 2012 remain the same in 2015 for the Subdivision site (see discussion for the added Intersection portion of the Project below).

A.3. Biological Communities and Habitat

The Subdivision site has been maintained in the same condition as it was in 2012 in which much of it had been graded and managed to maintain grassland habitat in prior years. The western portion, in vineyard in 2012, was still in vineyard in 2015 and other features noted in 2012, such as drainage ditches, were also still present in 2015. The Project is separated from the Napa River and the riparian habitat along the river (both considered sensitive habitats) by a water treatment pond and a habitat restoration area adjacent to the river; therefore the river and riparian habitat along the river was considered to be at far enough distance away from the development (approximately 500 feet) to not be adversely affected by the Project in the 2012 assessment, and that conclusion is still valid in 2015.

With the addition of the Intersection site, the chaparral/mixed broadleaf forest habitat on the hillside to the east would not be considered a sensitive habitat but the Napa River/riparian habitat to the west would be. Stream and/or riparian habitat is regulated by various agencies including the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act (the Napa River at areas below the ordinary high water mark) and the California Department of

Fish and Wildlife (CDFW) under 1600 Fish and Game Code (the Napa River, its banks, and riparian vegetation).

B. Biological Resource Assessment Information, Silverado Trail/Pope Street Intersection Site

Concerns that the Subdivision project may cause traffic congestion have been raised which may result in needing to install traffic lights and re-configure traffic lanes at the intersection of Silverado Trail and Pope Street (Intersection site), southeast of the Subdivision site (Figure 4). The addition of traffic light signals at the intersection will require modification of the roadway, including occupying wider areas of the existing roadway in order to maintain throughway lanes, add turn lanes, add bicycle lanes, add median strips and raised islands, and install traffic signal lights (Figure 4). As proposed, however, all of these improvements can be completed within the existing footprint of the existing roadway hardscape because of areas along the roadway that have been paved or used as pull over areas. Therefore, the Intersection work will not result in removal of any existing habitat and will only utilize existing roadway area hardscape more efficiently.

The location of the Intersection site is between the Napa River to the west and a hillside and ridge to the east, and these areas have different habitat types from what is present at the Subdivision site. These additional habitat types are stream/riparian habitat associated with the Napa River and chaparral/mixed broadleaf forest on the hillside and ridge. The special-status species that may use these habitats need to be added to the species list and evaluated for potential impacts. In order to make the list complete, the additional species have been combined into the 2012 list, and the full list containing the original 2012 list and newly added species is provided as one updated list in this report (Attachment 1). Although no habitat area will be removed in order to complete the Intersection improvement work, the potential for adverse impacts to sensitive habitat and/or special-status species was evaluated. Special-status species that were evaluated and ranked as having a Moderate or High potential for being present are presented below.

B.1. Special-status Species of Plants Potentially Present at Intersection Site

The stream/riparian and chaparral/mixed broadleaf forest habitats at the Intersection site have the potential for a number of plant species to be present that differ from the species at the Subdivision site. Therefore, the updated list of plant species includes the additions with a total number of plants now at 63 (see Attachment 1). Many of these additional potential species were determined to be Not Present or Unlikely to be present based on factors such as elevation range, soil type, or no known occurrences within several miles. Still, one plant was ranked as having High Potential for presence and three plants were ranked as having a Moderate Potential for presence, and these species are summarized below.

Napa false indigo (*Amorpha californica* var. *napensis*), High Potential. CNPS Rank 1B.2. – Often found in broadleafed upland forest, chaparral, cismontane woodland and in openings in forest or woodland or in chaparral. Its elevation range is below 800 m and it blooms in May through July. In addition to its habitat type being present adjacent to the Intersection site area, known occurrences have been reported within a mile of the Project.

Clara Hunt's milk-vetch (*Astragalus claranus*), Moderate Potential. Federal Endangered, State Threatened, CNPS Rank 1B.1. – This plant can be found in chaparral (openings), cismontane

woodland, valley and foothill grassland on serpentine or volcanic, rocky, clay soil. Elevation ranges of this plant are from 250 to 900 feet (75 to 275 meters), and it blooms March through May. There are occurrences of this plant reported in the area.

Narrow anthered brodiaea (*Brodiaea leptandra*), Moderate Potential. CNPS Rank 1B.2. This plant is found in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and in valley and foothill grassland at elevation ranges from 360 to 3000 feet (110 to 915 meters). It blooms in May through July. Suitable habitat is present, however elevation range of plant is generally higher than project area. The closest known occurrence is approximately 0.75 mile to east of Intersection site.

Greene's narrow-leaved daisy (*Erigeron greenei*), Moderate Potential. CNPS Rank 1B.2. Chaparral, and especially on serpentine or volcanic soil, is the preferred habitat for this species. Its elevation range is from 260 to 3300 feet (80 to 1005 meters) and it blooms May through September. Although no serpentine soil is present, nearby occurrence is the main factor this plant warrants a Moderate rating for being present in areas adjacent to the site.

Because no exiting habitat will be removed in order to complete the Intersection improvements, no adverse impact to special-status plants is expected. No additional surveys or mitigation measures are needed or recommended.

B.2. Special-status Species of Wildlife Potentially Present at Intersection Site

A review of the special-status wildlife species indicates that the same species described for the Subdivision site have the potential to be at the Intersection site. This is because of proximity to the Subdivision site and the fact that wildlife are not stationary and have the ability to move between habitat types (e.g., from nesting habitat to foraging habitat, etc.). However, the proximity of the Intersection site to the stream/riparian habitat and the chaparral/mixed broadleaf habitat causes the rating for presence of some of the wildlife species previously given in the 2012 assessment to change to higher probability, and these are summarized below:

Silver-haired Bat (*Lasionycteris noctivagans*), WBWG Medium Priority. Moderate Potential. Primarily a forest dweller, feeding over streams, ponds, and open brushy areas. It roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. Previously rated as Unlikely to be present at the Subdivision site, the proximity of the riparian and chaparral/mixed broadleaf forest habitat to the Intersection site may provide roost habitat for this species and the rating is raised to Moderate.

Fringed Myotis (*Myotis thysanodes*), WBWG High Priority. Moderate Potential. A bat associated with a wide variety of habitats including mixed coniferous-deciduous forest and redwood/sequoia groves. Buildings, mines and large snags are important day and night roosts. Previously rated as Unlikely for presence at the Subdivision site, the riparian and chaparral mixed broadleaf forest habitat in proximity to the Intersection site causes the rating for this species to be raised to Moderate.

Purple Martin (*Progne subis*), State Species of Special Concern. High Potential. A bird that inhabits woodlands and low elevation coniferous forests. It nests in old woodpecker cavities and human-made structures, and the nest is often located in a tall isolated tree or snag. Previously considered to be Not Present at the Subdivision site, the forest habitat and recent reported occurrences in the area gives cause to raise the rating for presence to High.

Foothill Yellow-legged Frog (*Rana boylii*), State Species of Special Concern. Moderate Potential Found in or near rocky streams in a variety of habitats and prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Previously rated as Not Present at the Subdivision site, the possibility that it could be present in the Napa River adjacent to the Intersection site raises the potential for occurrence to Moderate. It is not rated High because the nearest occurrence is approximately two miles west with the urban area of St. Helena in between. Therefore, there is no direct corridor that would allow migration between the Project location and the known occurrences.

Western Pond Turtle (*Actinemys marmorata*), State Species of Special Concern. Moderate Potential. A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. It requires basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying. Previously rated as Unlikely to be present at the Subdivision site, this species may be present in the Napa River for use as a migration corridor, and the rating for potential presence is changed to Moderate.

Steelhead, Central California Coast ESU (Oncorhynchus mykiss), Federal Threatened. High Potential. Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean. High rating is for the Napa River. This species is known to occur in upstream tributaries and likely migrates between those tributaries and downstream habitats, including the Pacific Ocean.

Other wildlife species evaluated but not rated as Moderate or High for potential presence are listed in Attachment 1.

The work to improve the intersection with traffic light signals, lane changes, and median strips and islands will be conducted within the existing footprint of roadway hardscape and no habitat will be removed. Although the construction work and eventual increased traffic may create activity and noise, this is not likely to cause an adverse impact to wildlife because a relatively high level of activity and noise is an existing condition at the intersection. This intersection was observed to be a busy intersection during the site visit conducted on an average afternoon in March 2015. Numerous vehicles were observed either traveling through the intersection on Silverado Trail and/or coming from or turning onto Pope Street and Howell Mountain Road; often there were vehicles backed up waiting to make turns. While additional construction work and traffic may result from the Subdivision project and may cause noise and traffic congestion at the Intersection, wildlife that is present in proximity to the intersection is already acclimated to activity, noise, and traffic as the normal condition. Any increase in activity, noise, or traffic that may be caused by the Subdivision project is not likely to affect wildlife adversely in any significant way because they are acclimated. Therefore, there are no recommendations needed to mitigate for an increase in construction activity, noise, and traffic.

B.3. Sensitive Habitat Community Evaluation

With the addition of stream/riparian and chaparral/mixed broadleaf forest habitats, only the stream/riparian habitat would be considered a sensitive habitat. No work will be conducted in the Napa River and work will only involve roadway areas that are existing hardscape that are 100 to 120 feet away from the river. No habitat or vegetation will be removed, therefore, no

impacts to sensitive habitat is expected as a result of work that will be conducted for improvements made at the Intersection site. No permits would be expected to be needed from the Corps or CDFW. Toxic liquids, such as paint, fuel, lubricants, and un-cured concrete, used during Intersection improvement work could adversely affect sensitive Napa River and riparian habitat if spilled or leaked in these habitats. However, measures to avoid or reduce the possibility of spillage or leaks will be included in a Storm Water Pollution Prevention Plan (SWPPP) that will be required to be prepared for the Project. This was addressed in the Project draft EIR in Section I. Hydrology and Water Quality, such as recommending fueling and maintenance offsite as much as possible and, if onsite, no closer than 50 feet to drain inlets, drainage courses, and receiving waters. Because the project is more than 100 feet away from the Napa River, no adverse impacts would be expected and no additional mitigation measures are recommended.

This concludes the review and evaluation of biological resources. If you have questions or require additional information, please contact us.

Sincerely,

Douglas Spicher

Encl.

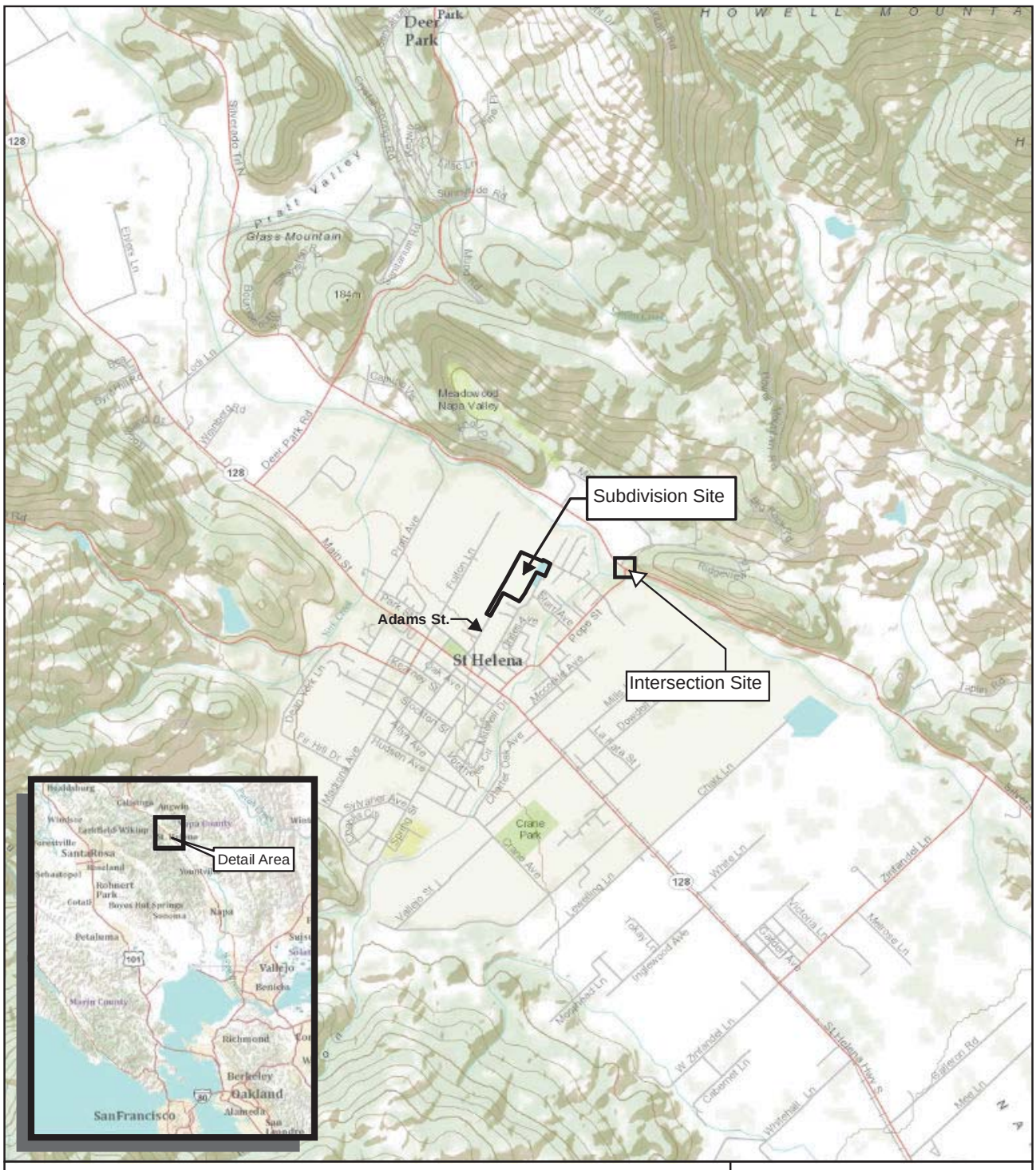


Figure 1. Project Area Location Map

Hunter BRA
Napa County, CA

ENVIRONMENTAL CONSULTANTS

Date: December 2011
Map By: Derek Chan
Base Source: ESRI

Path: L:\Acad 2000 Files\21000\21204\GIS\ArcMap\Fig1_LocMap_20111213.mxd

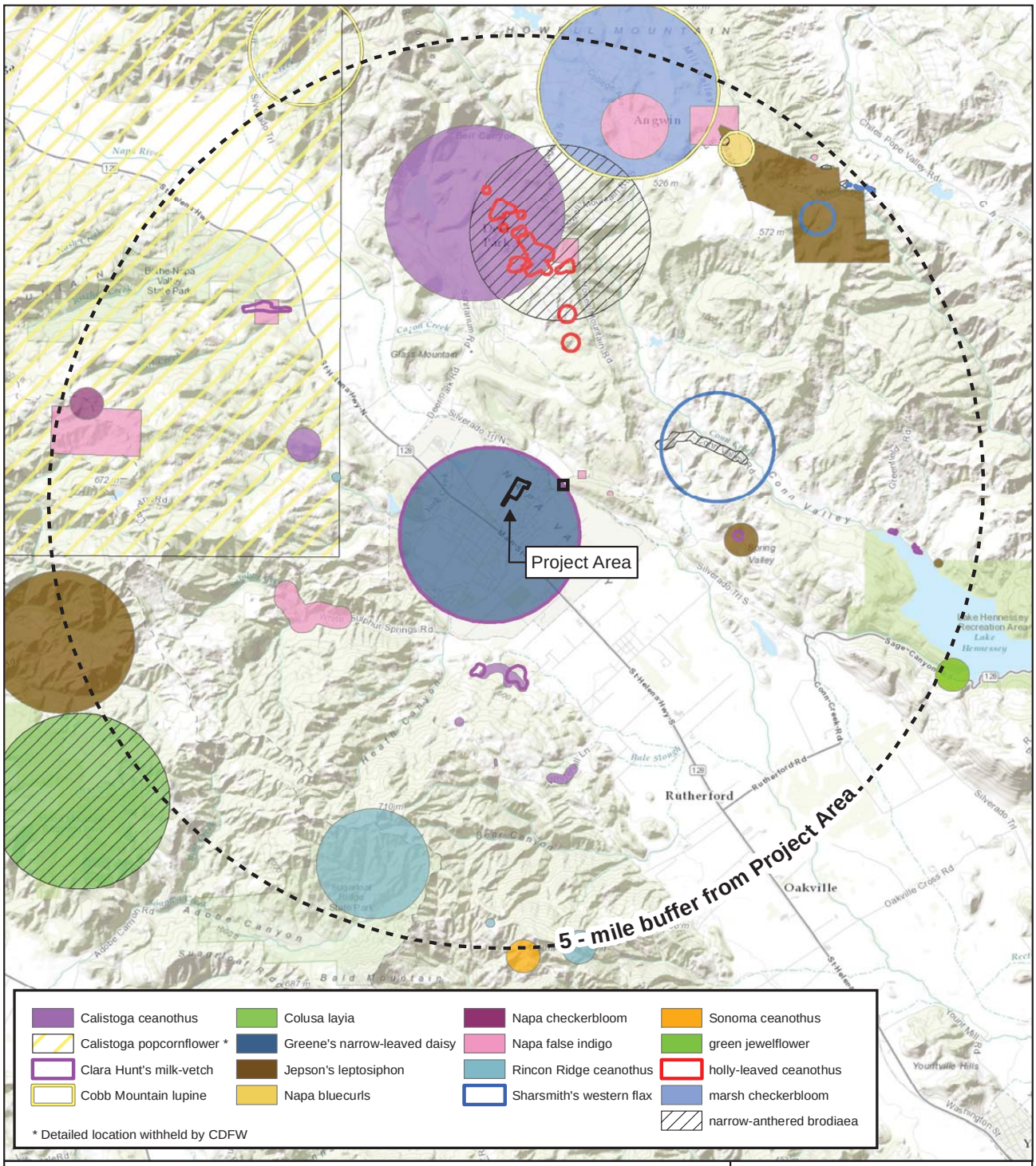


Figure 2. Special Status Plant Species within 5 miles of the Project Area

Hunter BRA
Napa County, California

0 1 2 4
Miles

ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 6/3/2015
Map Prepared By: dchan
Base Source:
Data Source(s): WRA

Path: L:\Acad 2000 Files\21000\21204\GIS\ArcMap\CNDDB_Plants_20150603.mxd

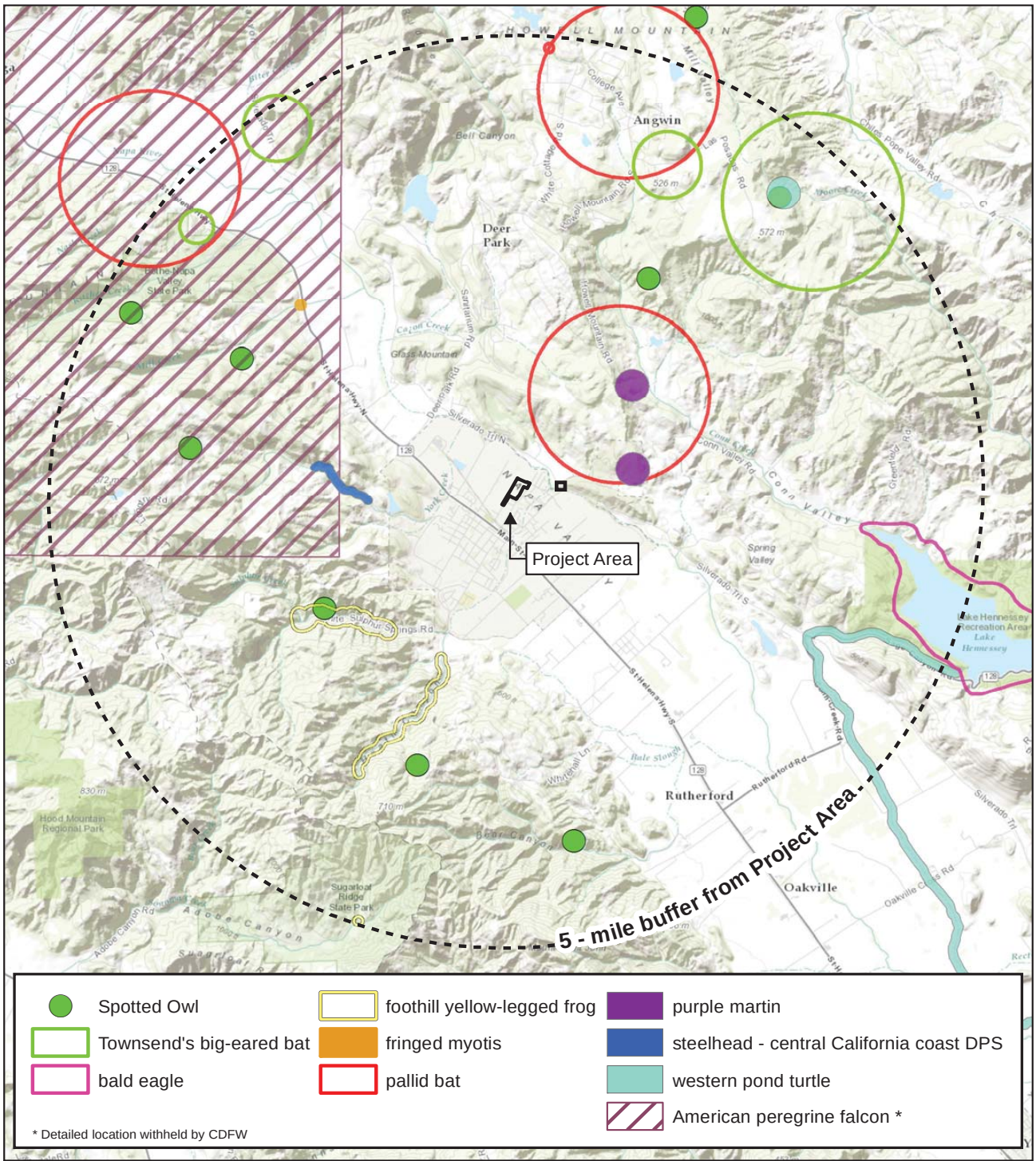


Figure 3. Special Status Wildlife Species within 5 miles of the Project Area

Hunter BRA
Napa County, California

0 1 2 4
Miles

ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 6/3/2015
Map Prepared By: dchan
Base Source:
Data Source(s): WRA

Path: L:\Acad 2000 Files\21000\21204\GIS\ArcMap\CNDDB_Wildlife_20150603.mxd

Figure 4. Intersection improvement plan for the Silverado Trail/Pope Street Intersection. All improvement work will occur within areas of the existing roadway hardscape.

DRAFT

Attachment 1. Special status plant and wildlife species that may occur, or are known to occur in habitats similar to those found on the Hunter Subdivision Project Area (Subdivision) and in the added Silverado Trail/Pope Street Intersection Signalization Area (Intersection). List compiled from CNDDB (CDFW 2015) and CNPS Electronic Inventory (CNPS 2015) for the St. Helena, Yountville, Kenwood, Rutherford, Chiles Valley, Calistoga, Walter Springs, Detert Reservoir and Aetna Springs USGS 7.5" quadrangles, and USFWS Species lists (USFWS 2015) for the Project area.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Plants			
Franciscan onion *Allium peninsulare var. franciscanum*	Rank 1B.2	Cismontane woodland, valley and foothill grasslands of clay, volcanic, or serpentine soils. 50-300 m. Blooms: May-June	**Not Present.** The Project Area lacks suitable serpentine soils habitat for this species.
Sonoma alopecurus *Alopecurus aequalis var. sonomensis*	FE, Rank 1B.1	Marshes and freshwater swamps and riparian scrub. 0-400 m. Blooms: May-June	**Not Present.** The Project Area lacks suitable freshwater habitat for this species.
Napa false indigo *Amorpha californica* var. *napensis*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland; in openings in forest or woodland or in chaparral. < 800 m. Blooms: May-July.	**High.** Suitable habitat is present in the area of the Intersection site. Known occurrences in area of project site.
bent-flowered fiddleneck *Amsinckia lunaris*	Rank 1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland. 50-500 m. Blooms: March - June	**Not Present.** The Project Area lacks suitable habitat for this species.
alkali milk-vetch *Astragalus tener* var. *tener*	RP, Rank 1B.2	Low ground, alkali flats, and flooded lands in annual grassland or in playas or vernal pools. 1-170 m. Blooms: March-June	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Konocti manzanita *Arctostaphylos manzanita ssp. elegans*	Rank 1B.3	Chaparral, cismontane woodland, lower montane coniferous forest/volcanic. Elevation ranges from 1300 to 5300 feet (395 to 1615 meters). Blooms January-May (July).	**Not Present.** Elevation range of plant is too high for project areas and none were observed during a site visit which included the blooming period.
Rincon Ridge manzanita *Arctostaphylos stanfordiana ssp. decumbens*	Rank 1B.1	Chaparral (rhyolitic), cismontane woodland. Elevation ranges from 250 to 1210 feet (75 to 370 meters). Blooms February-April (May).	**Unlikely.** Suitable habitat is present at the Intersection site, however none were observed during a site visit which included the blooming period. Occurrences reported are 5 miles or greater away from project sites.
Clara Hunt's milk-vetch *Astragalus claranus*	FE, ST, Rank 1B.1	Chaparral (openings), cismontane woodland, valley and foothill grassland/serpentine or volcanic, rocky, clay. Elevation ranges from 250 to 900 feet (75 to 275 meters). Blooms March-May.	**Moderate to Unlikely.** The Subdivision area is not suitable habitat because of its recent disturbance. The Intersection area could be suitable habitat, however, there are no serpentine soils in this area to which the plant has a high affinity. In addition, this plant was not observed to be present during a site visit conducted during the blooming period.
Jepson's milk-vetch *Astragalus rattanii var. jepsonianus*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland/often serpentine. Elevation ranges from 970 to 2300 feet (295 to 700 meters). Blooms March-June.	**Unlikely.** Elevation range of plant is too high for project areas and none were observed during a site visit which included the blooming period.
Sonoma sunshine *Blennosperma bakeri*	FE, SE, Rank 1B.1	Occurs in mesic soils of valley and foothill grasslands and vernal pools. 10 - 110 m. Blooms: March- May	**Not Present.** The Project Area lacks suitable wetlands and vernal pool habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
narrow-anthered brodiaea *Brodiaea leptandra*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland/volcanic. Elevation ranges from 360 to 3000 feet (110 to 915 meters). Blooms May-July.	**Moderate.** Suitable habitat is present, however elevation range of plant is generally higher than project area. Closest known occurrence is approximately 0.75 mile to east of Intersection site.
round-leaved filaree *California macrophylla*	Rank 1B.1	Clay soils of cismontane woodland, valley and foothill grasslands. 15-1,200 m. Blooms: March-May	**Not Present.** The Project Area lacks suitable habitat for this species.
small-flowered calycadenia *Calycadenia micrantha*	Rank 1B.2	Chaparral, meadows and seeps (volcanic), valley and foothill grassland/roadside, rocky, talus, scree, sometimes serpentine, sparsely vegetated areas. Elevation ranges 390 to 1500 m. Blooms June-September.	**Not Present.** Elevation of plant is higher than project sites and no seep/serpentine soils are present.
Rincon Ridge ceanothus *Ceanothus confusus*	Rank 1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland/volcanic or serpentine. Elevation ranges from 250 to 3490 feet (75 to 1065 meters). Blooms February-June.	**Unlikely.** Habitat is present although no serpentine soils are present and no individuals were observed during a site visit conducted during the blooming period.
Calistoga ceanothus *Ceanothus divergens*	Rank 1B.2	Chaparral (serpentine or volcanic, rocky). Elevation ranges from 560 to 3120 feet (170 to 950 meters). Blooms February-April.	**Not Present.** Elevation of plant is higher than project area and no Ceanothus species were observed during site visits which included the blooming period of this plant.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
holly-leaved ceanothus *Ceanothus purpureus*	Rank 1B.2	Chaparral, cismontane woodland/volcanic, rocky. Elevation ranges from 390 to 2100 feet (120 to 640 meters). Blooms February-June.	**Unlikely.** Elevation range of plant is generally higher than project area and none were observed during a site visit that included the blooming period.
Sonoma ceanothus *Ceanothus sonomensis*	Rank 1B.2	Chaparral; on sandy, serpentine or volcanic soils. 210-800m. Blooms : February-April.	**Not Present.** The Project Area lacks suitable habitat for this species. None were observed during site visit that was within the blooming period, serpentine soils are not present, and known occurrence is nearly 5 miles away.
pappose tarplant *Centromadia parryi ssp. parryi*	Rank 1B.2	Chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic)/often alkaline. Elevation ranges from 0 to 1380 feet (0 to 420 meters). Blooms May-November.	**Not Present.** No suitable habitat is present, particularly wetlands areas to which this plant has an affinity.
Point Reyes bird's-beak *Chloropyron maritimum* ssp. *palustre*	Rank 1B.2	Coastal salt marshes and swamps. 0 - 10 m. Blooms June-October.	**Not Present.** The Project Area contains no salt marsh habitat.
soft bird's beak *Chloropyron molle* ssp. *molle*	FE, SR, Rank 1B.2	Coastal salt marshes and swamps. 0-3 m. Blooms July- November.	**Not Present.** The Project Area contains no salt marsh habitat.
Sonoma spineflower *Chorizanthe valida*	FE, SE, Rank 1B.1	Coastal prairie (sandy). 10-305 m. Blooms June – August.	**Not Present.** The Project Area lacks suitable habitat for this species.
serpentine cryptantha *Cryptantha dissita*	Rank 1B.2	Chaparral (serpentine). Elevation ranges from 1300 to 1900 feet (395 to 580 meters). Blooms April-June.	**Not Present.** Plant has a high affinity for serpentine soil and none is present in the project areas.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Baker's larkspur *Delphinium bakeri*	FE, SE, Rank 1B.1	Broadleafed upland forest, coastal scrub, valley and foothill grassland. Occurs in decomposed shale and often mesic soils. 80-305 m. Blooms: March-May	**Not Present.** No known occurrences nearby and none were observed during a site visit conducted during the blooming period.
golden larkspur *Delphinium luteum*	FE, SR, Rank 1B.1	Chaparral, coastal prairie, rocky coastal scrub. 0-100 m. Blooms March – May.	**Not Present.** No known occurrences nearby and none were observed during a site visit conducted during the blooming period.
dwarf downingia *Downingia pusilla*	Rank 2	In mesic areas within valley and foothill grassland and vernal pools. Elevation range: 0 – 500 m. Blooms: March-May	**Not Present.** The Project Area lacks suitable wetlands-vernal pool habitat for this species.
Greene's narrow-leaved daisy *Erigeron greenei*	Rank 1B.2	Chaparral (serpentine or volcanic). Elevation ranges from 260 to 3300 feet (80 to 1005 meters). Blooms May-September.	**Moderate.** Habitat type and elevation range is suitable for this plant at the Intersection site, however there is no serpentine soil present. A survey for this plant should be conducted to determine presence or absence.
fragrant fritillary *Fritillaria liliacea*	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland; typically associated with clay substrate, often serpentine. 0 – 450 m. Blooms: February-April	**Not Present.** The Project Area lacks suitable habitat for this species. None were observed during a site visit conducted during the blooming period.
adobe-lily *Fritillaria pluriflora*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland/often adobe. Elevation ranges from 200 to 2310 feet (60 to 705 meters). Blooms February-April.	**Not Present.** The Project Area lacks suitable habitat for this species. None were observed during a site visit conducted during the blooming period.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Hall's harmonia *Harmonia hallii*	Rank 1B.2	Endemic to serpentine soils. 390 – 890 m. Blooms April – June.	**Not Present.** The Project Area lacks suitable habitat for this species because no serpentine soil is present in project areas.
sea-side tarplant *Hemizonia congesta ssp. congesta*	Rank 1B.2	Sometimes roadsides, valley and foothill grassland with affinity for serpentine soil. 20-560 m. Blooms: April- November	**Not Present.** The Project Area lacks suitable habitat for this species because no serpentine soil is present.
two-carpellate western flax *Hesperolinon bicarpellatum*	Rank 1B.2	Chaparral (serpentine). Elevation ranges from 200 to 3300 feet (60 to 1005 meters). Blooms May-July.	**No Present.** No serpentine soils are present in the project areas.
Marin western flax *Hesperolinon congestum*	FT, CT, Rank 1B.1	Chaparral, valley and foothill grassland (serpentine barrens, serpentine grassland). 30 – 365 m. Blooms: April –July	**Not Present.** The Project Area lacks suitable habitat for this species because no serpentine soil is present.
Napa western flax *Hesperolinon serpentinum (bicarpellatum)*	Rank 1B.1	A strict endemic to serpentine soils. Blooms March to July.	**Not Present.** Serpentine soils required by this plant are not present in the project areas.
Sharsmith's western flax *Hesperolinon sharsmithiae*	Rank 1B.2	Chaparral/serpentine. Elevation ranges from 890 to 980 feet (270 to 300 meters). Blooms May-July.	**Not Present.** The Project Area lacks suitable habitat for this species, plant elevation is higher than project sites, and no serpentine soils are present.
Santa Lucia dwarf rush *Juncus luciensis*	Rank 1B.2	Chaparral, great basin scrub, lower montane coniferous forest, meadows and seeps, vernal pools. Elevation ranges from 980 to 6690 feet (300 to 2040 meters). Blooms April-July.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
Burke's goldfields *Lasthenia burkei*	FE, SE, Rank 1B.1	Vernal pools, swales, meadows and seeps. 0 – 700 m. Blooms: April-June	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Contra Costa goldfields *Lasthenia conjugens*	FE, Rank 1B.1	Cismontane woodland, alkaline playas, valley and foothill grassland, vernal pools; in mesic portions of wetlands. 0 – 550 m. Blooms: March-June	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
Colusa layia *Layia septentrionalis*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland/sandy, serpentine. Elevation ranges from 330 to 3590 feet (100 to 1095 meters). Blooms April-May.	**Unlikely.** Habitat type is present, however recent disturbance of the Subdivision site precludes its presence, the elevation range of this plant is higher than the project areas, and none were observed during a site visit during its blooming period.
legenere *Legenere limosa*	Rank 1B.1	Vernal pools. Elevation range: 3 – 2885 feet. Blooms: April – June.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
Jepson's leptosiphon *Leptosiphon jepsonii*	List 1B	Chaparral, cismontane woodland; on open to partially shaded grassy slopes on volcanic or the periphery of serpentine substrate. 100 – 550 m. Blooms: April-May	**Unlikely.** The project area lacks suitable habitat for this species, no serpentine soil is present.
Sebastopol meadowfoam *Limnanthes vinculans*	FE, SE, Rank 1B.1	Vernal pools. 0 – 1,000 m. Blooms: April-June	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Cobb Mountain lupine *Lupinus sericatus*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 900 to 5000 feet (275 to 1525 meters). Blooms March-June.	**Not Present.** The habitat types are not suitable and elevation range of this plant is higher than the project areas.
marsh microseris *Microseris paludosa*	Rank 1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5 - 300 m. Blooms: April- June	**Not Present.** The Project Area lacks suitable habitat for this species.
Baker's navarretia *Navarretia leucocephala* ssp. *bakeri*	Rank 1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools. 5-1740m. Blooms April-July.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
few-flowered navarretia *Navarretia leucocephala ssp. pauciflora*	FE, ST, Rank 1B.1	Vernal pools (volcanic ash flow). Elevation ranges from 1310 to 2810 feet (400 to 855 meters). Blooms May-June.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
many-flowered navarretia *Navarretia leucocephala ssp. plieantha*	FE, SE, Rank 1B.2	Vernal pools (volcanic ash flow). Elevation ranges from 100 to 3120 feet (30 to 950 meters). Blooms May-June.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
small pincushion navarretia *Navarretia myersii ssp. deminuta*	Rank 1B.1	Vernal pools (clay loam). Elevation ranges from 1160 to 1160 feet (355 to 355 meters). Blooms April-May.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
Marin County navarretia *Navarretia rosulata*	Rank 1B.2	Closed-cone coniferous forest, chaparral/serpentine, rocky. Elevation ranges from 660 to 2080 feet (200 to 635 meters). Blooms May-July.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
Sonoma beardtongue *Penstemon newberryi* var. *sonomensis*	Rank 1B.3	Yellow pine forest, red fir forest, lodgepole forest, subalpine forest. 360 – 3560 m. Blooms April – May.	**Not Present.** The project areas lack suitable habitat for this species and plant elevation range is higher than project area.
Petaluma popcorn-flower *Plagiobothrys mollis var. vestitus*	Rank 1A	Occurs in coastal salt marshes and swamps and mesic areas within valley and foothill grasslands. 15-305 m. Blooms: June-July	**Not Present.** This species is presumed extinct in California.
Calistoga popcorn-flower *Plagiobothrys strictus*	FE, ST, Rank 1B.1	Meadows and seeps, valley and foothill grassland, vernal pools/alkaline areas near thermal springs. Elevation ranges from 300 to 520 feet (90 to 160 meters). Blooms March-June.	**Not Present.** Wetland habitat is not present in the project areas
North Coast semaphore grass *Pleuropogon hooverianus*	List 1B.1, ST	Broadleafed upland forest, meadows and seeps, North Coast coniferous forest, moist open areas. 10-671 m. Blooms April – June.	**Not Present.** The Project Area lacks suitable wetland habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Napa blue grass *Poa napensis*	FE, SE, Rank 1B.1	Meadows and seeps, valley and foothill grassland/alkaline, near thermal springs. Elevation ranges from 330 to 660 feet (100 to 200 meters). Blooms May-August.	**Not Present.** The Project Area lacks suitable wetland habitat for this species.
Pt. Reyes checkerbloom *Sidalcea calycosa ssp. rhizomata*	Rank 1B.2	Freshwater marshes and swamps near coast. 3-75 m. Blooms April to September.	**Not Present.** The Project Area lacks suitable freshwater habitat for this species.
Napa checkerbloom. *Sidalcea hickmanii* ssp *napensis*	Rank 1B.1	Perennial herb in chamise chaparral, rocky volcanic soil Elevation 450-500 m. Blooms April-June.	**Unlikely.** Elevation range is higher for this plant than the project sites. Known from only two occurrences.
Marsh checkerbloom *Sidalcea oregana* ssp. *hydrophila*	Rank 1B.2	Riparian, meadows, usually in wetlands conditions. 400-2300 m. Blooms July-August.	**Unlikely.** Wetlands conditions are not present, plant habitat at higher elevation range than project sites, and no known occurrences within 5 miles of project sites.
Kenwood Marsh checkerbloom *Sidalcea oregana ssp. valida*	FE, SE, Rank 1B.1	Marshes and swamps (freshwater). Elevation ranges from 380 to 490 feet (115 to 150 meters). Blooms June-September.	**Unlikely.** Wetlands conditions are not present, plant habitat at higher elevation range than project sites, and no known occurrences within 5 miles of project sites.
Tamalpais jewel-flower *Streptanthus batrachopus*	Rank 1B.3	Closed-cone coniferous forest, chaparral/serpentine. Elevation ranges from 1000 to 2130 feet (305 to 650 meters). Blooms April-July.	**Not Present.** Elevation of plant is higher than project sites and no serpentine soils are present.
Socrates mine jewelflower *Streptanthus brachiatus* ssp. *brachiatus*	Rank 1B.2	Chaparral, close coned forest (serpentine). 740 to 980 m. Blooms May-June	**Unlikely.** Elevation range of plant is generally higher that project sites, no serpentine soils are present, and known occurrence is more than 5 miles away.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
green jewel-flower *Streptanthus hesperidis*	Rank 1B.2	Chaparral (openings), cismontane woodland/serpentine, rocky. Elevation ranges from 430 to 2490 feet (130 to 760 meters). Blooms May-July.	**Unlikely.** Elevation range of plant is generally higher that project sites, no serpentine soils are present, and known occurrence is more than 5 miles away.
Three Peaks jewel-flower *Streptanthus morrisonii ssp. elatus*	Rank 1B.2	Chaparral (serpentine). Elevation ranges from 300 to 2670 feet (90 to 815 meters). Blooms June-September.	**Unlikely.** Elevation range of plant is generally higher that project sites, no serpentine soils are present, and known occurrence is more than 5 miles away.
Early jewelflower *Streptanthus vernalis*	Rank 1B.2	Affinity for serpentine gravelly soils. 600-900 m. Blooms March – May.	**Unlikely.** Elevation range of plant is generally higher that project sites, no serpentine soils are present, and known occurrence is more than 5 miles away.
Napa bluecurls *Trichostema ruygtii*	Rank 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 100 to 2230 feet (30 to 680 meters). Blooms June-October.	**Unlikely.** Subdivision habitat not suitable with recent disturbance. Plant is usually near habitat with vernal pools or saturated clay soils, therefore habitat at Intersection site also not suitable. Nearest occurrence nearly 5 miles away.
showy rancheria clover *Trifolium amoenum*	FE, List 1B	Valley and foothill grassland, coastal bluff scrub, swales, open sunny sites, sometimes on serpentine. 0- 450 m. Blooms: April-June.	**Not Present.** The Project Area lacks suitable habitat for this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
saline clover *Trifolium hydrophilum*	Rank 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation ranges from 0 to 980 feet (0 to 300 meters). Blooms April-June.	**Not Present.** The Project Area lacks suitable wetlands habitat for this species.
oval-leaved viburnum *Viburnum ellipticum*	Rank 2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 710 to 4590 feet (215 to 1400 meters). Blooms May-June.	**Not Present.** Elevation of plant is higher than project sites.
Mammals			
Pallid Bat *Antrozous pallidus*	SSC, WBWG High Priority	Occupies a variety of habitats at low elevation including grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	**Unlikely**. The Project Area lacks roost habitat for this species, though it may occasionally forage over the grassland.
Townsend's Big-eared Bat *Corynorhinus townsendii*	SSC	Lives in a wide variety of habitats; day roosts highly associated with caves and mines. Need appropriate roosting, maternity, and hibernation sites free from human disturbance.	**Unlikely.** Project Area lacks suitable rocky roost habitat for this species, though it could pass through while foraging.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Western Red Bat *Lasiurus blossevillii*	SSC, WBWG High Priority	Typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards or urban areas near riparian habitat.	**Moderate Potential**. The Project Area contains suitable foliage for roosting on its perimeter and the vineyards, open areas, ponds, and Napa River in the vicinity provide suitable foraging habitat.
Silver-haired Bat *Lasionycteris noctivagans*	WBWG Medium Priority	Primarily a forest dweller, feeding over streams, ponds, and open brushy areas. It roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	**Moderate Potential.** Project area at Intersection site has suitable forest roost habitat for this species and it could pass through while foraging.
Long-eared Myotis *Myotis evotis*	WBWG Medium Priority	Found in all brush, woodland and forest habitats from sea level to about 9000 feet. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	**Unlikely.** Project Area lacks suitable coniferous forest roost habitat for this species, though it could pass through while foraging.
Fringed Myotis *Myotis thysanodes*	WBWG High Priority	Associated with a wide variety of habitats including mixed coniferous-deciduous forest and redwood/sequoia groves. Buildings, mines and large snags are important day and night roosts.	**Moderate.** Project area at Intersection site has suitable forest roost habitat for this species and it could pass through while foraging.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Birds			
Golden Eagle *Aquila chrysaetos*	CFP, BCC	Rolling foothills mountain areas, sage-juniper flats, desert. Cliff-walled canyons or large trees in open areas provide nesting habitat.	**Unlikely.** Project Area lacks suitable nesting habitat, though this species may forage in the vicinity.
Bald Eagle *Haliaeetus leucocephalus*	FD, SE, CFP	Frequents ocean shores, lake margins, and rivers for both nesting and wintering. Most nests are located within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branchwork. Roosts communally in winter	**Unlikely.** Project Area lacks suitable nesting habitat, though this species may forage in the vicinity, along the Napa River.
White-tailed Kite *Elanus leucurus*	CFP	Year-long resident of coastal and valley lowlands; rarely found away from agricultural areas. Nests atop oak, willow or other trees. Preys mainly on small mammals but also birds, insects, reptiles and amphibians.	**Moderate Potential.** Suitable nesting habitat is present in oak, ash and willow trees at the perimeters of the Project Area, and foraging habitat is present in vineyards and grassland.
Prairie Falcon *Falco mexicanus*	BCC	Inhabits dry, open terrain, either level or hilly. Nesting sites typically located on cliffs. Forages far afield, even to marshlands and ocean shores.	**Unlikely.** Project Area lacks suitable nesting habitat, though the species may forage in the vicinity.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Peregrine Falcon *Falco peregrinus anatum*	FD, SE, CFP, BCC	Nests near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, buildings or bridges. Nest consists of a scrape on a depression or ledge in an open site.	**Not Present**. Suitable nesting habitat is not present in the vicinity of the Project Area.
Western Burrowing Owl *Athene cunicularia*	SSC, BCC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon small mammal burrows, most often dug by California ground squirrels.	**Not Present.** Burrows were not present and this species is most likely extirpated from Sonoma County.
Northern Spotted Owl *Strix occidentalis caurina*	FT, SSC	Old-growth forests or mixed stands of old-growth and mature trees. Prefers high, multistory canopy dominated by big trees, trees with cavities or broken tops, woody debris and space under canopy.	**Not Present.** Suitable forest habitat is not present in the Project Area.
Black Swift *Cypseloides niger*	SSC, BCC	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above surf; forages widely.	**Unlikely**. Project Area lacks suitable nesting habitat.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Purple Martin *Progne subis*	SSC	Inhabits woodlands and low elevation coniferous forests. Nests in old woodpecker cavities and human-made structures. Nest is often located in tall, isolated tree or snag.	**High Potential**. The Project Area has suitable woodland habitat for this species. Known occurrence approximately 0.5 mile east of Intersection site.
Yellow Warbler *Dendroica petechia brewsteri*	SSC	Occurs primarily in riparian zones. Prefers willows, cottonwoods, aspens, sycamores and alders for nesting and foraging.	**Unlikely.** The Project area at the intersection has suitable riparian woodland habitat for this species, but there are no known occurrences within 5 miles.
Tricolored Blackbird *Agelaius tricolor*	BCC, SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey close to the colony.	**Not Present**. Project Area lacks suitable habitat to support a nesting colony.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Reptiles and Amphibians			
Foothill Yellow-legged Frog *Rana boylii*	SSC	Found in or near rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	**Moderate Potential.** Suitable habitat may be present at the Intersection site along the Napa River and there are known occurrences within 5 miles.
California Red-legged Frog *Rana draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 10- 20 weeks of water for larval development. May disperse through upland habitats after rains to access aestivation habitat.	**Unlikely.** This species could potentially be present along the Napa River or in retention ponds adjoining the Project Area. However, the graded and disced fields of the Project Area would provide poor aestivation habitat for this species. There have been no known occurrences within 5 miles.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Western Pond Turtle *Actinemys marmorata*	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**Moderate Potential.** This species may be present in the Napa River as a migration corridor or in ponds adjoining the project areas. However, the graded and disced fields of the Subdivision project area would provide poor upland nesting habitat for this species. There are known occurrences within 5 miles.
Fishes			
Delta Smelt *Hypomesus transpacificus*	FT	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	**Not Present**. Suitable habitat is not present for this species and upper Napa River is out of its range.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Steelhead, Central California Coast ESU *Oncorhynchus mykiss*	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**High Potential**. High rating is for the Napa River. This species is known to occur in upstream tributaries and likely migrate between those tributaries and downstream habitats, including the Pacific Ocean.
Steelhead, Central Valley ESU *Oncorhynchus mykiss*	FT	Occurs in the Sacramento and San Joaquin Rivers and their tributaries, excluding San Francisco and San Pablo bays. Preferred spawning habitat is in perennial streams with cool to cold water temperatures, high dissolved oxygen levels and fast flowing water. Abundant riffle areas for spawning and deeper pools with sufficient riparian cover for rearing are necessary for successful breeding.	**Not Present**. The Project Area is outside the range of this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Chinook, California Coastal *Oncorhynchus tshawytscha*	FT	California Coastal Chinook Salmon ESU includes all naturally spawned populations of Chinook salmon from rivers and streams south of the Klamath River (exclusive) to the Russian River (inclusive). Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 degrees C lethal to adults.	**Not Present**. The Project Area is outside the range of this species.
Chinook, Central Valley spring run *Oncorhynchus tshawytscha*	FT	Occurs in the Feather River and the Sacramento River and its tributaries, including Butte, Mill, Deer, Antelope and Beegum Creeks. Adults enter the Sacramento River from late March through September. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams from mid-August through early October. Juveniles migrate soon after emergence as young-of-the-year, or remain in freshwater and migrate as yearlings.	**Not Present**. The Project Area is outside the range of this species.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
Chinook, Central Valley Fall/Late Fall-run ESU *Oncorhynchus tshawytscha*	FC, SSC	Populations spawn in the Sacramento and San Joaquin Rivers and their tributaries. Adults migrate upstream to spawn in cool clear, well-oxygenated streams. Juveniles remain in freshwater 1 or more years before migrating downstream to the ocean.	**Unlikely**. The Project Area is outside the range of this species.
Invertebrates			
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	Occurs only in the central valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberry 2 to 8 inches in diameter.	**Not Present**. The Napa River riparian habitat could provide suitable habitat if the host plant, elderberry, was present, however elderberry is not present and there is no known occurrence within 5 miles.

SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL FOR OCCURRENCE
California freshwater shrimp *Syncaris pacifica*	FE, SE	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low-gradient streams where riparian cover is moderate to heavy, in shallow pools away from main stream flow..	**Unlikely.** Suitable stream habitat may be present in the Napa River near the Intersection site, however the nearest known occurrence is more than 5 miles away.

STATUS CODES

FE	*Federally Endangered*	*SE*	*State Endangered*
FT	*Federally Threatened*	*ST*	*State Threatened*
FD	*Federally Delisted*	*CFP*	*California Fully Protected Species*
BCC	*USFWS Bird of Conservation Concern*	*SSC*	*California Species of Special Concern*

California Native Plant Society (CNPS):

1A Plants Presumed Extinct in California
1B Plants rare, threatened, or endangered in California and elsewhere
2 Plants rare, threatened, or endangered in California but more common elsewhere
3 Plants about which information is needed-a review list
.1 - seriously threatened in California (high degree/immediacy of threat)
.2 - fairly threatened in California (moderate degree/immediacy of threat)
.3 - not very threatened in California (low degree/immediacy of threats or no current threats known)

CULTURAL RESOURCES INVENTORY, EXTENDED PHASE I and PHASE II REPORT for the HUNTER SUBDIVISION PROJECT NAPA COUNTY, CALIFORNIA

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NATIONAL ARCHAEOLOGICAL DATABASE (NADB) INFORMATION

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Firm:	Dudek
Project Proponent:	Ben and Kelly Vanzutphen
Report Date:	March 2020
Report Title:	Cultural Resources Inventory, Extended Phase I, and Phase II Report for the Hunter Subdivision Project, Napa County, California
Type of Study:	Archaeological Inventory, Pedestrian Survey, Extended Phase I, Phase II
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MANAGEMENT SUMMARY

The proposed Hunter Subdivision Project (Project) is located within the northeast portion of the City of St. Helena, Napa County, California. The Project is situated at the northeastern terminus of Adams Street, northeast of State Route 29 (SR 29), and south of the Napa River. The Project intersects Public Land Survey System (PLSS) Section 30 of Township 8 North, Range 5 West; and falls on the Saint Helena 7.5-minute USGS topographic quadrangle. The area of potential effect (APE) is represented by the boundaries of the 17-acre Project site, Assessor's Parcel Number (APN) 009-030-057 (APE or Project site). The vertical APE, as represented by the maximum depth of disturbance, is assumed to be 6 feet in depth for utility trenching.

Ben and Kelly Vanzutphen (Project applicant) are proposing to subdivide the Project site into 51 lots to accommodate single-family residences, a 3.4-acre parcel that would accommodate 25 attached residential units, and a 0.06-acre parcel that would not be developed. The City of St Helena (City) is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA). It is yet undetermined if the Project will require federal agency review, however the present study has been prepared to accommodate compliance with the review for Section 106 of the National Historic Preservation Act (NHPA)if required.

Cultural resources Inventory efforts for this project have included a Northwestern Information Center (NWIC) records search of the project APE and a half-mile surrounding radius, intensive-level pedestrian survey, Extended Phase I (XPI) subsurface probing, Phase II evaluation, and a ground penetrating radar (GPR) investigation. Review of reports on file with the NWIC did indicate that three prehistoric sites intersect the APE: CA-NAP-406, CA-NAP-843, and CA-NAP-1008. CA-NAP-406 has been determined eligible for listing in the California Register of Historical Resources (CRHR) and National Register of Historic Properties (NRHP). CA-NAP-843 and CA-NAP-1008 have been determined not to be CRHR/NRHP-eligible. A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search did not indicate the presence of any resources in or near the Project APE. Subsequent Native American notification for the Project was completed by the City pursuant to Assembly Bill (AB) 52. One tribe, the Yocha Dehe Wintun Nation, has responded to this outreach with a request for a copy of the present report. A complete record of this consultation is on file with the City.

As noted above, prehistoric sites CA-NAP-843 and CA-NAP-1008 fall within the APE. These were evaluated through investigations completed for the St. Helena Flood Control Project. Previous investigations appear to have been included the full boundaries of these resources, within the present Project APE. Impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect to historical resources under CEQA and would represent to effect to historic properties under the NHPA.

CA-NAP-406 has been determined to be eligible for CRHR (Criterion 4) and NRHP (Criterion D) listing. However, previous investigations evaluating this resource were restricted to portions of this resource located immediately west of (largely outside) the present Project APE. The XPI and Phase II excavations were conducted to assess the level of previous disturbance to soils within the APE and determine the presence/absence of cultural deposits associated with CA-NAP-406 that could be encountered by the Project. Based on the results of archaeological excavations and a GPR investigation no intact deposits or features associated with CA-NAP-406 appear to extend to within the APE. While cultural material was identified, largely consisting of obsidian debitage concentrated within 60 cm of the surface, this was solely yielded from disturbed and redeposited soil. The exact depth, area, and severity of previous disturbances remains somewhat unclear. Google Earth imagery from October 2009 provides some insight into the use of the Project APE during the St. Helena Flood Protection Project. This shows the area north of the proposed Starr Avenue extension to be graded and used for staging. It appears likely that cultural deposits associated with CA-NAP-406 were redistributed throughout this area. This fill was observable to depths of approximately 100 cm below the surface during Dudek's subsurface excavation and GPR investigation. Disturbed and redeposited archaeological material within the APE is not CRHR/NRHP eligible. As such, effects to known cultural resources resulting from the Project as presently designed would be less than significant, No Historic Properties Affected.

There is the potential to encounter unanticipated significant cultural resources during Project construction activities, most notably where intact remnant deposits associated with CA-NAP-406 could be present. Based on the results of the XPI, Phase II, and GPR investigations, such deposits have the highest potential to be present beneath redeposited and disturbed fill areas located north of the planned Starr Avenue expansion. Portions of the APE to the south, presently occupied by vineyards, have a higher potential to contain intact cultural deposits at shallower depths. It should be further noted that numerous human burials have been identified in nearby areas, although not within the Project APE. Based on the identified sensitivity for encountering unanticipated significant cultural resources and human remains, archaeological monitoring during construction is recommended.

1 INTRODUCTION

1.1 Location

The proposed Hunter Subdivision Project (Project) is located within the northeast portion of the City of St. Helena, Napa County, California (Figure 1). The Project is situated at the northeastern terminus of Adams Street, northeast of State Route 29 (SR 29), and south of the Napa River. The Project area intersects Public Land Survey System (PLSS) Section 30 of Township 8 North, Range 5 West; and falls on the Saint Helena 7.5-minute USGS topographic quadrangle.

The site is generally rectangular with a "panhandle" extension that connects to Adams Street southwest of the panhandle. Adjacent land uses include single-family and multi-family residential development to the south, including the Vineyard Valley Mobile Home Park. Office uses are located immediately adjacent to the Project site's most southwestern edge at the terminus of Adams Street. Undeveloped land currently under cultivation with grape vines occupies the southern and central portion of the Project site. A canal and gravel maintenance road borders the site along the west/northwest.

1.2 Project Description

The City of St Helena (City) is the lead agency responsible for compliance with the California Environmental Quality Act (CEQA). It is yet undetermined if the Project will require federal agency review, however the present study has been prepared with to accommodate agency review for Section 106 of the National Historic Preservation Act (NHPA)if required.

Ben and Kelly Vanzutphen (Project applicant) are proposing to subdivide the Project site into 51 lots to accommodate single-family residences, a 3.4-acre parcel that would accommodate 25 attached residential units, and a 0.06-acre parcel that would not be developed. The 25 attached units would be income restricted, with 5 units affordable to very low income families, and 20 to moderate income families. The 51 single-family lots could be developed with single-family market-rate housing units (one dwelling per lot). An accessory dwelling unit (ADU or "granny units") would be allowed on a single-family lot, per the City's zoning ordinance (Section 17.116.030). The applicant has proposed ADUs on 11 of the single-family lots.

The single-family lots would range in size between 7,000 and 12,000 square feet, with most of the lots in the 7,000 to 8,000 square foot range. A number of irregular shaped lots would be located along the eastern edge of the project site and along the cul-de-sac. Each lot would have a minimum depth of 75 feet, and minimum width of 70 feet. The building pads shown within each lot would have a minimum 20-foot front and rear setback, and a 10-foot setback on the sides. Under the MR zoning the maximum height for principal dwellings is limited to a maximum of 30 feet (allowing

for a 2-story home) and for any accessory structure would be limited to a maximum height of 15 feet.

West of Starr Avenue the 3.4-acre parcel (Lot 52), would consist of attached housing (duplex or triplex) including 30,000 to 45,000 total square feet of building area that would include two-story, two-bedroom units each with a single-car garage and an on-site parking space plus 37 covered guest parking spaces. Access would be provided from Adams Street, just west of its intersection with Starr Avenue.

The area of potential effects (APE) is represented by the boundaries of the 17 acre Project site, which includes Assessor's Parcel Number (APN) 009-030-057. Figure 2 depicts the Project APE, as well as Extended Phase I (XPI) and Phase II testing locations. The vertical APE, as represented by the maximum depth of disturbance, generally varies throughout the Project site. Excavation for ground preparation is anticipated to be as deep as 1.5 feet below the existing grade. Utility trenching may require disturbances up to 6 feet in depth. Fill or otherwise redistributed soils are present across the Project site, northeast of the proposed Starr Avenue. South of this area are vineyards situated on the native ground surface.

1.3 Report Structure and Key Personnel

This report is divided into seven chapters. Following this introduction, Chapter 2 reviews the natural environment and the cultural context. Chapter 3 summarizes the results of the Northwest Information Center (NWIC) and Native American Heritage Commission (NAHC) search results. Chapter 4 provides research methods and a discussion of Inventory, XPI, Phase II, and GPR methods. Chapter 5 provides the results of pedestrian survey, XPI exploratory testing, Phase II excavations, and GPR study. Chapter 6 includes a summary of cultural resources information associated with the Project, potential regulatory compliance issues associated with impacts to cultural resources, and provides recommendations for additional actions to be taken in order to support preparation of a defensible EIR. References are provided for in Chapter 7. Several appendices are attached to this report. Appendix A includes confidential NWIC records search results; Appendix B includes the State historic Preservation Office (SHPO) concurrence letter for the St Helena Flood Control Project; Appendix C contains NAHC Sacred Lands File (SLF) search results; and Appendix D contains resulting data from the GPR study.

Adam Giacinto, MA, RPA, acted as principal investigator, oversaw field efforts, and authored the technical report. William Burns, MSc, RPA assisted with preparation of this report and completed survey, Extended Phase I testing, and Phase II testing. Ross Owen, MA, RPA, assisted with preparation of this report and Phase II testing. Nicholas Hanten, MA, assisted with preparation of this report and Phase II testing. Brad Comeau, MSc, RPA, conducted the GPR study and reviewed

the results. All archaeologists preparing this report meet the Secretary of the Interior Standards for archaeology and have extensive working within local, state, and federal regulatory contexts.

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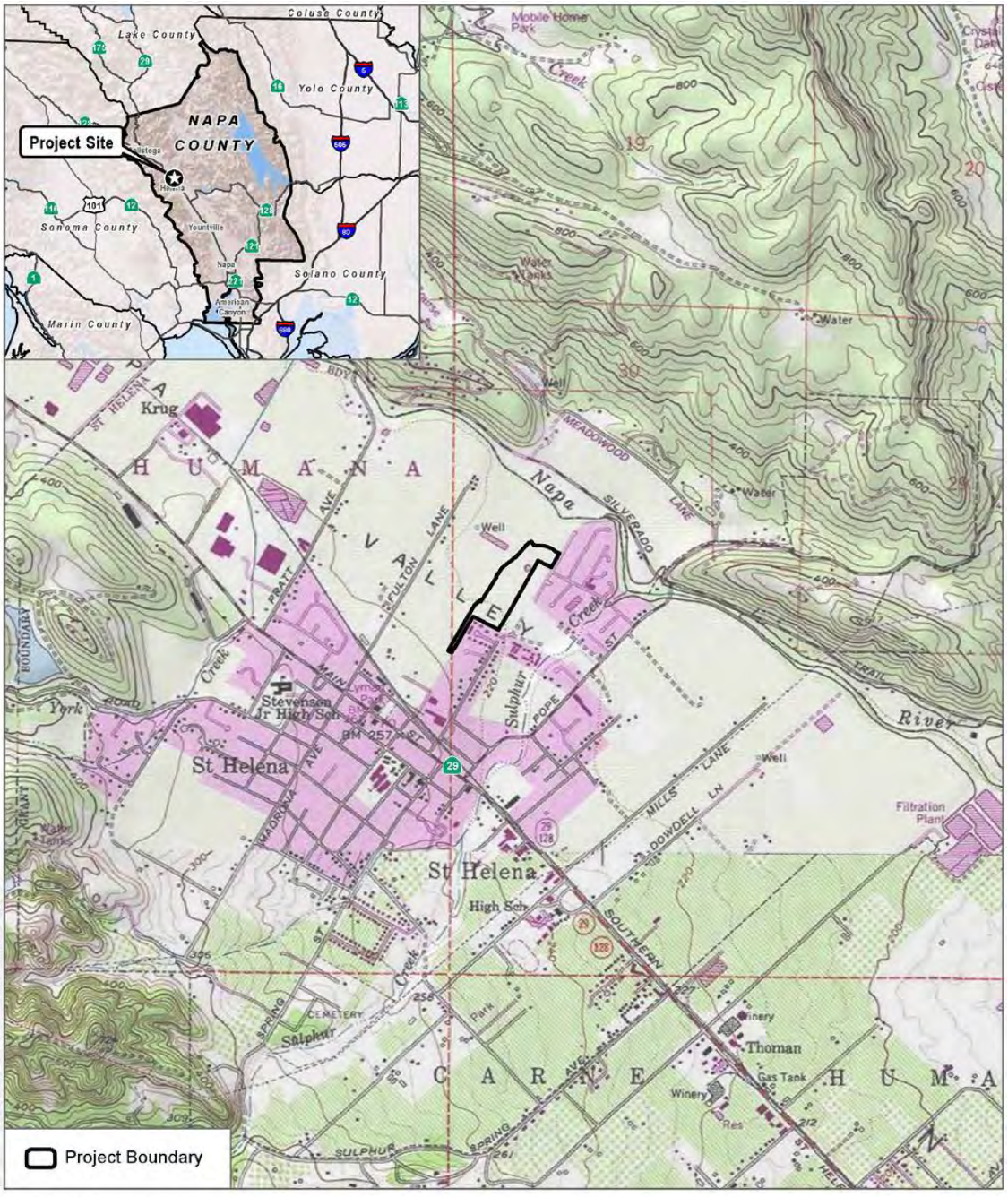

SOURCE: USGS 7.5-Minute Series Saint Helena Quadrangle
Township 8N; Range 5W; Section 30

DUDEK

0 1,000 2,000 Feet
0 285 570 Meters
1:24,000

FIGURE 1
Project Location
Hunter Subdivision Project

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SOURCE: Bing Maps 2018; Napa County 2015

DUDEK

0 125 250 Feet
0 30 60 Meters
1:5,000

FIGURE 2
XPI and Phase II Testing
Hunter Subdivision Project

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1.4 Regulatory Context

The current cultural resources investigation was completed to satisfy both CEQA and Section 106 of NHPA.

1.4.1 National Historic Preservation Act (NHPA)

The National Register of Historic Places (NRHP) is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service (NPS), under the U.S. Department of the Interior, the NRHP was authorized under the NHPA, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, *How to Apply the National Register Criteria,* as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (NPS 1990: 44). NRHP guidance further asserts that properties be completed at least 50 years ago to be considered for eligibility. Properties completed fewer than 50 years before evaluation must be proven to be "exceptionally important" (criteria consideration G) to be considered for listing.

A historic property is defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the NRHP criteria" (36 CFR Sections 800.16(i)(1)).

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Sections 800.5(a)(1):

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Adverse effects on historic properties are clearly defined and include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;

(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR 800.5 (2)).

If compliance with Section 106 is required, the criteria of adverse effect are applied to historic properties, if any exist in the Project Area of Potential Effect (APE), pursuant to 36 CFR Sections 800.5(a)(1). If no historic properties are identified in the APE, a finding of "no historic properties affected" will be made for the proposed Project. If there are historic properties in the APE, application of the criteria of adverse effect will result in Project-related findings of either "no adverse effect" or of "adverse effect," as described above. A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds in criteria of adverse effect 36 CFR Sections 800.5(a)(1), in certain cases when the undertaking is modified to avoid or lessen effects, or if conditions were imposed to ensure review of rehabilitation plans for conformance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (codified in 36 CFR Part 68).

If adverse effects findings were expected to result from the proposed Project, mitigation would be required, as feasible, and resolution of those adverse effects by consultation may occur to avoid, minimize, or mitigate adverse effects on historic properties pursuant to 36 CFR Part 800.6(a).

1.4.2 California Register of Historic Resources (CRHR) and CEQA

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." (PRC section 5020.1(j).) In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." (PRC section 5024.1(a). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see Cal. Code Regs., tit. 14, section 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC section 21083.2(g) defines "unique archaeological resource."
- PRC section 21084.1 and CEQA Guidelines section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of an historical resource.

- PRC section 21074(a) defines "tribal cultural resources."

- PRC section 5097.98 and CEQA Guidelines section 15064.5(e): Set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.

PRC sections 21083.2(b)-(c) and CEQA Guidelines section 15126.4: Provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between

artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource." (PRC section 21084.1; CEQA Guidelines section 15064.5(b). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC section 21084.1; CEQA Guidelines section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC section 21084.1; CEQA Guidelines section 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines section 15064.5(b)(1); PR Code section 5020.1(q)0. In turn, the significance of an historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

(CEQA Guidelines section 15064.5(b)(2).) Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be

preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC section 21083.2(a); CEQA Guidelines section 15064.5(c)(4).) However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC 21074(c); 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC section 5097.98.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (section 7050.5b). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (section 7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

2 PROJECT CONTEXT

2.1 Environmental Context

The Project site is located on undeveloped open agricultural land within the Napa Valley, immediately south of the Napa River, and within the City of St. Helena. The Pacific Ocean is located 30 miles west, San Pablo Bay is 25 miles to the south, and Lake Berryessa is 12 miles northeast. A canal constructed for the St. Helena Flood Protection Project in 2010 bounds the site to the west and north, a residential community is present to the east. Elevation throughout the Study Area ranges from approximately 210 feet above mean sea level (AMSL) in the northern portion of the site to 245 feet AMSL in the southern portion. Local vegetation consists primarily of low-laying meadow environment plants and grasses, with some scattered oak woodland and riparian community trees and shrubs along the drainages. The central portion of the Project site is planted with grape vines. The gradual slope throughout most of this area (less than 5 degrees) and proximity of Napa River and smaller drainages, would have historically resulted in the regular seasonal inundation of much of this area. The high level of surrounding topographic variability lends to the biodiversity of the area, this has traditionally provided for a broad range of flora and fauna that could be utilized by local Wappo populations.

Geologic maps of the project area indicate it is underlain primarily by Quaternary Alluvium consisting of Holocene-era alluvial soils deposited through stream action and erosion of the surrounding hillslopes and Franciscan Complex metamorphic deposits (Jennings et al. 1977, updated 2010). Napa Glass Mountain, the primary source of obsidian in Napa Valley, is upriver from the Project site. Soils within the Project site are mapped as Bale Clay Loam with 0 to 5% slopes. These soils are formed through alluvial action on a Holocene alluvial fan, with soils comprised of sit and clay with moderate gravel and send components (S-45641; SSURGO 2019).

2.2 Cultural Context

2.2.1 Prehistoric Context

Numerous chronological sequences have been developed to aid in understanding cultural changes in the region. Building on early studies and focusing on data synthesis, Fredrickson (1974, 1994) developed a prehistoric chronology for human history in this region that used sociopolitical complexity, trade networks, population, and the introduction and variation of artifact types to differentiate between cultural groups. Three periods are presented in Fredrickson's prehistoric sequence: Paleoindian, Archaic (consisting of Lower, Middle, and Upper), and Emergent. Following four decades, Fredrickson's synthesis is still widely used today as the dominant framework for northwest California researchers.

Paleoindian Period (ca. 10,000–6,000 BC)

Fredrickson's Paleoindian period marked the initial human migration into California with most known sites found on the edge of former lakeshores and waterways. Groups were small and highly mobile, occupying broad geographic areas. The vast array of research conducted on Paleoindian sites relies heavily on data collected from the Great Basin or Southern California region. Although Paleoindian sites exist in northwest California, a lack of well-defined Paleoindian assemblages associated with these sites prohibits the full understanding of the adaptive system of these early peoples. In northwest California, the Borax Lake site (LAK-36) near Clear Lake basin is the best illustration of the Paleoindian period, with fluted projectile points and chipped stone crescents. A site near Clear Lake (LAK-510) and another at Cache Creek (LAK-1581) have early dates associated with obsidian hydration, but they lack diagnostic items with strong associations to well-dated strata. Evidence of milling technology and associations with faunal remains is unknown (Hildebrandt 2007).

Archaic Period (6000 BC–AD 1000)

Fredrickson's Archaic period was characterized by three subdivisions based on developmental trends in subsistence strategies, settlement, technology, and social organization (Chartkoff 1998). The subdivisions defined a Lower (6000–3500 BC), Middle (3500–500 BC), and Upper (500 BC–AD 1000) Archaic sequence. A more diverse range of resources for groups to exploit proliferated during the Archaic period's substantial climate change to warmer and drier conditions. The diversification of the food base required more complex geographic mobility and expansion into surrounding environments, and the settlement strategies increased correspondingly. Archaic period social organization consisted of small-scale, semi-nomadic, socially egalitarian societies shifting from a foraging to a collecting way of life (Chartkoff 1998). Archaic cultures retained the use of large projectile points, but acorn and seed processing technology, consisting of the milling slab and handstone, was developed; this was eventually replaced by the bowl mortar and pestle. Trade systems and sustained exchanges between groups grew from the new diffuse economies. Shell beads gained significance as trade items.

Emergent Period (AD 1000–1800)

In the Emergent period (Fredrickson 1974, 1994), which lasted from the end of the Upper Archaic (ca. AD 1000) until European contact, there was an increase in the use of plant food resources in addition to an increase in terrestrial and fish game. There was a concurrent increase in the diversity and complexity of material culture during the Emergent period, as demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points, often stemless with convex or concave bases, suggests an increased usage of the bow and arrow rather

than the atlatl (spear throwing technology) and dart for hunting. Other items included the increased presence of smaller bone and Olivella beads, perforated stones, a variety of bone tools, and personal ornaments made from shell, bone, and stone. Many Emergent sites contain are highly formal and unnecessarily decorative. These items include the flanged pipe, the Olivella callus cup bead, and the banjo effigy ornament (Bennyhoff 1994). Mortuary customs were elaborate and include interment with abundant grave goods and cremation replacing the loosely flexed burial (Milliken et al. 2007).

Bartoy and Holson provided a detailed site-specific summary of this period in their investigation completed for the St. Helena Flood Control Project, portions of which have been borrowed directly here (2007). The variant of this pattern within the Napa Valley is referred to as the St. Helena Aspect. The intent of this terminology is to differentiate the Napa Valley from the Clear Lake Aspect manifestation. The local St. Helena Aspect expression of the Augustine Pattern is best exemplified at CA-NAP-129 (Bartoy and Holson 2007), located less than a mile upstream of the current project. The St. Helena Aspect is distinguished by the use of small, serrated projectile points with either parallel or corner-notched stems. Corner-notched points without serrations became more common towards the Historic Period. Well-shaped mortars and pestles are prevalent. Larger shouldered bifaces, bipoints, and leaf-shaped points are absent. Bone awls are common and probably indicate increased production of basketry. Associated with basketry, the hopper mortar became more prevalent. Tubular tobacco pipes are also quite common. There is also an increase in beads and ornaments made from shell, stone, and bone. This coincides with an increase in trade items from greater distances (Bartoy and Holson 2007).

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages (Wallace 1955). Larger populations and higher population densities are characteristic. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally (Milliken et al. 2007).

Ethnography

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the San Diego region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The principal intent of these researchers was to record the pre-contact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of

missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his "memory culture" approach (Lightfoot 2005:32) by recording languages and oral histories.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007:80). A large amount of variation within the language of a group represents a greater time depth then a group's language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla (2007:71) has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates. This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

The study area was traditionally occupied by the Wappo, with language origins associated with the Yukian language group. The name "Wappo" is said to be taken from the Spanish word "guapo" meaning handsome or brave, which was given to the group during Mission times by the Franciscans (Kroeber 1925). The Wappo language is the only Southern Yukian language and differs greatly from Northern Yukian with less than 20% of the basic vocabulary shared (Golla 2011). Isolated from other Yukian-speaking peoples, this group was bound on all sides by other native groups: the Lake Miwok to the north, the Patwin (Wintun) to the south and east, the Pomo to the north and west, and the Coast Miwok to the southwest (Heizer and Whipple 1971). The split between Northern Yukian and Wappo is somewhat unclear, likely ranging between 1,000 and

3,000 years ago (Kroeber 1925; Golla 2007). This split was likely related to the intrusion of Pomo-speaking communities during this period, which is evidenced through structural linguistic changes found within Wappo. These Wappo-speaking communities are indicated to have moved into the Napa region relatively, 500-1,500 years ago, based on the relatively limited presence of Miwok within the Wappo lexicon.

The territory occupied by the Wappo included Alexander Valley, most of Napa Valley, and the northern portion of Sonoma Valley. There are numerous regional subgroups including the Mishewal people of the Alexander and Knights Valley whose territory also included a small segment of the Russian River; the Mayacama people of the upper Napa Valley whose major village of *maya?kma* was located near present-day Calistoga; and the Caymus people whose territory was centered around a village located at Yountville. The *Guilicos* Wappo community were situated over the mountains to the west at the head of Sonoma Creek. Yet another Wappo group was located on the south shore of Clear Lake known as Lile'ek (Golla 2011).

Wappo settlements were organized in permanent villages throughout the valleys, typically found along major watercourses, such as rivers and creeks (Sawyer 1978). Districts of smaller settlements or tribelets were generally arranged around a larger community site (Kroeber 1925). The chiefs of these smaller tribelets resided in the larger villages but were responsible for maintaining close relationships with their tribelet as well as neighboring tribes. Subsistence for the Wappo was largely dependent upon the acorn (a staple food item), as well as other native plants, and hunting of a variety of animals, including deer, bear, elk, and rabbits.

Material cultural for the Wappo included tools made of stone, sticks, and shells. Basket making, likely influenced by the Pomo, was also an important aspect of the group's material culture and was of particularly high quality and aesthetic. The last description of a traditional village (Driver 1936) describes oval-shaped houses made of grass thatch placed over bent poles (Sawyer 1978). A lack of geographical restrictions in combination with their central location between the Pomo to the west and the Patwin to the east gave the Wappo the opportunity to act as middlemen in trading of items, such as shells for use as beads or ornaments (Heizer and Elsasser 1980). The Wappo would both bury and cremate the remains of the dead. Death rituals were complex and could involve burning personal possessions and relatives cutting their hair, rubbing clay on their heads, scoring of their flesh, and participating in intense ritual dances (Sawyer 1978).

2.2.2 The Historic Period

Spanish Period (1769–1822)

The first Spanish expedition to enter the San Francisco Bay Area occurred under Gaspar de Portola in 1769. Portola's chronicler, Fray Juan Crespi, detailed the journey of the group as it ventured up the coast. The first Spanish overland expedition into the San Francisco Bay region was led by Juan Bautista de Anza. The expedition reached San Francisco in 1776, where its members founded Mission Dolores and the Presidio. Spanish 'missionization' of Alta California was initiated in San Diego (1769). A total of 21 missions were constructed by the Dominican and Franciscan orders between 1769 and 1823. Missions in the region included San Francisco de Asís (1776), Santa Clara de Asís (1776), San José de Guadalupe (1797 in Alameda County), San Rafael Arcángel (1817 in Marin County), and San Francisco Solano (1823 in Sonoma County; Grunsky 1989).

Mexican Period (1822–1848)

Spanish-Mexican settlers arrived in the Napa Valley in 1823. In 1836, the first land grant within the Napa Valley area was awarded to George Yount at Caymus (Bartoy et al. 2005) Local Native Americans assisted Yount in constructing his two-story Kentucky-style log house. Within the next ten years, the Napa Valley was divided and parceled into numerous ranchos. In 1836, Nicolás Higuera, a soldier who served at the San Francisco Presidio, received several land grants from the Mexican government within Napa Valley, including an area called the Rancho Entre Napa, which included property that is now part of the present-day City of Napa.

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to Native American populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger Land Grants to affluent Mexican citizens and rancheros. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to Native Americans, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony.

Under the command of General Vallejo, Mexican soldiers had a series of conflicts with Wappo Native American tribes and allied Pomo tribes. Known as the Satiyomi Campaigns, the Wappo fought successfully against Vallejo and his Patwin allies in AD 1834, AD 1836, and AD 1842 (Bartoy et al. 2005). Largely as a result of these conflicts, Vallejo signed two treaties with the Wappo in AD 1836.

American Period (Post 1848)

California was officially ceded to the United States in 1848, which led to the continued appropriation of Native American Lands by ranchers, prospectors, and an increasing number of settlers. The United States Government did little to dissuade these trespasses. From 1850, with the passage of California's Indian Act, until legislative reforms in the late 1880s, state laws promoted conditions that amounted to indentured servitude for much of the Native American population throughout California. On February 8, 1850, Napa became one of California's original 27 counties, with the City of Napa as the seat of the county. In AD 1852, the first mineral springs resort in California was established at White Sulphur Springs, approximately four miles to the west of St. Helena (Bartoy et al. 2005). These bolstered the local economy, supporting the presence of multiple hotels and other businesses. A tremendous influx of individuals occurred in this area as a result of the California Gold Rush, which initiated in 1848. Since AD 1850, the economic growth of Napa County has been largely based on agriculture, ranching, timber, and mineral resources.

By 1868, the railroad had been extended to St. Helena, and with easier transportation came more residents and a thriving community. St. Helena, officially founded in 1876, was originally part of Dr. Edward Turner Bale's Rancho Carne Humana (Napa County Historical Society 2019). Bale died in 1849, leaving his wife, Maria Ygnacia Soberanes, a member of the prominent Vallejo family. Maria built Bale's grist and lumber mill into a profitable enterprise, and later sold 126 acres in St. Helena to Henry Still and Charles Walters. She also provided land to numerous individuals as an incentive to open local businesses.

A portion of downtown St. Helena was designated a National Register Historic District in 1998. Based on records maintained by the Napa County Historical Society, it contains 35 historic buildings mostly along Main Street but also extending onto Railroad Avenue and Money Way (2019).

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3. BACKGROUND

3.1 NWIC Records Search

A records search of the APE and the surrounding half-mile was completed by NWIC staff on October 22, 2018 (Confidential Appendix A). This search included their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/CRHR and listed OHP Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

Previously Conducted Studies:

NWIC records indicate that fifty-nine (59) previous cultural resources technical investigations have been conducted within a half-mile of the APE. Of these, seven have included a portion of the current APE (Table 1). Approximately 90% of the APE has been included in previous investigations.

Table 1. Previous technical studies within a one half-mile radius of the APE

Report ID	Author	Year	Company	Title
Previous Studies Conducted within the APE				
S-032333	Mike Davis	1995	De Leuw, Cather & Company	Historic Property Survey Report, Pope Street Bridge Replacement Project, 04-NAP-0000-SH1a, BRLO-5051 (001), Napa River, Pope Street, Br. No. 21C0109, 59312 962052
S-043810	Kevin M. Bartoy and John Holson	2005	Pacific Legacy, Incorporated	Extended Archaeological Survey for the St. Helena Flood Protection Project, City of St. Helena, Napa County, California.
S-043810a	Kevin Bartoy, John Holson, Lauren Rosenthal, and Heather Blind	2005	Pacific Legacy Incorporated	Archaeological Investigation and Evaluation of Eight Sites in the Napa River Floodplain for the St. Helena Flood Protection Project, City of St. Helena, Napa County, California (Vol 1: Report. Vol 2: Appendices.)
S-043810b	Kevin Bartoy and John Holson	2007	Pacific Legacy Incorporated	Revised Historic Properties Treatment Plan for Archaeological Sites CA-NAP-399, CA-NAP-406, CA-NAP-413, and CA-NAP-863, St. Helena Flood Protection Project, City of St. Helena, Napa County
S-043810c	Susan K. Stratton	2007	Office of Historic Preservation	EPA060919A: Revised Historic Properties Treatment Plan for the St. Helena Comprehensive Flood Protection Project, Napa County, California: SRP No. C-06-6093-110

Report ID	Author	Year	Company	Title
S-043810d	Tsim D. Schneider, Lori D. Hager, Samantha S. Schell, Lucian N. Schrader, and John Holson	2013	Pacific Legacy Incorporated	Archaeological Data Recovery at CA-NAP-399, CA-NAP-406, CA-NAP-413, and CA-NAP-863 for the St. Helena Flood Protection Project, City of St. Helena, Napa County, California
Previous Studies Conducted within ½ Mile of the Project Area				
S-000538	David Chavez	1977	Holman and Chavez, Consulting Archaeologists	An Archaeological Field Reconnaissance of a Development Site in the City of St. Helena, California (letter report)
S-000538a	David Chavez	1977	Holman and Chavez	Proposed Subsurface Archaeological Testing Program of the Housing Guild Associates' Development Site, City of St. Helena, Napa County, California (letter report)
S-000538b	David Chavez	1977	Holman and Chavez	Preliminary Report, Subsurface Archaeological Testing Program of the Housing Guild Associates' Development Site, City of St. Helena, Napa County, California (letter report)
S-000538c	David Chavez	1977	Holman and Chavez	Subsurface Archaeological Investigation of the Housing Guild Associates' Development Site, City of St. Helena, Napa County, California
S-000562	David Chavez	1977	Holman and Chavez, Consulting Archaeologists	An Archaeological Impact Evaluation of the Horace Jenkins Property in St. Helena, California (letter report)
S-001864	Katherine Flynn	1979	Archaeological Resource Service	Archival Search and Field Survey of the 255 acre Meadowood Golf and Tennis Club Expansion, St. Helena, California (letter report)
S-001864a	William Roop	1988	Archaeological Resource Service	Changes in the Proposed Master Plan Since Approval of the Meadowood Resort Master Plan of October 1980 (letter report)
S-001864b	William Roop	1989	Archaeological Resource Service	Changes in the Proposed Master Plan Since Approval of the Meadowood Resort Master Plan of October 1980 (letter report)
S-002486	Suzanne Baker	1981	Archaeological Consultants	Archaeological Reconnaissance of a Portion of the Silverado Trail, Napa County, California
S-002551	Stephen A. Dietz	1981	Archaeological Consulting and Research Services, Inc.	Cultural Resource Survey Report of the Calistoga Pipeline Archaeological Reconnaissance, Napa County, California
S-007618	Gregory King, Pat Oman, Margaret Buss, Denise O'Connor, Daryl Noble, Terry Schuster, and John Snyder	1986	California Department of Transportation	Historic Properties Survey Report Proposed Shoulder Widening and Installation of Left Turn Lanes, Napa County, 4-NAP-29 22.2/28.4 04226-111330

Report ID	Author	Year	Company	Title
S-007618a	Pat Oman	1985	Caltrans District 4	Archaeological Survey Report for Widening and Left-Turn Channelization to Highway 29 in Napa County, 4-NAP-29 22.2/28.4 04226-111330
S-007618b	Denise O'Connor and Gregory King	1986	Caltrans	Historical Architectural Survey Report for a Widening Project on Highway 29 from Oakville to St. Helena, Napa County, 4-NAP-29 22.2/28.4 04226-111330
S-007618c	Gregory King	1985	Caltrans	Historic Resource Evaluation Report on Historic Debris Located in the Oakville Vicinity, Napa County, 4-NAP-29 22.2/28.4 04226-111330
S-007618d	Gregory King	1986	Caltrans	Historic Resource Evaluation Report on Former Napa Valley Railroad Line, 4-NAP-29 22.2/28.4 04226-111330
S-007618e	Mick Hayes	1990	Caltrans	Negative Archaeological Survey Report: Addendum #1, for Widening and Left-Turn Channelization to Highway 29 in Napa County
S-007618f	Glenn Gmoser	1990	Caltrans	Negative Archaeological Survey Report: Addendum #2, for Widening and Left-Turn Channelization to Highway 29 in Napa County
S-007618g	Steven J. Rossa	1992	Basin Research Associates	Negative Archaeological Survey Report: Addendum #4, for Widening and Left-Turn Channelization to Highway 29 in Napa County
S-007618h	Gregory King	1987	Caltrans	Oakville and Its Store
S-007618i	Kathryn Gualtieri, Thomas F. McDonnell, and Richard T. Fitzgerald	1991	Office of Historic Preservation; Caltrans	FHWA861015A; 4-NAP-29 22.2/28.4
S-012060	William Roop	1990	Archaeological Resource Service	A Cultural Resources Evaluation of the Lands of David Garden, Assessor's Parcel 009-070-005, St. Helena, Napa County, Calif.
S-012739	Milton W. Stoll, Jr.	1960		Napa Valley Archaeological Survey
S-013885	Sunshine Psota	1992	Cultural Resources Facility, Sonoma State University	An Archaeological Investigation of a Bank Stabilization Project along the Napa River, St. Helena, Napa County, California
S-014817	Janine M. Loyd and Thomas M. Origer	1993	Tom Origer & Associates	An Archaeological Survey for the St. Helena Water Storage Tank Site and Water Main, St. Helena, Napa County, California
S-014848	Archeo-Tec Inc.	1993	Archeo-Tec Inc.	Archival Literature Review, On-Site Archaeological Surface Reconnaissance, and Subsurface Archaeological Testing of the Approximately 5.8 Acre Safeway Relocation Project Parcel Located at the Intersection of Adams Street and Library Lane, St. Helena, Napa County, California

Report ID	Author	Year	Company	Title
S-016834	Janine M. Loyd and Thomas M. Origer	1995	Tom Origer & Associates	A Cultural Resources Survey for the Brown Street Apartment Project, St. Helena, Napa County, California
S-016913	William Roop and Jeff Parsons	1995	Archaeological Resource Service	A Cultural Resources Evaluation of the Meadow Creek Subdivision, St Helena, Napa County, California
S-016927	Thomas M. Origer and Janine M. Loyd	1995	Tom Origer & Associates	A Cultural Resources Survey for Stonebridge Well II, St. Helena, Napa County, California
S-017144	Thomas M. Origer	1994	Tom Origer & Associates	Investigations at CA-NAP-863: A Prehistoric Archaeological Site on the West Bank of the Napa River in the City of St. Helena, Napa County, California
S-017145	Vicki R. Beard and Thomas M. Origer	1995	Tom Origer & Associates	Archaeology of CA-NAP-159, St. Helena, California
S-017180	Mark V. Thornton	1994	California Department of Forestry and Fire Protection	A Survey and Historic Significance Evaluation of the CDF Building Inventory, CDF Archaeological Reports, Number 17, Volume 1 of 2
S-017180a	Mark V. Thornton	1994	California State University, Fresno	A Survey and Historic Significance Evaluation of the CDF Building Inventory,CDF Archaeological Reports, Number 17, Volume 2 of 2
S-019105	Michael Smith, Laurence H. Shoup, and Suzanne Baker	1997	Archaeological/ Historical Consultants	Archaeological Survey Report, Silverado Trail Bike Lane Expansion Project, Napa County, California (Caltrans Project No. 5921)
S-019204	William Roop	1997	Archaeological Resource Service	A Cultural Resources Evaluation of the Napa Valley Wine Train, St. Helena Station
S-021260	Kim J. Tremaine and John A. Lopez	1998	Tremaine & Associates, Archaeological Consultants	Rock Fences of Napa County: A Pilot Study
S-022014	Katherine Flynn	1998	Archaeological Resource Service	A Cultural Resources Evaluation of the Hunt Avenue Parcel, St Helena, Napa County
S-023611	Lorna Billat	2001	EarthTouch, LLC.	Proposed Modifications to an Exisiting Telecommunications Facility (Nextel Site Number CA-0915A-"St. Helena") (letter report)
S-024365	Katherine Flynn	2001	Archaeological Resource Service	A Cultural Resources Evaluation of the Proposed Small Winery Construction Within APN 025-080-039, 690 Meadowood Lane, St. Helena, Napa County, CA
S-030905	Stacie Ham	2003	California Department of Transportation	Survey and Evaluation of Masonry Arch Bridges
S-030905a	Stephen E. Mikesell	2004	Office Historic Preservation	FHWA030430X; Survey and Evaluation of Masonry Arch Bridges - Caltrans Statewide Historic Bridge Survey Update

Cultural Resources Inventory, Extended Phase I, and Phase II Report for the Hunter Subdivision Project, Napa County, California

Report ID	Author	Year	Company	Title
S-032333a	Donna M. Garaventa, Stuart A. Guedon, and Melody E. Tannam	1995	Basin Research Associates, Inc.	Positive Archaeological Survey Report Pope Street Bridge Replacement Project City of St. Helena, Napa County, California
S-032333b	JRP Historical Consulting Services	1995	JRP Historical Consulting Services	Historic Architectural Survey Report Pope Street Bridge Replacement Project
S-032333c	JRP Historical Consulting Services; Basin Research Associates, Inc.	1996	JRP Historical Consulting Services; Basin Research Associates, Inc.	Finding of No Adverse Effect, Pope Street Bridge Replacement Project, St. Helena, Napa County, California, Bridge No. 21C-109
S-032333d	JRP Historical Consulting Services; Basin Research Associates, Inc.	1997	JRP Historical Consulting Services; Basin Research Associates, Inc.	Finding of No Adverse Effect, Pope Street Bridge Replacement Project, St. Helena, Napa County, California, Bridge No. 21C-109
S-032333e	Cherilyn Widell and David H. Densmore	1997	Office of Historic Preservation, Federal Highway Administration	FHWA960522A; 04-NAP-0-SH1a, Pope Street Bridge Replacement, St. Helena
S-033511	Laura Leach-Palm, Patricia Mikkelsen, Jerome King, Paul Brandy, Lindsay Hartman, and Bryan Larson	2007	Far Western Anthropological Research Group, Inc.; JRP Historical Consulting	Cultural Resources Inventory of Caltrans District 4 Rural Conventional Highways in Alameda, Marin, Napa, San Mateo, Santa Clara, and Sonoma Counties
S-034210	Carie Montero	2006	Caltrans	Historic Property Survey Report for the Route 29 Saint Helena Left-Turn Channelization and Road Rehabilitation Project in Napa County, California, 04-NAP-29, PM 25.5/28.4 (KP 41.0/45.7), EA 259400.
S-034210a	Vida Germano	2006	California Department of Transportation, District 4	Historical Resources Evaluation Report for the Route 29 Saint Helena Channelization Project in Napa County, California, 04-NAP-29, PM 25.5/28.4 (KP 41.0/45.7), EA 259400
S-034210b	Eric Wohlgemuth and Meta Bunse	2007	Far Western Anthropological Research Group, Inc.; JRP Historical Consulting	Archaeological Survey Report for the St. Helena Left-Turn Channelization Project, along State Route 29 near St. Helena, Napa County, California, 04-NAP-29, PM 25.5-28.4 (KP 41.0/45.7), EA 025940
S-034210c	eric Wohlgemuth, Jeffrey Rosenthal, and Meta Bunse	2006	Far Western Anthropological Research Group, Inc.; JRP Historical Consulting	Prehistoric Land Use and Obsidian Production in Upper Napa Valley: Extended Phase I Investigations at CA-NAP-710/H, -711, and -805, and Phase II Investigations at CA-NAP-710/H and -712, along State Route 20 near St. Helena, Napa County,

Report ID	Author	Year	Company	Title
				California, 04-NAP-29, PM 25.5-28.4 (KP 41.0/45.7), EA 025940
S-035822	Diana J. Painter	2008	Painter Preservation & Planning	An evaluation of the proposed changes to the St. Helena Carnegie Library (letter report)
S-035929	Pacific Gas and Electric Company	2008	Pacific Gas and Electric Company	Cultural Resources Assessment - Fulton to St. Helena Rebuild Project

S-043810 (2005) thru S-043810d (2013)

Archaeological investigations conducted by Pacific Legacy in support of the St. Helena Flood Protection Project occurred between 2004 and 2013. This project overlapped the western and northern portions of the present Project APE. As a result of the survey and Extended Phase I exploratory work, eight archaeological resources were identified (all in the general vicinity of the present Project APE): CA-NAP-399, CA-NAP-406, CA-NAP-413, CA-NAP-843, CA-NAP-863, CA-NAP-1007 (formerly HMS Vineyards Site), CA-NAP-1008 (formerly Miller Vineyard Site), and CA-NAP-1009/H (formerly HMS Historic Stone Wall). Based on the results of the Phase I Inventory and Phase II Evaluation efforts, the U.S. Army Corps of Engineers (USACOE) and State Water Resources Control Board (SWRCB) determined that five of the identified archaeological sites (CA-NAP-413, CA-NAP-843, CA-NAP-1007, CA-NAP-1008, and Cal-NAP-1009H) lacked sufficient data potential and integrity to meet the criteria for NRHP eligibility. It was determined that three sites (CA-NAP-399, CA-NAP-406 and CA-NAP-863) were eligible for listing in the NRHP listing under Criterion D. Avoidance of the sites was considered, and it was determined that the objectives of the proposed undertaking were important and could not be met without destroying or damaging the identified Historic Properties. The State Historic Preservation Office (SHPO) concurred with these findings in 2006 (Appendix B). A Historic Properties Treatment Plan (HPTP) was prepared outlining a program for Phase III Data Recovery and analysis that addressed the research potential of cultural deposits situated within the St. Helena Flood Control Project APE. As part of this process, a Memorandum of Agreement (MOA) was prepared between SHPO, USACE, and SWRCB in 2007. With the expectation that human remains would be encountered during investigations and later monitoring activities, the Mishewal Wappo Tribe of Alexander Valley and the City of St. Helena developed a burial agreement for the treatment of human remains in 2007 (Bartoy and Holson 2007: 87). Phase III Data Recovery was completed of the entirety of CA-NAP-399 and CA-NAP-863, as well as an approximate 500 x 100 ft section of CA-NAP-406 (the extent of their APE). Site CA-NAP-406 was indicated in report maps to continue eastward into what represents the present Project APE (Bartoy et al. 2005: 90). The eastern limits of this site were not determined as part of this work, nor was subsurface evaluation or data recovery completed of this area within the present Project APE.

Previously Identified Cultural Resources:

Thirty (30) cultural resources have been recorded within the records search area. Three of the above mentioned resources intersect the Project APE: CA-NAP-406, CA-NAP-843, and CA-NAP-1008 (Table 2; Confidential Appendix A). Work for the St. Helena Flood Protection Project resulted in a substantial level of previous archaeological investigation along the western and northern portions of the APE. This work has demonstrated the area to contain significant and highly sensitive archaeological resources. Specifically, 163 human burials were recovered from one site (CA-NAP-399); the largest number of burials recovered from a single site in Napa Valley to date (Schneider et al. 2013: 44). Human remains were not documented within archaeological resources intersecting the present Project APE.

Table 2. Cultural resources within a one half-mile radius of the APE

Primary	Trinomial	Age	Resource Name	Description
Resources within the Project APE				
P-28-000307	CA-NAP-000406	Prehistoric	B-83-MC	LITHIC SCATTER; HABITATION DEBRIS
P-28-000701	CA-NAP-000843	Prehistoric	SR-1	LITHIC SCATTER
P-28-001267	CA-NAP-001008	Prehistoric	Miller Vineyard Site	LITHIC SCATTER
Resources within ½ Mile of the Project APE				
P-28-000009	CA-NAP-000863	Prehistoric	Adams Street Site	LITHIC SCATTER; BURIAL; HEARTH; HABITATION DEBRIS
P-28-000150	CA-NAP-000158	Prehistoric	B-59-Z	LITHIC SCATTER; HABITATION DEBRIS
P-28-000151	CA-NAP-000159	Prehistoric	B-70-DG	LITHIC SCATTER; HABITATION DEBRIS
P-28-000301	CA-NAP-000399	Prehistoric	B- 55- V	LITHIC SCATTER; BURIAL; CACHES; HEARTH; HABITATION DEBRIS
P-28-000305	CA-NAP-000404	Prehistoric	B-80-WC	LITHIC SCATTER; HABITATION DEBRIS
P-28-000313	CA-NAP-000413	Prehistoric	Adams Napa Junction Site	LITHIC SCATTER; BEDROCK MILLING
P-28-000476	CA-NAP-000594H	Historic	AC-43	FOUNDATIONS; WALLS/FENCES
P-28-000770	None	Historic	Saint Helena Ranger Unit Headquarters	SINGLE FAMILY PROPERTY; GOVERNMENT

Primary	Trinomial	Age	Resource Name	Description
				BUILDING; WPA/CCC STRUCTURE
P-28-000790	None	Historic	St. Helena Post Office	GOVERNMENT BUILDING
P-28-000966	CA-NAP-001113H	Historic	Southern Pacific Railroad	ROADS/TRAILS; ENGINEERING STRUCTURE; BRIDGE
P-28-001262	None	Prehistoric	Silverado and Pope Isolate	ISOLATE
P-28-001263	CA-NAP-001007	Prehistoric	HMS Vineyards Site	LITHIC SCATTER
P-28-001264	None	Prehistoric	HMS Vineyards Isolate #1	ISOLATE
P-28-001265	None	Prehistoric	HMS Vineyards Isolate #2	ISOLATE
P-28-001266	None	Prehistoric	HMS Vineyards Isolate #3	ISOLATE
P-28-001268	CA-NAP-001009H	Historic	HMS Vineyards Historic Stone Wall	WALLS/FENCES
P-28-001299	None	Historic	State Highway 29 over Sulphur Creek Bridge (#21-16)	BRIDGE
P-28-001300	None	Historic	Pope Street over Napa River Bridge (#21C-109)	BRIDGE
P-28-001302	None	Historic	Pope Street over Sulphur Creek Bridge (#21C-110)	BRIDGE
P-28-001540	None	Historic	1381 Main Street	1-3 STORY COMMERICAL BUILDING
P-28-001547	None	Historic	Napa Valley Railroad District	ROADS/TRAILS
P-28-001548	None	Historic	F-SH 1	ENGINEERING STRUCTURE
P-28-001610	None	Historic	St. Helena Public Library	GOVERNMENT BUILDING
P-28-001750	None	Historic	Saint Helena Southern Pacific Railroad Depot	RAILROAD DEPOT
P-28-001875	None	Historic	222 Pope Street	SINGLE FAMILY PROPERTY
P-28-001876	None	Historic	21 Silverado Trail	SINGLE FAMILY PROPERTY
P-28-002481	None	Historic	St. Helena Historic Commercial District	1-3 STORY COMMERICAL BUILDING

P-28-000307 (CA-NAP-406)

P-28-000307 was recorded initially during survey and subsurface testing completed by Yolande Beard in 1976 as a small site with worked obsidian, a pestle fragment and a small piece of magnesite. The resource was relocated by Stuart Guedon on June 13, 1995 at this recorded location. Guedon observed light scatter of obsidian debitage. The site was recorded as part of investigation and data recovery efforts for the St. Helena Flood Protection Project between 2004

and 2009 (Bartoy et al. 2005; Schneider et al. 2013). At the time of this study, the eastern and western extent of this site remained unconfirmed, however the resource as recorded measured 130 x 95 m. This resource was determined eligible for inclusion in the NRHP/CRHR by the USACE and SWRCB in 2005. SHPO provided concurrence with these determinations in 2006. As such, an undetermined portion of this site, continuing from the west into the APE, was assumed prior to Dudek's present investigation to be eligible for NRHP/CRHR listing.

During Pacific Legacy's 2005 evaluation, an archaeological investigation of CA-NAP-406 consisted of the placement of 17 auger bores, 22 shovel test probes (50 cm x 50 cm), two excavation units (1 m x 1 m), and one mechanically excavated trench (3 m x 0.5 m; Bartoy et al. 2005). A total of four of the auger bores were placed within excavation units and shovel test probes to ensure that the maximum depth of the cultural deposit had been reached. Testing was limited to the APE, which was defined as approximately 100 feet to the east of the then proposed Adams Street extension. The total amount of soil excavated in the 22 shovel test probes and two excavation units amounted to 4.24 cubic meters. A total of 4,244 artifacts were recovered from this site during this investigation.

Phase III data recovery at CA-NAP-406 was completed between 2007 and 2009, and involved excavation of two Control Units (CUs) measuring 1 x 1 m; four Rapid Recovery Units (RRUs) measuring 2 x 1 m; and four trenches, measuring 3 x 1 m. In total, including Phase II investigations, the recovered assemblage included 5,711 pieces of lithic debitage, 17 bifaces, one core, seven edge-modified flakes, one hammerstone, 101 charcoal fragments, seven pieces of baked clay, and 40 historical-era artifacts.

P-28-000701 (CA-NAP-843)

CA-NAP-843 was recorded initially during survey and subsurface testing completed by J. Abell of Archaeo-Tec on April 1, 1993. The site was recorded as a sparse obsidian lithic scatter with 3 projectile point fragments, one biface and several modified flakes, and debitage distribute across an area measuring 85 x 35 m. The recorded location of this site was located immediately southwest of the present Project APE, however Abell noted that the resource may continue into the parcel representing the present APE. All item were identified on the surface; auguring yielded no subsurface material or identified midden-like soils. The resource was relocated by Stuart Guedon on June 13, 1995 at this recorded location. Guedon observed an extremely light and diffuse scatter of obsidian debitage that did not extend into adjoining areas.

The site was re-identified during subsurface testing by Pacific Legacy for the St. Helena Flood Protection Project in 2004. While NWIC resource files map this site to the southwest, Pacific Legacy's technical report indicates that this testing occurred within the boundaries of the Project

APE (Bartoy et al. 2005: 126). Archaeological investigation consisted of the placement of 29 auger bores and 15 shovel test probes (50 cm x 50 cm). The total amount of soil excavated in the shovel test probes amounted to 1.5 cubic meters. A total of four artifacts were recovered from this site during this investigation. Testing confirmed the characterization of this site as a low density lithic scatter with no associated midden (Bartoy et al. 2005). The site was considered a sparse surface scatter with no depth to the deposit. The artifact assemblage from the site included three edge-damaged obsidian flakes and one fragment of historic glass. Given the low density of cultural materials and the lack of spatial patterning, this resource was determined not eligible for inclusion in the NRHP or the CRHR by the USACE and SWRCB. SHPO provided concurrence with these determinations in 2006.

P-28-001267 (CA-NAP-1008)

CA-NAP-1008 (also referred to as "Miller Vineyard Site") was identified by Pacific Legacy for the St. Helena Flood Protection Project initiating in 2004 at a location that falls within northeastern portion of the present Project APE. The site was recorded as a surface scatter and shallow deposit of flaked lithic artifacts, predominantly Napa Valley obsidian, measuring 150 x 100 m. Extended Phase I Inventory and Phase II Evaluation work completed by Pacific Legacy occurred in 2004 and 2005 (Bartoy et al. 2005). Subsurface archaeological investigation included 32 augers, 13 STPs (measuring 50 x 50 cm), two excavation units (measuring 1 x 1 m), and two mechanically excavated trenches (measuring 3 m x 0.5 m). A total of 396 artifacts were recovered from within 3.88 cubic meters of removed soil. Soil mixing to a depth of 60 cm below the surface (cmbs) was observed, presumably as a result of past discing activities associated with the surrounding vineyard. Obsidian hydration placed the sited chronologically between 2,500 years BP and 500 years BP. The site was determined not eligible for CRHR/NRHP listing by the USACE and SWRCB based on the results of extended Phase I Inventory and Phase II Evaluation work for the Flood Protection Project (Bartoy et al. 2005). SHPO provided concurrence with these determinations in 2006.

3.2 NAHC Correspondence

Dudek requested a NAHC search of their Sacred Lands File on September 28, 2018 for the proposed Project area. The results of this search were provided on October 10, 2018. These did not identify the presence of sacred sites within the Project area. The NAHC additionally provided contact information for Native American representatives with traditional cultural affiliations with this area. It was recommended that these individuals be contacted with requests for additional cultural resources information.

While Dudek has not contacted these individuals to date, outreach with NAHC-listed representatives was initiated for the Project was completed by the City pursuant to Assembly Bill (AB) 52. The Project is subject to compliance with AB 52 (PRC Section 21074), which requires consideration of impacts to "tribal cultural resources" as part of the CEQA process, and requires the CEQA lead agency to notify any groups (who have requested notification) of the Project who are traditionally or culturally affiliated with the geographic area of the Project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City. The City sent Project notification letters to the following tribes on April 23, 2018: Cortina Band of Indians, Federated Indians of Graton Rancheria (Graton Rancheria), Middletown Rancheria of Pomo Indians, and Mishewal Wappo Tribe of Alexander Valley. Letters contained a description of the Project, outlined the process and timing of AB 52, and requested that the tribes respond with a request for consultation, if desired. On May 16, 2018, Graton Rancheria responded with an email indicating that the Project is not in their traditional ancestral territory. One tribe, the Yocha Dehe Wintun Nation, responded on May 22, 2018 indicating that the project is within their aboriginal territories and requesting a copy of the present report. No additional responses to this outreach have been received by the City to date.

3.3 Geomorphology

The Project site is located within the Coast Ranges Geomorphic Province of California. This region is part of the San Andreas Fault system, the boundary of the North American and Pacific tectonic plates. Motion between the two plates is generally a right-lateral strike slip with the Pacific Plate moving northwestward in relation to the North American Plate. A data recovery of archaeological sites in the vicinity of the project area has resulted in substantial and detailed description of geomorphic setting, formation processes, and soil stratigraphy (Schneider et al. 2013). Segments of this report have been included to follow here directly.

The Project site is situated on the floodplain southwestern of the Napa River. Areas immediately south of the river are on a Holocene fluvial terrace. The river channel has been forced to the eastern side of the Napa Valley by alluvial fans deposited by Sulphur and York Creeks. The central portion of the Project is comprised of these alluvial fans, at the distal margin of the fan deposited by Sulphur Creek. Closer to the Sulphur Creek channel, the distal end of the fan protrudes into the terrace, likely resulting in the deposition of relatively coarse sediments (coarse sand and gravel) in that area. Areas near the river have a relatively complex stratigraphy, with one or more buried occupation surfaces present created due to their context within alluvial depositional environments. Sites farther from the Napa River channel demonstrate less stratigraphic complexity than the other sites in the project area, with no evidence of buried occupation surfaces.

Within the Project site, soils are noted to be relatively consistent throughout. Across the site appears to be a disturbed surface stratum underlain by natural alluvial soils. The depth of this disturbance varies greatly throughout the APE. Previous and current testing indicates that between approximately 0.5 m and 1.5 m below surface, a layer of gray clay intermixed with small gravels is present. This layer of clay appeared to be natural alluvial subsoil that formed the base of the terrace in this area.

4 RESEARCH METHODS

The Secretary of the Interior has issued Standards and Guidelines for Archeology and Historic Preservation (48 FR 44720–44726), which are used for the identification and evaluation of historic properties and to ensure that the procedures are adequate and appropriate. The identification and evaluation of historic properties are dependent upon the relationship of individual properties to other similar properties (NPS and ACHP 1998, pp. 18–20). Information associated with properties regarding their prehistory, history, architecture, and other aspects of culture must be collected and organized to define these relationships (NPS 2009), which is the intent of the current inventory.

The City had previously hired a consultant to evaluate the Project and an environmental impact report (EIR) was prepared and released for public review in 2012. The City did not take any action on the Project at that time and based on receipt of new information the draft EIR was subsequently revised, but was never released for public review (WSA 2017). In late 2017, Dudek was retained to prepare a new EIR for the Project and the prior cultural evaluation was reviewed for adequacy. Based on a review of the prior cultural work including the methods, findings, and mitigation, a number of information gaps were identified. Dudek provided the following recommendations for additional cultural resources efforts to be completed with the intent of ensuring that work supporting this EIR would be completed to adequate and appropriate standards:

- Determine the distribution of the planned Project disturbances relative to the horizontal and vertical distribution of cultural resources.
- Complete an updated records NWIC search to ensure the project has a current record archaeological work completed to date.
- Request an updated NAHC Sacred Lands File search in order to retain contact information for traditionally affiliated Native American representatives.
- Assist with facilitation of AB52 consultation, if required by the lead agency for compliance with CEQA.
- Complete a Phase I Survey to document the present conditions within the project site and any visible archaeological resources.
- Conduct Extended Phase I and Phase II excavations within areas anticipated to intersect CA-NAP-406 and an appropriate sample of surrounding areas with potential to contain cultural resources. The intent of this work will be to examine the subsurface soils to depths that will be impacted by the project.

- Complete a GPR study to document general soil strata throughout the APE and locate possible subsurface anomalies.

- Provide cultural resources recommendations to be provided based on background research and fieldwork regarding what additional steps are required in order to ensure compliance with CEQA and other regulatory conditions.

4.1 Research Questions

The broader Project area has been subject to a substantial level of previous archaeological investigation. These focused on the areas intersecting the St. Helena Flood Control Project, which generally bounded, and overlapped to some degree, the west and the north sides of the Project APE. The prior EIR indicated that all significant resources within the Project APE were covered with fill that had been displaced by work associated with the St. Helena Flood Control Project. With this consideration in mind, the following research questions were developed in order to guide the present cultural resources work:

- What is the recorded distribution of potentially significant cultural resources relative to the Project APE? Most pertinently, does NRHP-eligible site CA-NAP-406 or other resources have potential to extend into the Project site?

- How much of the Project site has been subject to previous investigation, and what has this investigation included?

- What Native American tribes and tribal representatives have specific traditional associations with this area and who should be contacted should sensitive material of Native American origin be identified in the future?

- Do existing subsurface soils have potential to support the presence of archaeological resources?

- Is there evidence of fill or specific disturbances within the Project APE and, if so, to what depth?

- Has existing work satisfied standard requirements for CEQA compliance and, if not, what additional work is required to meet this compliance?

4.2 Pedestrian Survey

Following Bureau of Land Management (BLM) precedents, which are appropriate for cultural resources projects in general, survey techniques are loosely grouped into two categories:

reconnaissance and intensive (BLM 2004; NPS 2009). The choice of survey category depends on the level of effort required for a particular project, which can vary depending on the nature of the properties or property types, the possible adverse effects on such properties, and agency requirements (NPS and ACHP 1998). The selection of field survey techniques and level of effort must be responsive to the management needs and preservation goals that direct the survey effort. For any survey, it is important to consider the full range of historic properties that may be affected, either directly or indirectly, and consider strategies that will minimize any adverse effects and maximize beneficial effects on those properties (BLM 2004; NPS 2009; NPS and ACHP 1998).

The current survey (completed November 15, 2018) can be classified as intensive since short-interval transect spacing and full documentation of cultural resources was completed. Survey staff exceeded the applicable Secretary of Interior Professional Qualifications Standards for archaeological survey. Dudek archaeologist William Burns, MA, RPA surveyed the entire APE with transects spaced no more than 15 meters apart and oriented along cardinal directions where possible. Survey direction and location was adjusted for the presence of grape vines that were present through the central and southern portions of the Project APE. Survey crew was equipped with a Trimble Geo7X Global Positioning System (GPS) receiver with sub-meter accuracy. Location-specific photographs were taken using an IPhone 7 equipped with 8 MP resolution and georeferenced PDF maps of the project area. Accuracy of this device ranged between 2 meters and 5 meters. Subsurface exposures were opportunistically sought out and inspected near rodent burros, as well as along natural and human-made erosional features.

4.3 Subsurface Testing

4.3.1 Extended Phase I Testing

Dudek developed an XPI exploratory program in order to address the research questions outlined above. The intent of XPI investigations is to build upon Phase I survey information. Three hollow stem 6-inch auger borings and five STPs, measuring 0.5 x 0.25 m, were excavated at pre-determined locations placed with the intent of providing a general understanding of the present subsurface conditions throughout the Project site. These locations were set with the goal of assessing the level of previous subsurface disturbance and presence of fill within the Project site, and the potential for soils to support the presence of cultural material and deposits associated with the three previously recorded sites in the vicinity: CA-NAP-406, CA-NAP-843, and CA-NAP-1008.

4.3.2 Phase II Testing

Further excavations within the APE were necessary to fully understand the extent of disturbances resulting from the previous levee project and soils changes. The intent of Phase II investigations

is to build upon Phase I survey and XPI information. Ground penetrating radar (GPR) was utilized in transects and blocks to locate subsurface anomalies. Ten hollow stem 6-inch auger borings and twenty STPs, measuring 0.5 x 0.25 m, were excavated at anomaly locations discovered though GPR as well as pre-determined locations placed with the intent of providing a general understanding of the present subsurface conditions throughout the Project site. These locations were set with the goal of assessing the level of previous subsurface disturbance and presence and depth of fill within the Project site, and the potential for soils to support the presence of cultural material and deposits associated with the three previously recorded sites in the vicinity: CA-NAP-406, CA-NAP-843, and CA-NAP-1008. Excavation units are shown relative to the October 2009 Google Earth imagery within Figure 3. Active construction activities for the prior levee project are observable within this imagery.

Excavations units, including both auger and STP samples, were excavated and recorded in 20 cm arbitrary levels from the surface and screened using 1/8 inch mesh. Accurate vertical provenience was allowed by the short intervals of the hand-excavated augurs and STPs. Augers can be excavated more rapidly, with less disturbance, and to greater depths than STPs. STPs require removal of more soil than augers. However, this unit type also provides for a larger sample when looking for buried cultural deposits and allow for direct inspection of subsurface soil profiles along their exposed side walls. All removed soil soils and units were examined for midden-like soils and other cultural characteristics based on color, texture, consistency, stickiness, plasticity, and the presence of artifacts. Depositional characteristics and indications of past disturbance and/or fill were documented. Field notes were taken on Dudek auger and STP forms. All holes were backfilled using removed soils after sampling. Topsoil or grass was placed back on the surface of all excavated areas and restored to their previous appearance as best possible. A series of overview and excavation photographs were taken to document the current surface and subsurface conditions in each area. Any artifacts identified were documented using field forms, photographed, then bagged with labels identifying their subsurface provenience. Artifacts found during XPI excavations were buried on site in the corresponding backfilled unit within 10-20 cm of the surface. Artifacts found during Phase II excavations were collected and returned to Dudek's office for analysis.

4.4 Ground Penetrating Radar

Dudek has in-house GPR equipment and dedicated personnel trained in its use. The Dudek GPR is a wheeled device approximately the size of a child's wagon, and can be pushed across the ground in a pre-defined survey pattern that is tracked by a GPS devise. A Sensors and Software, Ltd., Noggin 250 GPR unit was used to collect all data, using the SmartCart configuration. This allowed investigators an opportunity to observe any potential anomalies in real time as they walked the site. The GPR was set up to record data to a maximum depth of 8 meters (approximately 26 feet).

A Trimble GeoXt device with sub-meter accuracy was used to collect locational information for each line and grid. GPR is non-invasive and uses electromagnetic fields to probe subsurface contexts for objects and changes in soil or material properties. Generally summarized, an antenna sends a finite frequency non-dispersive wave through the ground. This wave is then scattered and/or reflected back as "anomalies" with interpretable characteristics. While the location of anomalies can be identified in the field, and GPR survey strategies adjusted to focus on these areas in real-time, results are post-processed through software for the final results. By walking continuous linear transects and grids, this software allows for generation of three dimensional horizontal and visual mapping of subsurface features. This is most effective with historical or modern built environment features constructed of materials such as asphalt, brick, concrete, metal, wood, and other materials that would stand out against the surrounding soil matrix.

Raw GPR data is processed analyzed using GPR Slice (v7) software to create 2-dimensional vertical radargram images and time-slice horizontal (plan view) images for the Project site. Time-slice imagery is generated through post-processing of grids within a specific area. These can be viewed vertically from the surface to provide rough 3-dimensional renderings of subsurface anomalies, if present. Radargrams are also visible for review real-time on the GPR display during linear transects. Subsurface features as represented as hyperbolas, with the slope and size of the hyperbola related to the size and shape of the object. Round, linear features, such as enclosed waterlines and pipes, can be identified as smooth hyperbolae when crossed perpendicularly and as a solid line when the GPR runs parallel to the direction of the feature. Consecutive time-slice images are stitched from

Twenty-six transects lines and two grids (Grid-01: 10 m by 10 m, Grid-02: 10 m by 7.5 m) were tested. Their locations decided on attempting to avoid areas of high disturbance, based of older aerial satellite images (Figure 4). GPR was performed in order to identify potential subsurface archaeological features and signs of the extent of disturbance in the APE.

Based on review of records search information, the results of the XPI testing, and historical aerial imagery, transects for Lines 1 through 9, Grid-01, and Grid-02 were placed in the middle of the APE. The placement of this GPR study areas were to avoid the areas of highest disturbance seen in the 2009 aerial images while targeting locations intersecting the likely extended boundary of CA-NAP-406.

GPR transect Lines 1-19 were placed intersecting and just north of the boundary of CA-NAP-406 as it has been indicated to extend to within the Project APR by previous studies (Bartoy et al. 2005: 90). Grid-01 (10 m by 10 m) was comprised of 21 parallel lines oriented north-south (0.5 m interval) and 21 parallel lines oriented east-west (0.5 m interval) and Grid-02 (10 m by 7.5 m) was comprised of 16 parallel lines oriented north-south (0.5 m interval) and 21 parallel lines oriented

east-west (0.5 m interval). Both grids and were placed near the central area of the APE, within the likely expanded site boundaries of CA-NAP-406 as indicated by previous studies. GPR transect Lines 20-25 were placed along the northern boundary of the over-excavated area located immediately north of the extant vineyards. After completing the GPR data acquisition and initial field analysis of the data, high-potential anomalies were ground-truthed through excavation of STPs to assess the GPR anomalies and surface observations.



SOURCE: Bing Maps 2018; Napa County 2015

DUDEK

0 90 180 Feet
0 30 60 Meters

FIGURE 3

XPI and Phase II Investigation, Oct 2009 Imagery

Hunter Subdivision Project

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FIGURE 4
GPR Investigation Area
Hunter Subdivision Project

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5 RESULTS

This section presents the results of the records search and the field survey of the current study.

5.1 Survey Results

A Phase I Survey of the entire Project APE was completed November 15, 2018. The southern half of the Project APE was occupied by grape vines, allowing for approximately one-half of the ground surface to be directly visible. Low-laying grasses were present throughout the northern half of the Project APE, restricting visibility of the ground surface to less than 10% in most areas on this initial site visit (see Figures 5-6). Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion/excavation exposures and the spoils from rodent burrows. The Project APE has been subject to a number of past disturbances. The most notable of these have included present and past agricultural activities, as well as likely earth moving work in the northernmost portion of the Project APE. No artifacts were observed on the surface during survey, however visibility was highly restricted in most areas by low-laying vegetation and organic debris.



Figure 5. Overview of Auger-1 Location, view northward



Figure 6. Overview of STP-2, view westward toward levee

5.2 Extended Phase I and Phase II Results

Dudek archaeologist, William Burns performed XPI testing from November 15, 2018 to November 17, 2018. Dudek archaeologists Adam Giacinto, William Burns, Ross Owen, Nicholas Hanten, Kolin Taylor, Jessica Borges, and Brad Comeau performed Phase II testing from January 20, 2020 to January 24, 2020. Results of these excavations are provided in Table 3.

Table 3. Extended Phase I and Phase II Testing Results

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
AT-01	0-20	Negative	None	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	1 obsidian shatter	2.5Y 5/3 Light olive brown clay silt with gravel, compact: 1 obsidian shatter fragment
	40-60	Negative	None	2.5Y 6/2 Light brown gray clay silt with gravel, compact. Rock impasses at 60 cmbs
AT-02	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
AT-03	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with gravel, compact
AT-04	0-20	Positive	1 green bottle glass fragment	10YR 4/1 Dark gray silty clay, no gravels: 1 fragment green bottle glass
	20-40	Negative	None	10YR 4/1 Dark gray clay, < 2% angular gravels
	40-60	Negative	None	10 YR 4/1 Dark gray clay < 5% angular gravels
	60-80	Negative	4 obsidian debitage	10 YR 4/1 Dark gray clay < 5% angular gravels. Rock impasse at 75 cmbs
AT-05	0-20	Negative	None	2.5 YR 3/2 Very dark grayish brown clay loam
	20-40	Positive	2 obsidian debitage	10YR 3/2 Very dark grayish brown silty loam with increased sand content
	40-60	Positive	2 obsidian debitage	10YR 3/2 Very dark grayish brown silty loam with increased sand content
	60-80	Positive	1 obsidian debitage	10YR 2/2 Very dark brown silty loam with increased grit, moderately compact. Rock impasse at 80 cmbs
AT-06	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	20-40	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	40-60	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	60-80	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	80-100	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	100-120	Negative	None	10YR 3/2 Very dark grayish brown silty loam
	120-140	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	140-160	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	160-180	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel.
	180-200	Negative	None	2.5Y 4/3 Olive brown sandy silt, with 20% gravel. Auger terminated at 187 cmbs
AT-07	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam, gradual increase in sand content with depth
	20-40	Negative	None	10YR 3/2 Very dark grayish brown silty loam, gradual increase in sand content with depth
	40-60	Negative	None	10YR 4/2 Dark grayish brown sandy loam
	60-80	Negative	None	10YR 4/2 Dark grayish brown sandy loam
	80-100	Negative	None	10YR 5/3 Brown sandy clay, coarse sand with 15% angular gravels. Rock impasse at 90 cmbs
AT-08	0-20	Negative	None	10YR 3/2 Very dark grayish brown clay loam
	20-40	Negative	None	2.5Y 3/2 Very dark gray brown clay loam, increased sand, <5% small cobbles and gravel
	40-60	Negative	None	2.5Y 3/2 Very dark gray brown clay loam, increased sand, <5% small cobbles and gravel
	60-80	Negative	None	2.5Y 4/3 Olive brown sandy silt, some oxidation present

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	80-100	Negative	None	2.5Y 4/4 Olive brown sandy silt, some oxidation present
AT-09	0-20	Negative	None	10YR 3/3 Dark brown silt loam
	20-40	Negative	None	10YR 3/3 Dark brown silty loam
	40-60	Negative	None	10 YR 3/2 Very dark gray brown silty clay loam. Rock impasse at 55 cmbs
AT-10	0-20	Negative	None	10YR 3/2 Very dark grayish brown silty loam with coarse sand
	20-40	Negative	None	10YR 3/3 Dark brown silty clay loam
	40-60	Negative	None	10YR 3/3 Dark brown silty clay loam. Rock impasse at 53 cmbs
AT-11	0-20	Negative	None	10YR 3/1 Very dark gray clay silt
	20-40	Negative	None	2.5Y 3/3 dark olive brown silty clay
	40-60	Negative	None	2.5Y 3/3 dark olive brown silty clay
	60-80	Negative	None	2.5Y 3/3 dark olive brown silty clay
	80-100	Negative	None	2.5Y 2.5/1 Black silty clay
	100-120	Negative	None	2.5Y 2.5/1 Black silty clay
	120-140	Negative	None	2.5Y 2.5/1 Black silty clay
	140-160	Negative	None	2.5Y 2.5/1 Black silty clay
AT-12	0-20	Positive	1 obsidian debitage	2.5Y 3/2 Very dark gray brown clay loam
	20-40	Positive	2 obsidian debitage	2.5Y 3/2 Very dark gray brown clay loam
	40-60	Negative	None	2.5Y 3/2 Very dark gray brown clay loam
	60-80	Negative	None	2.5Y 3/2 Very dark gray brown sandy clay loam, with 20% small-medihm gravels and cobbles. Rock impasse at 70 cmbs
AT-13	0-20	Positive	1 obsidian flake	2.5Y 3/2 Very dark gray brown silty loam
	20-40	Negative	None	2.5Y 3/2 Very dark gray brown silty loam
	40-60	Negative	None	2.5Y 4/1 dark geay silty clay loam with oxidation throughout
	60-80	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	80-100	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	100-120	Negative	None	2.5Y 2.5/1 black silty clay loam, compact
	120-140	Negative	None	10YR 4/1 dark gray mottled with 10YR 4/3 brown clay loam, compact
	140-160	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	160-180	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	180-200	Negative	None	2.5Y 5/2 grayish brown sandy clay loam
	200-220	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam
	220-240	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam
	240-260	Negative	None	2.5Y 4/2 Dark grayish brown sandy clay loam

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	260-280	Negative	None	2.5Y 4/2 Dark grayish brown sandy loam, water table at 280 cmbs
STP-01	0-20	Positive	21 obsidian flakes, 1 retouched obsidian flake	10YR 3/2 very dark gray brown loamy clay with gravel, compact
	20-40	Positive	45 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-02	0-20	Positive	9 obsidian flakes	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	44 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-03	0-20	Positive	3 obsidian flakes, 1 chert flake	2.5Y 5/3 Light olive brown clay silt with gravel, compact
	20-40	Positive	3 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-04	0-20	Positive	14 obsidian flakes	10YR 3/3 Dark Brown sandy clay silt with gravel, compact
	20-40	Positive	8 obsidian flakes	10YR 3/2 Very dark gray brown clay silt, compact
STP-05	0-20	Positive	34 obsidian flakes	10YR 4/2 Dark grayish brown loamy clay with gravel, compact
	20-40	Positive	63 obsidian flakes, 1 obsidian chopper/scraper	10YR 3/2 Very dark gray brown clay silt, compact
STP-08	0-20	Positive	50 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <5% small rounded gravels
	20-40	Positive	44 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <5% small rounded gravels
	40-60	Positive	4 obsidian debitage	10YR 3/2 very dark gray brown loamy clay, lightly compacted, with <2% small rounded gravels
	60-80	Negative	None	10YR 4/3 Brown clay with <2% small angular and rounded gravels
	80-100	Negative	None	10YR 4/4 Dark yellowish brown sandy clay, <5% gravel and cobbles
	100-120	Negative	None	10YR 4/4 Dark yellowish brown sandy clay, <5% gravel and cobbles. Terminated at 105 cmbs due to water table
STP-09	0-20	Positive	21 obsidian debitage	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	20-40	Positive	14 obsidan debitage, modern plastic	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	40-60	Positive	21 obsidian debitage, brick fragment, wooden lathe fragment, and modern plastic	2.5Y 3/1 Very dark gray silty clay with <10% angular gravel
	60-80	Positive	21 obsidian debitage, 1 obsidian retouched edge tool, brick fragment	2.5Y 3/2 very dark gray brown sandy silt with <15% angular gravel, very compact
	80-100	Positive	22 obsidian debitage, brick fragment	2.5Y 3/2 very dark gray brown sandy silt with <15% angular gravel, very compact

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	100-120	Positive	1 obsidian debitage	Auger - 2.5Y 3/2 very dark gray brown clay loam with <15% angular gravel, slightly compact. Rock impase at 120 cmbs
STP-10	0-20	Positive	1 obsidian biface, 17 obsidian debitage	2.5Y 3/2 Very dark gray brown silty clay loam
	20-40	Positive	3 obsidian debitage, 2 glass fragments, plastic, and aluminum	2.5Y 3/2 Very dark gray brown silty clay loam, increasing clay content and compaction with depth
	40-60	Positive	1 obsidian debitage	2.5Y 3/2 Very dark gray brown sandy silty clay loam
	60-80	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	80-100	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	100-120	Negative	None	Auger - 2.5Y 3/2 Very dark gray brown sandy silt
	120-140	Negative	None	Auger - 2.5Y 3/1 Very dark gray sandy clay
	140-160	Negative	None	Auger - 2.5Y 3/2 Very dark gray coarse sand. Terminated at 160 cmbs
STP-11	0-20	Positive	6 obsidian debitage	7.5YR 3/2 dark brown loamy clay with <5% rounded gravel
	20-40	Positive	3 obsidian debitage	7.5YR 3/2 dark brown loamy clay with <5% rounded gravel
	40-60	Positive	3+ pieces of plastic	10YR 3/2 dark grayish brown loam with <5% rounded gravel
	60-80	Negative	None	7.5YR 3/4 dark brown loam
	80-100	Negative	None	80-90 cmbs: 7.5YR 3/4 dark brown loam 90-100 cmbs: coarse gray sand
STP-12	0-20	Positive	3 obsidian debitage	10YR 3/3 Dark brown sandy silt
	20-40	Positive	6 obsidian debitage	10YR 3/3 Dark brown sandy silt
	40-60	Positive	13 obsidian debitage	40-50 cmbs: 10YR 3/3 Dark brown sandy silt 50-60: 10YR 3/2 Very dark grayish brown sandy silt with ~50% cobbles
	60-80	Negative	None	10YR 3/2 Very dark grayish brown sandy silt with ~50% cobbles. Terminated at 75 cmbs due to rock impasse
STP-14	0-20	Negative	None	10YR 4/3 Brown sandy loam with <5% gravel
	20-40	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	40-60	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel, cobbles at 55 cmbs
STP-16	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay, 55cmbs increased cobbles (5-10 cm diam.)
STP-17	0-20	Positive	1 obsidian debitage	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)
	20-40	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	40-60	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with angular cobbles (5-15 cm diam.)
STP-18	0-20	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with <5% angular gravels. Angular cobbles (4-8 cm diam.) at 15 cmbs
	20-40	Negative	None	10YR 4/1 Dark gray loamy clay, < 2% angular gravels, clobbles (~10 cm diam.)
	40-60	Negative	None	10YR 4/1 Dark gray loamy clay, < 2% angular gravels, clobbles (~10 cm diam.)
STP-19	0-20	Negative	None	10YR 3/2 Very dark grayish brown loamy clay
	20-40	Negative	None	10YR 3/3 Dark brown loamy clay with cobbles (4-8 cm diam.)
	40-60	Negative	None	10YR 3/3 Dark brown loamy clay with cobbles (4-8 cm diam.)
STP-21	0-20	Positive	1 obsidian debitage	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
	20-40	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
	40-60	Negative	None	10YR 3/2 Very dark grayish brown loamy clay with <5% angular gravels
STP-22	0-20	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	20-40	Negative	None	10YR 3/3 Dark brown sandy loam with <5% gravel
	40-60	Negative	None	10YR 3/3 Dark brown sandy loam with >50% cobbles (4-10 cm diam.)
STP-23	0-20	Positive	1 obsidian debitage	2.5Y 3/2 Dark Brown clay silt
	20-40	Negative	None	2.5Y 3/2 Dark Brown clay silt
	40-60	Negative	None	2.5Y 3/2 Dark Brown clay silt
	60-80	Negative	None	Auger - 60-70 cmbs: 2.5Y 3/2 Dark brown clay silt 70-80 cmbs: 2.5Y 2.5/1 Black silty clay
	80-100	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	100-120	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	120-140	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
	140-160	Negative	None	Auger - 2.5Y 2.5/1 black silty clay
STP-24	0-20	Negative	None	10YR 3/3 Dark brown sandy silt
	20-40	Negative	None	10YR 3/3 Dark brown sandy silt
	40-60	Negative	None	10YR 3/3 Dark brown sandy silt
STP-25	0-20	Positive	1 obsidian debitage	7.5YR 3/2 Dark brown sandy loam with 5% large cobbles (5-15 cm diam.)
	20-40	Positive	1 historic ceramic	7.5YR 3/2 Dark brown sandy loam with 70% large cobbles (5-15 cm diam.)
STP-26	0-20	Negative	None	7.5YR 3/2 Dark brown silty sandy loam
	20-40	Negative	None	7.5YR 3/2 Dark brown silty sandy loam

Unit ID	Depth (cmbs)	Results	Artifacts Recovered	Soil Description
	40-60	Negative	None	7.5YR 3/2 Dark brown silty sandy loam with 50% cobbles (5-15 cm diam.)
STP-27	0-20	Negative	None	10YR 4/2 Dark grayish brown loamy clay with ~50% gravel
	20-40	Negative	None	10YR 3/2 Very dark gray sandy clay with ~50% gravel
	40-60	Positive	12 obsidian debitage	10YR 3/2 Very dark grayish brown clay with 10% gravels: 12 obsidian debitage
	60-80	Negative	None	10YR 3/2 Very dark grayish brown sandy loam with 10% gravels
	80-100	Negative	None	10YR 2/2 Very dark brown sandy loam
	100-120	Negative	None	10YR 2/2 Very dark brown sandy loam
	120-140	Negative	None	10YR 2/2 Very dark brown sandy loam. Terminated at 130 cmbs
STP-28	0-20	Positive	6 obsidian debitage	10YR 4/2 Dark grayish brown silty clay
	20-40	Negative	None	10YR 3/2 Very dark grayish brown clay
	40-60	Negative	None	2.5YR 3/1 Very dark grayish brown
	60-80	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	80-100	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	100-120	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	120-140	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
	140-160	Negative	None	Auger - 2.5YR 4/1 Very dark gray sandy clay
STP-29	0-20	Positive	6 obsidian debitage	10YR 2/2 Very dark brown clay
	20-40	Positive	3 obsidian debitage	10YR 2/2 Very dark brown clay
	40-60	Positive	4 obsidian debitage	10YR 3/2 Very dark grayish brown silty clay
	60-80	Positive	1 obsidian debitage, 3 glass fragments	10YR 3/2 Very dark grayish brown silty clay
	80-100	Negative	None	10YR 3/2 Very dark grayish brown silty clay
	100-120	Negative	None	10YR 3/2 Very dark grayish brown silty clay
	120-140	Negative	None	10YR 3/2 Very dark grayish brown silty clay
	140-160	Negative	None	5Y 3/1 Very dark gray silty clay. Terminated at 150 cmbs.
STP-30	0-20	Positive	2 obsidian debitage	2.5Y 3/2 Dark brown sandy loam
	20-40	Positive	1 obsidian debitage	2.5Y 3/2 Dark brown sandy loam
	40-60	Negative	None	2.5Y 3/1 Very dark grayish brown sandy loam
	60-80	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt with 40% large cobbles
	80-100	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt
	100-120	Negative	None	2.5Y 4/2 Dark grayish brown sandy silt

Archaeological testing did not result in the identification of intact cultural deposits. Results indicate artifact frequencies were highest in the central (near CA-NAP-406) and northern (CA-NAP-1008) portions of the Project APE. Most cultural material was recovered from shallower contexts (above 60 cmbs). Modern debris was encountered to 100 cmbs. Artifacts consisted predominantly of small obsidian tertiary flakes. These findings are generally consistent with the assemplage documented for Phase II excavations completed for the St. Helena Flood Control Project along the western side of the central portion of the Project APE (Bartoy et al. 2005). This study suggested that a gray sandy clay sterile soil sub-stratum was present approximately 1.5 m below the surface (Schneider et al. 2013: 27).

The portion of the APE north of the existing vineyards was confirmed to be covered by a layer of fill extending to at least 100 cmbs (3.28 ft). A soil shoulder of this approximate height marks the extent of this graded fill along the eastern perimeter of the APE, north of the vineyard. A ditch, as well as narrow lower terrace, is present east of this berm where native soils could be encountered at shallow depths. October 2009 Google Earth imagery (as previously included in Figure 3) does show the distribution of fill in this area. At the time of the prior levee project, the area was used for staging of equipment. It is unclear from this imagery if underlying native soils were graded, ripped, or otherwise prepped prior to the distribution of fill. A large area of likely excavation is also visible within the 2009 imagery just north of the existing vineyard. The patterning shown by the distribution of artifacts in this area is somewhat unclear. In general, artifacts are clearly associated with soils approximately 60 cmbs or shallower, below which the presence of artifacts substantially decreases. The areas nearest the recorded boundaries of CA-NAP-406, notably STP-9, did yield relatively high frequencies of artifacts to depths up to 100 cmbs. However, modern construction waste (brick) was also found within this unit at this same depth. Based on this distribution of cultural material, it seems most likely that soils and/or artifacts associated with CA-NAP-406 were spread throughout the APE at a later stage of the levee project. This likely occurred after grading and partial leveling of soils from outside of CA-NAP-406, which helps explain both why the distribution of artifacts remains relatively vertically constrained and why there is not a clear soil transition between the different levels of graded soils.

The areas of the APE within the vineyard, while previously disturbed through agricultural activities, were not capped by redistributed soils during the levee project. As such, these areas would have the highest potential for intact cultural deposits to persist. The total assemblage of artifacts recovered from all excavation units within this area included four fragments of obsidian debitage and one possibly historical-era ceramic fragment. All material was recovered from the upper 40 cmbs. It is most likely that soils within the vineyard are likely representative of the native soils underlying fill to the north, consisting of sandy loam with increased frequencies of rock at depth.

5.3 Ground Penetrating Radar Review

GPR data collection was performed on January 14 and 15, 2020 by Brad Comeau, Adam Giacinto, and William Burns. Twenty-six transects lines and two square grids were tested. The transect lines were organized into two groups. Lines 1 to 19 were placed close to the center of the Project site and ran E/W across the entirety of the APE. These lines had no major hits, though a few stronger anomalies were ground-truthed with STPs. The STPs were generally irrigation lines; no cultural features were encountered. Lines 20-26 were placed farther south from Line 1-19. Line 20 registered an anomaly at 118 m east along the transect, at a depth of approximately 0.5 m (Figure 7). This anomaly was investigated with STP 11, however the STP failed to locate a feature and was likely reflective of a soil change or subsurface cobble. A few other minor hits along Line 20-26 were investigated with STPs, though none revealed any features. Radargrams generated through linear transects provided an approximate cross section of stratigraphy across the entire APE, east to west. GPR data indicates a soil change between approximately 0.5 m and 1.5 m (Figure 7). This clearly aligns with soil profiles revealed through STPs and auger bores, which display a disturbed fill from the ground surface, transitions to a subsurface alluvium between 0.5 m and 1.5 m. The two grids, Grid-01 and Grid-02, contained no substantial GPR findings.

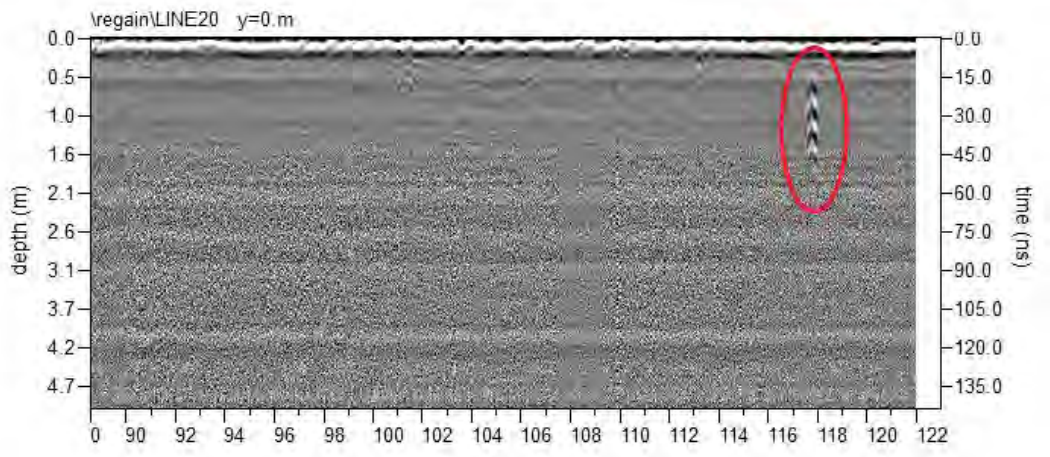

Figure 7. GPR Line 20 Anomaly

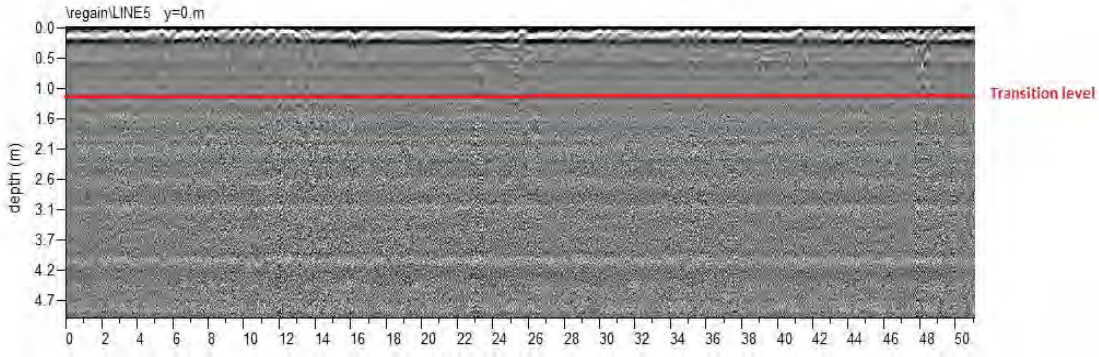

Figure 8. GPR General Soil Profile (Line 5)

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6 SUMMARY AND MANAGEMENT CONSIDERATIONS

6.1 Summary

This study has consisted of a CHRIS records search of the Project APE and a half-mile radius, NAHC Sacred Lands File search, intensive-level pedestrian survey, XPI subsurface probing, Phase II excavations, and a GPR investigation. A NAHC Sacred Lands File did not indicate the presence of any Native American cultural resources in or near the Project APE. Dudek did not contact Native American representatives as part of these efforts, however the City has notified and consulted with NAHC-listed Tribal representatives pursuant to AB 52. One tribe, the Yocha Dehe Wintun Nation, has responded to this outreach with a request for a copy of the present report. A record of consultation is on file with the City.

Records on file with the NWIC provided documentation of three previously recorded archaeological sites within the Project APE (CA-NAP-406, CA-NAP-843, and CA-NAP-1008). An additional five archaeological sites have been identified in the immediate vicinity of the Project. Two of these have been determined NRHP/CRHR eligible. CA-NAP-406 has been determined to be eligible for listing on the NRHP listing under Criterion D with SHPO concurrence. CA-NAP-843 and CA-NAP-1008 were determined with SHPO concurrence to be ineligible for NRHP/CRHR listing based on a lack of sufficient data potential and integrity.

XPI exploratory probing confirmed that soil containing archaeological material associated with CA-NAP-406, CA-NAP-843 and CA-NAP-1008 is present within the Project APE. Phase II excavations and research were able to identify a layer of disturbed fill/redistributed soils across the northern half of the APE which contained the cultural material in its upper layers (generally less than 60 cmbs but as deep as 100 cmbs). It is likely that this upper layer of fill is comprised largely of redeposited and otherwise disturbed cultural deposits associated with CA-NAP-406. Soils identified below the fill was not found to contain cultural deposits or substantial frequencies of cultural material. CA-NAP-843 and CA-NAP-1008 have been subject to previous evaluation efforts, and are not NRHP/CRHR eligible. No intact cultural deposits were identified as a result of XPI, Phase II, and GPR investigations.

6.2 Review of Potential Impacts

The City is the lead agency responsible for compliance with the CEQA. Compliance with Section 106 may also be required. According to CEQA (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect (adverse effect) on the environment and the cultural resource itself. A substantial adverse change in the significance of an historical resource would be constituted by physical demolition, destruction, relocation, or

alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. Once a baseline understanding of resource distribution and significance is understood, the CEQA process provides that some impacts may be made to be less than significant with application of mitigation.

Effects on historic properties under Section 106 of the NHPA are defined in the assessment of adverse effects in 36 CFR Sections 800.5(a)(1). An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. Compliance with Section 106 requires, the criteria of adverse effect are applied to historic properties, if any exist in the Project APE. If no historic properties are identified in the APE, a finding of "no historic properties affected" will be made for the proposed Project. If there are historic properties in the APE, application of the criteria of adverse effect will result in Project-related findings of either "no adverse effect" or of "adverse effect".

CA-NAP-843 and CA-NAP-1008 fall within the APE. These have both been determined ineligible for CRHR/NRHP-listing with concurrence from SHPO. Previous investigations appear to have included the portions of these resources intersecting the present Project APE. Impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect, although appropriate management strategies to account for unanticipated impacts will require consideration.

CA-NAP-406 has been determined to be eligible for CRHR (Criterion 4) and NRHP (Criterion D) listing. Previous investigations evaluating this resource were restricted to portions of this resource located immediately west of the present Project APE. Prior to the presently documented investigations, the actual distribution, composition, and significance of archaeological deposits associated with this resource within the present Project APE remained undetermined. Based on the results of archaeological excavations and a GPR investigation no intact deposits or features associated with CA-NAP-406 appear to extend to within the APE. Disturbed and redeposited archaeological material within the APE is not CRHR/NRHP eligible. As such, effects to known cultural resources resulting from the Project as presently designed would be less than significant, No Historic Properties Affected.

6.3 Recommendations

While archaeological resources were identified within the Project APE, all observed cultural material was identified within disturbed and redeposited context. The exact depth, area, and severity of previous disturbances remains somewhat unclear. The vertical APE of the Project is as deep as 6 feet below the existing ground surface for utility trenching and 1.5 feet below the existing grade for general ground preparation. There is some potential to encounter unanticipated significant cultural resources during Project activities, most notably where intact remnant deposits associated with CA-NAP-406 could be present. Based on the results of XPI, Phase II, and GPR investigations, such deposits have the highest potential to be present deeper than two feet beneath the present grade in areas located north of the planned Starr Avenue expansion. Portions of the APE to the south, presently occupied by vineyards, have a higher potential to contain intact cultural deposits at shallower depth. In addition, it should be noted that numerous human burials have been identified in nearby areas, although not within the Project APE.

Based on identified sensitivity for encountering unanticipated significant cultural resources and human remains, archaeological monitoring is recommended. The following plan has been prepared with the intent of aiding in future cultural monitoring efforts.

Monitoring Roles and Responsibilities

The requirement for a Native American monitor shall be determined by the City in consultation with traditionally culturally affiliated tribes. Archaeological monitors should be present during all initial ground-disturbing activities with the potential to encounter cultural resources. Prior to the initiation ground-disturbing work, construction crews will be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Archaeological monitoring may be adjusted (increase, decreased, or discontinued) at the recommendation of the qualified archaeological principal investigator meeting the Secretary of the Interior's Professional Qualification Standards, and in consultation with the City, based on inspection of exposed cultural material and the observed potential for soils to contain intact cultural deposits or otherwise significant archaeological material.

The archaeological monitor shall be provided a copy of this technical report and its pertinent appendices to inform their monitoring efforts. The archaeological shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. In the event that potentially intact archaeological deposits or features are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until the archaeological principal investigator can evaluate the significance of the find and determine whether or not additional study is warranted. The work exclusion buffer

may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeological principal investigator. Should it be required, temporary flagging may be installed around this resource in order to avoid any disturbances from construction equipment. The potential for project avoidance of potentially significant cultural resources should be a primary consideration as part of this initial process. Significance of the find will be assessed as outlined by CEQA (14 CCR 15064.5(f); PRC Section 21082). If the archaeological principal investigator observes the discovery to be potentially significant under CEQA or Section 106 of the NHPA, additional efforts such as preparation of an archaeological treatment plan, testing, and/or data recovery may be warranted prior to allowing construction to proceed in this area.

In accordance with Section 7050.5 of the California Health and Safety Code, if potential human remains are found the county coroner shall be immediately notified of the discovery. The coroner will provide a determination within 48 hours of notification. No further excavation or disturbance of the identified material, or any area reasonably suspected to overlie additional remains, shall occur until a determination has been made. If the county coroner determines that the remains are, or are believed to be, Native American, they shall notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with California Public Resources Code Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendent (MLD) from the deceased Native American. Within 48 hours of their notification, the MLD will recommend to the lead agency their preferred treatment of the remains and associated grave goods.

Reporting Requirements

Daily monitoring logs will be completed by onsite archaeological monitor. Within 60 days following completion of construction, the qualified archaeological principal investigator shall provide an archaeological monitoring report to the City. This report shall include the results of the cultural monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates all mitigation measures defined in the Environmental Impact Report (EIR) were appropriately met. Appendices should include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the NWIC once considered final.

7 REFERENCES

16 U.S.C. 470–470x-6. National Historic Preservation Act of 1966, as amended.

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APPENDIX A (CONFIDENTIAL)

NWIC Records Search Results

APPENDIX B

SHPO Concurrence Letter for the St Helena Flood Control Project

STATE OF CALIFORNIA – THE RESOURCES AGENCY
ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

RECEIVED
DEC 28 2006
DIVISION OF
FINANCIAL ASSISTANCE

December 14, 2006

Reply to: EPA060919A

Cookie Hirn
Cultural Resources Officer
State Water Resources Control Board
Division of Financial Assistance
1001 I Street
Sacramento, CA 95814

RE: Request for Section 106 consultation, St. Helena Comprehensive Flood Protection Project, Napa County, SRF NO. C-06-6093-110.

Dear Ms. Him,

Thank you for your letter dated 19 September 2006 regarding the above referenced undertaking. Your letter indicates your request for consultation in order to comply with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations at 36 CFR Part 800, is prompted by the use of an United States Environmental Protection Agency (USEPA) capitalization grant, administered by the State Water Resources Control Board (SWRCB) State Revolving Fund (SRF) program, to assist the City of St. Helena and the Napa County Flood Control District with financing of a comprehensive flood protection project. The SWRCB has been delegated authority to act on behalf of the USEPA in carrying out Section 106 responsibilities under the terms of the nationwide *Programmatic Agreement Among the Environmental Protection Agency, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers Concerning Compliance with the National Historic Preservation Act under EPA's State Water Pollution Control Revolving Fund Program* (1990). As the project will also involve a permit from the U.S. Army Corps of Engineers (ACOE), you have consulted with the ACOE and they have agreed that the SWRCB will act as lead agency in fulfilling collective responsibilities under Section 106.

It is my understanding that the proposed undertaking involves a number of interrelated construction components designed to provide flood protection and restore habitat. These components are illustrated on the submittal labeled Enclosure 1 and include: extensive modification of a floodplain terrace on the southern bank of a section of the Napa River (Terrace B), relocation of up to 17 mobile homes currently residing on Terrace B, restoration of approximately 600 feet of shoreline in the Terrace B area, construction of an approximately 2000 foot long levee using the soil removed from Terrace B with the excess soils disposed upon the Miller and Hunter Parcels, installation of a ditch system, construction of a detention basin and pumping facility, installation of a 30-inch storm drain, construction of a new floodwall, and undergrowth clearing for vegetation management referred to as "Element C". It is also my understanding that previously proposed components regarding work on Terrace A and at the nearby wastewater treatment plant are no longer included in the undertaking.

Your letter also describes the Area of Potential Effects (APE), Native American consultation, efforts to identify Historic Properties, requests concurrence on determinations of eligibility for eight identified archaeological sites, and concludes with a request for concurrence on an adverse effect finding for the undertaking. These determinations and findings are supported by the following enclosed documents:

Enclosure 1. APE map

Enclosure 2. *Extended Archaeological Survey Report for the St. Helena Flood Protection Project, City of St. Helena, Napa County, California.* January 2005.

Enclosure 2a *Addendum Archaeological Survey of the Hunter Parcel, St Helena, Napa County, California.* May 2006.

Enclosure 3. *Archaeological Investigation and Evaluation of Eight Sites in the Napa River Floodplain for the St. Helena Flood Protection Project, City of St. Helena, Napa County, California Draft Report.* July 2005. (Evaluation Report).

Enclosure 4. *DRAFT Memorandum of Agreement Among the California State Water Resources Control Board, the United States Army Corps of Engineers, and the California State Historic Preservation Office Regarding the Construction of the St. Helena Comprehensive Flood Protection Project (2006 Plan), Napa County, California.* (MOA)

Based on my review of the enclosed documents, I agree that the APE is adequate to encompass the various components of the proposed undertaking and those efforts to identify historic properties within the APE meet the reasonable and good faith standard. One of the identified archaeological sites, CA-NAP-1007, lies outside the currently defined APE and is therefore removed from further consideration for the present undertaking.

The SWRCB and the ACOE have determined that four of the remaining identified archaeological sites (CA-NAP-413, 843, 1008, and 1009H) lack sufficient data potential and integrity to meet the criteria for National Register eligibility. I concur that CA-NAP-843, 1008, and 1009H are *not* eligible.

As discussed in e-mail and telephone conversations, my questions regarding the potential of site CA-NAP-413 to yield important information have been resolved with the agreement that the eligibility of CA-NAP-413 will be deferred, and a final determination made in conjunction with the archaeological treatment plan prepared and implemented as a component of the resolution of adverse effects. A signature block is included at the end of this letter for you to acknowledge your agreement that the eligibility of CA-NAP-413 is yet to be determined, and that I have correctly understood the various components of the proposed undertaking. At your earliest convenience, please submit a copy of the signed letter for inclusion in our files.

The SWRCB and the ACOE have determined that three sites (CA-NAP-399, 406 and 863) are eligible for listing in the National Register under Criterion D. I concur that these sites *are* eligible based on their potential to yield information important to regional prehistory.

As avoidance of impacts has been considered, and it has been determined that the objectives of the proposed undertaking are important and cannot be met without destroying or damaging the identified Historic Properties, I concur with your adverse effect finding.

While I am able to concur on the above determinations and finding based on the submitted documentation, I request the *Draft* Evaluation Report be finalized in accordance with the Secretary of the Interiors Standards and Guidelines for Archaeology and Historic Preservation and the State of California guidance on Archaeological Resource Management Reports. The revised version should include photographs of the site areas and excavations, photographs or illustrations of recovered formal artifacts, and a more detailed presentation of the results of the

mechanical trenching program with a focus on characterization of the depositional history of the project areas landforms.

While use of the Harris (1989) single context recording system (aka Harris Matrix) was employed during site excavation, it is not fully represented in the reporting, i.e. there is no graphic depiction of a matrix displaying the stratigraphic relationships of the contexts identified at the sites. There also seems to be a lack of integration of the individual sites stratigraphy with each other and with the broader geomorphic history of the area. As geomorphology is integral to the design of the proposed flood control features, a geoarchaeological approach to interpretation of site formation processes would seem a natural fit for this project.

Additional consultation on the excavation methods, and other sampling strategies, proposed to resolve the adverse effects of the undertaking is necessary. Formal comments on the MOA, and attached Historic Properties Treatment Plan (HPTP), submitted to initiate consultation regarding resolution of adverse effects under Section 800.6 are forthcoming. In the interim it is recommended that the SWRCB initiate revisions to the HPTP by reviewing recent data and research trends in the Napa region, e.g. Carpenter and Mikkelsen 2005, Gilreath and Wohlgemuth 2004, Martin and Meyer 2005, White 2002, and Wohlgemuth 2006.

I look forward to our continued consultation of this undertaking. If you have any questions or concerns, please feel free to contact Todd Jaffke at (916) 653-8902, or by e-mail at tjaffke@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

MWD/tj

_____ Date:_____
Cookie Hirn, Cultural Resources Officer, State Water Resources Control Board, Division of Financial Assistance, Sacramento, CA.

References

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2004 Investigations *at Lemmon's Quarry, CA-NAP-117/118.* Far Western Anthropological Research Group, Inc. Submitted to California Department of Forestry and Fire Protection, Santa Rosa Office.

Martin, T. and J. Meyer

2005 *Archaeological Data Recovery at the Napa Creek Site (CA-NAP-916), State Route 29, Napa, California.* Report prepared for Caltrans District 04, Oakland.

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2002 *Cultural Diversity and Culture Change in Prehistoric Clear Lake Basin: Final Report of the Anderson Flat Project.* Center for Archaeological Research at Davis Publication 13. University of California Davis.

Wohlgemuth, E.
2006 *Extended Phase I Investigation at CA-NAP-710/H, -711, and -805, and Phase II Investigations at CA-NAP-710/H and -712, along State Route 29 near St. Helena, Napa County, California.* Draft report prepared for Caltrans District 04, Oakland.

APPENDIX C

NAHC Sacred Lands File Search and AB 52 Notification Letters

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Hunter Subdivision Project (10839-09)

County: Napa

USGS Quadrangle Name: Saint Helena, CA

Township: 8 North **Range:** 6 West **Section(s):** 25, 30, 31, 36

Company/Firm/Agency: Dudek

Contact Person: Adam Giacinto, M.A., RPA

Street Address: 853 Lincoln Way, Suite 208

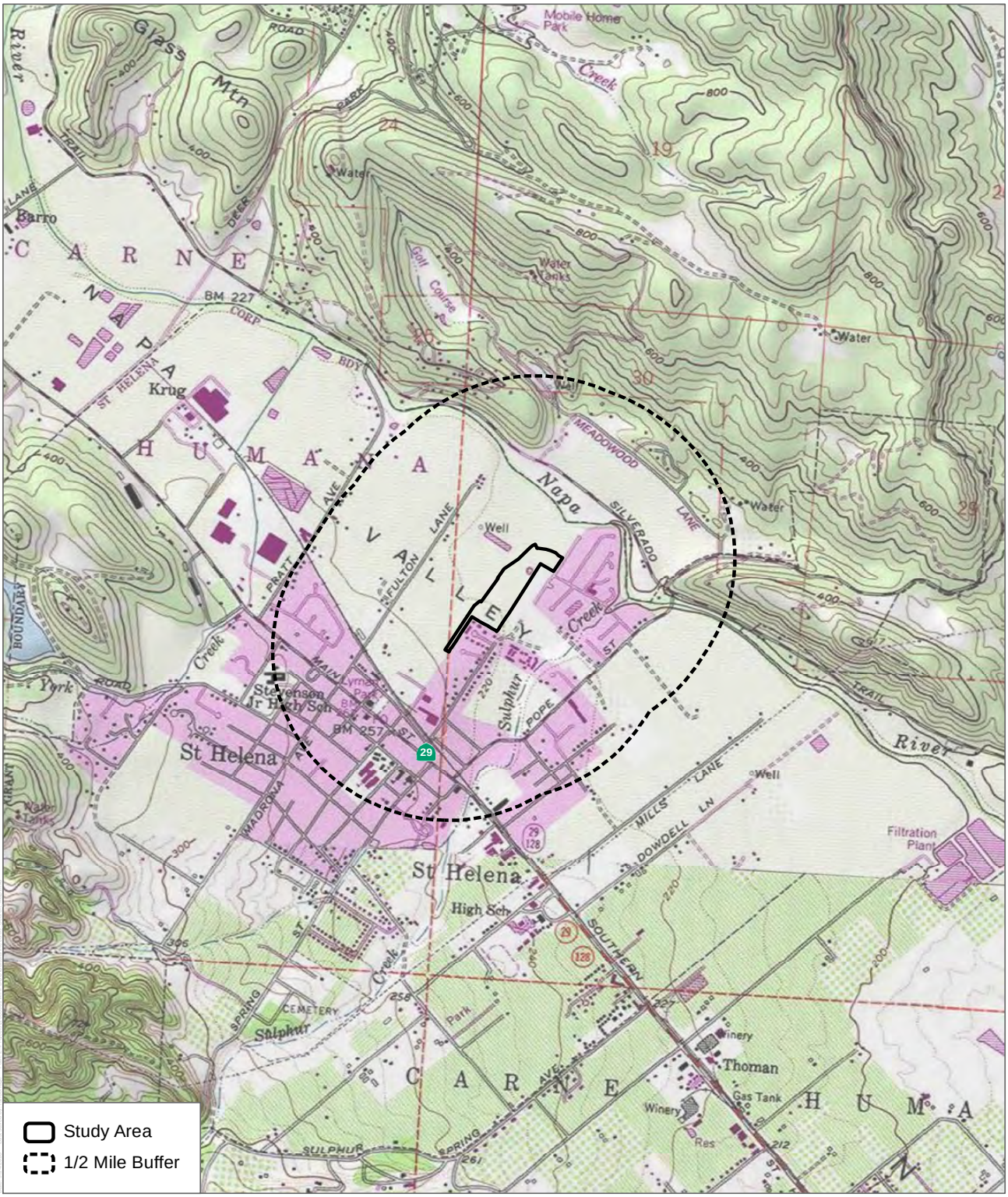
City: Auburn **Zip:** 95603

Phone: 530.863.4653 **Fax:** 530.887.1250

Email: agiacinto@dudek.com

Project Description: The project is assessing current cultural resources constraints for a proposed subdevelopment. The City of Saint Helena is the CEQA lead agency. Dudek is requesting a Sacred Lands File search as part of the cultural resources Inventory process. Please provide contacts for appropriate traditionally geographically affiliated Native American representatives and/or organizations from whom this information may be also requested.

(See attached Project Location Map)



SOURCE: USGS 7.5-Minute Series Saint Helena Quadrangle
Township 8N; Range 6W, 5W; Sections 25, 30, 31, 36

DUDEK

Records Search
Hunter Subdivision Project

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

October 10, 2018

Adam Giancinto
DUDEK

Sent by Email: agiacinto@dudek.com
Number of Pages: 2

RE: Hunter Subdivision Project, Saint Helena, Napa County

Dear Mr. Giacinto:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results**. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult.** If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: Sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

Native American Heritage Commission
Native American Contacts List
10/10/2018

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630 Wintun / Patwin
Williams ,CA 95987
(530) 473-3274 Office
(530) 473-3301 Fax

Middletown Rancheria
Jose Simon III, Chairperson
P.O. Box 1035 Pomo
Middletown ,CA 95461 Lake Miwok
(707) 987-3670 Office
(707) 987-9091 Fax

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road Wappo
Windsor ,CA 95492
scottg@mishewalwappotribe.com
(707) 494-9159

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18 Wintun (Patwin)
Brooks ,CA 95606
aroberts@yochadehe-nsn.gov
(530) 796-3400
(530) 796-2143 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed: Ash, Inc./Bel Air Greens General Hunter Subdivision Project, Saint Helena, Napa County.

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

Cortina Band of Indians
Charlie Wright, Chairperson
P.O. BOX 1630
Williams, CA 95987

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Wright,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

Project Location: The project site is located in the northeast portion of the City, at the eastern terminus of Adams Street, north of Starr Avenue and west of the Napa River (Assessor's Parcel 009-030-057), see attached vicinity map.

Project Description: The proposed project includes a request to approve a Tentative Map to subdivide the existing 16.9-acre parcel into 51 single-family lots, one 3.4-acre parcel, and a 0.06-acre remainder parcel. The project design also includes onsite water, sewer and storm drain infrastructure to tie into the City's existing system and the extension of Adams Street and Starr Avenue to connect to the City's roadway system, in keeping with the City's 1993 General Plan Circulation Element

Upon receipt of this notice, the Cortina Band of Indians has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If the Cortina Band of Indians provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

The Federated Indians of Graton Rancheria
Greg Sarris, Chairperson
6400 Redwood Drive, Ste 300
Rohnert Park 94928

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Sarris,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

Project Location: The project site is located in the northeast portion of the City, at the eastern terminus of Adams Street, north of Starr Avenue and west of the Napa River (Assessor's Parcel 009-030-057), see attached vicinity map.

Project Description: The proposed project includes a request to approve a Tentative Map to subdivide the existing 16.9-acre parcel into 51 single-family lots, one 3.4-acre parcel, and a 0.06-acre remainder parcel. The project design also includes onsite water, sewer and storm drain infrastructure to tie into the City's existing system and the extension of Adams Street and Starr Avenue to connect to the City's roadway system, in keeping with the City's 1993 General Plan Circulation Element

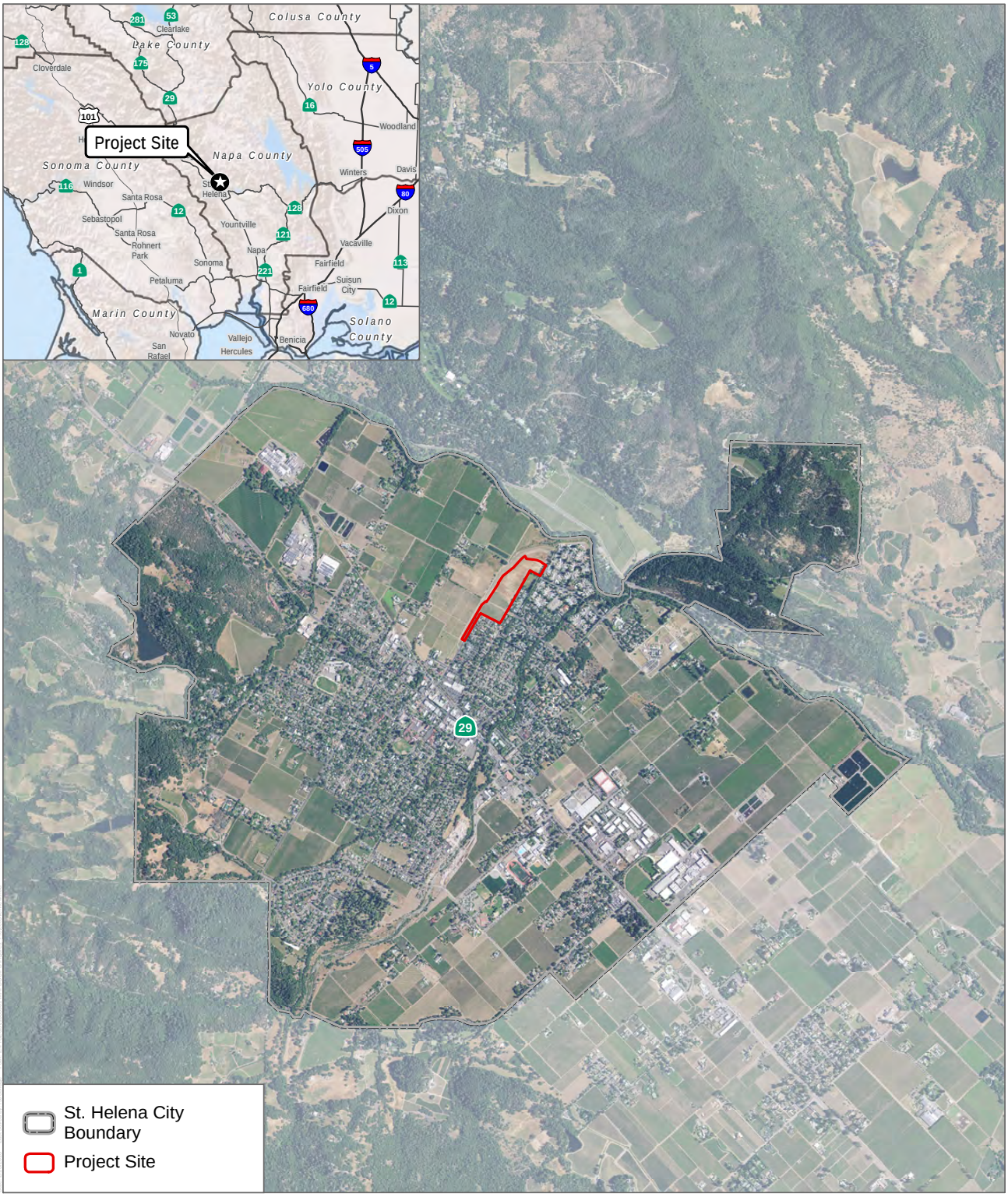
Upon receipt of this notice, the Federated Indians of Graton Rancheria has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If the Federated Indians of Graton Rancheria provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

The Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste 300
Rohnert Park 94928

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Buvelot,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

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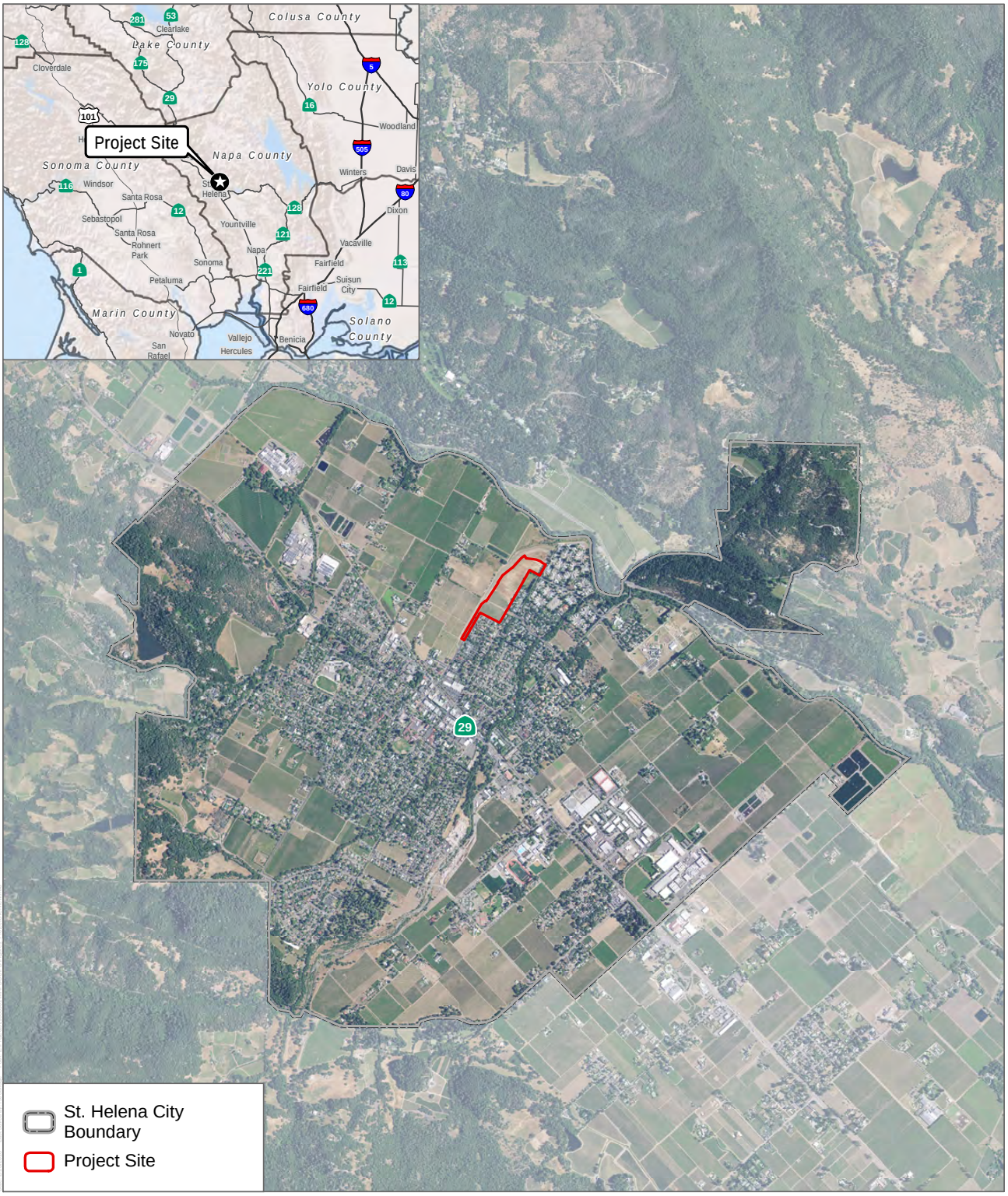
Upon receipt of this notice, The Federated Indians of Graton Rancheria has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If The Federated Indians of Graton Rancheria provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project

From: THPO@gratonrancheria.com [mailto:THPO@gratonrancheria.com]
Sent: Wednesday, May 16, 2018 3:38 PM
To: Noah Housh
Subject: Proposed Hunter Subdivision

Dear Noah Housh,

The Federated Indians of Graton Rancheria, a federally recognized Tribe and sovereign government has received your correspondence requesting information on a project located at Proposed Hunter Subdivision. The Tribe has reviewed the location of the project and we have determined it is not in our traditional ancestral territory, therefore have no comments on this project, at this time. We appreciate the opportunity to review the project proposal. If you have any additional questions regarding this letter please feel free to email my office at thpo@gratonrancheria.com or call the office at (707) 566-2288.

Sincerely,
Buffy McQuillen
Tribal Heritage Preservation Officer (THPO)
Native American Graves Protection and Repatriation Act (NAGPRA)
Office: 707.566.2288; ext. 137
Cell: 707.318.0485
FAX: 707.566.2291

Antonette Tomic
THPO Administrative Assistant
Federated Indians of Graton Rancheria
6400 Redwood Drive, Suite 300
Rohnert Park, CA 94928
Office: 707.566.2288, ext. 143
Fax: 707.566.2291
atomic@gratonrancheria.com

please consider our environment before printing this email.

Federated Indians of Graton Rancheria and Tribal TANF of Sonoma & Marin - Proprietary and Confidential
CONFIDENTIALITY NOTICE: This transmittal is a confidential communication or may otherwise be privileged. If you are not the intended recipient, you are hereby notified that you have received this transmittal in error and that any review, dissemination, distribution or copying of this transmittal is strictly prohibited. If you have received this communication in error, please notify this office at 707-566-2288, and immediately delete this message and all its attachments, if any. Thank you

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

Middletown Rancheria of Pomo Indians
Jose Simon III, Chairperson
P.O. Box 1035
Middletown, CA 95461

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Simon,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

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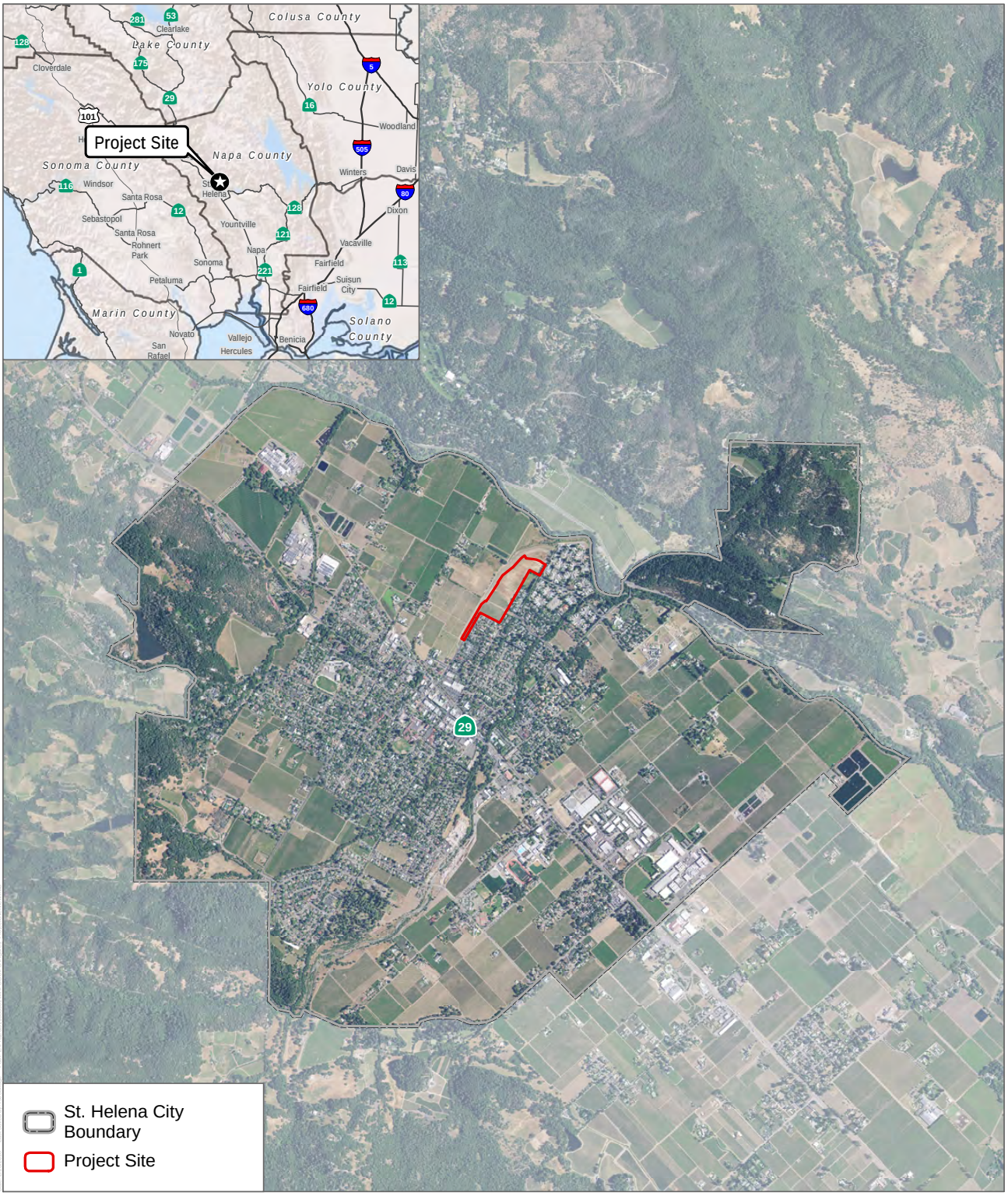
Upon receipt of this notice, the Middletown Rancheria of Pomo Indians has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If the Middletown Rancheria of Pomo Indians provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

Mishewal Wappo Tribe of Alexander Valley
Vincent Salsedo
P.O. BOX 1086
Santa Rosa, CA 95402

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Salsedo,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

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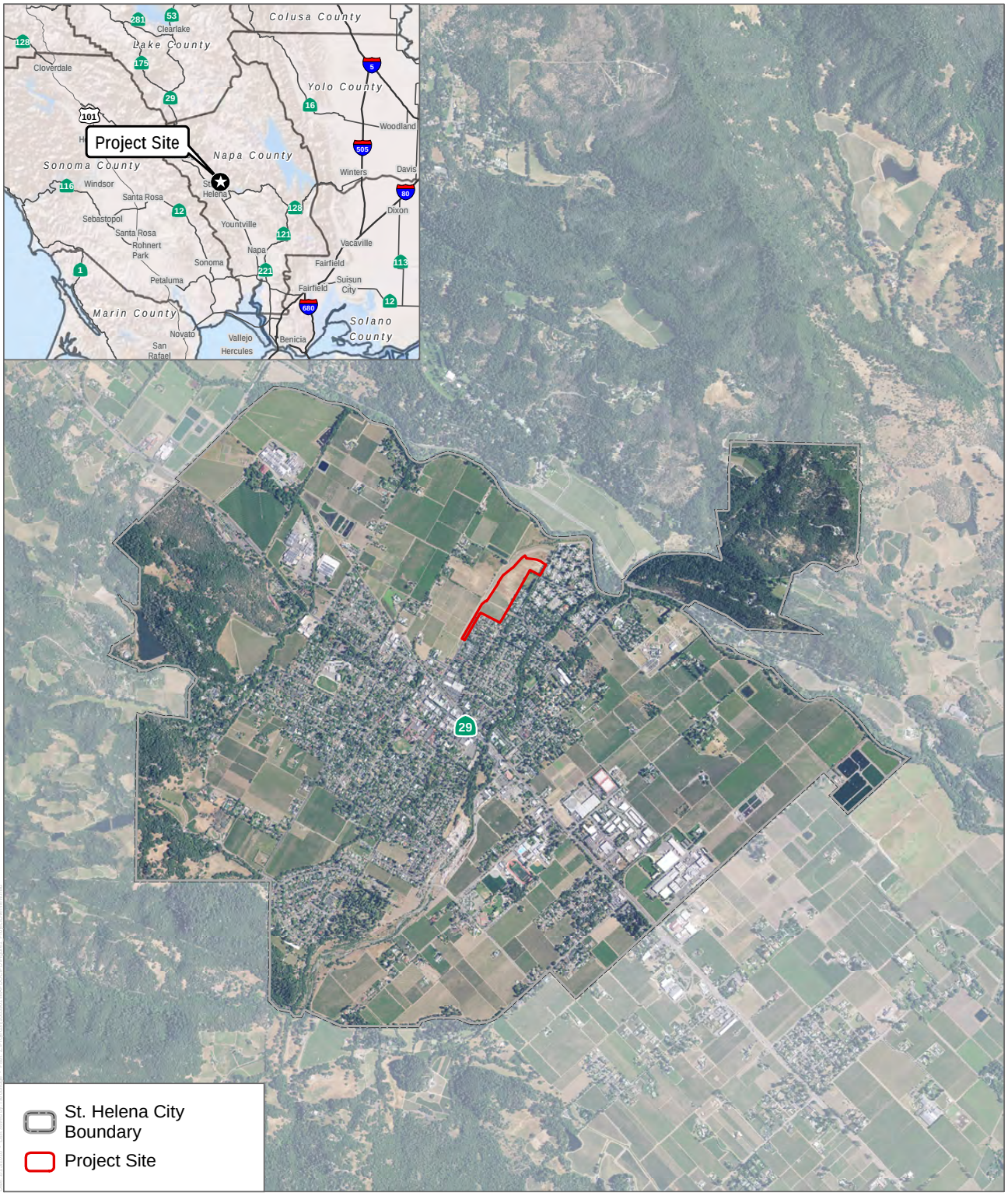
Upon receipt of this notice, the Mishewal Wappo Tribe of Alexander Valley has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If the Mishewal Wappo Tribe of Alexander Valley provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project

City of St. Helena
Planning Department
1480 Main Street
St. Helena, CA 94574

April 23, 2018

Yocha Dehe Wintun Nation
Leland Kinter, Chairperson
P.O. BOX 18
Brook, CA 95606

RE: Proposed Hunter Subdivision (Assessor's Parcel 009-030-057)
File No. PL2010-40

Mr. Kinter,

This letter provides notice, pursuant to Public Resources Code §21080.3.1(d), that the City of St. Helena is in receipt of a development application subject to the California Environmental Quality Act (CEQA) and Assembly Bill 52. The City of St. Helena recognizes the importance of preserving tribal cultural resources and respectfully invites you to consult on and participate in the review process for this project.

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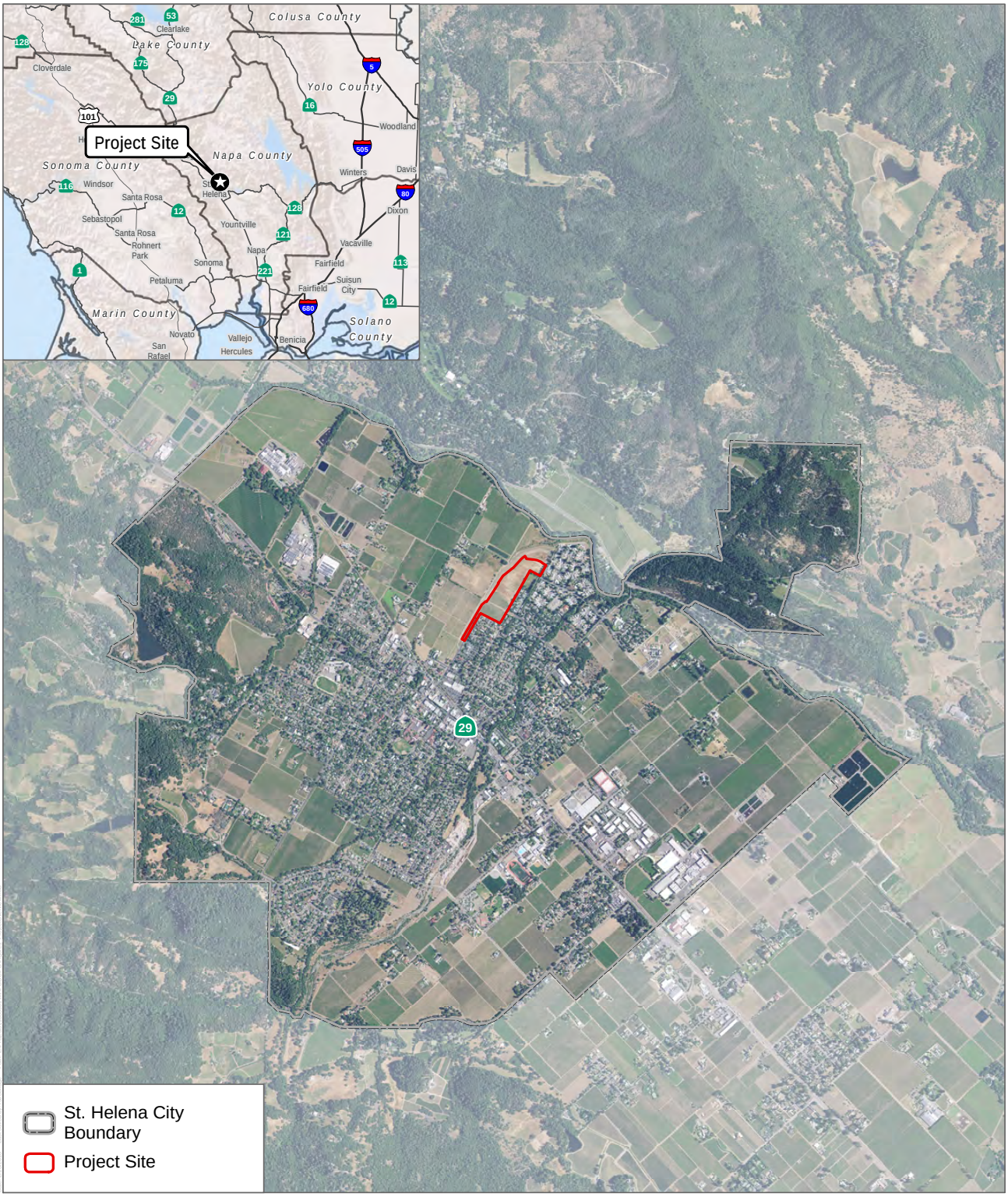
Upon receipt of this notice, the Yocha Dehe Wintun Nation has thirty (30) days to request consultation pursuant to Public Resources Code §21083.3.1, 21083.3.2, and 21083.3. If the Yocha Dehe Wintun Nation provides the City of St. Helena with confidential information subject to Public Resources Code §21082.3(c), Government Code §6254.10, or Government Code Section §6254(r), we request that it be explicitly labeled and packaged to prevent inadvertent public disclosure.

If you have any questions and/or would like to request consultation, please contact me at 707-968-2659 or nhoush@sthelena.org.



Noah Housh,
Planning and Community Improvement Director
City of St. Helena

ATTACHMENT: Vicinity Map



SOURCE: USDA NAIP Imagery (2016); Napa County GIS (2015)

DUDEK

0 0.25 0.5 Miles

FIGURE 1

Project Location

Hunter Subdivision Project

YOCHA DEHE
CULTURAL RESOURCES

May 22, 2018

City of St. Helena, Planning Dept.
Attn: Noah Housh, Director
1480 Main Street
St. Helena, CA 94574

RE: Hunter Subdivision Project File No. PL2010-40

Dear Mr. Housh:

Thank you for your project notification letter dated, April 23, 2018, regarding cultural information on or near the proposed Hunter Subdivision Project, St. Helena, Napa County. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, the Tribe has concerns that the project could impact known archaeological/cultural sites. Please send us the cultural resource study for this project.

Should you have any questions, please contact the following individual:

Reimann Rouse, GIS Analyst
Yocha Dehe Wintun Nation
Office: (530) 723-2805
Email: rrouse@yochadehe-nsn.gov

Please refer to identification number YD – 05212018-02 in any correspondence concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

Marilyn Delgado
Director of Cultural Resources

Yocha Dehe Wintun Nation
PO Box 18 Brooks, California 95606 p) 530.796.3400 f) 530.796.2143 www.yochadehe.org

APPENDIX D

Ground Penetrating Radar Results

GRID01

10 x 10 m

21 X lines, 21 Y lines

0.5m spacing

Starting point: SW corner

Transects progress in a forward/reverse direction (alternating direction)

GRID02

7.5 x 10 m

16 X lines, 21 Y lines

0.5m spacing

Starting point: SW corner

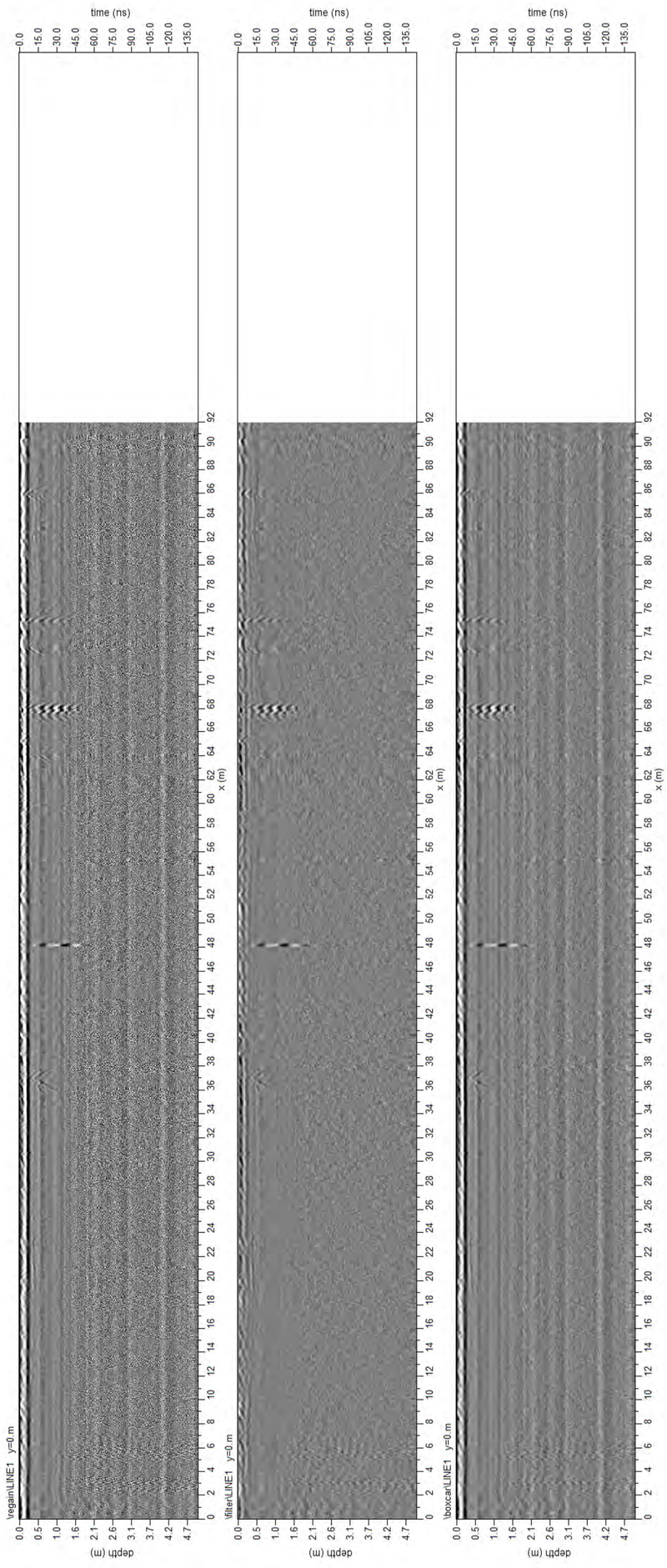
Transects progress in a forward/reverse direction (alternating direction)

LINESET

#	Feet	Meters
L-1	303.7639696	92.5827399
L-2	135.4376145	41.27937047
L-3	136.0253088	41.45849095
L-4	304.739171	92.87996678
L-5	305.3310671	93.06036791
L-6	308.6705208	94.07818372
L7	307.208955	93.63272021
L-8	310.0050917	94.48494109
L-9	307.2382551	93.64165044
L-10	313.3336194	95.49942682
L-11	311.6784213	94.99494706
L-12	314.0050929	95.70408196
L-13	315.0704754	96.0287947
L-14	136.9952042	41.75410064
L-15	176.8782512	53.90986016
L-16	316.4090042	96.43675837
L-17	318.9322955	97.20582002
L-18	319.5485919	97.393658
L-19	321.0521732	97.85192722

L-20	401.1411849	122.2618668
L-21	403.4247082	122.9578507
L-22	404.9017897	123.4080432
L-23	122.7124776	37.40093801
L-24	251.2389221	76.57388665
L-25	406.1657642	123.7932838
L-26	406.5474007	123.9096009

Filtering
Radar files to regain using AGC gain
Regain to boxcar using 1x1
Boxcar to background filter using auto setting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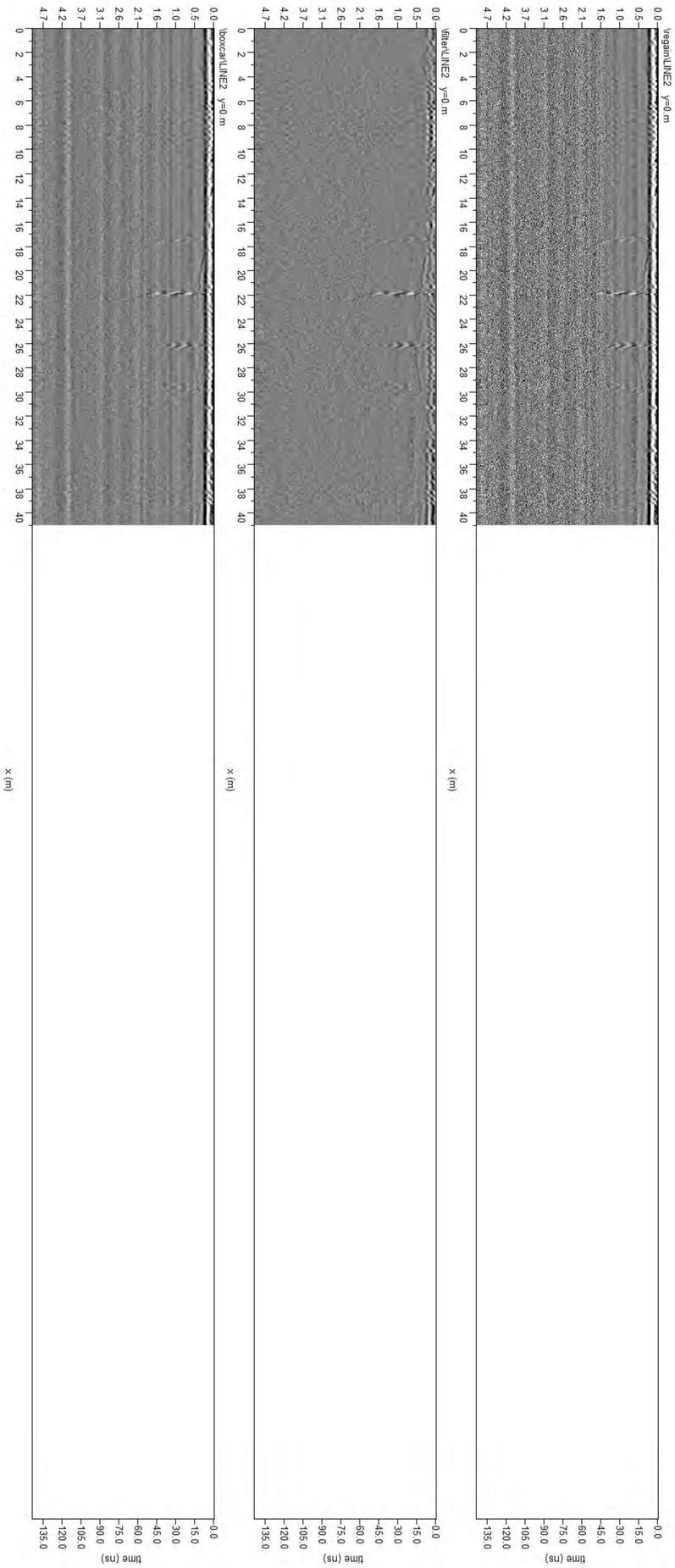
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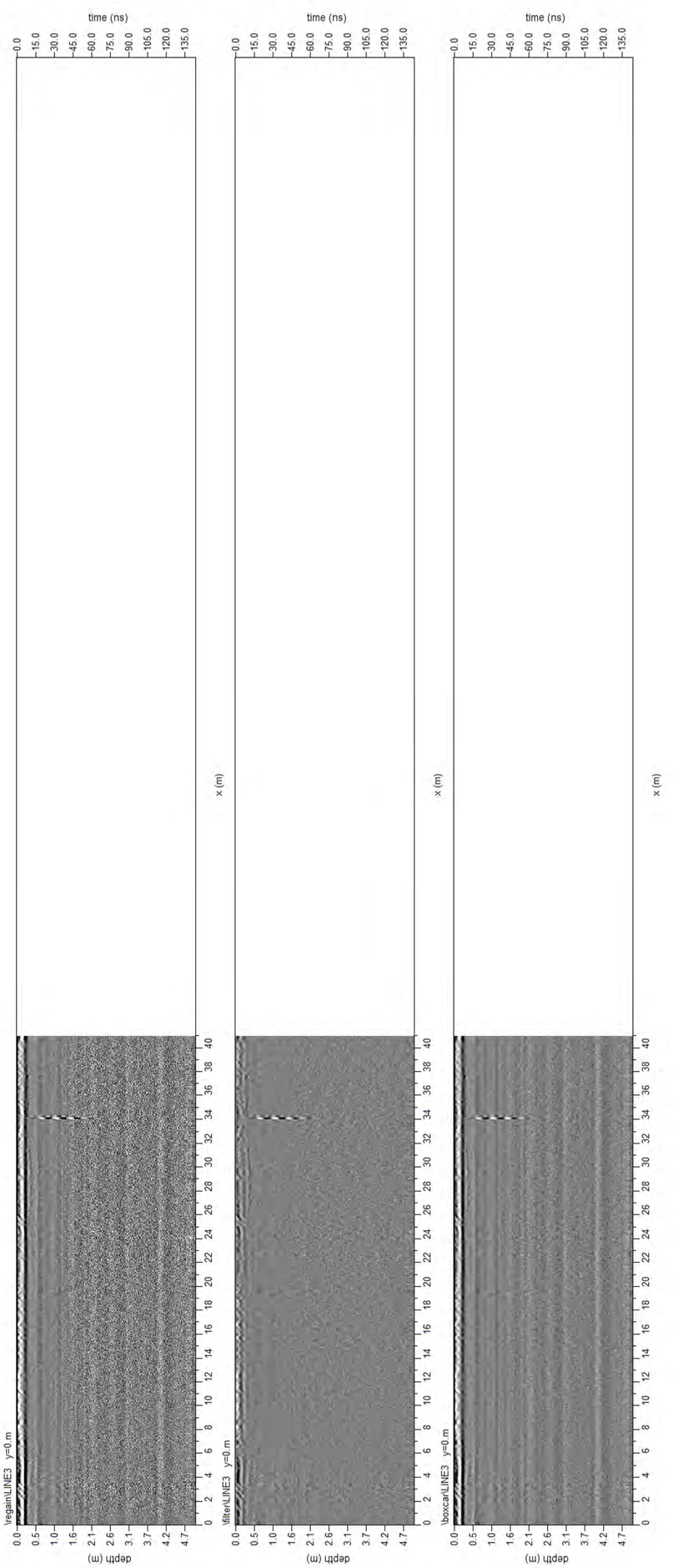
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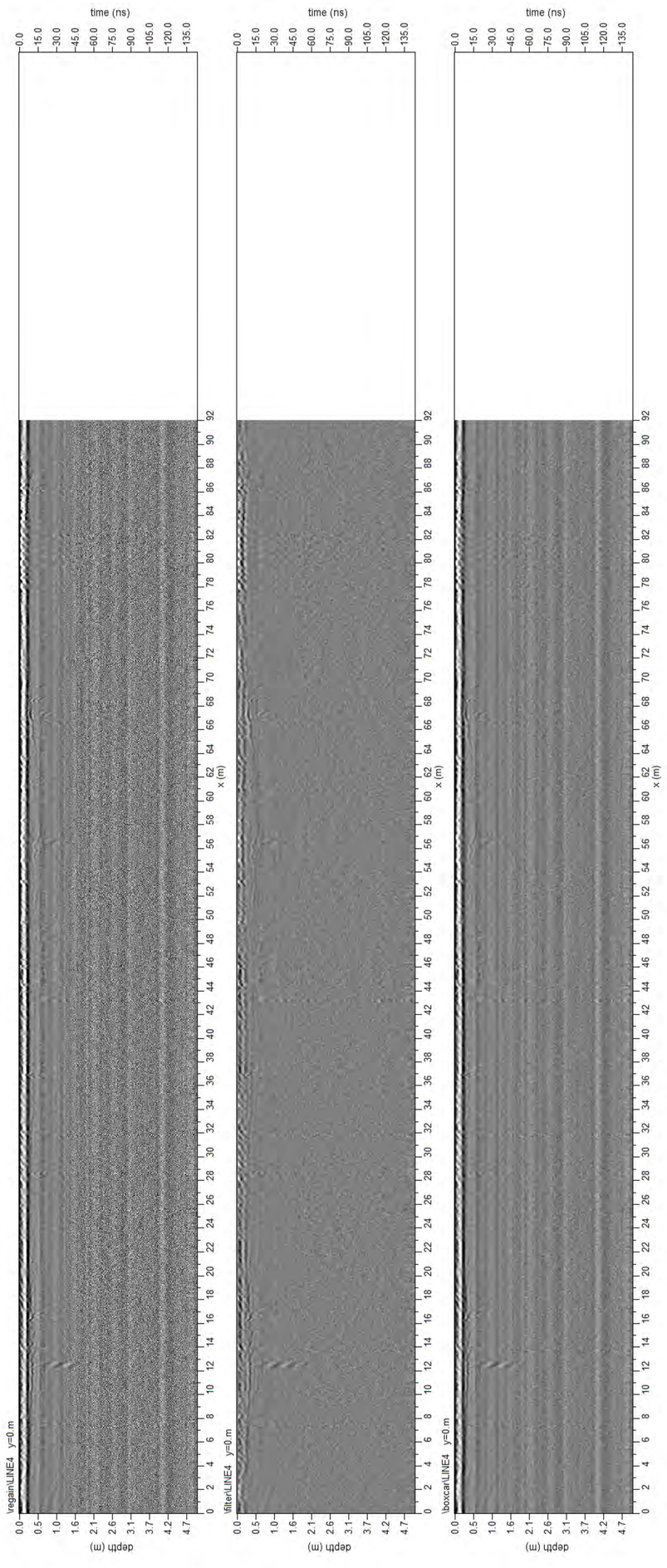
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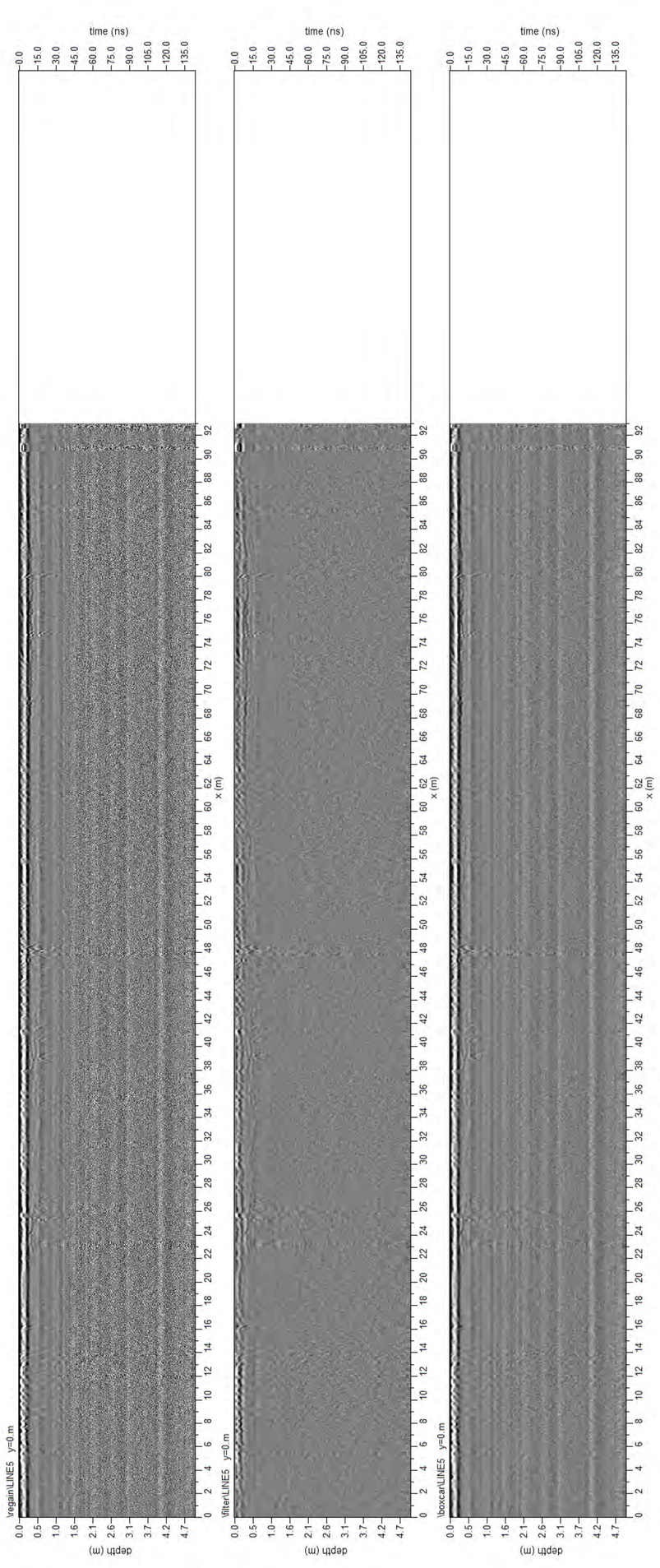
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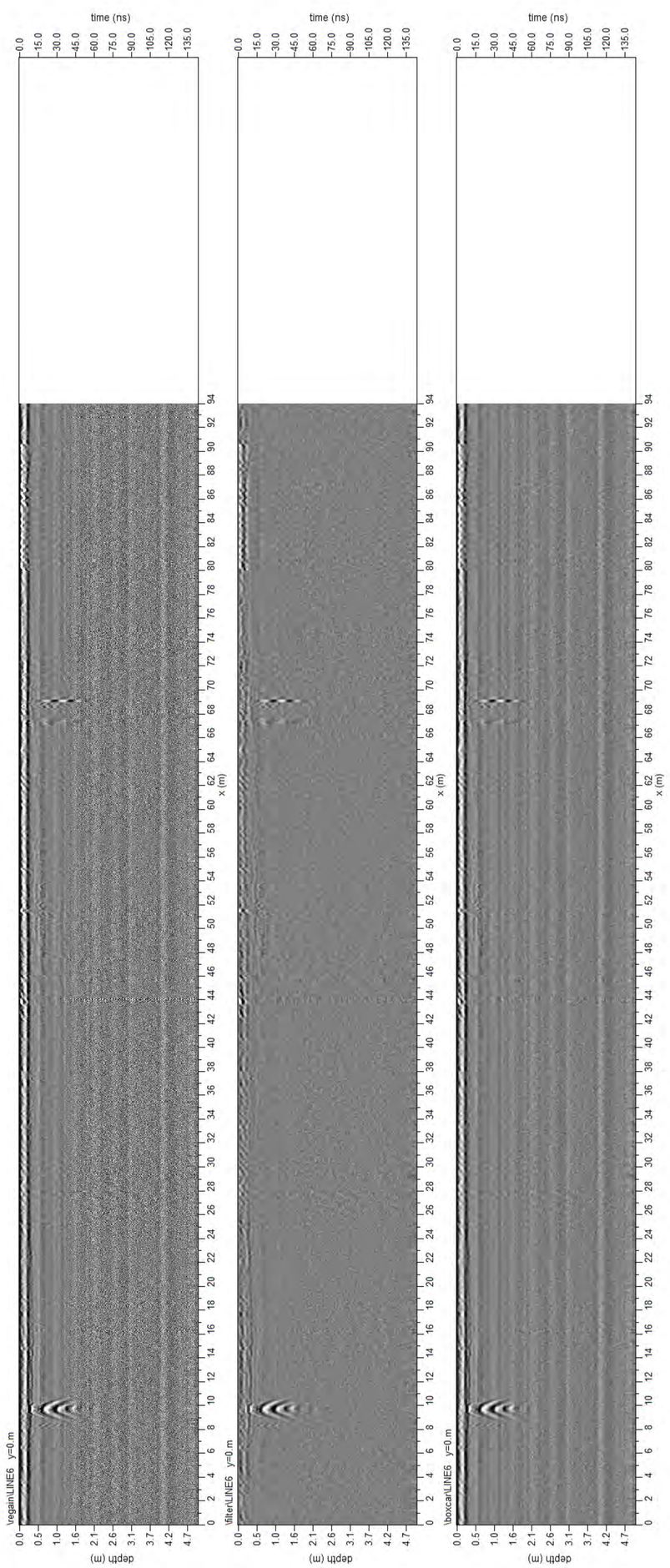
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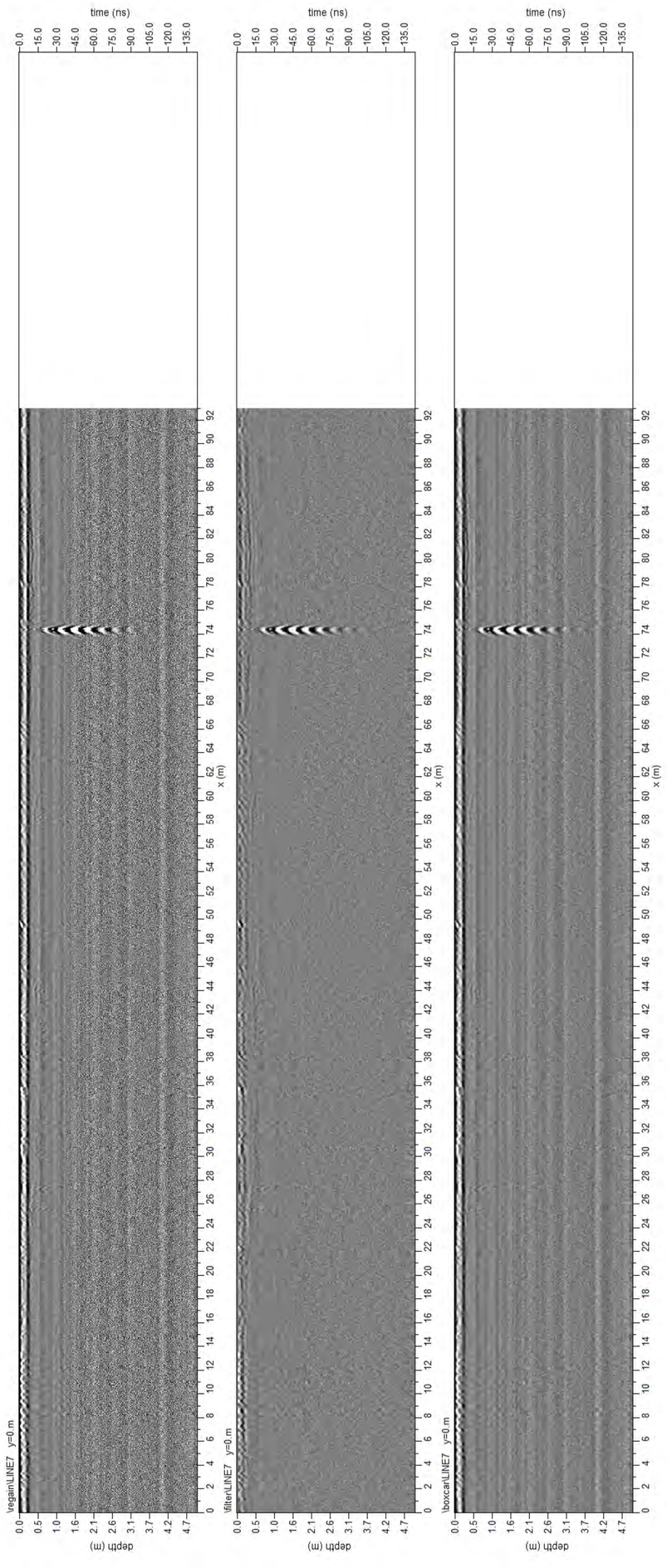
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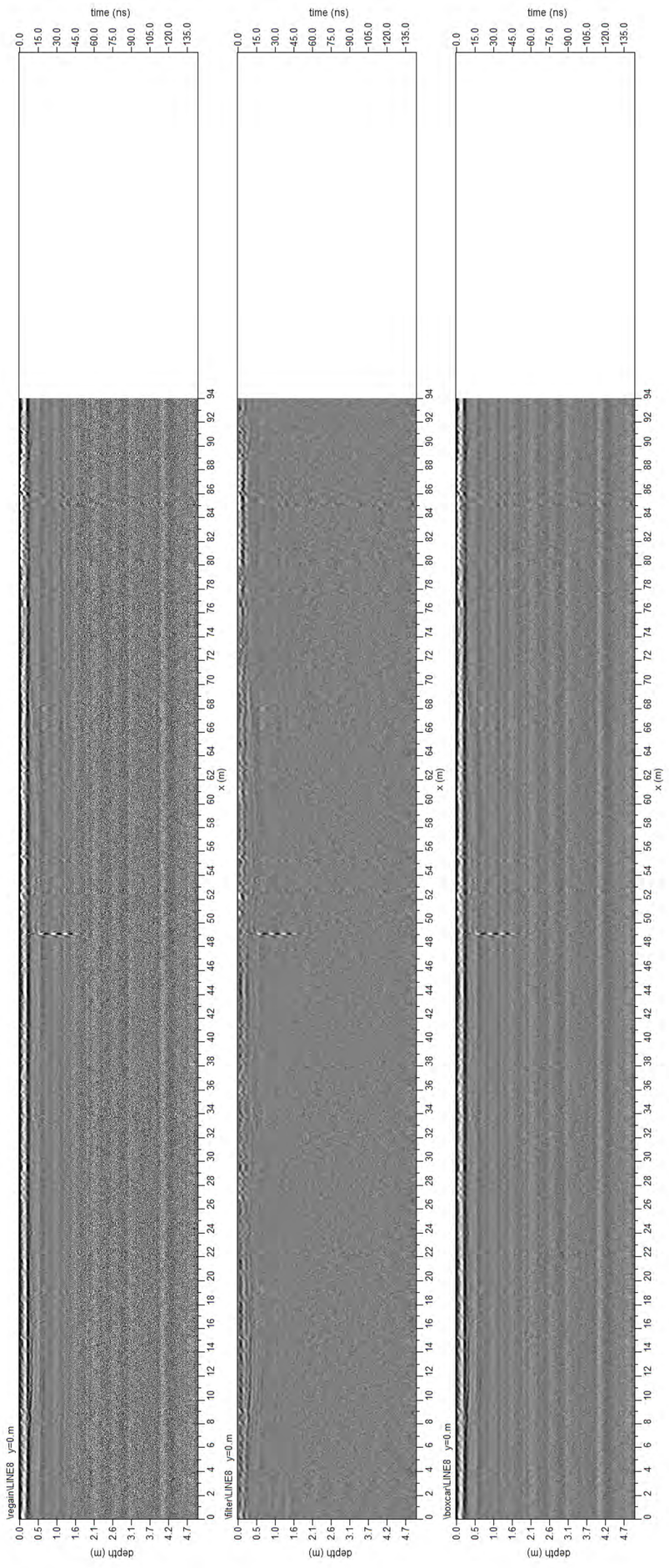
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0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
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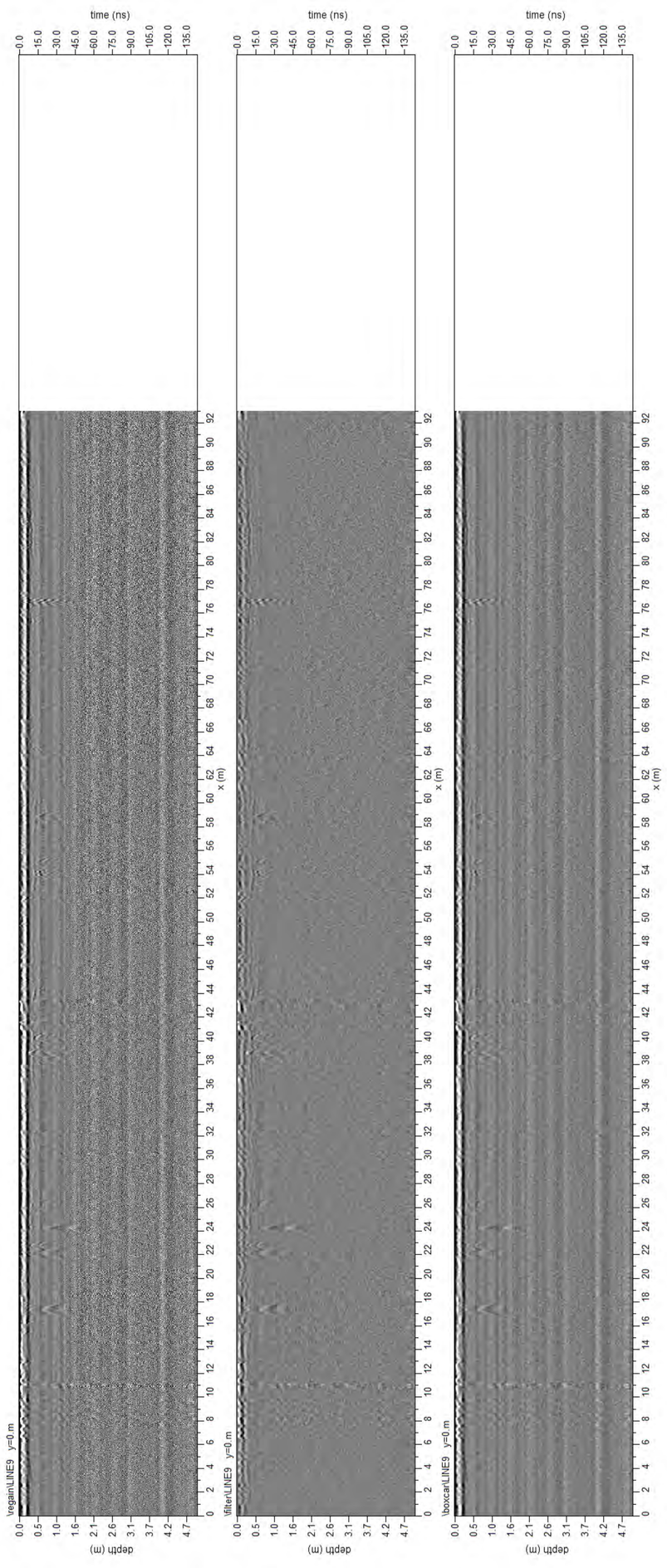
80
82
84
86
88
90
92
94


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\regain\LINE9 y=0 m
\filter\LINE9 y=0 m
\boxcar\LINE9 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
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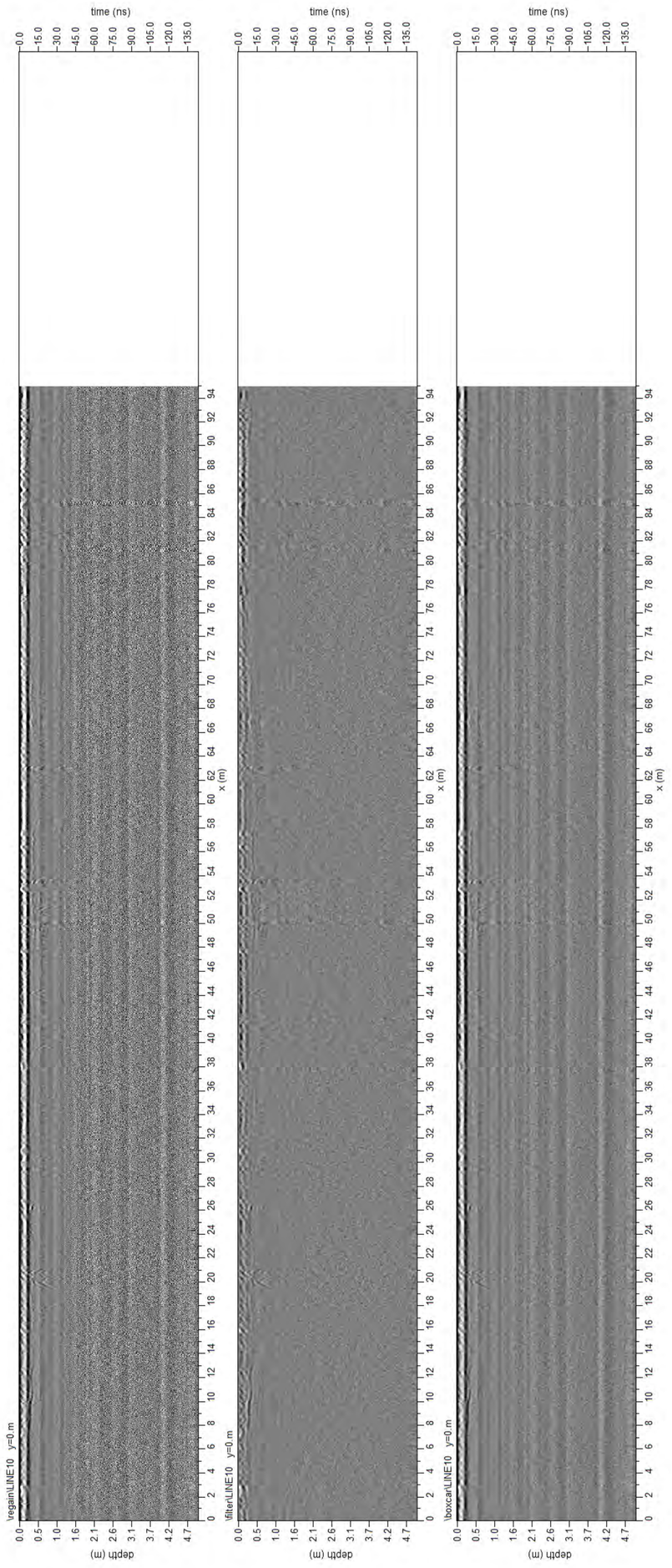
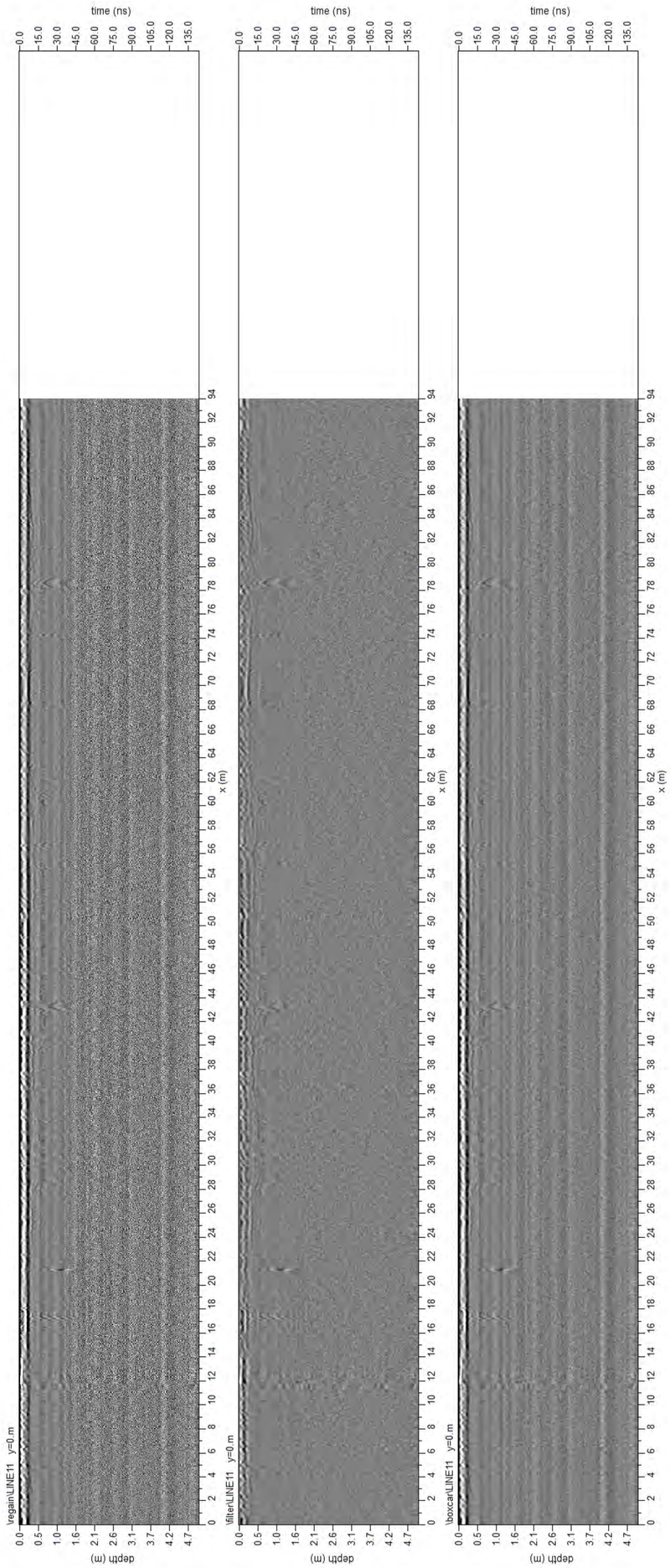
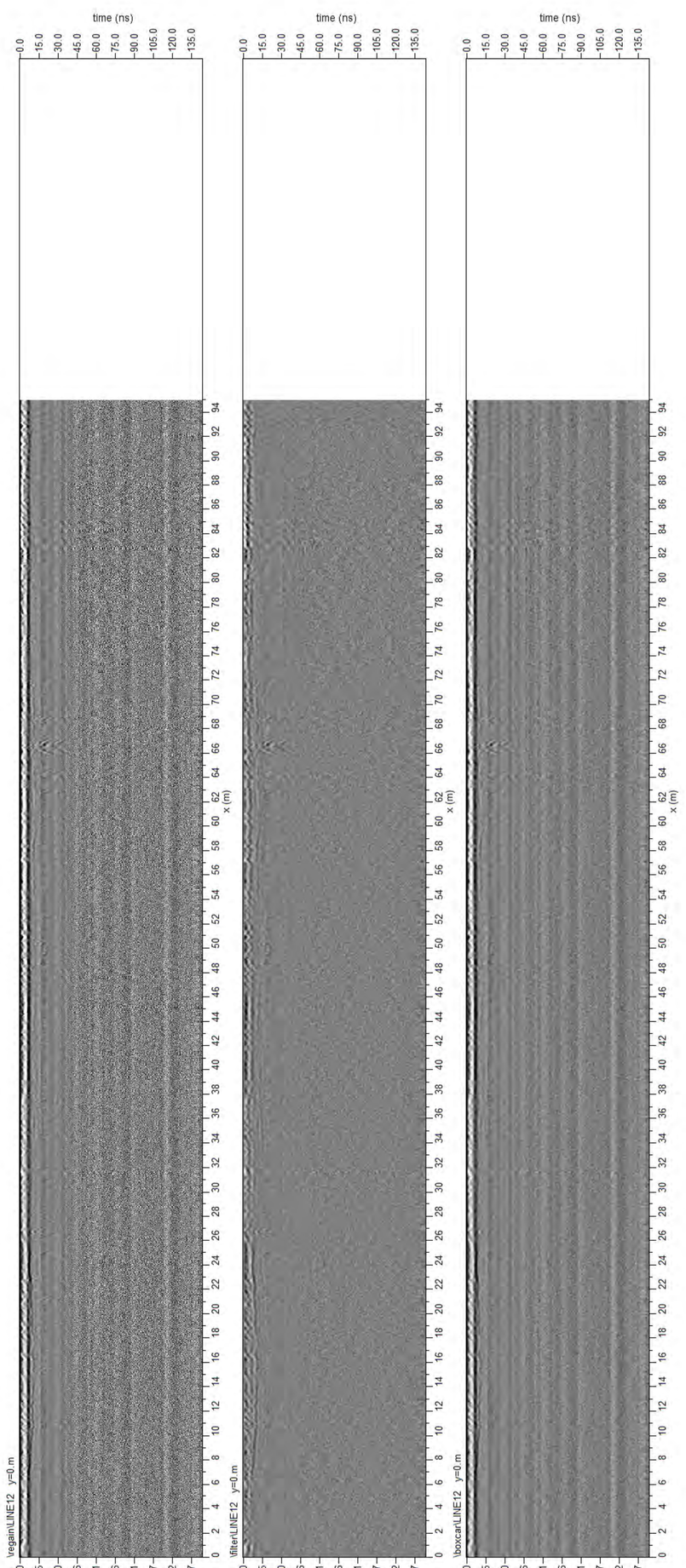
86
88
90
92


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
86
88
90
92
94
\vegain\LINE10 y=0 m
\filter\LINE10 y=0 m
\boxcar\LINE10 y=0 m


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
80
82
84
86
88
90
92
94
\regain\LINE11 y=0 m
\filter\LINE11 y=0 m
\boxcar\LINE11 y=0 m


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegaInLINE12 y=0 m
\filterLINE12 y=0 m
\boxcarLINE12 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
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60
62
64
66
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74
76
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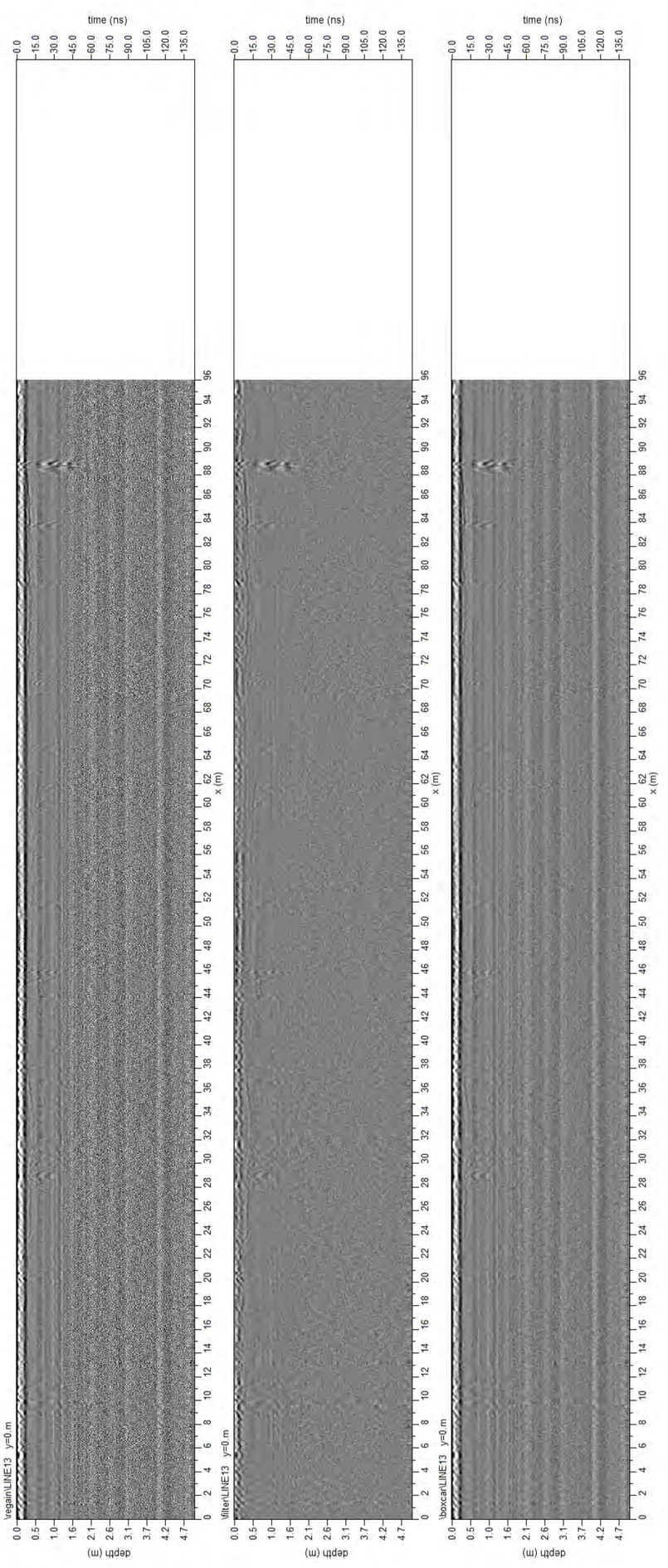
88
90
92
94


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegain\LINE13 y=0 m
\filter\LINE13 y=0 m
\boxcar\LINE13 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
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60
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64
66
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72
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90
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94
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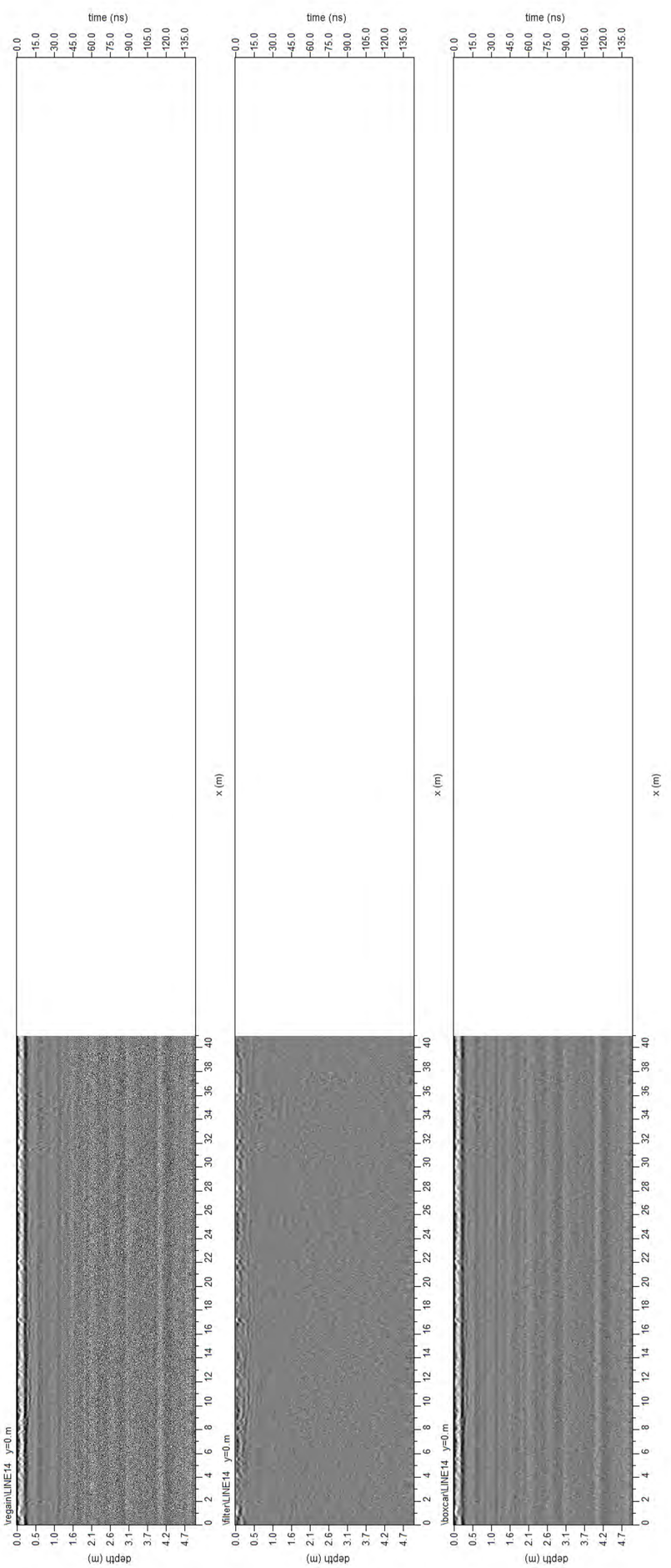
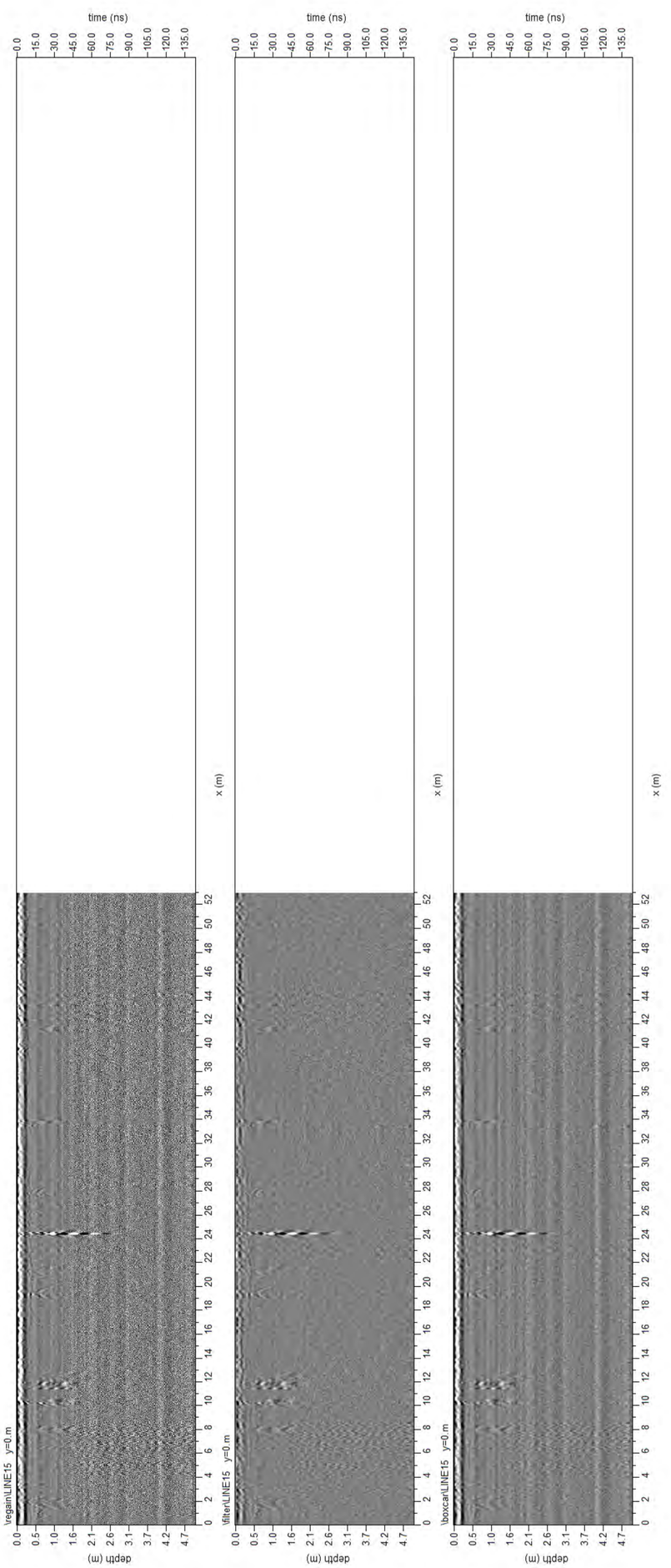
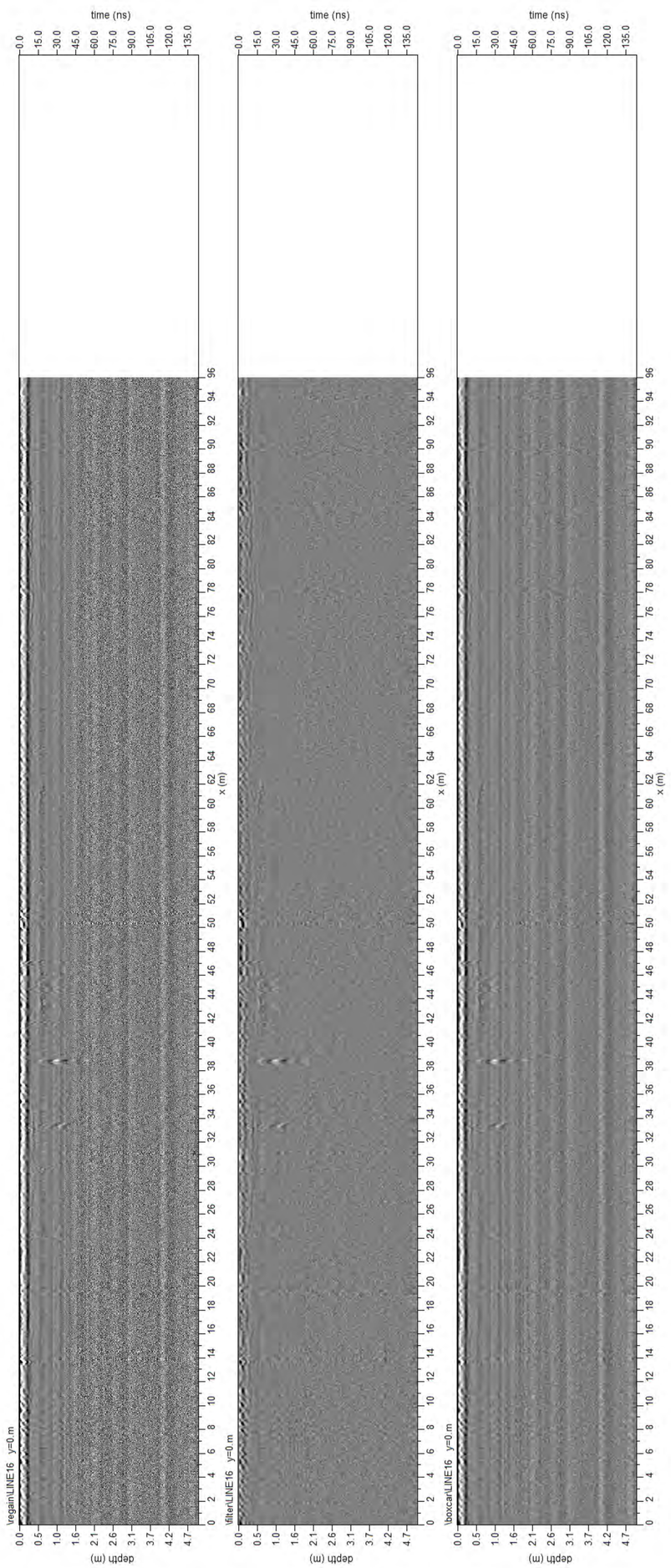

time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegam\LINE14 y=0 m
\filer\LINE14 y=0 m
\boxcar\LINE14 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegain\LINE15 y=0 m
\filer\LINE15 y=0 m
\boxcar\LINE15 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\regain\LINE16 y=0.m
\filter\LINE16 y=0.m
\boxcar\LINE16 y=0.m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
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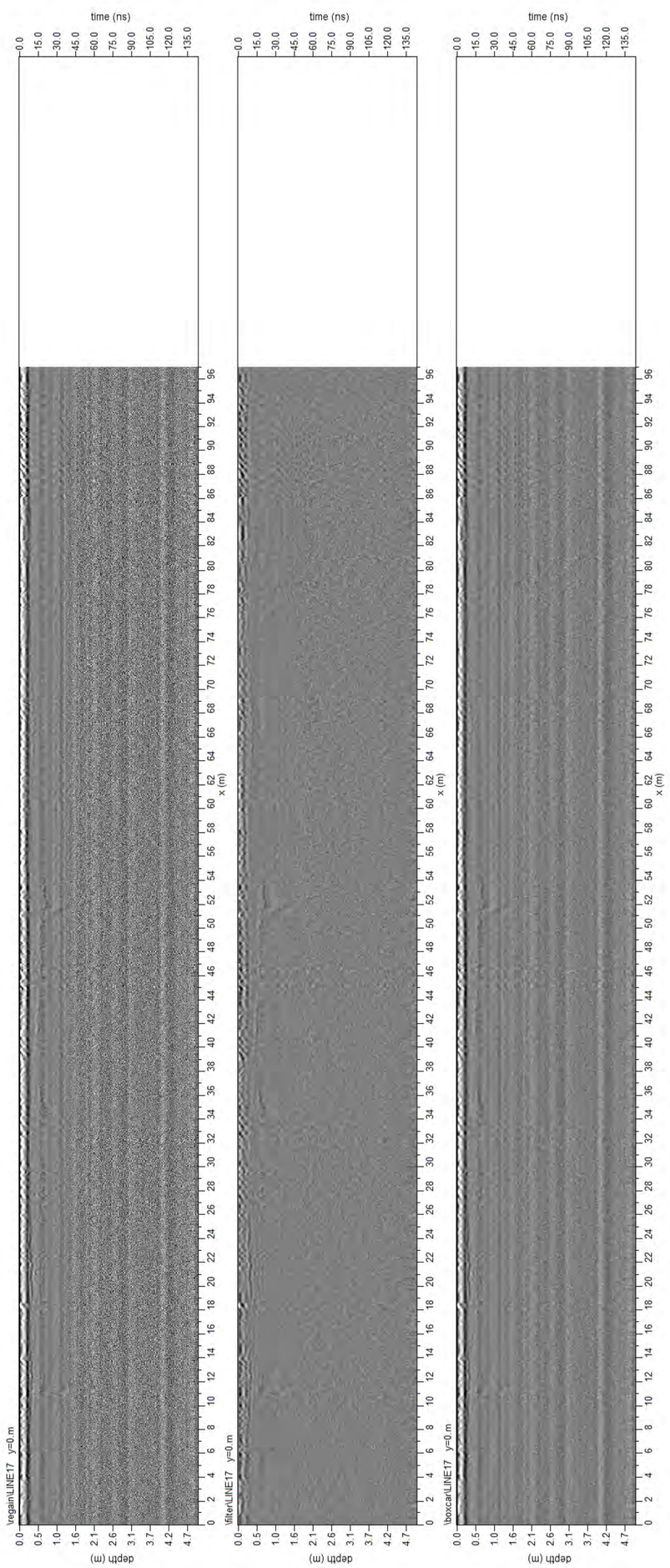
time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegaInLINE17 y=0 m
\filterLINE17 y=0 m
\boxcarLINE17 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
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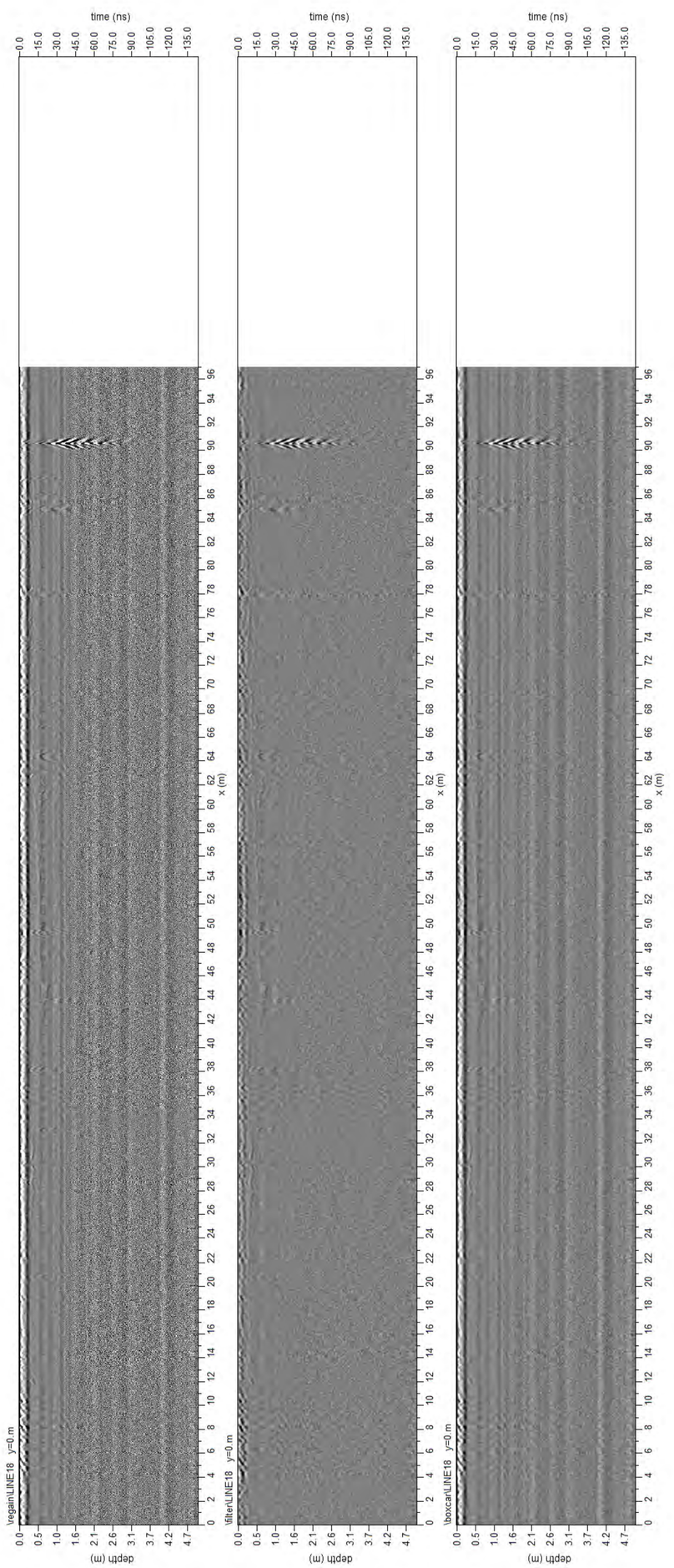
time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\regain\LINE18 y=0 m
\filter\LINE18 y=0 m
\boxcar\LINE18 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
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66
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74
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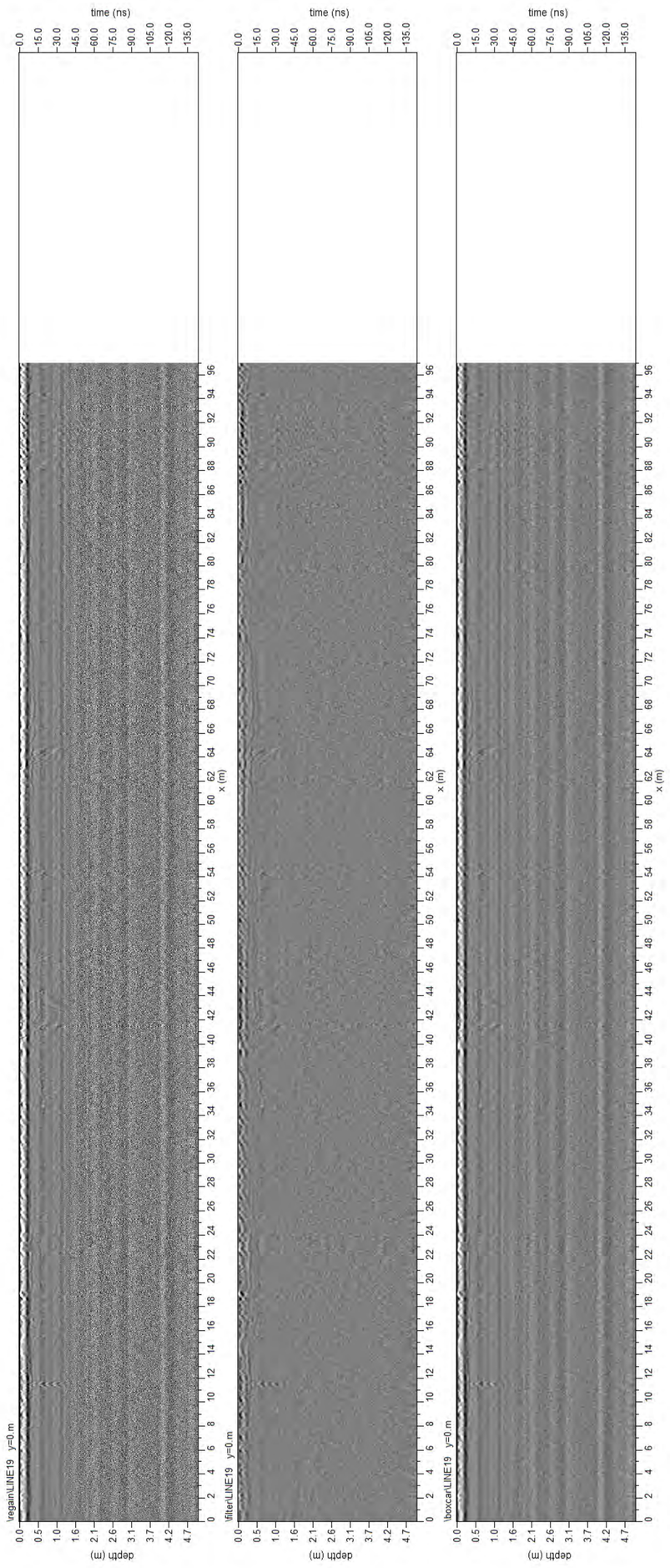
time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\regain\LINE19 y=0 m
\filter\LINE19 y=0 m
\boxcar\LINE19 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
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94
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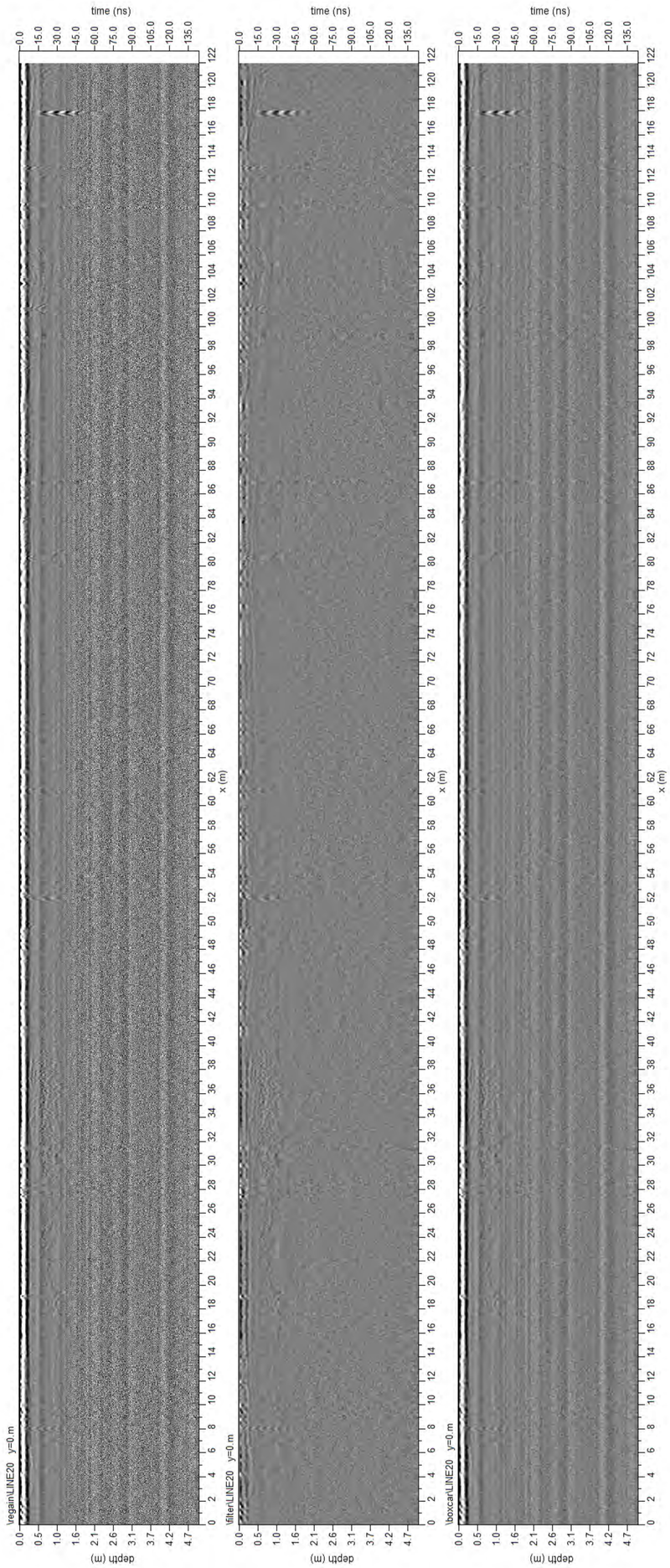
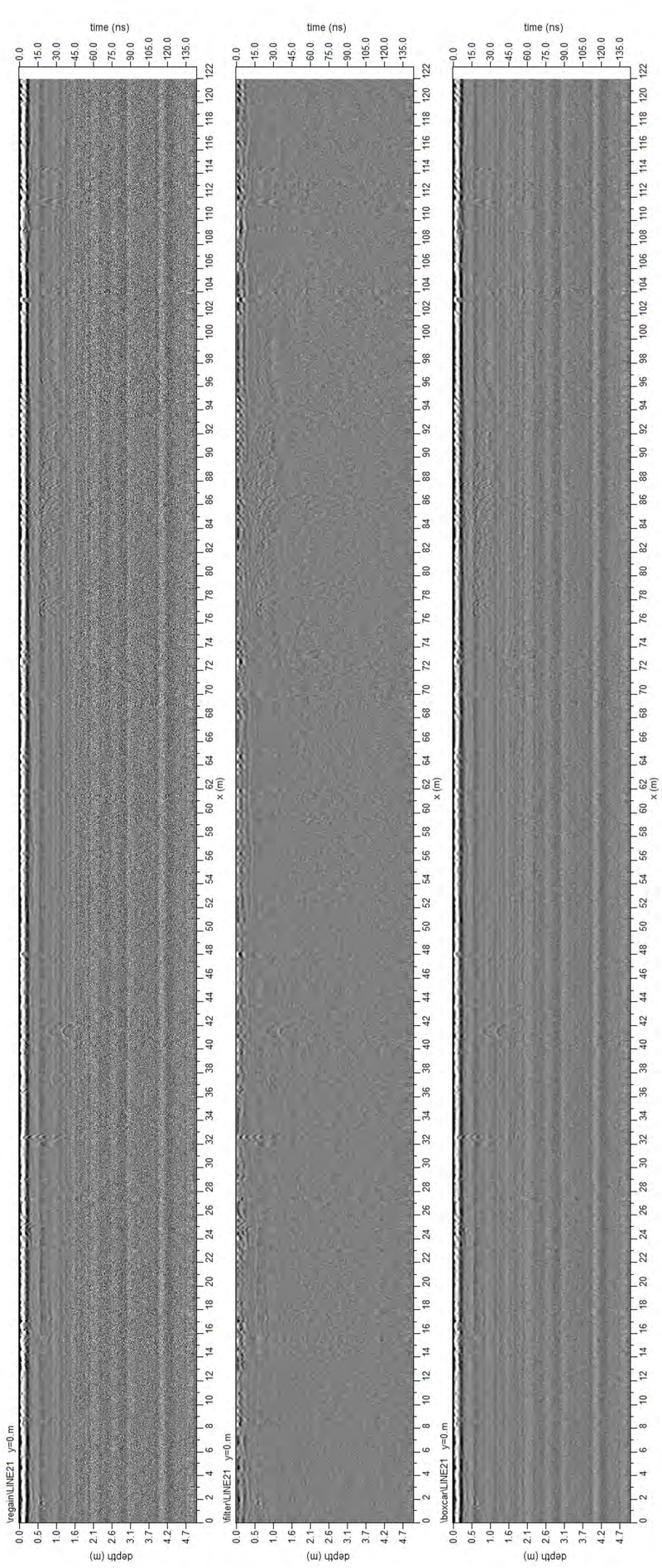
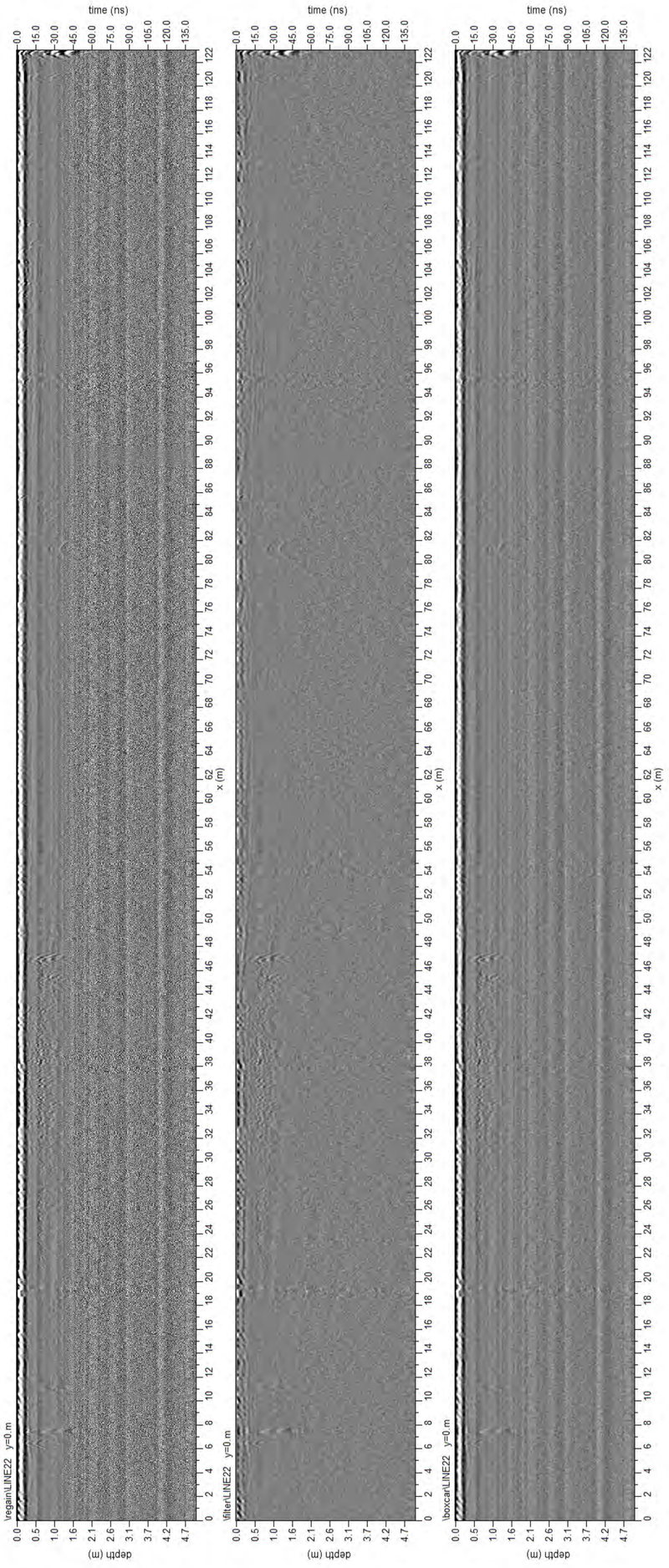

time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\egain\LINE20 y=0 m
\filter\LINE20 y=0 m
\boxcar\LINE20 y=0 m
depth (m)
x (m)


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
122
120
118
116
114
112
110
108
106
104
102
100
98
96
94
92
90
88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
x (m)
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
\regain\LINE21 y=0.m
\filter\LINE21 y=0.m
\boxcar\LINE21 y=0.m


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\vegain\LINE22 y=0 m
\filter\LINE22 y=0 m
\boxcar\LINE22 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
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86
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92
94
96
98
100
102
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112
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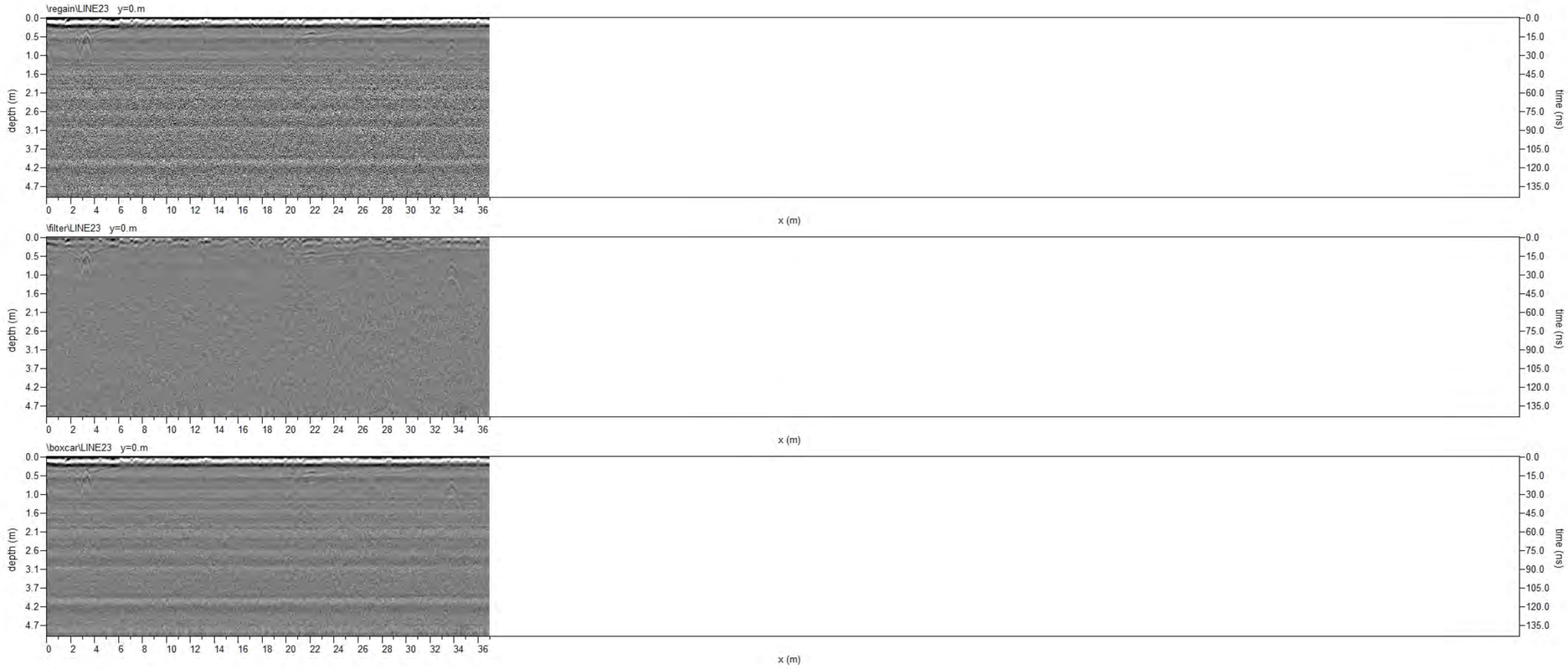
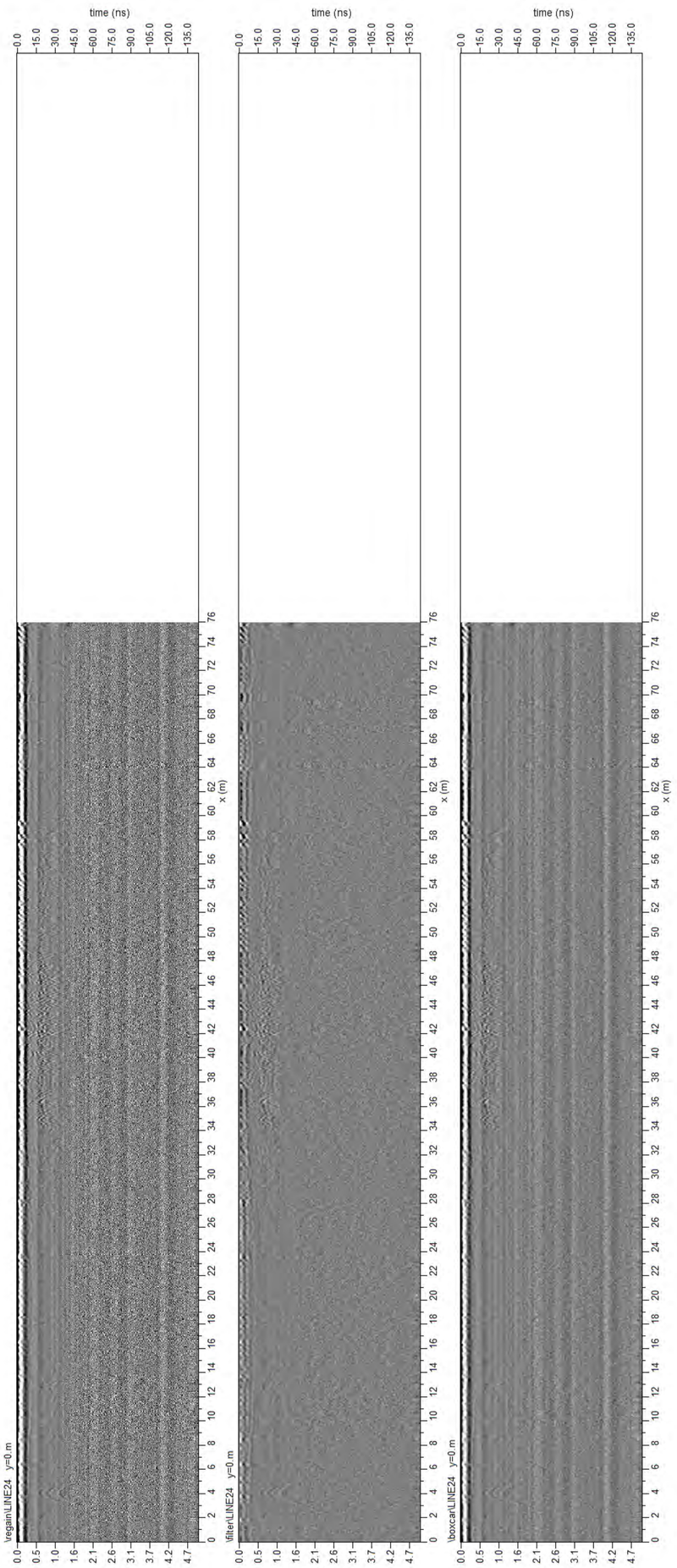
116
118
120
122


\regain\LINE23 y=0.m
\filter\LINE23 y=0.m
\boxcar\LINE23 y=0.m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36
x (m)


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\egain\LINE24 y=0 m
\filter\LINE24 y=0 m
\boxcar\LINE24 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
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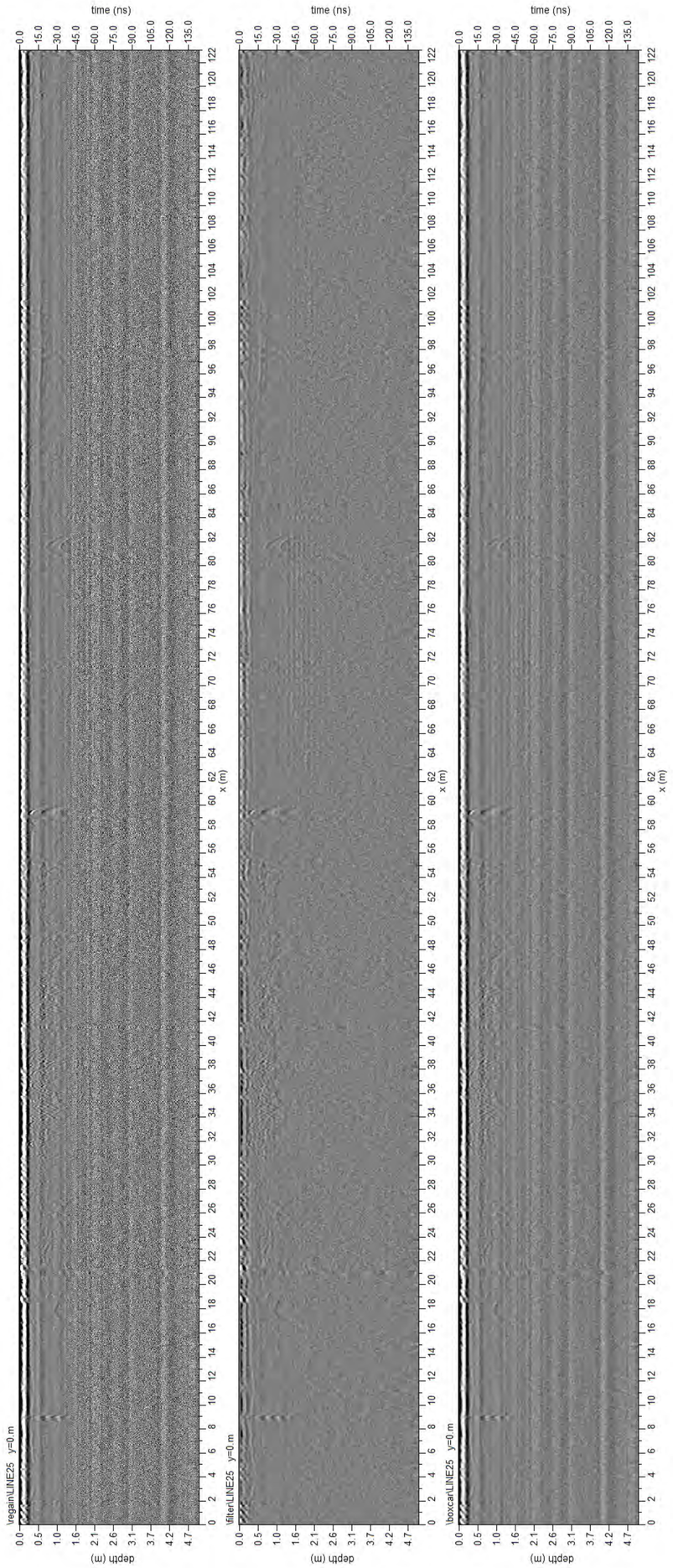
time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
\regain\LINE25 y=0 m
\filter\LINE25 y=0 m
\boxcar\LINE25 y=0 m
depth (m)
0.0
0.5
1.0
1.6
2.1
2.6
3.1
3.7
4.2
4.7
x (m)
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
42
44
46
48
50
52
54
56
58
60
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66
68
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72
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76
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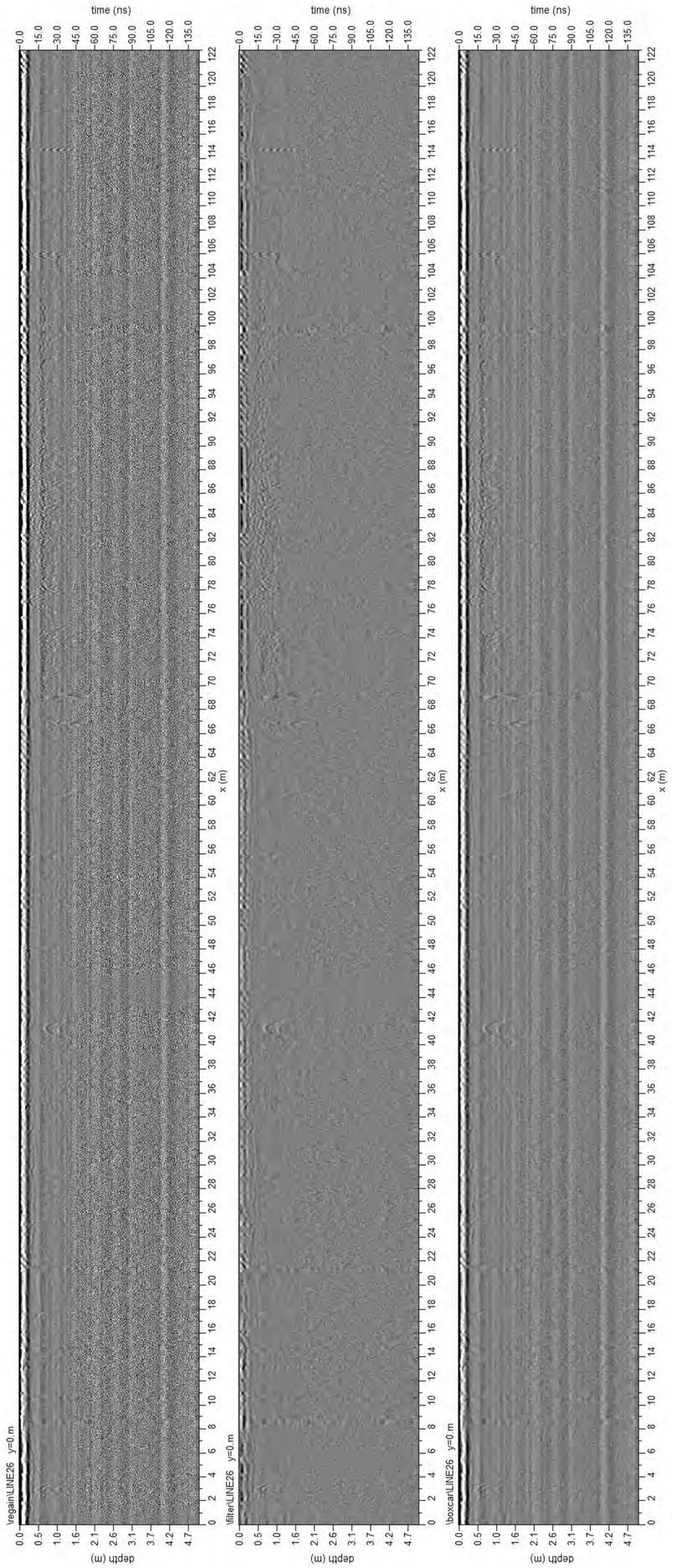
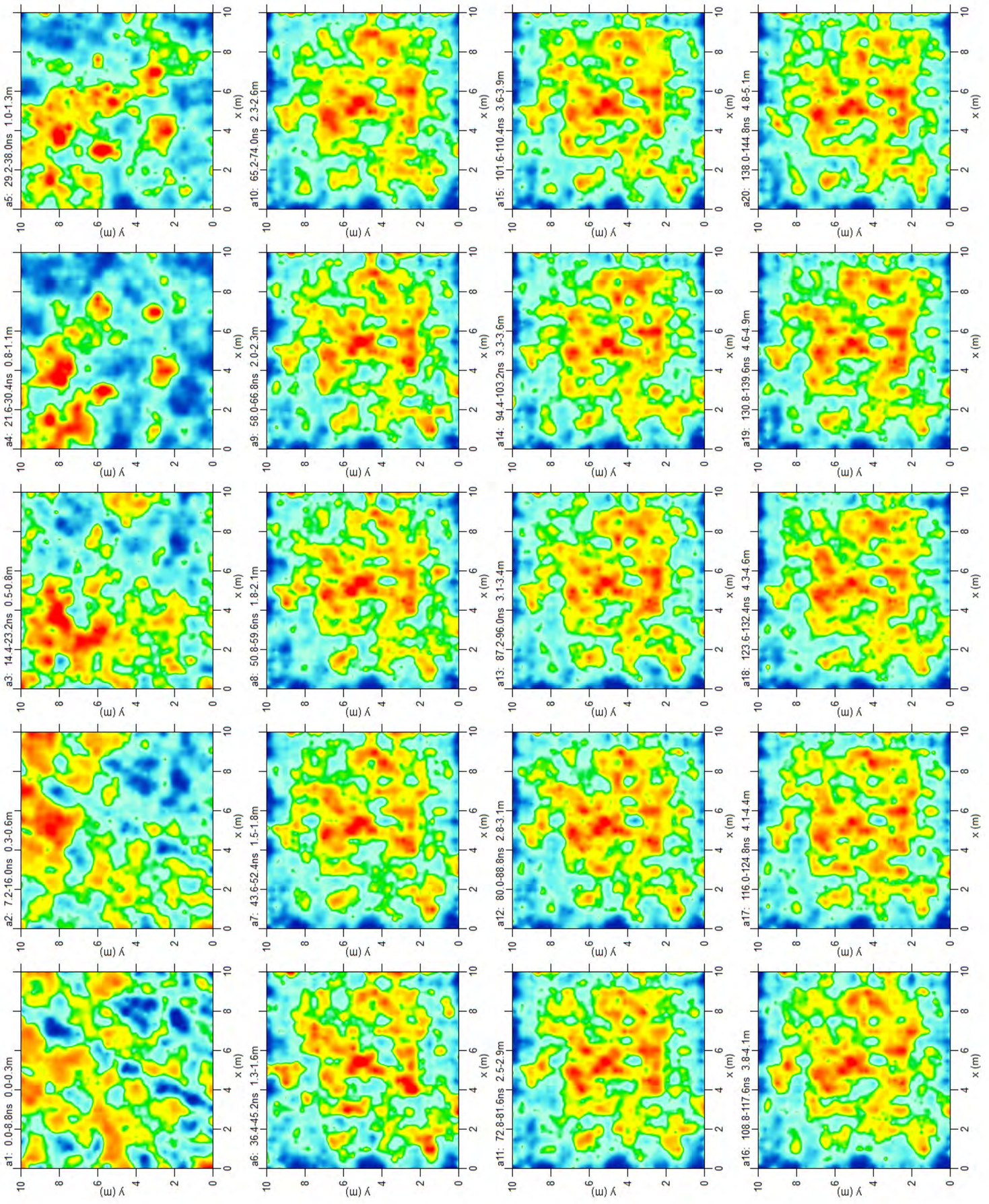
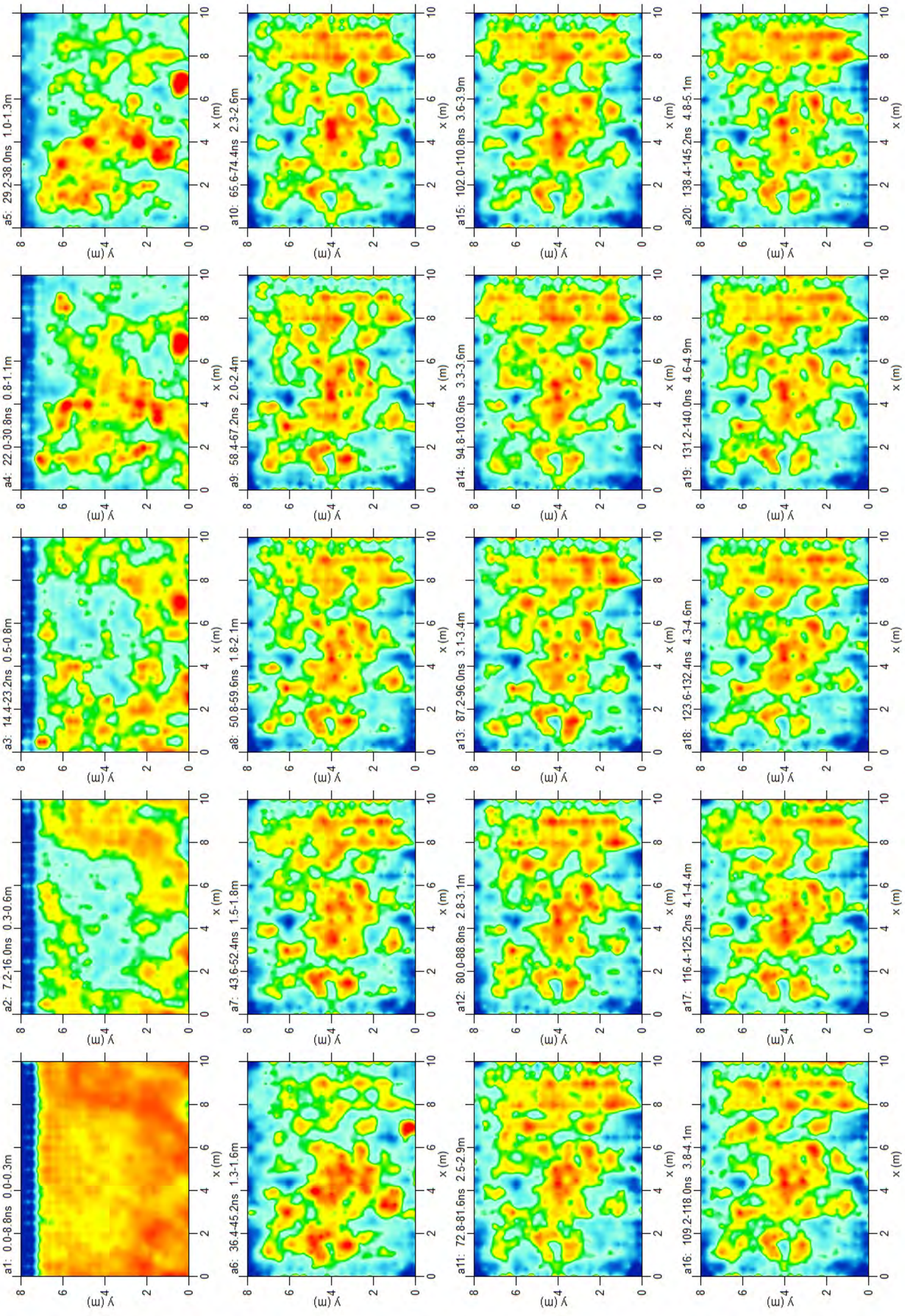
122


time (ns)
0.0
15.0
30.0
45.0
60.0
75.0
90.0
105.0
120.0
135.0
x (m)
depth (m)
\regain\LINE26 y=0 m
\filter\LINE26 y=0 m
\boxcar\LINE26 y=0 m


a1: 0.0-8.8ns 0.0-0.3m
a2: 7.2-16.0ns 0.3-0.6m
a3: 14.4-23.2ns 0.5-0.8m
a4: 21.6-30.4ns 0.8-1.1m
a5: 29.2-38.0ns 1.0-1.3m
a6: 36.4-45.2ns 1.3-1.6m
a7: 43.6-52.4ns 1.5-1.8m
a8: 50.8-59.6ns 1.8-2.1m
a9: 58.0-66.8ns 2.0-2.3m
a10: 65.2-74.0ns 2.3-2.6m
a11: 72.8-81.6ns 2.5-2.9m
a12: 80.0-88.8ns 2.8-3.1m
a13: 87.2-96.0ns 3.1-3.4m
a14: 94.4-103.2ns 3.3-3.6m
a15: 101.6-110.4ns 3.6-3.9m
a16: 108.8-117.6ns 3.8-4.1m
a17: 116.0-124.8ns 4.1-4.4m
a18: 123.6-132.4ns 4.3-4.6m
a19: 130.8-139.6ns 4.6-4.9m
a20: 138.0-144.8ns 4.8-5.1m
x (m)
y (m)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a2: 7.2-16.0ns 0.3-0.6m
a3: 14.4-23.2ns 0.5-0.8m
a4: 22.0-30.8ns 0.8-1.1m
a5: 29.2-38.0ns 1.0-1.3m
a6: 36.4-45.2ns 1.3-1.6m
a7: 43.6-52.4ns 1.5-1.8m
a8: 50.8-59.6ns 1.8-2.1m
a9: 58.4-67.2ns 2.0-2.4m
a10: 65.6-74.4ns 2.3-2.6m
a11: 72.8-81.6ns 2.5-2.9m
a12: 80.0-88.8ns 2.8-3.1m
a13: 87.2-96.0ns 3.1-3.4m
a14: 94.8-103.6ns 3.3-3.6m
a15: 102.0-110.8ns 3.6-3.9m
a16: 109.2-118.0ns 3.8-4.1m
a17: 116.4-125.2ns 4.1-4.4m
a18: 123.6-132.4ns 4.3-4.6m
a19: 131.2-140.0ns 4.6-4.9m
a20: 138.4-145.2ns 4.8-5.1m
x (m)
y (m)

Miller Pacific
ENGINEERING GROUP

February 22, 2011
File: 1610.01altr.doc

Willowglen Homes
900 College Avenue
Santa Rosa, California 95401

Attention: Mr. Ben Van Zutphen

Re: Updated Geotechnical Engineering Report
Evaluation of Shallow Soil Conditions and
Recommendations for Subgrade Preparation and Grading Specifications
Future Residential Development
Lands of Hunter
Adams Street
St. Helena, California

Introduction

This updated report presents the results of our geotechnical investigation of the shallow soil conditions underlying the future Adams Street (Hunter Parcel) residential development, located on Adams Street in St. Helena, California (Site Location Map, Figure 1). In 2009 our firm conducted an investigation of the shallow soil conditions at the project site, and published a report dated August 13, 2009 summarizing the field and laboratory data collected from ten exploratory borings drilled during our earlier study in 2009, and presenting our geotechnical recommendations for site preparation and grading at the project site. Subsequent to our earlier study and report, we understand that approximately 27,000 cubic yards of engineered fill has been placed on the Hunter parcel (during summer 2010) as a part of the City of St. Helena Flood Protection Project. The purpose of our services at this time is to provide an updated summary of the shallow soil conditions underlying the project site in order that we can provide revised recommendations for proper subgrade preparation beneath future development areas. This updated report re-summarizes the information included in the earlier August 13, 2009 report, and includes a discussion of the additional 27,000 cubic yards of engineered fill placed on the Hunter Parcel as a part of the City of St. Helena Flood Protection Project during the summer of 2010.

In accordance with our agreement dated July 28, 2009, the scope of our services in 2009 included the excavation of ten shallow exploratory borings, laboratory testing of selected soil samples, and the preparation of our report dated August 13, 2009 which summarized our field observations and test results, and presented our geotechnical conclusions and recommendations with respect to future grading at the site. In order to update our report to reflect the current shallow soil conditions subsequent to the placement of engineered fill at the site during the summer of 2010, members of our staff have made recent several site visits. Field density testing was conducted by our personnel on October 21, 2010 to measure the in-situ relative compaction of the recently placed engineered fill. Finally, we have reviewed field density testing conducted by Kleinfelder between June 10 and October 8, 2010 during the placement of the fill on the Hunter Parcel.

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Phone 707 765-6140 Fax 707 765-6222

It is noted that when more detailed planning is available for the proposed residential development, design-level geotechnical investigations (including much deeper borings and additional soil sampling) should be undertaken for the design, permitting, and construction of the project.

Based on our understanding, the project site encompasses an area of roughly ten to fifteen acres of nearly level to gently sloping terrain. The site has been used until recently as a vineyard. A former pond, measuring roughly one hundred and thirty feet in diameter, was located near the northeastern portion of the parcel, as approximately shown on the Site Plan, Figure 2. The pond has been backfilled with undocumented, uncompacted fill. Some excavations (exploratory trenches) were made during 2009 (by others) at various locations on the site, extending to a depth of up to roughly four feet, to investigate archeological impacts at the site. It is thought that these exploratory trenches are also backfilled with undocumented, uncompacted fill.

We understand that excess clean soil generated during the construction of the adjacent St. Helena Flood Protection Project was placed as an engineered, compacted fill over a significant portion of the Hunter parcel during the summer of 2010. The planned grading on the Hunter parcel is shown on a grading plan prepared by Mead & Hunt Engineers and dated January 2009, with a latest revision of June 4, 2010. We understand that fills of up to three to four feet in thickness were placed relative to the former site grades. In general, the new fill placed during 2010 is thicker along the eastern portion of the Hunter Parcel, and thinner along the western portion of the site. Based on our understanding that roughly 27,000 cubic yards of fill was placed on the Hunter Parcel during 2010, the average depth of fill over the graded portion of the site would be approximately two feet.

We understand that at some future date, the Hunter parcel may be developed as a residential subdivision, including one, two, or three story residential structures, asphalt paved streets and concrete driveways, underground utilities, and associated improvements. No specific development plans are available at this time, however.

Subsurface Exploration and Laboratory Testing

Ten shallow exploratory borings were drilled at the site on July 21, 2009 using four inch diameter manual bucket auger drilling equipment. The borings were drilled to depths ranging between three and nine feet beneath the existing ground surface at that time. The approximate locations of the exploratory borings are shown on the attached Site Plan, Figure 2. As the borings were drilled, relatively undisturbed samples of the various soil layers encountered were obtained using a 2.5 inch diameter sampler driven into the bottom of the boring using a 35 pound hammer dropped 24 inches. The samples were sealed in the field to preserve their natural moisture content, and were transported to our laboratory for testing. Logs of the borings were prepared by our representative in the field based on cuttings emerging from the borings and observation of the collected samples. Occasional editing of the field logs was based on a closer examination of the samples in our laboratory and on the results of laboratory tests conducted on some of the samples. The logs of the borings, along with a soil classification chart, are presented in Figures A-1 through A-11.

The collected samples were subjected to laboratory testing, including unconfined compressive strength, moisture content, and dry density determinations on most of the collected samples. A bulk sample representative of the near surface soil (between a depth of roughly one to three feet below the former existing grade) was collected and used to obtain a laboratory compaction curve, based on ASTM D1557. The results of the laboratory compaction curve are shown on the attached Figure A-12.

Shallow Soil Conditions

Based on the ten exploratory borings drilled during our 2009 study, and subsequent observations at the site, the shallow soil profile beneath the Hunter Parcel currently consists of a layer of recent, compacted fill having a thickness of typically one to four feet (average depth two feet), underlain by a thin layer of older fill (scarified and recompacted native soil) composed of stiff, relatively dry, light brown clayey silt with some sand extending to a depth of between 6 inches and 18 inches beneath the bottom of the new fill layer. Beneath the stiff light brown clayey silt, soft to medium stiff dark brown, moist, clayey silt was encountered, extending typically to a depth of four to seven feet beneath the current ground surface (three feet below the former ground surface). The medium stiff dark brown clayey silt typically grades denser, lighter in color, and with a lower moisture content below a depth of four to seven feet relative to the existing site grade (three feet below the bottom of the new fill layer). The exception to this typical soil profile is found in the former pond area (exploratory boring 4). In the former pond area, soft to medium stiff mottled light brown to dark brown clayey silt (fill) was encountered, extending to a depth of approximately ten feet beneath the existing ground surface. Beneath the fill in boring 4, stiff light gray brown clayey silt with sand (undisturbed native soil) was encountered, extending to the maximum depth drilled (thirteen feet relative to the current site grades). No groundwater was encountered in any of the borings at the time of drilling. However, it is anticipated that the shallow groundwater level beneath the site will vary seasonally, and may be higher during certain times of the year.

Based on our laboratory testing, the soft to medium stiff dark brown clayey silt found at a depth of between roughly six inches and 36 inches beneath the bottom of the recent, compacted fill layer is unsuitable to leave in place beneath new engineered fills that at some time in the future will support a residential development. The dark brown clayey silt layer (between 0.5 and 3 feet) was found to typically have a moisture content of five to ten percent or more over optimum (as defined by the laboratory compaction curve, ASTM D1557), and was found to have an in-situ dry density of only approximately eighty percent of the laboratory maximum density (ASTM D1557). Engineered fills are typically compacted to at least 90 percent of the laboratory maximum density.

Based on our understanding of the grading operation undertaken during summer 2010 to place the 27,000 cubic yards of new fill at the Hunter Parcel, only shallow, six to eight inches deep scarifying and recompacting was undertaken to prepare the formerly existing ground surface prior to the placement and compaction of new fill. Therefore, the three foot thick layer of soft, weak natural soil remains beneath the recently placed and compacted fill layer.

Conclusions and Recommendations

In our opinion, based on the ten exploratory borings drilled as a part of our study, the site is underlain by a shallow layer of soft to medium stiff dark brown clayey silt that typically extends to a minimum depth of three feet beneath the bottom of the recently placed fill layer. In our opinion, this layer of soft to medium stiff clayey silt must be overexcavated, moisture conditioned to permit proper compaction, and then be replaced as compacted, engineered fill prior to the construction of new homes and other improvements on the Hunter parcel. It is not acceptable to place compacted, engineered fill (designed to support future development) on the Hunter Parcel without first overexcavating and recompacting the existing weak surface layer, due to the anticipated settlement of the weak soil layer as a result of the loads imposed by the new fill, as well as future building loads. Settlement of the weak soil layer, if left in place beneath the recently placed compacted fill, could lead to damage to new residential structures, streets, utilities, and concrete flatwork supported over the weak soil layer.

Specifically, prior to the development of the project site, we recommend that all of the recently placed (2010) fill, and the upper 2.5 feet of soil (measured from the bottom of the new fill layer) should be overexcavated and the overexcavated soil aerated or moisture conditioned, as necessary, to permit proper compaction. Based on an average thickness of the new fill layer of two feet, the average depth of the required overexcavation and recompaction of the site is 4.5 feet. The bottom of the excavated area should then be scarified to a minimum depth of eight inches, moisture conditioned to permit proper compaction, and then be recompacted to a minimum degree of compaction of 90 percent (based on ASTM D1557) to provide a smooth, uniform, and unyielding surface. Fill can then be placed in thin lifts (uncompacted thickness eight inches or less), moisture conditioned to permit proper compaction, and compacted to a minimum degree of compaction of 90 percent. Soil used as fill should be clean and free of organic or toxic contamination, and should not have rock pieces larger than six inches in diameter or more than 15 percent by weight of rock pieces larger than 2.5 inches in diameter.

In the former pond area, located roughly as shown on the attached Site Plan, Figure 2, the required depth of overexcavation will be roughly ten feet relative to the current site grades. The bottom of the overexcavated area should be scarified to a depth of eight inches, moisture conditioned to permit proper compaction, and compacted to a minimum degree of compaction of 90 percent. Fill can then be placed as described above.

It is possible that there may be areas on the site where weak soil extends to a depth greater than seven feet below the existing grade (or greater than three feet below the bottom of the recent fill layer). In general, aside from the former pond area, we believe that an overexcavation depth of 2.5 feet (measured from the bottom of the new fill layer) will be sufficient. However, if localized areas of deeper weak surface soil are encountered during the site grading operation, the soil engineer's representative may recommend deeper overexcavation in these areas.

February 22, 2011

Supplemental Services

Construction Observation & Testing

During construction, including any grading operation, our representative must be present intermittently to verify that the soil conditions are as anticipated and to observe and test the geotechnical portions of the work, including overexcavation of existing weak surface soil, scarification and recompaction at the bottom of the overexcavated areas, and placement and compaction of fills.

Design Level Geotechnical Investigation

When more detailed plans are available for the proposed residential development, a much more detailed geotechnical study should be undertaken. This study would include much deeper borings, additional soil sampling, laboratory testing, and engineering analyses, including an evaluation of liquefaction potential and settlement potential based on an evaluation of the deeper soil conditions beneath the site.

If you have any questions about our findings and conclusions, or if we can be of further assistance, please do not hesitate to call us at your convenience.

Yours very truly,
MILLER PACIFIC ENGINEERING GROUP



Daniel S. Caldwell
Geotechnical Engineer No. 2006
(Expires 9/30/11)

4 copies submitted

Attachments: Figures 1-2,
Appendix A: A-1-A-12



SITE LOCATION

SCALE

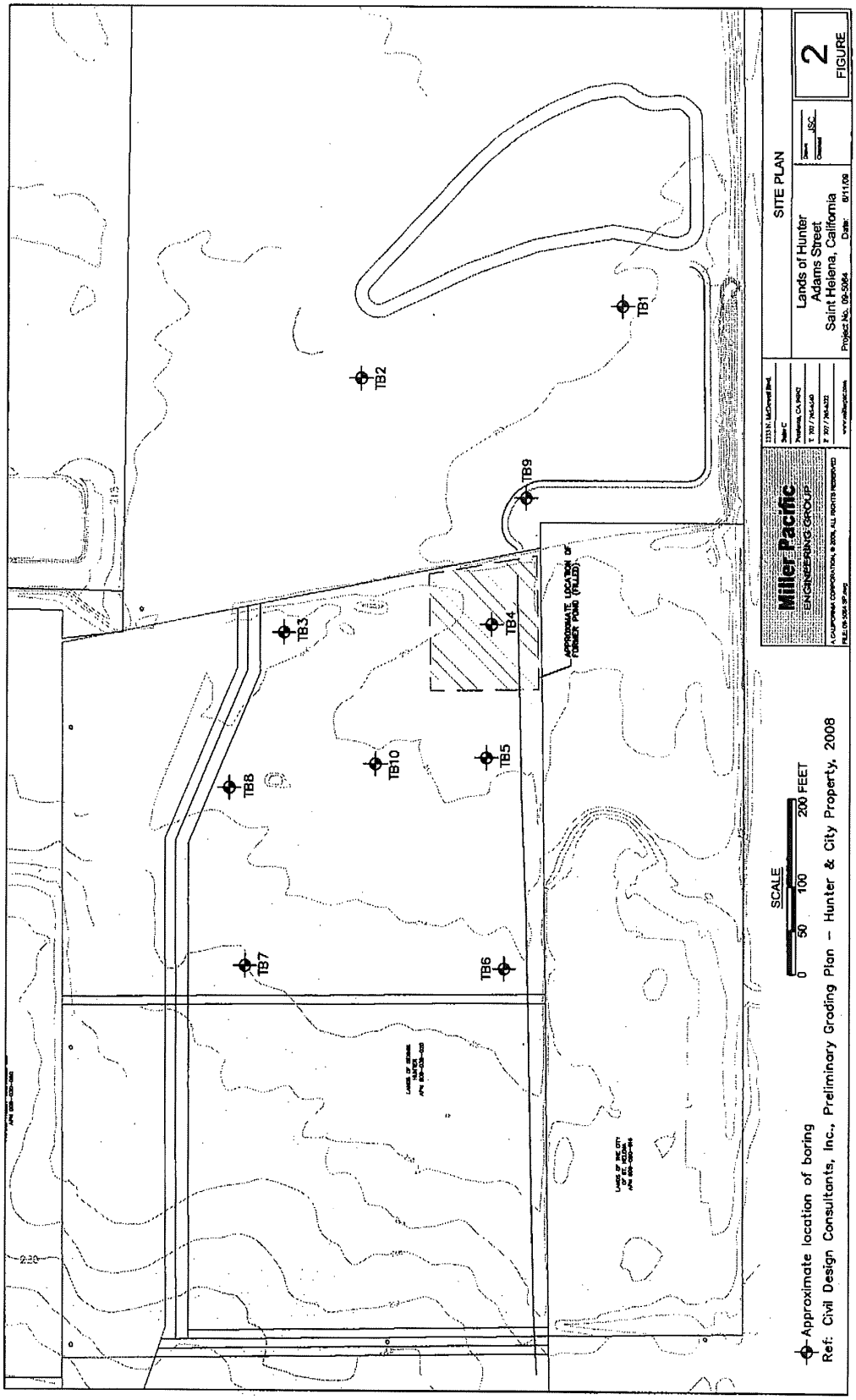
0 1000 2000 4000 FEET

0 500 1000 METERS

NORTH

REFERENCE: DeLorme 3D TopoQuads, 1999

Miller Pacific ENGINEERING GROUP	504 Redwood Blvd. Suite 220 Novato, CA 94947 T 415 / 382-3444 F 415 / 382-3450 www.millerpac.com	SITE LOCATION MAP	Drawn JSC Checked	1 FIGURE
A CALIFORNIA CORPORATION, © 2008, ALL RIGHTS RESERVED FILE: 09-5084 SLM.dwg		Lands of Hunter Adams Street Saint Helena, California Project No. 09-5084 Date: 8/11/09		


TB1
TB2
TB3
TB4
TB5
TB6
TB7
TB8
TB9
TB10
APPROXIMATE LOCATION OF FORMER POND (FILLED)
SCALE
0 50 100 200 FEET
Approximate location of boring
Ref: Civil Design Consultants, Inc., Preliminary Grading Plan – Hunter & City Property, 2008
Miller Pacific
ENGINEERING GROUP
SITE PLAN
Lands of Hunter
Adams Street
Saint Helena, California
Project No. 05-5084
Date: 6/11/08
FIGURE
2

MAJOR DIVISIONS		SYMBOL	DESCRIPTION
COARSE GRAINED SOILS over 50% sand and gravel	CLEAN GRAVEL	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
	GRAVEL with fines	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	CLEAN SAND	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
	SAND with fines	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE GRAINED SOILS over 50% silt and clay	SILT AND CLAY liquid limit <50%	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	SILT AND CLAY liquid limit >50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS		PT	Peat, muck, and other highly organic soils
ROCK			Undifferentiated as to type or composition

KEY TO BORING AND TEST PIT SYMBOLS

CLASSIFICATION TESTS

PI	PLASTICITY INDEX
LL	LIQUID LIMIT
SA	SIEVE ANALYSIS
HYD	HYDROMETER ANALYSIS
P200	PERCENT PASSING NO. 200 SIEVE
P4	PERCENT PASSING NO. 4 SIEVE

STRENGTH TESTS

TV	FIELD TORVANE (UNDRAINED SHEAR)
UC	LABORATORY UNCONFINED COMPRESSION
TXCU	CONSOLIDATED UNDRAINED TRIAXIAL
TXUU	UNCONSOLIDATED UNDRAINED TRIAXIAL
	UC, CU, UU = 1/2 Deviator Stress

SAMPLER TYPE

- MODIFIED CALIFORNIA
- STANDARD PENETRATION TEST
- THIN-WALLED / FIXED PISTON
- HAND SAMPLER
- ROCK CORE
- X DISTURBED OR BULK SAMPLE

SAMPLER DRIVING RESISTANCE

Modified California and Standard Penetration Test samplers are driven 18 inches with a 140-pound hammer falling 30 inches per blow. Blows for the initial 6-inch drive seat the sampler. Blows for the final 12-inch drive are recorded onto the logs. Sampler refusal is defined as 50 blows during a 6-inch drive. Examples of blow records are as follows:

- 25 sampler driven 12 inches with 25 blows afte initial 6-inch drive
- 85/7" sampler driven 7 inches with 85 blows afte initial 6-inch drive
- 50/3" sampler driven 3 inches with 50 blows during initial 6-inch drive or beginning of final 12-inch drive

NOTE: Test boring and test pit logs are an interpretation of conditions encountered at the excavation location during the time of exploration. Subsurface rock, soil or water conditions may vary in different locations within the project site and with the passage of time. Boundaries between differing soil or rock descriptions are approximate and may indicate a gradual transition.

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FILE: 09-5084 BL.dwg

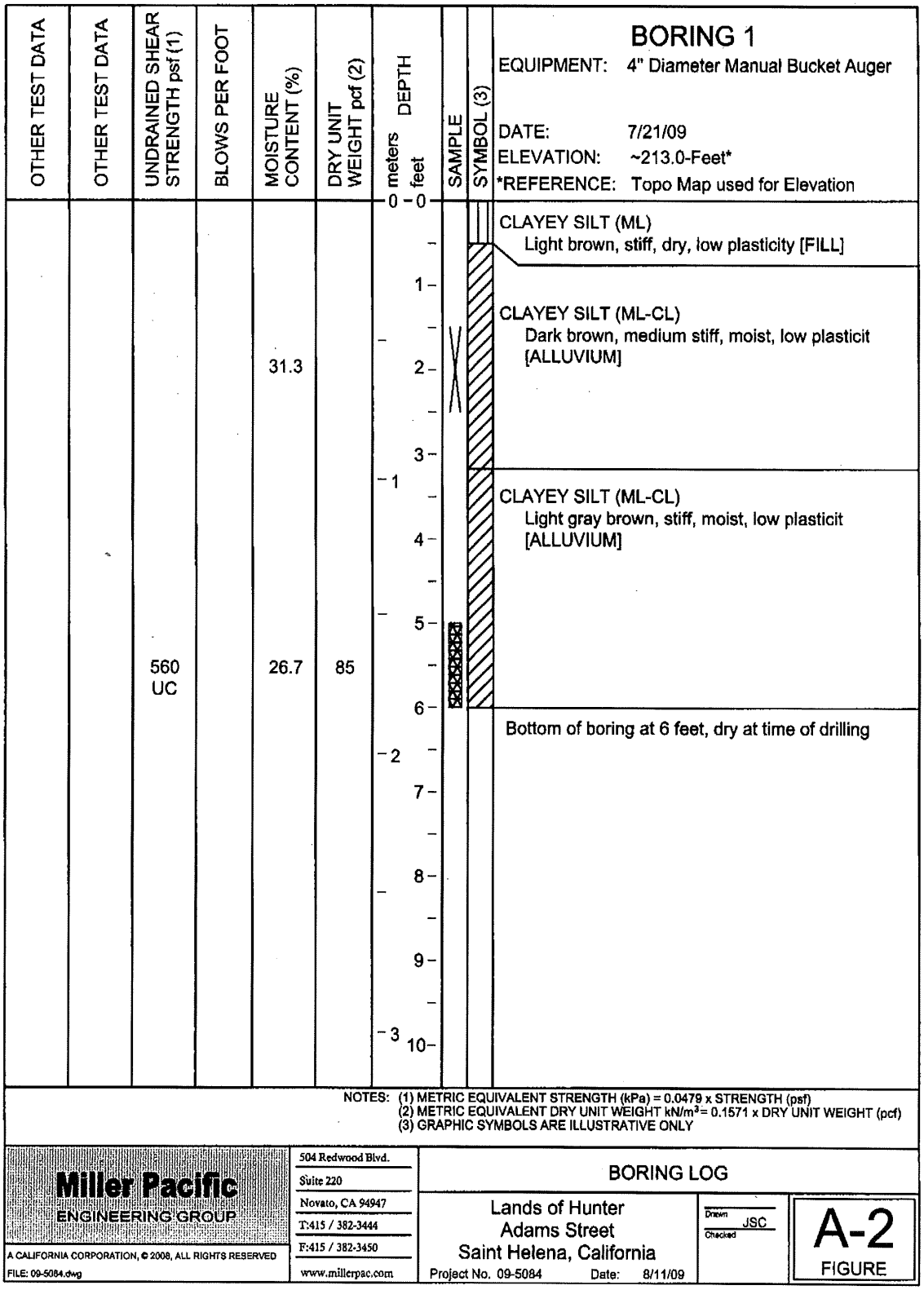
SOIL CLASSIFICATION

Lands of Hunter
Adams Street
Saint Helena, California

Project No. 09-5084 Date: 8/11/09

Drawn JSC
Checked

A-1
FIGURE


BORING 1
EQUIPMENT: 4" Diameter Manual Bucket Auger
DATE: 7/21/09
ELEVATION: ~213.0-Feet*
*REFERENCE: Topo Map used for Elevation
OTHER TEST DATA
OTHER TEST DATA
UNDRAINED SHEAR STRENGTH psf (1)
BLOWS PER FOOT
MOISTURE CONTENT (%)
DRY UNIT WEIGHT pcf (2)
DEPTH
meters
feet
SAMPLE
SYMBOL (3)
CLAYEY SILT (ML)
Light brown, stiff, dry, low plasticity [FILL]
CLAYEY SILT (ML-CL)
Dark brown, medium stiff, moist, low plasticit
[ALLUVIUM]
31.3
CLAYEY SILT (ML-CL)
Light gray brown, stiff, moist, low plasticit
[ALLUVIUM]
560
UC
26.7
85
Bottom of boring at 6 feet, dry at time of drilling
NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m³= 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY
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BORING LOG
Lands of Hunter
Adams Street
Saint Helena, California
Project No. 09-5084 Date: 8/11/09
Drawn JSC
Checked
A-2
FIGURE

BORING 2

EQUIPMENT: 4" Diameter Manual Bucket Auger

DATE: 7/21/09
ELEVATION: ~213.5-Feet*
*REFERENCE: Topo Map used for Elevation

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	
						0 – 0			CLAYEY SILT (ML) Light brown, stiff, dry, low plasticity [FILL]
						1			CLAYEY SILT (ML-CL) Dark brown, medium stiff, moist, low plasticit [ALLUVIUM]
				19.7	80	2			
						3 – 1			CLAYEY SILT (ML-CL) Light gray brown, stiff, moist, low plasticit [ALLUVIUM]
						4			Bottom of boring at 4 feet, dry at time of drilling
						5			
						6 – 2			
						7			
						8			
						9			
						3 10			

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m³= 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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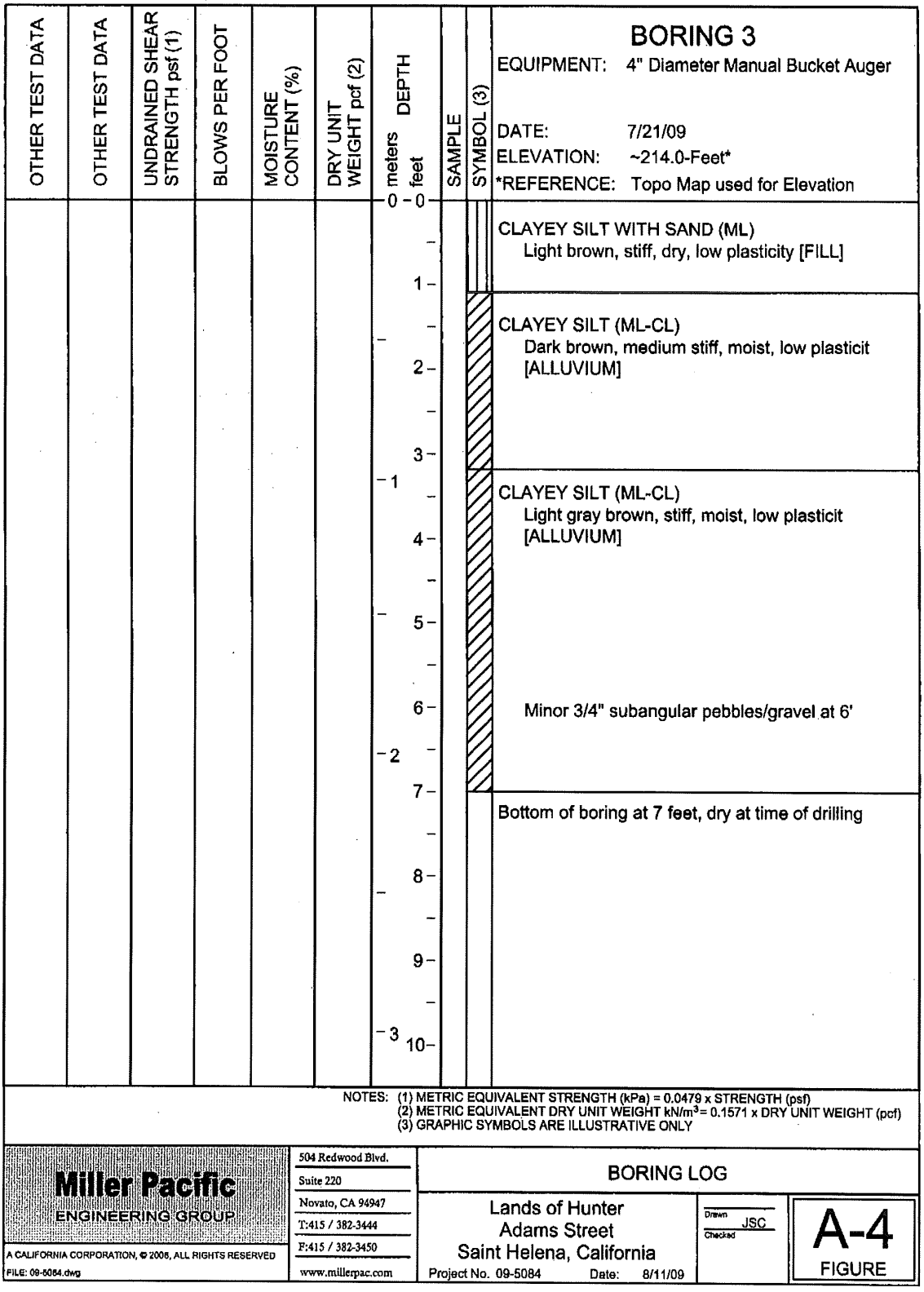
BORING LOG

Lands of Hunter
Adams Street
Saint Helena, California
Project No. 09-5084 Date: 8/11/09

Drawn JSC
Checked

A-3
FIGURE


OTHER TEST DATA
OTHER TEST DATA
UNDRAINED SHEAR STRENGTH psf (1)
BLOWS PER FOOT
MOISTURE CONTENT (%)
DRY UNIT WEIGHT pcf (2)
DEPTH
meters
feet
SAMPLE
SYMBOL (3)
BORING 3
EQUIPMENT: 4" Diameter Manual Bucket Auger
DATE: 7/21/09
ELEVATION: ~214.0-Feet*
*REFERENCE: Topo Map used for Elevation
CLAYEY SILT WITH SAND (ML)
Light brown, stiff, dry, low plasticity [FILL]
CLAYEY SILT (ML-CL)
Dark brown, medium stiff, moist, low plasticit
[ALLUVIUM]
CLAYEY SILT (ML-CL)
Light gray brown, stiff, moist, low plasticit
[ALLUVIUM]
Minor 3/4" subangular pebbles/gravel at 6'
Bottom of boring at 7 feet, dry at time of drilling
NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m3= 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY
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Lands of Hunter
Adams Street
Saint Helena, California
Project No. 09-5084 Date: 8/11/09
Drawn JSC
Checked
A-4
FIGURE

BORING 4

EQUIPMENT: 4" Diameter Manual Bucket Auger

DATE: 7/21/09
ELEVATION: ~213.0-Feet*
*REFERENCE: Topo Map used for Elevation

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	
						0 – 0			CLAYEY SILT (ML) Light brown, medium stiff, dry, low plasticity [FILL]
						1			CLAYEY SILT (ML-CL) Mottled dark brown/light brown, soft to mediu stiff, moist, low to moderate plasticity [FILL]
						2			
						3 – 1			
						4			
						5			
						6			
						2			CLAYEY SILT WITH SAND (ML) Brown to light gray brown, stiff, moist, lo plasticity [ALLUVIUM]
						7			
						8			
						9			Bottom of boring at 9 feet, dry at time of drilling
						3 10			

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m^3 = 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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BORING LOG

Lands of Hunter
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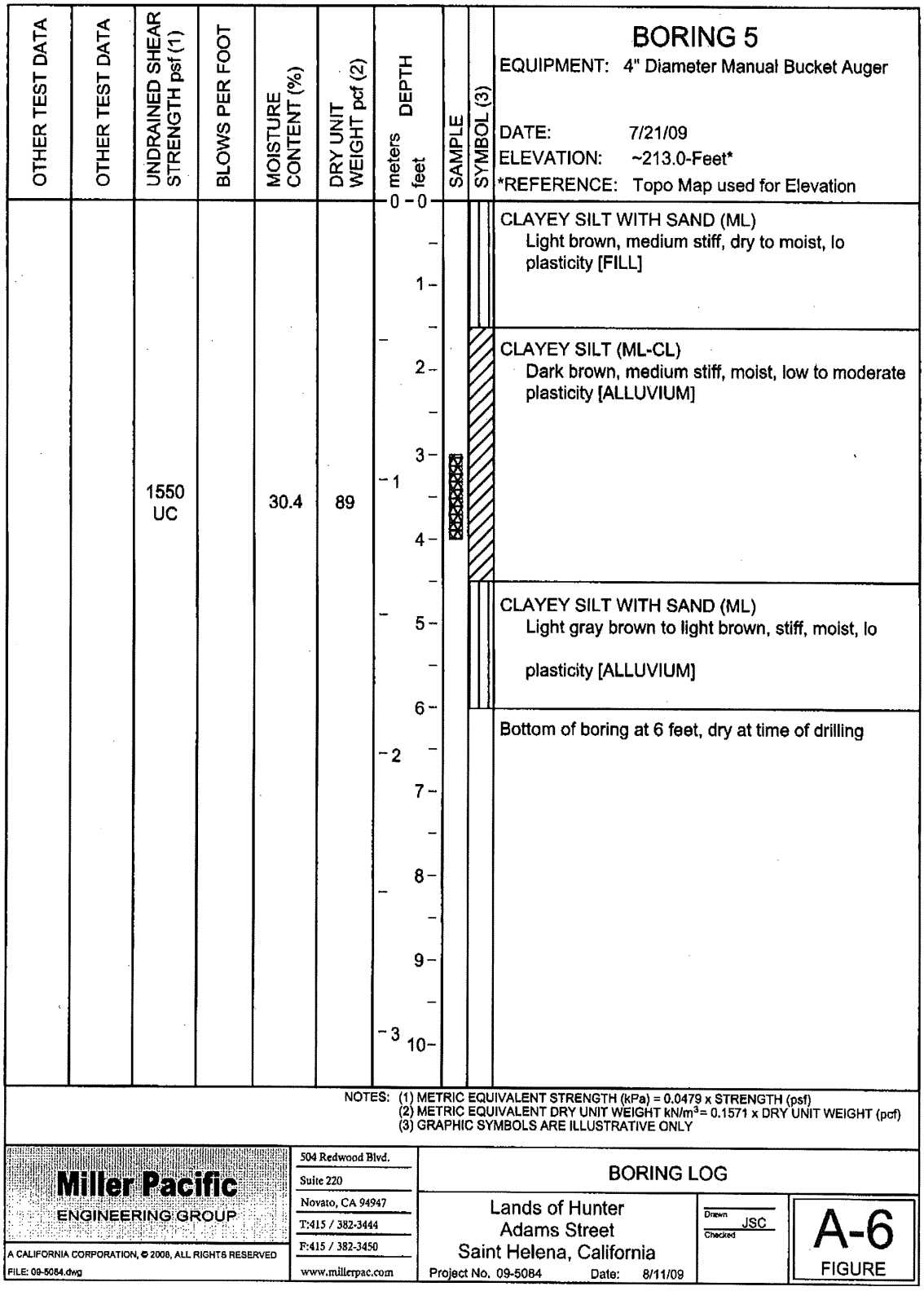
Project No. 09-5084 Date: 8/11/09

Drawn JSC
Checked

A-5
FIGURE


BORING 5
EQUIPMENT: 4" Diameter Manual Bucket Auger
DATE: 7/21/09
ELEVATION: ~213.0-Feet*
*REFERENCE: Topo Map used for Elevation
OTHER TEST DATA
OTHER TEST DATA
UNDRAINED SHEAR STRENGTH psf (1)
BLOWS PER FOOT
MOISTURE CONTENT (%)
DRY UNIT WEIGHT pcf (2)
DEPTH
meters
feet
SAMPLE
SYMBOL (3)
1550 UC
30.4
89
CLAYEY SILT WITH SAND (ML)
Light brown, medium stiff, dry to moist, lo plasticity [FILL]
CLAYEY SILT (ML-CL)
Dark brown, medium stiff, moist, low to moderate plasticity [ALLUVIUM]
CLAYEY SILT WITH SAND (ML)
Light gray brown to light brown, stiff, moist, lo
plasticity [ALLUVIUM]
Bottom of boring at 6 feet, dry at time of drilling
NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m3= 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY
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Lands of Hunter
Adams Street
Saint Helena, California
Project No. 09-5084 Date: 8/11/09
Drawn JSC
Checked
A-6
FIGURE

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	BORING 6
									EQUIPMENT: 4" Diameter Manual Bucket Auger DATE: 7/21/09 ELEVATION: ~214.5-Feet* *REFERENCE: Topo Map used for Elevation
						0 – 0			CLAYEY SILT (ML) Light brown, medium stiff, dry, low plasticity with some cobbles [FILL]
						1 –			
						–			CLAYEY SILT (ML-CL) Dark brown, medium stiff, moist, low plasticity with cobbles [ALLUVIUM]
						2 –			
						–			
						3 –			
						– 1			
						–			Bottom of boring at 3.5 feet, refusal on cobble, dry at time of drilling
						4 –			
						–			
						5 –			
						–			
						6 –			
						– 2			
						7 –			
						–			
						8 –			
						–			
						–			
						9 –			
						–			
						– 3			
						10 –			

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m³ = 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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BORING LOG

Lands of Hunter
Adams Street
Saint Helena, California
Project No. 09-5084 Date: 8/11/09

Drawn JSC
Checked

A-7
FIGURE

BORING 7

EQUIPMENT: 4" Diameter Manual Bucket Auger

DATE: 7/21/09

ELEVATION: ~215.0-Feet*

*REFERENCE: Topo Map used for Elevation

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	
						0 – 0			CLAYEY SILT (ML) Light brown, medium stiff, dry, low plasticit [FILL]
						1			
						2			CLAYEY SILT (ML-CL) Dark brown, medium stiff, moist, low to moderate plasticity, with cobbles [ALLUVIUM]
						3 – 1			Bottom of boring at 3 feet, refusal on cobble, dry at time of drilling
						4			
						5			
						6			
						2 – 7			
						8			
						9			
						3 – 10			

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m^3 = 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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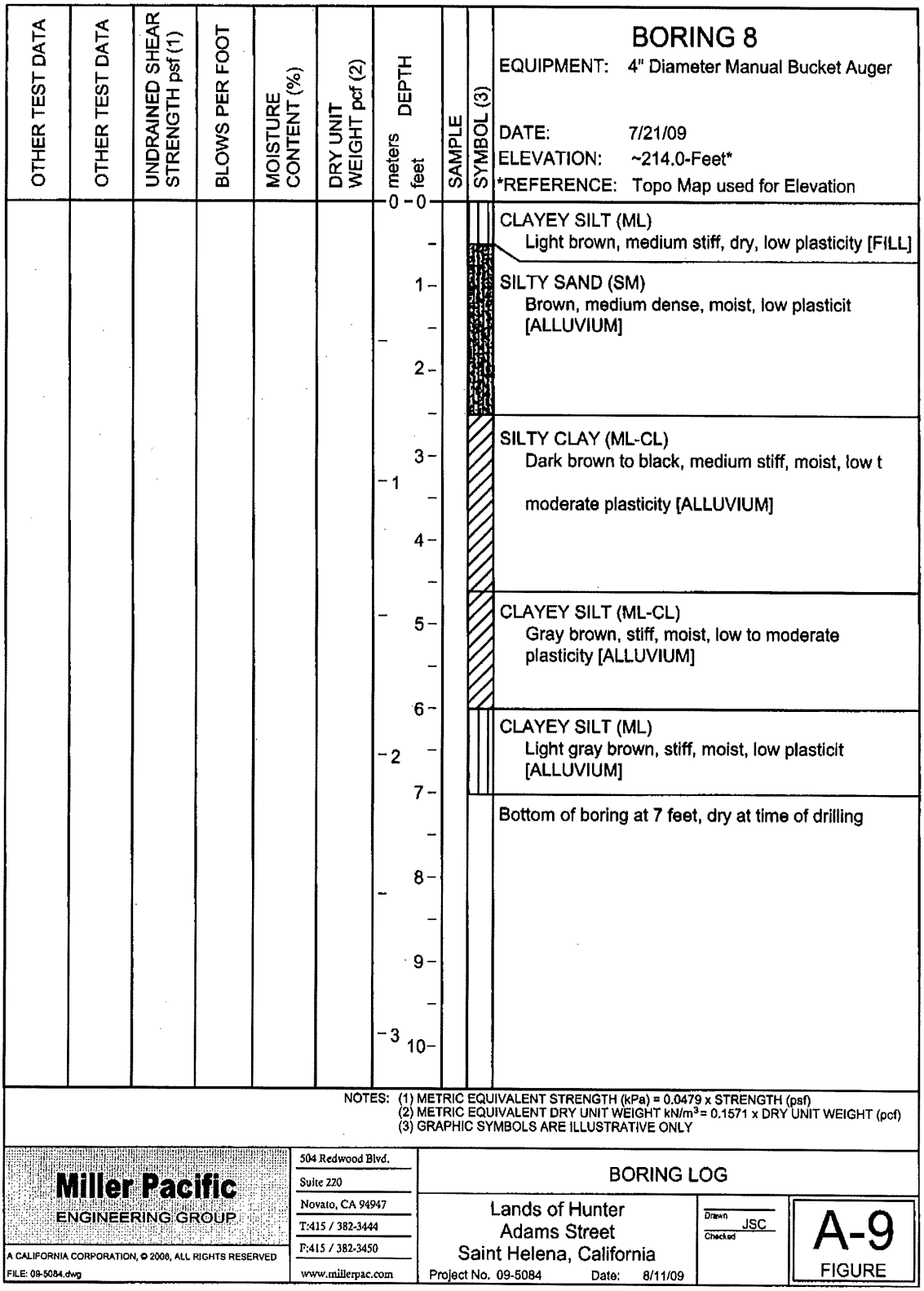
A-8
FIGURE


BORING 8
EQUIPMENT: 4" Diameter Manual Bucket Auger
DATE: 7/21/09
ELEVATION: ~214.0-Feet*
*REFERENCE: Topo Map used for Elevation
OTHER TEST DATA
OTHER TEST DATA
UNDRAINED SHEAR STRENGTH psf (1)
BLOWS PER FOOT
MOISTURE CONTENT (%)
DRY UNIT WEIGHT pcf (2)
DEPTH
meters
feet
SAMPLE
SYMBOL (3)
CLAYEY SILT (ML)
Light brown, medium stiff, dry, low plasticity [FILL]
SILTY SAND (SM)
Brown, medium dense, moist, low plasticit
[ALLUVIUM]
SILTY CLAY (ML-CL)
Dark brown to black, medium stiff, moist, low t
moderate plasticity [ALLUVIUM]
CLAYEY SILT (ML-CL)
Gray brown, stiff, moist, low to moderate plasticity [ALLUVIUM]
CLAYEY SILT (ML)
Light gray brown, stiff, moist, low plasticit
[ALLUVIUM]
Bottom of boring at 7 feet, dry at time of drilling
NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m3= 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY
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Project No. 09-5084 Date: 8/11/09
Drawn JSC
Checked
A-9
FIGURE

BORING 9

EQUIPMENT: 4" Diameter Manual Bucket Auger

DATE: 7/21/09
ELEVATION: ~212.5-Feet*
*REFERENCE: Topo Map used for Elevation

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	
						0 – 0			CLAYEY SILT (ML) Light brown, medium stiff, dry, low plasticit [FILL]
		440 UC		22.9	79	1 – 2 – 3			CLAYEY SILT (ML-CL) Dark brown, medium stiff, moist, low to moderate plasticity [ALLUVIUM]
						– 1 – 4			CLAYEY SILT (ML) Light gray brown to gray brown, stiff, moist, lo plasticity [ALLUVIUM] Bottom of boring at 4 feet, dry at time of drilling
						– 2 – 5 – 6 – 7 – 8 – 9 – 3 – 10			

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m³ = 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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Checked

A-10
FIGURE

BORING 10

EQUIPMENT: 4" Diameter Manual Bucket Auger

DATE: 7/21/09
ELEVATION: ~213.0-Feet*
*REFERENCE: Topo Map used for Elevation

OTHER TEST DATA	OTHER TEST DATA	UNDRAINED SHEAR STRENGTH psf (1)	BLOWS PER FOOT	MOISTURE CONTENT (%)	DRY UNIT WEIGHT pcf (2)	DEPTH meters / feet	SAMPLE	SYMBOL (3)	
						0 – 0			CLAYEY SILT (ML) Light brown, medium stiff, dry, low plasticit [FILL]
		785 UC		28.1	85	1 – 2 – 3			CLAYEY SILT (ML-CL) Dark brown, medium stiff, moist, low to moderate plasticity [ALLUVIUM]
						– 1 – 4 – 5			CLAYEY SILT (ML) Light gray brown, stiff, moist, low plasticit [ALLUVIUM]
						6 – – 2 – 7 – 8 – 9 – – 3 10 –			Bottom of boring at 5.5 feet, dry at time of drilling

NOTES: (1) METRIC EQUIVALENT STRENGTH (kPa) = 0.0479 x STRENGTH (psf)
(2) METRIC EQUIVALENT DRY UNIT WEIGHT kN/m³ = 0.1571 x DRY UNIT WEIGHT (pcf)
(3) GRAPHIC SYMBOLS ARE ILLUSTRATIVE ONLY

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Project No. 09-5084 Date: 8/11/09

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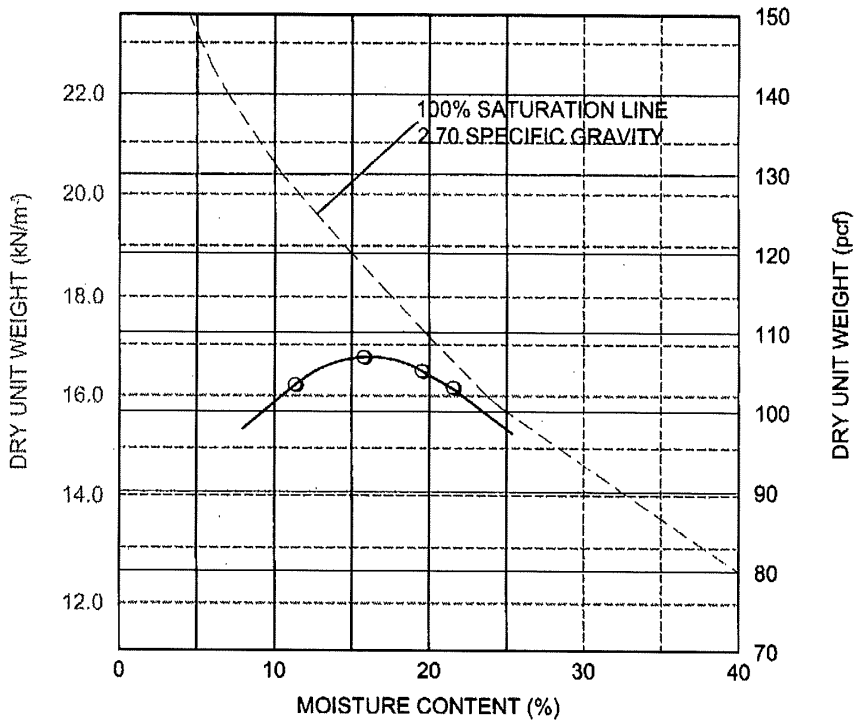
A-11
FIGURE



NOTE: pcf x 0.157 = kN/m³ (rounded to 3 significant figures)

SYMBOL	SAMPLE SOURCE	CLASSIFICATION	OPTIMUM MOISTURE CONT. (%)	MAXIMUM DRY UNIT WEIGHT (kN/m³)	(pcf)
○	On-Site	CLAYEY SILT (ML-CL) dark brown	17.5	17.0	108

REFERENCE: ASTM Method D1557

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COMPACTION CURVE

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A-12
FIGURE

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October 1, 2018
File: 1610.01bltr.doc

Willowglen Homes
P. O. Box 2357
Healdsburg, California 95448

Attention: Mr. Ben vanZutphen

Re: Addendum to Geotechnical Engineering Report Dated February 22, 2011
Preliminary Evaluation of Liquefaction Potential and
Preliminary Recommendations for Mitigation of Liquefaction Induced Settlement (if any)
Proposed Hunter Residential Development
Lands of Hunter
Adams Street
St. Helena, California

Introduction and Scope

This report is an addendum to a geotechnical report by Miller Pacific Engineering Group dated February 22, 2011, which presented the results of a geotechnical investigation of the shallow soil conditions underlying the future Adams Street (Hunter Parcel) residential development, located on Adams Street in St. Helena, California (Site Location Map, Figure 1).

The proposed residential development is to consist of 51 single family residential lots and Lot 52, which is to be developed with 25 apartment units, as shown on the Site Plan, Figure 2. We understand that the proposed single family homes would typically consist of one or two story, wood frame structures with concrete slab-on-grade or raised wood floors. We anticipate that the apartment structures would also be one or two story wood frame structures. The proposed development would also include asphalt paved streets and concrete driveways, underground utilities, and associated improvements. No specific development plans are available at this time, however.

Regional geologic mapping indicates that the project site is underlain by an undetermined thickness of alluvial fan deposits consisting of poorly sorted sands and gravels, with interbedded silts and clays. A regional geologic map of the site and vicinity is shown on Figure 3.

The purpose of our services at this time is to provide a preliminary evaluation of liquefaction potential at the proposed development site, and provide an outline of typical mitigation measures to address the impacts of liquefaction induced ground settlement (if any) on the proposed development.

Liquefaction refers to the sudden, temporary loss of soil shear strength during strong ground shaking. Liquefaction-related phenomena include liquefaction-induced settlement, flow failure, and lateral spreading. These phenomena can occur where there are saturated, loose, granular deposits. Recent advances in liquefaction studies indicate that liquefaction can occur in granular materials with a high, 35 to 50%, fines content (soil particles that pass the #200 sieve), provided the fines exhibit a plasticity index of less than 7. The site is mapped regionally (ABAG, 2018) as having moderate susceptibility to liquefaction, as shown on Figure 4.

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MILLER PACIFIC ENGINEERING GROUP

October 1, 2018

To evaluate soil liquefaction, the seismic energy from an earthquake is compared with the ability of the soil to resist pore pressure generation, known as the Cyclic Resistance Ratio (CRR). The earthquake energy is termed the cyclic stress ratio (CSR) and is a function of the maximum considered earthquake peak ground acceleration (PGA) and depth. Soil resistance to liquefaction is based on its relative density, and the amount and plasticity of the fines (silts and clays). The relative density of cohesionless soil is correlated with the Cone Penetration Test (CPT) tip resistance and Standard Penetration Test (SPT) blow count data measured in the field and corrected for hammer efficiency, overburden and percent fines.

Based on the available regional liquefaction susceptibility mapping and regional geologic mapping, the project site has a moderate risk of experiencing liquefaction and liquefaction induced ground surface settlement during a future strong earthquake.

Mitigation of Liquefaction Induced Settlement

For low rise commercial structures and light weight residential structures, mitigation of the impacts of liquefaction induced settlement is typically accomplished by the design of stiff, shallow mat slab or post-tensioned slab foundations or stiff, shallow grid foundations designed to resist distortion and wracking due to differential settlement. If predicted differential settlements are significant, utility connections to structures can be designed to be flexible to allow for some differential movement.

In many cases, liquefaction that occurs in relatively thin lenses or at greater depth beneath the ground surface may not result in settlement of the ground surface, and therefore would not have a negative impact on improvements at the ground surface.

Design Level Geotechnical Investigation

When more detailed plans are available for the proposed residential development, a much more detailed geotechnical study should be undertaken. This study would include much deeper borings and/or Cone Penetration testing, additional soil sampling, laboratory testing, and engineering analyses, including a more detailed evaluation of liquefaction potential and settlement potential based on an evaluation of the deeper soil conditions beneath the site.

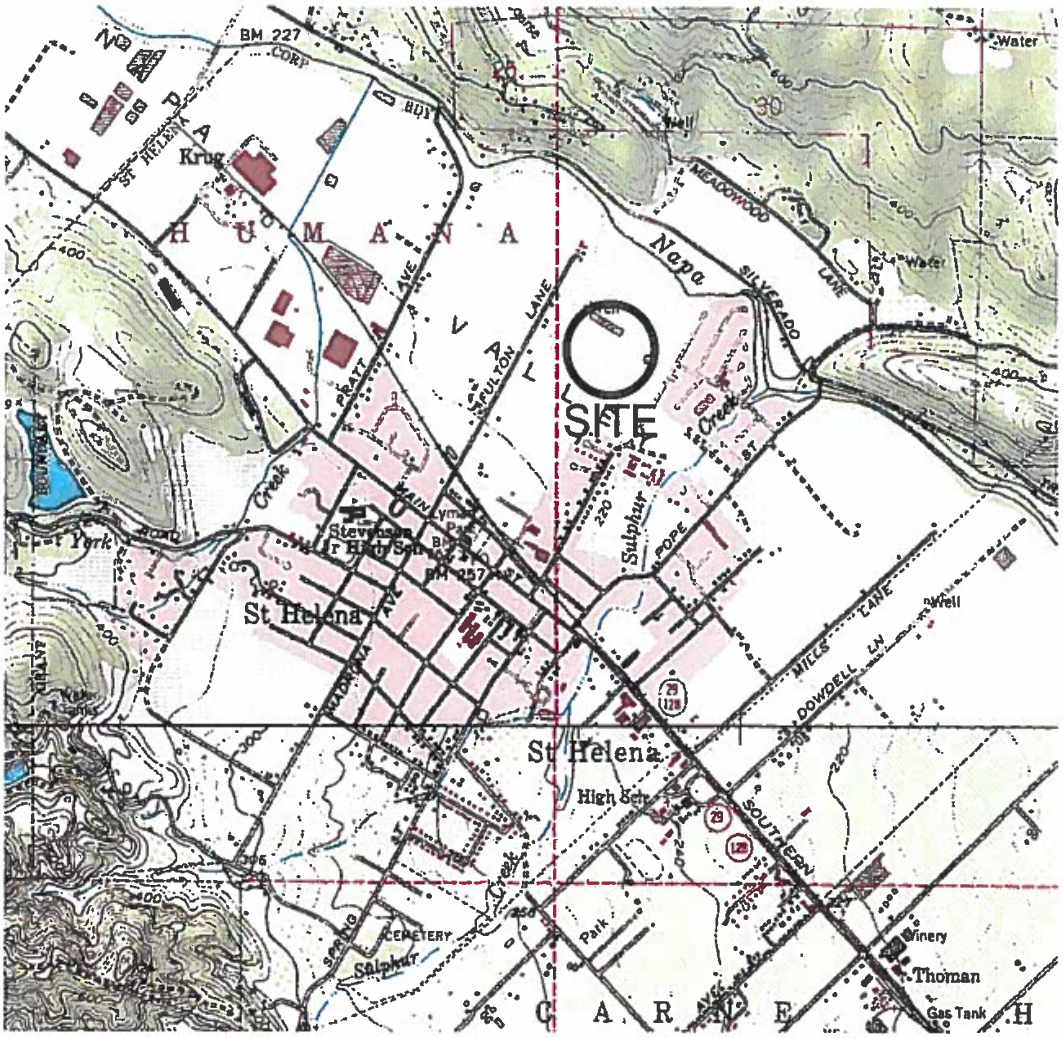
If you have any questions, or if we can be of further assistance, please call us at your convenience.

Yours very truly,
MILLER PACIFIC ENGINEERING GROUP

Daniel S. Caldwell
Geotechnical Engineer No. 2006
(Expires 9/30/19)

Enclosures: Figures 1 through 4

REGISTERED PROFESSIONAL ENGINEER
DANIEL S. CALDWELL
No.002006
Exp. 9/30/19
GEOTECHNICAL
STATE OF CALIFORNIA



SITE LOCATION

SCALE

0 1000 2000 4000 FEET

0 500 1000 METERS

NORTH

REFERENCE: DeLorme 3D TopoQuads, 1999

Miller Pacific ENGINEERING GROUP	504 Redwood Blvd. Suite 220 Novato, CA 94947 T 415 / 382-3444 F 415 / 382-3450 www.millerpac.com	SITE LOCATION MAP		
		Lands of Hunter Adams Street Saint Helena, California Project No. 1610.01 Date: 7/3/2018	Drawn MMT Checked	1 FIGURE

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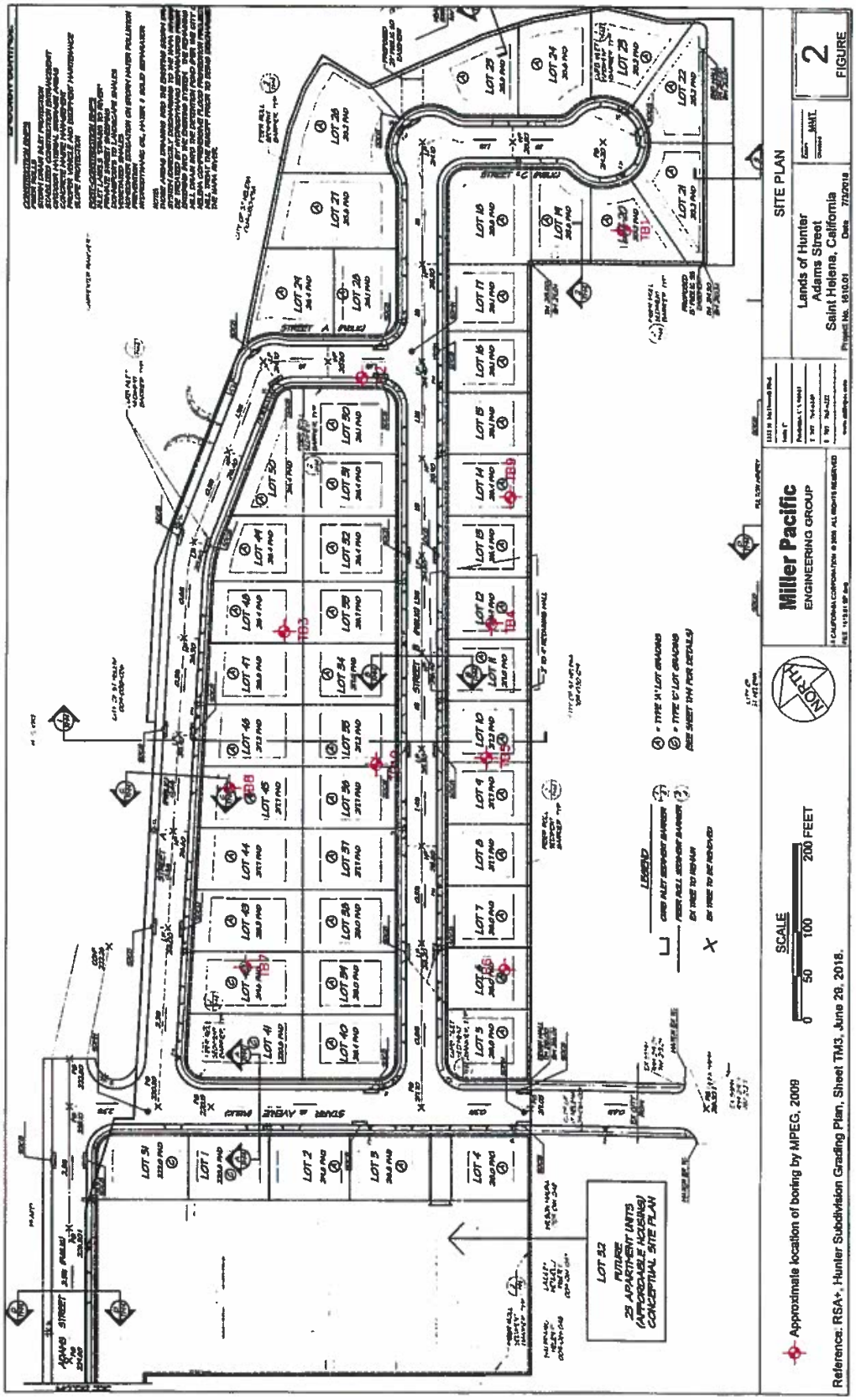
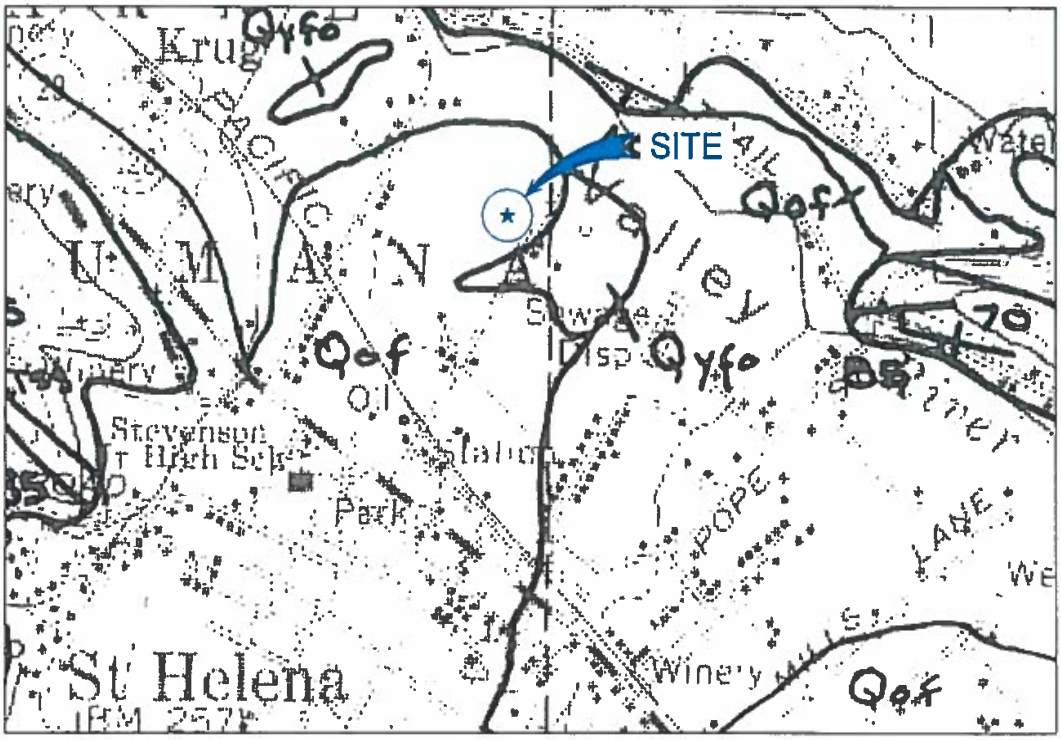

SITE PLAN
Miller Pacific
ENGINEERING GROUP
Lands of Hunter
Adams Street
Saint Helena, California
FIGURE 2
SCALE
0 50 100 200 FEET
NORTH
LEGEND
Approximate location of boring by MPEG, 2009
Reference: RSA+, Hunter Subdivision Grading Plan, Sheet TM3, June 28, 2018.
LOT 52
FUTURE
29 APARTMENT UNITS
(AFFORDABLE HOUSING)
CONCEPTUAL SITE PLAN



REGIONAL GEOLOGIC MAP
(NOT TO SCALE)

NORTH

LEGEND:

Qof: Alluvial fan deposits bordering uplands; heads of fans incised by channels partly filled by terraced deposits of younger alluvium; mainly deeply weathered poorly sorted coarse sand and gravel.

Qyfo: Fluvial deposits at the outer edge of alluvial fans; forms levees between basin deposits; characterized by fine, but variable, grain size; composed mainly of fine sand, silt, and silty clay.

Reference: K.F. Fox, Jr., J.D. Sims, J.A. Bartow and E.J. Helley, "Preliminary Geologic Map of Eastern Sonoma County and Western Napa County, California, Sheet 3 of 4, 1973.

Miller Pacific ENGINEERING GROUP	1333 N. McDowell Blvd. Suite C Petaluma, CA 94954 T 707 / 765-6140 F 707 / 765-6222 www.millerpac.com	REGIONAL GEOLOGIC MAP	Drawn MMT Checked	3 FIGURE
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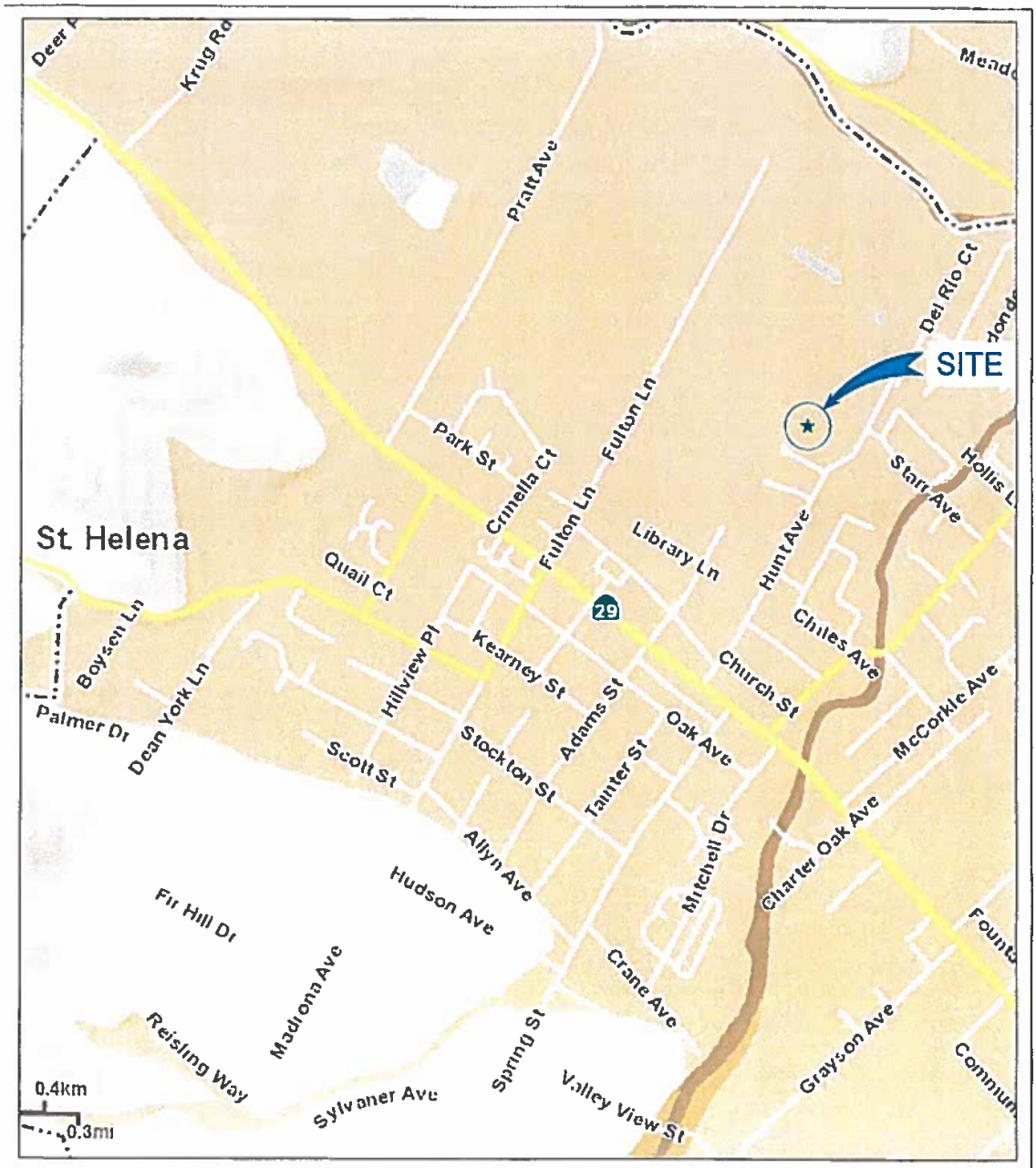

Susceptibility Level:
Very High | Moderate | Very Low
High | Low

No Scale
Local Road
Major Road

Map Reference: ABAG Geographic Information System.

NORTH

Miller Pacific ENGINEERING GROUP	1333 N. McDowell Blvd. Suite C Petaluma, CA 94954 T 707 / 765-6140 F 707 / 765-6222 www.millerpac.com	LIQUEFACTION SUSCEPTIBILITY MAP	
		Lands of Hunter Adams Street Saint Helena, California Project No. 1610.01 Date: 7/3/2018	Drawn MMT Checked
A CALIFORNIA CORPORATION, 2018, ALL RIGHTS RESERVED FILE: 1610.01 SP.dwg			4 FIGURE

Prepared for

Mr. Ben Van Zutphen
P.O. Box 2357
Healdsburg, California 95448

PHASE I ENVIRONMENTAL SITE ASSESSMENT

APN 009-030-057

SAINT HELENA, CALIFORNIA

MARCH 6, 2018

EBA Project No. 18-2550

825 Sonoma Avenue, Suite C Santa Rosa, CA 95404 (707) 544-0784 FAX (707) 544-0866



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PHASE I ENVIRONMENTAL SITE ASSESSMENT

HUNTER PROPERTY

APN 009-030-057

ST. HELENA, CALIFORNIA

MARCH 6, 2018

EBA Project No. 18-2550

Professional Certification

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the Property. We have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

David Noren, Manager
Environmental Services

3/6/2018
Date

Forest Kan, G.I.T.
Staff Geologist

3/6/18
Date

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1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by EBA Engineering for the property herein identified as Napa County Assessor Parcel Number (APN) 009-030-057. The property is further identified hereinafter as the project site. This ESA was completed for Ben Van Zutphen and the City of St. Helena in conformance with ASTM Standard Practice E1527-13.

1.1 PURPOSE

The purpose of this environmental site investigation is to assess the possible contamination of the project site with hazardous or toxic substances or wastes. A site may contain these substances or wastes as a result of current or past site activities, unauthorized dumping or disposal, or migration of contaminants from adjacent or nearby properties.

The Client should be aware that strict interpretation of California and federal legislation and case law may hold the landowner responsible for any toxic liability including future cleanup costs and, potentially, historical assessments and remediation work on the project site. Such statement is not motivated by any condition of the project site but is a general observation of the advisability that property owners and purchasers exercise all appropriate diligence and alertness to hazardous material risks.

This report is not intended to provide the necessary level of detail to be utilized for structural demolition/remodeling or soil or groundwater remediation. For such activities, appropriate regulations should be followed to ensure adequate coverage of material handling, worker and employee safety, airborne contamination during construction, and the precise extent of any contamination for contractor directions. This report conforms to American Society of Testing and Materials (ASTM) Standards E 1527-13 for Phase I Environmental Site Assessments.

In defining a standard of good commercial and customary practice for conducting an environmental site assessment, the goal of the processes established by this practice is to identify recognized environmental conditions, historical recognized environmental conditions and controlled recognized environmental conditions. The term recognized environmental conditions (RECs) refers to the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term historic REC refers to a past release of a hazardous substance or petroleum hydrocarbons that has occurred in connection to the property and has been addressed to the satisfaction of applicable regulatory agencies without restricting use of the property or requiring controls. The term controlled REC refers to a past release of a hazardous substance or petroleum hydrocarbons that has occurred in connection to the property and has been addressed to the satisfaction of applicable regulatory agencies and allowed to remain in place subject to the implementation of required controls. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not

intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

By performing a Phase I ESA of a parcel of real estate with respect to the range of contaminants within the scope of the CERCLA (42 U.S.C. §9601) and petroleum products, a user satisfies one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

1.2 SCOPE OF WORK

This Phase I ESA was performed in general accordance with the requirements of the ASTM International Designation: E 1527-13, *Standard Practice for Environmental Site Assessment.* To determine the condition of the project site with respect to environmental liability, EBA performed the following tasks:

1) Reviewed past and current land use for indications of the manufacture, generation, use, storage, and/or disposal of hazardous substances;

2) Evaluated the potential for on-site soil and/or groundwater contamination resulting from past and present project site land use activities and, to the extent possible, adjacent off-site operations;

3) Rendered findings and professional opinions regarding the potential for environmental contamination at the project site; and

4) Recommend and perform further investigations (i.e., Phase II ESA), if deemed appropriate to evaluate whether contamination and/or environmental hazards exist at the locations identified.

1.3 SIGNIFICANT ASSUMPTIONS

No significant assumptions were made during the performance of this Phase I ESA.

1.4 LIMITATIONS, EXCEPTIONS, AND DEVIATIONS

Local, State, and Federal environmental regulations and property conditions can vary significantly over time. Consequently, the conclusions and recommendations presented as a result of this environmental site assessment apply strictly to the environmental regulations and property conditions existing at the time EBA performed this study. EBA assumes that the data obtained and the inferences made during this investigation are reasonable and representative of the property.

EBA makes no warranty, expressed or implied, except that our services have been performed in accordance with generally accepted existing environmental engineering, health and safety principles, and applicable regulations at the time and location of the study. EBA has analyzed the available information using currently applicable engineering techniques.

Please be advised that the recommendations presented herein are based solely on information made available to EBA by others, and includes professional interpretations based on limited research and data. Based on these circumstances, the decision to conduct additional investigative work to substantiate the findings and conclusions presented herein is the sole responsibility of the Client.

No Exceptions or Deviations occurred from the ASTM Standard.

1.5 SPECIAL TERMS AND CONDITIONS

This Phase I ESA was conducted in accordance with our executed contract. No special terms or conditions apply.

1.6 USER RELIANCE

This report has been prepared solely for the Client and any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

Please note pursuant to Section 4.6 of the *ASTM Standard E 1527-13 for Phase I Environmental Site Assessments,* this report is valid for 180 days from the date noted herein.

1.7 REASON FOR PERFORMING PHASE I ESA

It is our understanding that this Phase I ESA was performed as part of a larger Environmental Impact Report (EIR) for the proposed development of the project site.

2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The project site property consists of a 16.9 acre agricultural parcel of land located on the north side of the city of St. Helena, California. The project site does not have a physical site address and is identified as Napa County APN 009-030-057. The property is partially occupied by a vineyard, while the remaining portion remains undeveloped. Figure 1, Appendix A shows the location of the project site. Figures 2, Appendix A shows the project site boundaries, as shown on the current tax assessor's map. Figure 3, Appendix A shows various pictures of the project side and associated features. Photo plates are also included in Appendix A that show relevant site features.

Legal descriptions of the project site are included in the Preliminary Title Report and are enclosed in Appendix B.

The following presents project site specific information:

Site Location: No Address; Napa County APN 009-030-057

Owner:	Dennis R. Hunter
Site Occupants:	Currently Unoccupied
Zoning:	Medium Density Residential
Lot Size:	16.9 acres
County:	Napa
USGS Quadrangle:	St. Helena, California
Latitude and Longitude:	N 38° 30' 42.12''Latitude & W 122° 27' 52.40''Longitude ** Approximate center of project site

2.2 SITE CHARACTERISTICS

The project site is located within the city limits of St. Helena, California in the central-northwestern portion of the Napa Valley. The project site consists of vineyards in the southwest portion of the property and undeveloped grasslands in the northeast portion of the property.

2.3 CURRENT USE OF THE PROPERTY

The project site is currently unoccupied and is currently partially utilized for vineyard cultivation.

2.4 PHYSICAL SETTING

2.4.1 TOPOGRAPHY

The project site is located in the central portion of the Napa Valley within the City of St. Helena and is generally flat and level with limited topography. The site is at an elevation of approximately 220 feet above mean sea level.

2.4.2 GEOLOGIC SETTING

The project site is located within the Coast Range Geomorphic Province of northern California. The Coast Range Geomorphic Province is generally characterized as a series of northwest trending elongated ridges and valleys that are a result of folding and faulting. The province includes many separate ranges, coalescing mountain masses, and several major structural valleys. The regional structure of the Coast Range is considered to be a number of independent fault blocks with different stratigraphic and structural histories.

The project site is mapped as being composed of Younger alluvial soils consisting of poorly sorted silt, sand, and gravel may overlay portions of the bedrock materials that are the result or weathering and erosion. The alluvial deposits can vary in thickness and are underlain by the Sonoma Volcanics geologic formation. The Sonoma Volcanics are Pliocene in Age and consist of a variety of volcanic rocks including basalt, rhyolite, andesite, tuff and other volcanic rocks. In some areas the volcanics are interlayered with tuff and volcanic sedimentary deposits.

Based on the surface topography and near site investigations, groundwater in the area of the project site is anticipated to flow northeast towards the Napa River. Groundwater in the area of the project site has been recorded to vary from approximately one to 17 feet below

ground surface. Depths of groundwater are expected to be influenced by topography and may vary seasonally.

2.4.3 SURFACE WATER BODIES/FLOODPLAINS

The Napa River is located northeast of the project site. A review of the Federal Emergency Management Agency Flood Insurance Rate Map [Map No. 06055C0264E] indicates the project site is located within an area of reduced flood hazard due to the presence of a flood control levee.

2.4.4 HYDROGEOLOGY

Based on the surface topography and subsurface investigations conducted in the surrounding area, groundwater in the area of the project site is anticipated to flow to the north to northeast towards the Napa River.

2.5 DESCRIPTION OF STRUCTURES, ROADS AND IMPROVEMENTS

The project site consists of a 16.9 acre agricultural property, and contains no permanent structures or significant property improvements. An unpaved pedestrian path begins at the end of Adams Street and runs along the entire length of the northwest side of the project site. The pathway is located on top of a constructed levee that was constructed by the City of St. Helena for the control of flooding from the Napa River.

The project site contains approximately seven acres of developed vineyards that are located on the southern side of the project site. The remainder of the project site includes approximately 9.9 acres of undeveloped grasslands.

There is a water supply well located on the northern side of the project site. The well appears to be inoperable.

2.6 CURRENT ADJOINING PROPERTIES

The project site is bound on the north and west by agricultural properties that include developed vineyards and on south and east by developed residential properties.

3.0 USER PROVIDED INFORMATION

3.1 TITLE RECORDS

A Preliminary Title Report dated March 27, 2014 was reviewed for the project site. Title records dating from March 27, 2014 to the present were reviewed on the Napa County Recorder's Office web site. A copy of the report is enclosed in Appendix B.

3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS (AULS)

A review of Title information was performed using available public documents from the Napa County Recorder's Office and the Preliminary Title Report dated March 27, 2014. No environmental liens or Use Limitations were noted in record information reviewed for this assessment.

3.3 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The project site property is owned by Dennis R. Hunter.

The project site is currently unoccupied.

3.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

The ASTM Standard requires an evaluation of environmental issues that would result in a devaluation of the property. There were no issues of environmental concern observed at the project site identified as part of this assessment that would be expected to affect the full and fair use and value of the project site property.

3.5 PREVIOUS ENVIRONMENTAL REPORTS

No environmental reports were available for the project site.

3.6 PHASE I QUESTIONNAIRE

A Phase I Questionnaire was completed by the prospective buyer, Ben VanZutphen. This questionnaire has been included in Appendix C.

4.0 RECORDS REVIEW

4.1 ENVIRONMENTAL RECORDS SOURCES

EBA contacted Environmental Data Resources (EDR) of Southport, Connecticut, to conduct a comprehensive Federal, state and local environmental records search for the project site and properties within a one-mile radius of the project site. The purpose of the database search was to identify potential exposure to the subject property from various environmental concerns and/or hazardous materials releases. The following databases and environmental programs are included in the database search:

- National Priority List
- Proposed National Priority List Sites
- NPL Federal Superfund Liens
- National Priority List Deletions
- CERCLIS Comprehensive Environmental Response, Compensation, & Liability Information System
- Federal Facility Site Information listing
- CERC-NFRAP CERCLIS No Further Remedial Action Planned
- CORRACTS Corrective Action Report
- RCRA-TSDF RCRA - Treatment, Storage and Disposal
- RCRA-LQG RCRA - Large Quantity Generators
- RCRA-SQG RCRA - Small Quantity Generators
- RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generator
- US ENG CONTROLS Engineering Controls Sites List
- US INST CONTROL Sites with Institutional Controls
- LUCIS Land Use Control Information System

- ERNS Emergency Response Notification System
- RESPONSE State Response Sites
- ENVIROSTOR EnviroStor Database
- SWF/LF Solid Waste Information System
- SLIC Statewide SLIC Cases
- INDIAN LUST Leaking Underground Storage Tanks on Indian Land
- UST Active UST Facilities
- AST Aboveground Petroleum Storage Tank Facilities
- INDIAN UST Underground Storage Tanks on Indian Land
- FEMA UST Underground Storage Tank Listing
- VCP Voluntary Cleanup Program Properties
- INDIAN VCP Voluntary Cleanup Priority Listing
- US BROWNFIELDS A Listing of Brownfields Sites
- ODI Open Dump Inventory
- DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
- WMUDS/SWAT Waste Management Unit Database
- SWRCY Recycler Database
- HAULERS Registered Waste Tire Haulers Listing
- INDIAN ODI Report on the Status of Open Dumps on Indian Lands
- US Clandestine Drug Labs
- HIST Cal-Sites Historical Calsites Database
- SCH School Property Evaluation Program
- Toxic Pits Toxic Pits Cleanup Act Sites
- CDL Clandestine Drug Labs
- US HIST CDL National Clandestine Laboratory Register
- CA Facility Inventory Database
- SWEEPS UST Listing
- LIENS 2 CERCLA Lien Information
- LIENS Environmental Liens Listing
- DEED Deed Restriction Listing
- HMIRS Hazardous Materials Information Reporting System
- CHMIRS California Hazardous Material Incident Report System
- LDS Land Disposal Sites Listing
- MCS Military Cleanup Sites Listing
- SPILLS 90 data from FirstSearch
- RCRA NonGen / NLR RCRA - Non Generators
- DOT OPS Incident and Accident Data
- DOD Department of Defense Sites
- FUDS Formerly Used Defense Sites
- CONSENT Superfund (CERCLA) Consent Decrees
- ROD Records Of Decision
- UMTRA Uranium Mill Tailings Sites
- US MINES Mines Master Index File

- TRIS Toxic Chemical Release Inventory System
- TSCA Toxic Substances Control Act
- FIFRA/ TSCA Tracking System Federal Insecticide, Fungicide, & Rodenticide Act
- HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
- SSTS Section 7 Tracking Systems
- ICIS Integrated Compliance Information System
- PCB Activity Database System
- Material Licensing Tracking System
- Radiation Information Database
- Facility Index System/Facility Registry System
- RCRA Administrative Action Tracking System
- RMP Risk Management Plans
- CA Bond Expenditure Plan
- NPDES Permits Listing
- Cortese Hazardous Waste & Substances Sites List
- CUPA Listings CUPA Resources List
- Proposition 65 Records
- DRYCLEANERS Cleaner Facilities
- Well Investigation Program Case List
- Enforcement Action Listing
- San Mateo County Business Inventory
- EMI Emissions Inventory Data
- INDIAN RESERV Indian Reservations
- State Coalition for Remediation of Drycleaners Listing
- Coal Combustion Residues Surface Impoundments List
- EnviroStor Permitted Facilities Listing
- Financial Assurance Information
- PCB Transformer Registration Database
- Financial Assurance Information Listing
- PROC Certified Processors Database
- EPA WATCH LIST
- 2020 Corrective Action Program List
- Lead Smelter Sites
- Aerometric Information Retrieval System Facility Subsystem
- WDS Waste Discharge System
- PRP Potentially Responsible Parties
- Medical Waste Management Program Listing
- COAL ASH DOE Steam-Electric Plant Operation Data
- Registered Hazardous Waste Transporter Database
- EDR Proprietary Manufactured Gas Plants
- EDR US Hist Auto Stat EDR Exclusive Historic Gas Stations
- EDR US Hist Cleaners EDR Exclusive Historic Dry Cleaners
- RGA LF Recovered Government Archive Solid Waste Facilities List

- RGA LUST Recovered Government Archive Leaking Underground Storage Tank

The Environmental Record Search (ERS) consists of a map showing the location of the identified sites relative to the project site, a summary listing the identified sites by street names, and a final report describing the sources investigated and the resulting findings. It should be noted that the findings are those noted on the regulatory database(s) and that accuracy and completeness of record information varies among information sources, including government sources. The ERS findings are supplemented by interviews with owners/occupants/employees, and local government officials. Agency records review and historical data review are also used to ascertain the potential environmental significance of sites reported in the ERS. Results of the record search are presented in Appendix D.

The project site is not identified in environmental databases or regulatory agency files as having issues of environmental concern. Several properties in the surrounding area were identified within a one-mile radius of the project site boundary as having environmental concerns. Relevant near site properties are further discussed below.

4.2 PROJECT SITE

The project site property was not identified in regulatory agency files or databases as having environmental concerns and there is no indication of the historic use, generation or disposal of hazardous materials and/or waste at the project site. Further there is no indication of the current or historic use of either underground or aboveground fuel storage tanks at the project site.

It should be noted that there are records of the use of agricultural pesticides at the project site that have been applied to the vineyard. Records obtained from the Napa County Agricultural Commissioner's Office include the use of herbicides, fungicides and miticides. The use of agricultural pesticides is regulated and overseen by the Napa County Agricultural Commissioner's Office in accordance with Title 3 of the California Code of Regulations. It does not appear that any agricultural chemicals are stored or mixed at the project site. Copies of the available Pesticide Use Reports are included in Appendix E.

It should be further noted that historic records, including historic aerial photographs, indicate that a portion of the project site was used as an orchard dating from the 1940's. Agricultural operations conducted during this time period often used agricultural pesticides, such as organochlorines and arsenic, which are long lived and persistent in the environment. The use of these materials would have been at a time period that no regulatory oversite or reporting were required. No records of such use was encountered in regulatory records reviewed for this assessment and further no testing for these compounds was conducted as part of this assessment.

4.2.1 PROPERTIES WITHIN THE APPROXIMATE MINIMUM SEARCH DISTANCE

Several near site properties were identified in EDR Radius Map Report as having environmental concerns within the minimum search distance from the project site property as required by ASTM Standard 1527-13. A review of available information regarding the

identified properties indicates that all of the identified properties are located at a distance of greater than 1,000 feet from the project site. In addition, regulatory agency records indicate that all of the identified site have completed environmental investigation and remediation with regulatory oversight and direction from applicable regulatory agencies. Given the proximity, case status and hydraulically co-gradient nature of sites identified within the approximate minimum search distance it is unlikely that these sites will present an environmental threat to the project site.

Additional Sites

Several additional sites within a one-mile radius of the project site were identified in regulatory agency files and databases as having issues of environmental concern. A review of the available information indicates that many of these properties are identified as generators of hazardous materials and/or wastes and are regulated for such use, storage and disposal. Several of the other identified sites consist of closed contaminant sites that have been characterized and closed with regulatory oversight. These sites are seen as posing no environmental threat to the project site.

4.2.2 ORPHAN SITES

EDR orphan site designation indicated insufficient address information for an identified site to be plotted. EBA reviewed the Orphan Sites identified in the Radius Map Report. Neither the project site nor any near site properties were identified in the Orphan Summary.

4.2.3 VAPOR ENCROACHMENT SCREENING

Preliminary vapor encroachment screening pursuant to ASTM Standard 2600-10 was conducted for the project site property in conjunction with this assessment. Tier 1 vapor screening was performed to determine if vapor intrusion was a threat to the present or future use of the project site due to the presence of the documented releases of petroleum hydrocarbons at near site properties. The Tier 1 screening is based on the following factors:

- Types and concentrations of contaminants present
- Soil characteristics
- Depth to groundwater
- Location of the project site property in relation to the known or suspected contaminants
- Vapor conduits
- Cleanup status of the contaminated property

ASTM-2600 sets a minimum distance of 1/10 mile (528 feet) for petroleum hydrocarbons and 1/3 mile (1,742 feet) for volatile organic compounds as an initial criteria distance for screening vapor threats. A review of the available information indicates that there are several properties within these minimum search distances that have documented releases of contaminants to soil and groundwater. However, no properties identified as having releases of petroleum hydrocarbons were identified within 528 feet of the project site boundaries. A review of available information regarding the remaining sites with historic volatile organic compound impacts within 1,742 feet of the project site boundaries, indicates

that all of the sites have been investigated and remediated to the satisfaction of applicable regulatory agencies and granted case closure status by the regulating agencies. There is no indication that the releases at these properties have impacted the project site and all are seen as posing a minimal threat to the project site.

Based on this information the threat of vapor intrusion to the project is seen as unlikely.

4.3 ADDITIONAL ENVIRONMENTAL RECORDS SOURCES - INTERVIEWS & REGULATORY AGENCY REVIEWS

Supplemental interviews and research were performed based on findings from the environmental records search. The interview and research process targeted both project site and regulatory personnel and regulatory agencies in an attempt to ascertain the nature and status of known environmental issues. Regulatory agencies and individuals contacted during the information review process included:

- Mr. Ben VanZutphen – Prospective Developer of Project Site
- Noah Housh – City of St. Helena Planning Department
- St. Helena Planning and Building Department
- Napa County Recorder's Office
- Napa County Planning, Building and Environmental Services Website
- Napa County Agricultural Commissioner's Office
- San Francisco Bay Regional Water Quality Control Board
- California Department of Toxic Substances Control
- California State Water Resources Control Board Geotracker Web Site
- California Department of Toxic Substances Control Envirostor Website

Regulatory agency files were reviewed at the agencies listed above. The findings from the file reviews are as follows:

ST. HELENA PLANNING AND BUILDING DEPARTMENT

Development and building records were available and reviewed at the St. Helena Planning and Building Department that dated from the mid 1980's to the present. The majority of the available records are related to a flood mitigation project that occurred in the early 2000's on the parcel adjacent to the northeast of the project site.

NAPA COUNTY ASSESSOR'S OFFICE

Development and tax records were reviewed at the Napa County Assessor's Office. No significant data gaps were noted within the available information.

NAPA COUNTY RECORDER'S OFFICE

Recorded deeds and other relevant site documentation were reviewed at the Napa County Recorder's Office. No environmental liens or deed restrictions were noted in the available information.

NAPA COUNTY AGRICULTURAL COMMISSIONER'S OFFICE
Pesticide Use Reports for the use and applicable of agricultural pesticides were obtained from the Napa County Agricultural Commissioner's Office.

SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD
Files available at the San Francisco Bay Regional Water Quality Control Board are duplicated and uploaded to GeoTracker. Therefore, available information for near site properties were reviewed on the GeoTracker web site.

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
No files were available for the project site property at this agency.

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD GEOTRACKER WEB SITE DATABASE
The Geotracker web site was consulted to determine if either the project site or surrounding properties were identified in this environmental database as having environmental concerns. The project site was not identified. Several near site properties were identified.

CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL ENVIROSTOR WEB SITE DATABASE
The Envirostor web site was consulted to determine if either the project site or surrounding properties were identified in this environmental database as having environmental concerns. The project site was not identified in this environmental database. One nearby site was identified.

4.4 PHYSICAL SETTING SOURCES
Several sources of information were reviewed to establish the physical setting of the project site property including the following:

- Google Earth
- USGS Topographic Maps
- Published Geologic references

4.5 HISTORICAL USE INFORMATION FOR THE PROJECT SITE
The history of the project site was researched to ascertain the past use from the present back to the property's first developed use. Reasonably ascertainable historical information sources were reviewed to determine the history of the project site property. The following historical sources were reviewed as part of this assessment:

- Historical aerial photographs
- Historical Maps and research
- Interviews with persons knowledgeable about the project site.

4.5.1 HISTORICAL SUMMARY
The first developed use of the project site appears to start sometime prior to 1947. Historic aerial photographs indicate that the project site was largely utilized for cultivation purposes, notably vineyards and orchards. From the available information it appears that the project

site has remained generally undeveloped with limited property use, with the exception of vineyards that are currently present on the southwestern portion of the project site.

As discussed herein the project site was also associated with the construction of a flood control project that included a constructed levee that is located along the western and northern sides of the project site. The flood control project also includes a stormwater catch basin that is reported to collect stormwater runoff from the developed portions of St. Helena located to the south and east of the project site. The flood control basin then pumps the collected water to the Napa River located to the north and east of the project site.

The history and use of the project site is known and documented through several means including available public records and historic aerial photographs. It should be recognized that there are data gaps in the history and use of the project site that are due to the passage of time, a lack of available property owners and a lack of historical documentation regarding the historic use of the project site. These data gaps are seen as insignificant.

4.5.2 Historical Aerial Photographs

Historical aerial photographs were obtained from Environmental Data Resources for the years 1947, 1953, 1958, 1968, 1973, 1982, 1993, 2006, 2010, and 2014. Aerial photographs can indicate changes in land use of a site over time. The following presents our findings from a review of the available photographs.

1947 Photograph

The 1947 photograph indicates the presence of an orchard in the northeast portion of the project site. The remainder of the project site is visible as undeveloped grasslands. It should be noted that a series of holding ponds are visible along the southeastern border of the project site. The surrounding area appears to consist of low density residential developments towards the southeast and agricultural development towards the north and west.

1953 Photograph

The 1953 photograph indicates no significant changes to the project site from the 1947 photograph. The adjacent and surrounding area appears generally unchanged.

1958 Photograph

The 1958 photograph indicates no significant changes to the project site from the 1953 photograph. The adjacent and surrounding area appears generally unchanged.

1968 Photograph

The 1968 photograph indicates that the orchard previously located in the northeast portion of the project site has been removed. The remaining portion of the project site and the surrounding area remains generally unchanged.

1973 Photograph

The 1973 photograph indicates the project site with developed vineyards in the central and southwest portions of the property. The remaining portion of the project site remains unchanged. It should be noted that the holding ponds southeast of the project site have

been removed in the 1973 photograph. The adjacent and surrounding area appears to be in the initial stages of suburban development.

1982 PHOTOGRAPH
The 1982 photograph indicates the appearance of a holding pond in the northeast portion of the project site. The greater surrounding area appears to have undergone significant residential development since the 1973 photograph.

1993 PHOTOGRAPH
The 1993 photograph indicates no significant changes to the project site from the 1982 photograph. The greater surrounding area appears generally unchanged.

2006 PHOTOGRAPH
The 2006 photograph indicates no significant changes to the project site from the 1993 photograph. The adjacent and surrounding area appears to have undergone significant residential development.

2010 PHOTOGRAPH
The 2010 photograph indicates that a portion of the vineyard in the northeast portion of the project site have been removed and the area appears to have been regraded. The adjacent and surrounding area appears generally unchanged.

2014 PHOTOGRAPH
The 2014 photograph indicates no significant changes to the project site from the 2010 photograph. The adjacent and surrounding area appears generally unchanged.

Copies of the aerial photographs are included in Appendix F.

4.5.3 SANBORN FIRE INSURANCE MAPS
No Sanborn Fire Insurance Map coverage is available for the project site property.

4.6 HISTORICAL USE INFORMATION FOR ADJOINING PROPERTIES
Historic research was ascertained for adjoining properties by reviewing the historical documents referenced above.

5.0 SITE RECONNAISSANCE

5.1 METHODOLOGY AND LIMITING CONDITIONS
EBA personnel conducted site inspections on February 12, 2018. The site reconnaissance entailed viewing the project site and the surrounding areas. The site was inspected to observe the property and to identify discernible or potential environmental concerns. In addition, a reconnaissance of adjacent properties was performed to confirm surrounding land use and conditions. Information was obtained by interviews with knowledgeable individuals regarding the past and current uses of the project site. No limitations were encountered that limited the extent of the property inspection. Findings from the site reconnaissance activities are summarized in the following sections.

5.2 CURRENT USE OF THE PROPERTY
The project site is currently utilized as a vineyard.

5.3 EXTERIOR OBSERVATIONS
As discussed the project site consists of a developed vineyard with some grasslands. There are no structures present at the project site. At the time of the property inspection the project site was observed to be clean and well maintained with no issues of environmental concern.

5.4 INTERIOR OBSERVATIONS
No structures are present at the project site, therefore no interior inspections or observations were made as part of this assessment.

5.5 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS
There were no hazardous substances or petroleum products observed at the project site during the site reconnaissance.

5.6 ODORS
No odors were observed at the project site during the site reconnaissance.

5.7 POOLS OF LIQUID
No pools of free liquid were observed at the project site during the site reconnaissance.

5.8 DRUMS
No drums were observed at the project site during the site reconnaissance.

5.9 UNIDENTIFIED SUBSTANCE CONTAINERS
No unidentified drums or containers were observed at the project site during the site reconnaissance.

5.10 INTERIOR STAINS OR CORROSION
No stained soil or corrosion were observed at the project site during the site reconnaissance.

5.11 DRAINS AND SUMPS
No drains or sumps were observed at the project site during the site reconnaissance.

5.12 PITS, PONDS OR LAGOONS
No pits, ponds or lagoons were observed at the project site during the site reconnaissance.

5.13 STAINED SOIL OR PAVEMENT
There was no stained soil or pavement observed at the project site during the site reconnaissance.

5.14 SOLID WASTE
No solid waste was observed at the project site during the site reconnaissance.

5.15 STRESSED VEGETATION
No areas of stressed vegetation were observed at the project site during the site reconnaissance.

5.16 WELLS
A water supply well is located on the northern portion of the project site. At the time of the property inspection, the well was not in use.

5.17 SEPTIC SYSTEMS
There is no records of septic systems at the project site.

5.18 ELECTRICAL TRANSFORMERS
A pole mounted electrical transformer is present at the northern portion of the project site that appears to be associated with the power infrastructure for the water supply well. At the time of the property inspection the transformer appeared to be intact with no indication of leakage or failure.

5.19 UNDERGROUND STORAGE TANKS
There is no record of the current or historic use of underground fuel tanks at the project site.

5.20 ABOVE GROUND STORAGE TANKS
No above ground fuel tanks were observed at the project site during the site visit.

5.21 UTILITIES
The only utility observed at the project site is the power pole and transformer that services the water supply well.

5.22 FILL MATERIALS
It appears that the construction of the flood control levee and associated work included regrading and filling portions of the project site. It is assumed that the fill materials were from the flood control project and did not include imported fill materials.

5.23 ASBESTOS
No structures are currently present at the project site, therefore there is no likelihood of asbestos containing materials being present.

5.24 LEAD PAINT
No structures are currently present at the project site, therefore there is no likelihood of lead paint being present.

5.25 RADON
The U.S. Environmental Protection Agency Radon Zone Classification for Napa County is 2, which is defined as having a moderate potential to have radon concentration between 2 to 4 picocuries per liter (pCi/L). The U.S. EPA action level for radon is 4.0 pCi/L. Based on

the radon concentration information, it is unlikely but possible that radon abatement activities would be required at the project site; however it should be noted that no testing for radon has been performed.

6.0 DISCUSSION

Development at the project site likely began prior to the 1947 aerial photograph. Sequential aerial photographs starting from 1947 indicate the presence of an orchard and vineyards at the project site. No structures currently exist on the project site, and there is no evidence that indicates the presence of historical structures at the property. Currently, a portion of the project site appears unutilized, while the remaining portion appears to be used in the cultivation of grapes.

The project site is not identified in regulatory agency databases or files as having issues of environmental concern and there is no indication of the use, generation or disposal of hazardous materials or wastes at the project site. Further, there is no indication of the current or historic use of underground fuel storage tanks at the project site.

Several sites are identified in the surrounding areas as having issues of environmental concern. These sites are located more than 1,000 feet from the boundaries of the project site, and are listed in regulatory databases as closed investigations. From a review of the available information all the identified sites in the surrounding area are seen as posing a minimal threat to the project site.

It should be noted that there are records of the use of agricultural pesticides at the project site that have been applied to the vineyard. Records obtained from the Napa County Agricultural Commissioner's Office include the use of herbicides, fungicides and miticides. The use of agricultural pesticides is regulated and overseen by the Napa County Agricultural Commissioner's Office in accordance with Title 3 of the California Code of Regulations. It does not appear that any agricultural chemicals are stored or mixed at the project site. Additionally, historical photographs indicate the presence of an orchard on the project site in the Late 1940's. Though the usage of organochlorine pesticides may have historically occurred, it is unlikely that any significant concentrations would be present onsite.

7.0 CONCLUSIONS/RECOGNIZED ENVIRONMENTAL CONDITIONS

EBA Engineering has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 for the property identified as APN 009-030-057. Any exceptions to, or deletions from, this practice are described herein. Based on conclusions from the environmental records search, historical data review, and the site reconnaissance we find no evidence of recognized environmental conditions in connection with the project site property.

8.0 NON-SCOPE CONSIDERATIONS

8.1 NON-SCOPE CONSIDERATIONS

The following environmental issues are outside the scope (non-scope considerations) of the standard practice defined by ASTM Standard Practice E 1527-13:

- Regulatory Compliance;
- Cultural and Historic Resources;
- Industrial Hygiene;
- Health and Safety;
- Ecological Resources;
- Endangered Species;
- Indoor Air Quality;
- High Voltage Power Lines;
- Biological Agents; and
- Mold

EBA identified no ASTM non-scope considerations/RECs in connection with the project site that represent potential business environmental risk but are outside the standard scope of services prescribed by ASTM Standard Practice E 1527-13.

8.2 ADDITIONAL SERVICES

No additional services beyond the standard scope of services prescribed by ASTM Standard Practice E 1527-13 were requested by the Client.

9.0 REFERENCES

Aerial Photographs:

1947	Environmental Data Resources
1953	Environmental Data Resources
1958	Environmental Data Resources
1968	Environmental Data Resources
1973	Environmental Data Resources
1982	Environmental Data Resources
1993	Environmental Data Resources
2006	Environmental Data Resources
2010	Environmental Data Resources
2014	Environmental Data Resources

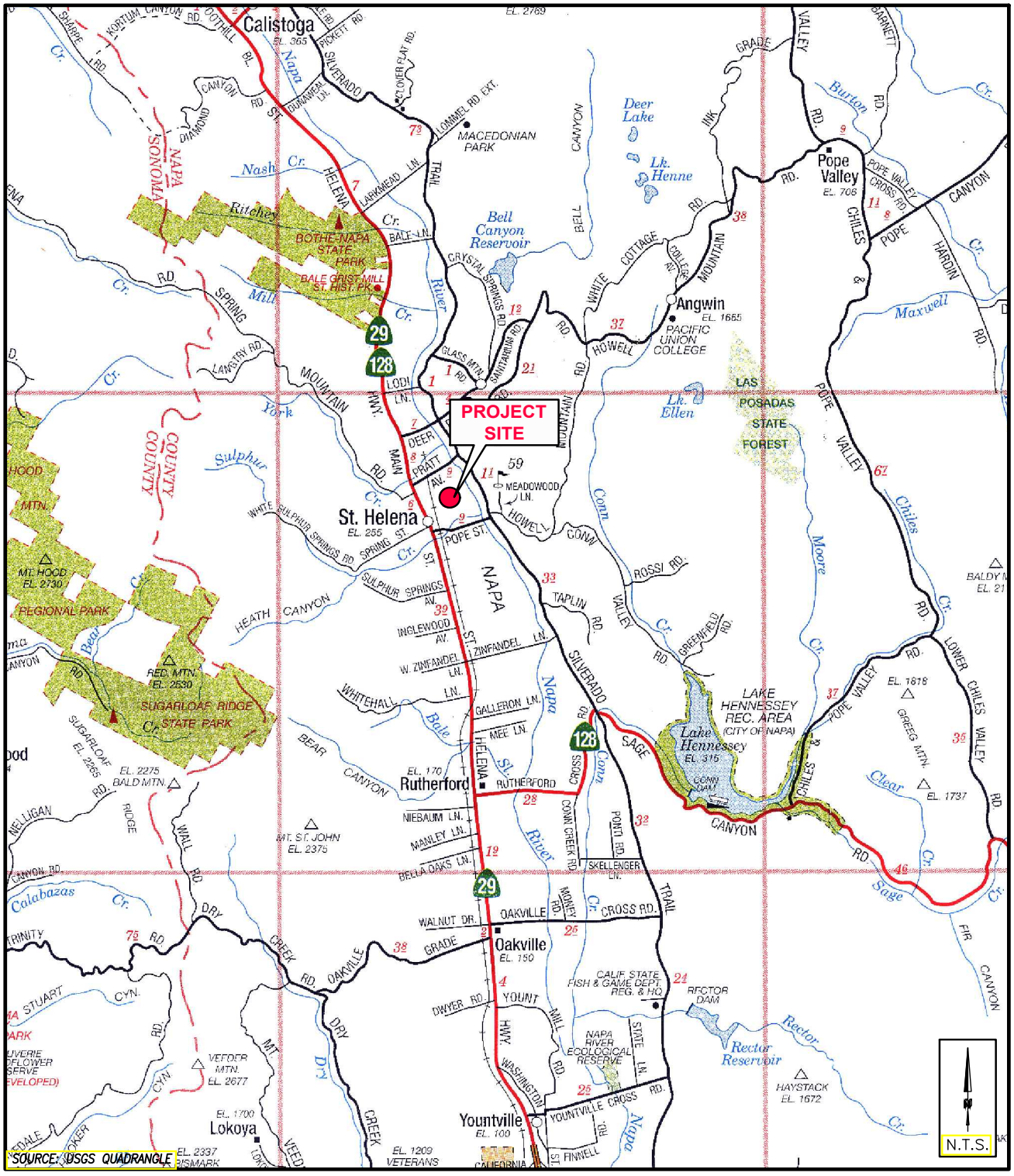
Geology of Northern California, California Division of Mines and Geology – Bulletin 190

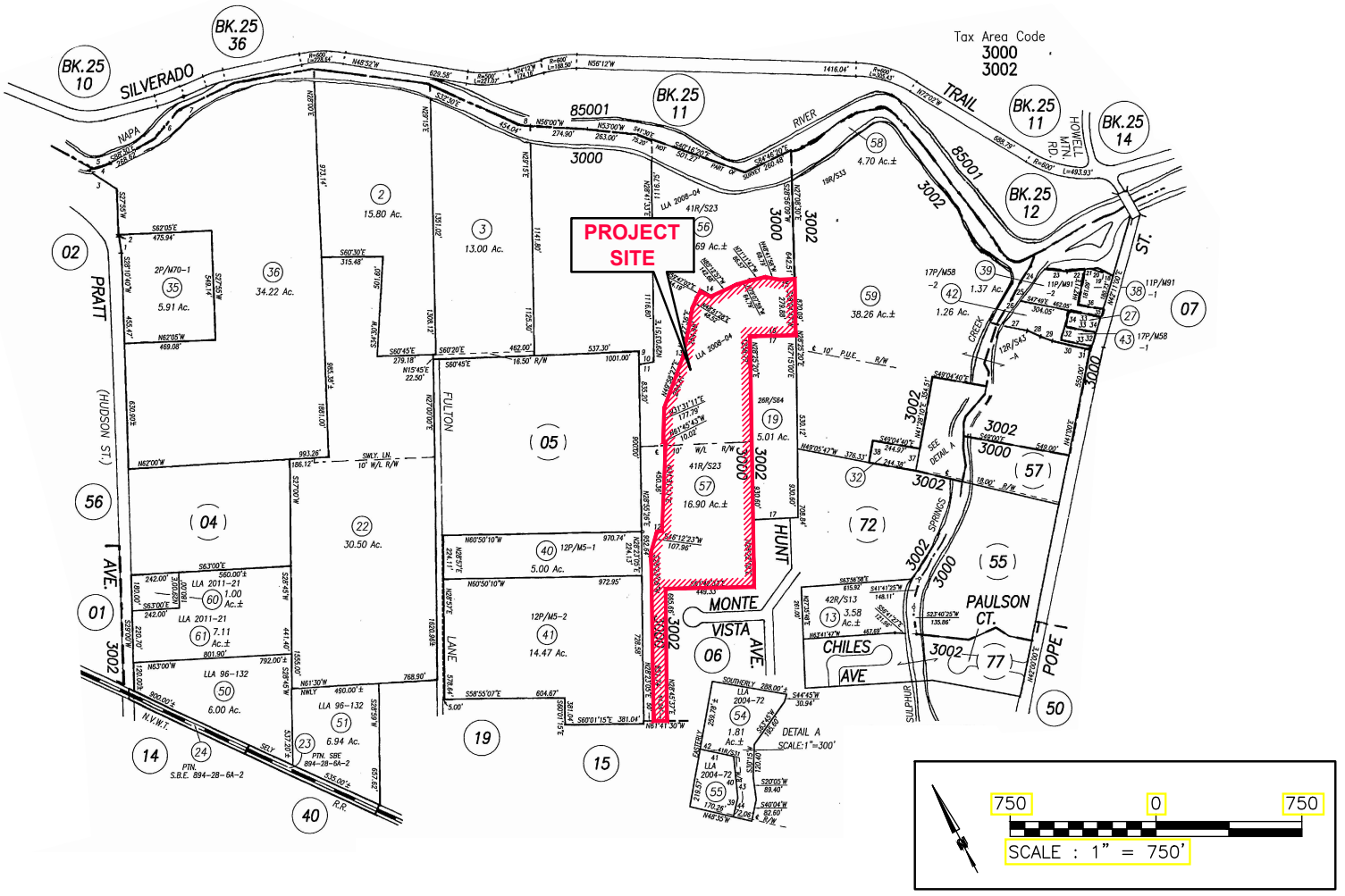
Geologic Map and Map Database of Eastern Sonoma and Western Napa Counties, California. Complied by R.W. Graymer, E.E. Brabb, D.L. Jones, J. Barnes, R.S. Nicholson and R.E. Stamski. U.S. Department of the Interior, U.S. Geological Survey, 2007.

U.S. Geological Survey, 7.5 Minute - Topographic Quadrangle, Saint Helena, California.

APPENDIX A

FIGURES


PROJECT SITE
Calistoga
St. Helena
Rutherford
Oakville
Yountville
Angwin
Pope Valley
Lokoya
Napa
Sonoma
Lake Hennessey
Lake Henne
Bell Canyon Reservoir
Rector Reservoir
Deer Lake
Lake Ellen
Las Posadas State Forest
Bothe-Napa State Park
Bale Grist Mill St. Hist. Pk.
Sugarloaf Ridge State Park
Pacific Union College
Macedonian Park
Mt. Hood
Red Mtn.
Bald Mtn.
Mt. St. John
Veeder Mtn.
Haystack
Napa River Ecological Reserve
Lake Hennessey Rec. Area
Calif. State Fish & Game Dept. Reg. & HQ
Rector Dam
Conn Dam
Lake Hennessey
Silverado
Napa River
Conn Creek
Dry Creek
Rutherford Cross
Oakville Cross
Yountville Cross
Pope Valley
Chiles Valley
Howell Mountain
Spring Mtn.
Greens Mtn.
Baldy
Foss Valley
Meadowood
Taplin
Rossi
Greenfield
Inglewood
Sulphur Springs
Zinfandel
Whitehall
Galleron
Mee
Niebaum
Manley
Bella Oaks
Skellenger
Walnut Dr.
Dwyer
Yount Mill
Hwy 29
Hwy 128
Silverado Trail
Napa Valley Wine Train
Napa Valley Vineyards
Napa Valley Expo
Napa Valley Museum
Napa Valley Opera House
Napa Valley Wine Auction
Napa Valley Marathon
Napa Valley Film Festival



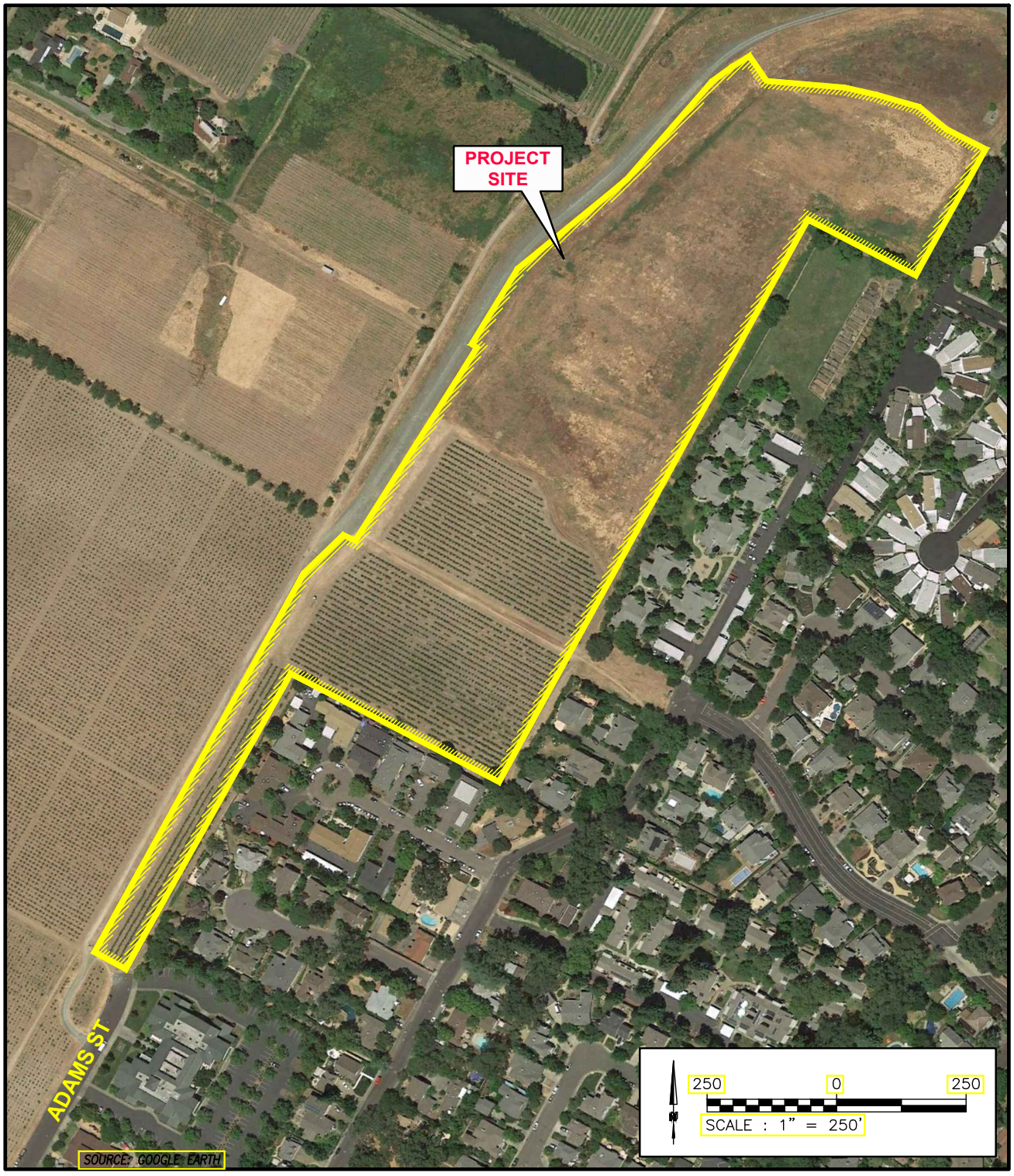
EBA ENGINEERING
825 SONOMA AVENUE
SUITE C
SANTA ROSA, CA 95404
TEL: (707) 544-0784

ASSESSORS PARCEL MAP

HUNTER PROPERTY
SAINT HELENA, CALIFORNIA

FIGURE
2
18-2550

Q:\2550\Location Maps.dwg, APN Map, 2/16/2018 11:56:20 AM



EBA ENGINEERING
825 SONOMA AVENUE
SUITE C
SANTA ROSA, CA 95404
TEL: (707) 544-0784

AERIAL VIEW

HUNTER PROPERTY
SAINT HELENA, CALIFORNIA

FIGURE
3
18-2550

Q:\2550\Location Maps.dwg, Aerial View, 2/16/2018 12:02:23 PM



View of the project site looking northeast.



View of the project site looking southwest.

EBA ENGINEERING

PHOTO PLATE
HUNTER PROPERTY
APN 009-030-057
ST. HELENA, CALIFORNIA

FIGURE 4

February 2018
18-2550

APPENDIX B

PRELIMINARY TITLE REPORT

Stewart Title of California, Inc
2850 Cordelia Road, Ste 100
Fairfield, CA 94534
(707) 439-7500 Phone

PRELIMINARY REPORT

Order Number : 463973
Title Unit Number : 7931

Buyer/Borrower Name: :
Seller Name: : Dennis R. Hunter

Property Address: APN# 009-030-057, Napa, California

In response to the above referenced application for a Policy of Title Insurance, Stewart Title of California, Inc. hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referenced to as an Exception on Schedule B or not excluded from coverage pursuant to the printed Schedules, Conditions, and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on covered Risks of said policy or policies are set forth in Exhibit A attached. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limits of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters, which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report, (and any supplements or amendments thereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance a binder or commitment should be requested.

Dated as of: March 27, 2014 at 7:30 a.m.

Update No. 1

Bill Curry, Title Officer

When replying, please contact Sandy Veveiros, Escrow Officer

Stewart Title of California, Inc.
1101 College Avenue, Suite 100
Santa Rosa, Calif. 95404,
(707) 526-2000

PRELIMINARY REPORT

The form of Policy of Title Insurance contemplated by this report is:

☒ California Land Title Association Standard Coverage Policy

☐ American Land Title Association Owners Policy

☐ American Land Title Association Residential Title Insurance Policy

☐ American Land Title Association Loan Policy

☐ CLTA/ALTA Homeowners Policy

☐ ALTA Short Form Residential Loan Policy (06/16/07)

☐ 2006 ALTA Loan Policy

SCHEDULE A

The estate or interest in the land hereinafter described or referred to covered by this report is:

Fee

Title to said estate or interest at the date hereof is vested in:

Dennis R. Hunter, dealing with his separate property, who acquired title as an unmarried man

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, County of Napa, City of Napa, and described as follows:

Portions of that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of Parcel One described in the Grant Deed to the City of St Helena recorded March 15, 2005 at Document No. 2005-0009620 Official Records Napa County and a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portions being more particularly described as follows:

COMMENCING at the southwestern corner of the above reference lands to Dennis R. Hunter; thence along the southwestern line of said lands S60°50'08"E, 50.00 feet to the True Point of Beginning; thence leaving last said line N29°14'27"E, 851.74 feet; thence N47°03'45"E, 107.96 feet; thence 560°46'20"E, 22.90 feet; thence N32°22'33"E, 450.36 feet; thence N60°54'21"W, 10.02 feet; thence N32°22'33"E, 177.79 feet; thence N50°49'49"E, 264.81 feet to the general southwestern line of the above referenced Parcel One to the City of St Helena; thence along said general southwestern line S71°07'20"E, 2.96 feet; thence leaving last said line N41°18'58"E, 254.98 feet; thence N49°42'50"E, 48.52 feet; thence N60°38'24"E, 44.19 feet; thence S 7729°32'38"E, 64.19 feet; thence S84°21'35"'E, 142.68 feet; thence S78°16'37"E, 64.79 feet; thence S70°20'25"E, 86.57 feet; thence S47°50'36"E, 68.79 feet; thence S62°05'04"E, 77.73 feet to the southeastern line of said Parcel One to the City of St. Helena; thence along last said line S28°56'09"W, 279.88 feet to the northeastern corner of said lands to Dennis R. Hunter; thence along the general southeastern and southwestern lines of said lands to Dennis R. Hunter N60°46'20"W, 234.63 feet; thence S29°13'40"W, 1258.77 feet; thence N60°51'11"W, 449.33 feet; thence S29°36'59"W, 665.66 feet; thence N60°50'08"W, 64.96 feet to the True Point of Beginning.

Assessor's Parcel Number 009-030-057-000

(End of Legal Description)

SCHEDULE B

At the date hereof, exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy or policies would be as follows:

Taxes:

A. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes, to be levied for the fiscal year 2014 – 2015.

B. General and Special City and/or County taxes, including any personal property taxes and any assessments collected with taxes, for the fiscal year 2013 - 2014:

1st Installment:	$11,242.63	Paid
2nd Installment:	$11,242.63	Open
Parcel No.:	009-030-057	
Code Area:	003-000	

C. Assessments, if any, for Community Facility Districts affecting said land which may exist by virtue of assessment maps or notices filed by said districts. Said assessments are collected with the County Taxes.

D. The lien of supplemental taxes, if any, assessed pursuant to the provisions of Chapter 3.5 (commencing with Section 75) of the Revenue and Taxation Code of the State of California.

Exceptions:

1. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records

2. An easement for public utilities and rights incidental thereto in favor of Pacific Telephone and Telegraph Company as set forth in a document recorded March 28, 1930 in Book 49 at Page 169 of Official Records, affects as described therein.

3. An easement for underground water pipeline and rights incidental thereto in favor of the City of St. Helena as set forth in a document recorded December 5, 1972, in Book 895 at Page 383 of Official Records, affects as described therein.

4. The matters contained in an instrument entitled “Hunt Avenue Storm Drain Reimbursement Agreement” dated November 14, 1995, by and between the City of St. Helena and St. Helena Office Park, a California general partnership and B & E Properties, a California general partnership upon the terms therein provided recorded November 29, 1995, as Instrument 1995-026769 of Official Records.

5. The matters contained in an instrument entitled “Temporary Construction Easement” dated December 9, 2008, by and between Dennis R. Hunter, Grantor and the City of St. Helena, Grantee upon the terms therein provided recorded April 17, 2009, as Instrument 2009-0009317 of Official Records.

   Affects as shown on map attached thereto

6. The matters contained in an instrument entitled "Utility Easement Agreement" dated December 9, 2009, by and between Dennis R. Hunter, Grantor and the City of St. Helena, Grantee upon the terms therein provided recorded April 17, 2009, as Instrument 2009-0009318 of Official Records.

   Affects as shown on map attached thereto.

7. Deed of Trust to secure an indebtedness in the amount shown below, and any other obligations secured thereby:

Amount:	$10,000,000.00
Dated:	May 12, 2009
Trustor:	Dennis R. Hunter, dealing with his separate property
Trustee:	Stewart Title of California, Inc.
Beneficiary:	First Community Bank
Recorded:	May 19, 2009 as Instrument No. 2009-0012656 of Official Records
Loan No.:	0001 801006 06

   The above deed of trust is reflected as an equity line loan or a revolving line of credit. Prior to final payoff we will require a written statement from the beneficiary that the account has been closed, the enclosed indemnity (for refinance purposes only) signed by the owner/trustor, and or a full reconveyance must be submitted for recording concurrent with payoff.

8. The matters contained in an instrument entitled "Temporary Construction Easement" dated December 9, 2008, by and between City of St. Helena and Dennis R. Hunter upon the terms therein provided recorded April 17, 2009 as Instrument No. 2009-0009317, of Official Records.

9. The matters contained in an instrument entitled "Utility Easement Agreement" dated December 9, 2008, by and between City of St. Helena and Dennis R. Hunter upon the terms therein provided recorded April 17, 2009 as Instrument No. 2009-0009318, of Official Records.

10. Matters which may be disclosed by an inspection or by a survey of said land satisfactory to this Company, or by inquiry of the parties in possession thereof.

11. Rights of parties in possession.

(End of Exceptions)

NOTES AND REQUIREMENTS

A. If an Owners Policy will be requested, please be aware that unless instructed otherwise, we will issue a CLTA Standard Coverage Owners Policy. If a different form of policy is contemplated for this transaction, please advise and contact your title officer for additional requirements.

B. There are no conveyances affecting said land, recorded with the County Recorder within 24 months of the date of this report.

C. This report can be used as an expedited search/starter in a subsequent sale.

D. This report is preparatory to the issuance of an ALTA loan Policy. We have no knowledge of any fact which would preclude the issuance of the policy with CLTA Endorsement Forms 100 and 116 and if applicable, 115 and 116.2 attached.

E. The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Rate.

F. The map attached, if any, may or may not be a survey of the land depicted hereon. Stewart Title expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

G. A Preliminary Change of Ownership Report must be completed by the transferee (buyer) prior to the transfer of property in accordance with the provisions of Section 480.3 of the Revenue and Taxation Code. The Preliminary Change of Ownership Report should be submitted to the recorder concurrent with the recordation of any document effecting a change of ownership. If a document evidencing a change of ownership (i.e. Deed, Affidavit-Death Joint Tenant) is presented to the recorder for recording without a preliminary change of ownership report, the recorder may charge an additional $20.00

H. If your property is in San Francisco, it is the requirement of the City and County of San Francisco that a Transfer Tax affidavit to be completed and signed by the Grantor for each deed submitted for recording. This is an addition to a Preliminary Change of Ownership Report.

In addition to County Transfer Tax, any conveyance of the herein described property may be subject to a City Transfer and/or Conveyance Tax, as follows.

Alameda	$12.00 per thousand
Albany	$11.50 per thousand
Berkeley	$15.00 per thousand
Cloverdale	$1.10 per thousand
Cotati	$1.90 per thousand
Culver City	$4.50 per thousand
Hayward	$4.50 per thousand
Los Angeles	$4.50 per thousand
Mountain View	$3.30 per thousand
Oakland	$15.00 per thousand
Palo Alto	$3.30 per thousand
Petaluma	$2.00 per thousand
Piedmont	$13.00 per thousand

Pomona	$2.20 per thousand
Redondo Beach	$2.20 per thousand
Richmond	$7.00 per thousand
Riverside	$1.10 per thousand
Sacramento	$2.75 per thousand
San Leandro	$6.00 per thousand
City and County of San Francisco	Up to $250,000 = $5.00 per thousand $250,000 to $1,000,000 = $6.80 per thousand $1,000,000 to $5,000,000 = $7.50 per thousand $5,000,000 to $10,000,000 = $20.00 per thousand Above $10,000,000 = $25.00 per thousand (Do not add the additional $1.10 for County Tax, it is included.)
San Jose	$3.30 per thousand
San Mateo	$5.00 per thousand
San Rafael	$2.00 per thousand
Santa Monica	$3.00 per thousand
Santa Rosa	$2.00 per thousand
Sebastopol	$2.00 per thousand
Vallejo	$3.30 per thousand
Waterford	$0.55 per thousand
Winters	$1.10 per thousand
Woodland	$1.10 per thousand

Additional Requirements for "Short Sale" Transactions in which a lender will accept less than the outstanding balance of its loan as full satisfaction of the obligation:

The Company will require, prior to the issuance of a policy of title insurance, evidence that the first-position trust deed holder has received and acknowledged all payments to be made to subordinate-position lien holders, regardless of whether such payments are to be made from proceeds or from contributions by real estate brokers and/or buyers in the subject transaction, or from other third-party sources. Evidence shall include but not be limited to: (a) a written demand from the first-position trust deed holder acknowledging and approving payments to subordinate-position lien holders from proceeds and otherwise; or (b) a supplemental letter or amended demand from the first-position lien holder acknowledging payments to be made to subordinate lien holders from sources other than proceeds (including broker commissions and additional buyer deposits).

CALIFORNIA "GOOD FUNDS" LAW

California Insurance Code Section 12413.1 regulates the disbursement of escrow and sub-escrow funds by title companies. The law requires that funds be deposited in the title company escrow account and available for withdrawal prior to disbursement. Funds received by Stewart Title of California, Inc. via wire transfer may be disbursed upon receipt. Funds received via cashier's checks or teller checks drawn on a California Bank may be disbursed on the next business day after the day of deposit. If funds are received by any other means, recording and/or disbursement may be delayed, and you should contact your title or escrow officer. All escrow and sub-escrow funds received will be deposited with other escrow funds in one or more non-interest bearing escrow accounts in a financial institution selected by Stewart Title of California, Inc.. Stewart Title of California, Inc. may receive certain direct or indirect benefits from the financial institution by reason of the deposit of such funds or the maintenance of such accounts with the financial institution, and Stewart Title of California, Inc. shall have no obligation to account to the depositing party in any manner for the value of, or to pay to such party, any benefit received by Stewart Title of California, Inc.. Such benefits shall be deemed additional compensation to Stewart Title of California, Inc. for its services in connection with the escrow or sub-escrow.

If any check submitted is dishonored upon presentation for payment, you are authorized to notify all principals and/or their respective agents of such nonpayment.

Wire Instructions

Please find below Wiring Instructions for Escrow # 463973

Effective **March 31, 2014**

All funds wired should be directed to:

Bank	**Comerica Bank** **San Jose Main**
Address	**333 West Santa Clara Street**
City/State	**San Jose, CA 95113**
ABA	**121137522**
Credit To	**Stewart Title of California, Inc.**
Account No.	**1894094869**
Reference	**Escrow Officer - Sandy Veveiros** **Escrow Number - 463973** **Escrow Unit No. - 7903**

We do not accept ACH Transfers, these funds will be returned and may cause a delay in closing. If you have any questions regarding this matter, please do not hesitate to contact this office.

4 4STG Privacy Notice 1 (Rev 01/26/09) Stewart Title Companies

WHAT DO THE STEWART TITLE COMPANIES DO WITH YOUR PERSONAL INFORMATION?

Federal and applicable state law and regulations give consumers the right to limit some but not all sharing. Federal and applicable state law regulations also require us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand how we use your personal information. This privacy notice is distributed on behalf of the Stewart Title Guaranty Company and its affiliates (the Stewart Title Companies), pursuant to Title V of the Gramm-Leach-Bliley Act (GLBA).

The types of personal information we collect and share depend on the product or service that you have sought through us. This information can include social security numbers and driver's license number.

All financial companies, such as the Stewart Title Companies, need to share customers' personal information to run their everyday business—to process transactions and maintain customer accounts. In the section below, we list the reasons that we can share customers' personal information; the reasons that we choose to share; and whether you can limit this sharing.

Reasons we can share your personal information	Do we share?	Can you limit this sharing?
For our everyday business purposes— to process your transactions and maintain your account. This may include running the business and managing customer accounts, such as processing transactions, mailing, and auditing services, and responding to court orders and legal investigations.	Yes	No
For our marketing purposes— to offer our products and services to you.	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes— information about your transactions and experiences. Affiliates are companies related by common ownership or control. They can be financial and nonfinancial companies. *Our affiliates may include companies with a Stewart name; financial companies, such as Stewart Title Company*	Yes	No
For our affiliates' everyday business purposes— information about your creditworthiness.	No	We don't share
For our affiliates to market to you	Yes	No
For nonaffiliates to market to you. Nonaffiliates are companies not related by common ownership or control. They can be financial and nonfinancial companies.	No	We don't share

We may disclose your personal information to our affiliates or to nonaffiliates as permitted by law. If you request a transaction with a nonaffiliate, such as a third party insurance company, we will disclose your personal information to that nonaffiliate. [We do not control their subsequent use of information, and suggest you refer to their privacy notices.]

Sharing practices	
How often do the Stewart Title Companies notify me about their practices?	We must notify you about our sharing practices when you request a transaction.
How do the Stewart Title Companies protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal and state law. These measures include computer, file, and building safeguards.
How do the Stewart Title Companies collect my personal information?	We collect your personal information, for example, when you • request insurance-related services • provide such information to us We also collect your personal information from others, such as the real estate agent or lender involved in your transaction, credit reporting agencies, affiliates or other companies.
What sharing can I limit?	Although federal and state law give you the right to limit sharing (e.g., opt out) in certain instances, we do not share your personal information in those instances.

Contact Us	If you have any questions about this privacy notice, please contact us at: Stewart Title Guaranty Company, 1980 Post Oak Blvd., Privacy Officer, Houston, Texas 77056

File No.: 463973

Order No. 463973

AVAILABLE DISCOUNTS DISCLOSURE STATEMENT

This is to give you notice that Stewart Title of California, Inc. ("Stewart Title") is pleased to inform you that upon proper qualification, there are premium discounts available upon the purchase of title insurance covering improved property with a one to four family residential dwelling.

Such discounts apply to and include:

Property located within an area proclaimed a state or federal disaster area;

Property purchased from a foreclosing beneficiary or successful bidder at a foreclosure sale;

Property being refinanced.

Please talk with your escrow or title officer to determine your qualification for any of these discounts.

EXHIBIT "A"

LEGAL DESCRIPTION

Order No.: 463973
Escrow No: 463973

The land referred to herein is situated in the State of California County of Napa, City of Napa, and described as follows:

Portions of that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of Parcel One described in the Grant Deed to the City of St Helena recorded March 15, 2005 at Document No. 2005-0009620 Official Records Napa County and a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portions being more particularly described as follows:

COMMENCING at the southwestern corner of the above reference lands to Dennis R. Hunter; thence along the southwestern line of said lands S60°50'08"E, 50.00 feet to the True Point of Beginning; thence leaving last said line N29°14'27"E, 851.74 feet; thence N47°03'45"E, 107.96 feet; thence 560°46'20"E, 22.90 feet; thence N32°22'33"E, 450.36 feet; thence N60°54'21"W, 10.02 feet; thence N32°22'33"E, 177.79 feet; thence N50°49'49"E, 264.81 feet to the general southwestern line of the above referenced Parcel One to the City of St Helena; thence along said general southwestern line S71°07'20"E, 2.96 feet; thence leaving last said line N41°18'58"E, 254.98 feet; thence N49°42'50"E, 48.52 feet; thence N60°38'24"E, 44.19 feet; thence S 7729°32'38"E, 64.19 feet; thence S84°21'35"'E, 142.68 feet; thence S78°16'37"E, 64.79 feet; thence S70°20'25"E, 86.57 feet; thence S47°50'36"E, 68.79 feet; thence S62°05'04"E, 77.73 feet to the southeastern line of said Parcel One to the City of St. Helena; thence along last said line S28°56'09"W, 279.88 feet to the northeastern corner of said lands to Dennis R. Hunter; thence along the general southeastern and southwestern lines of said lands to Dennis R. Hunter N60°46'20"W, 234.63 feet; thence S29°13'40"W, 1258.77 feet; thence N60°51'11"W, 449.33 feet; thence S29°36'59"W, 665.66 feet; thence N60°50'08"W, 64.96 feet to the True Point of Beginning.

Assessor's Parcel Number 009-030-057-000

(End of Legal Description))

CLTA Preliminary Report Form

Exhibit A (Revised 06-03-11)

CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

CLTA Preliminary Report Form

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

6. Any lien or right to a lien for services, labor or material not shown by the public records.

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (02-03-10)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:

   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.

   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.

3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.

4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1 % of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$10,000.00
Covered Risk 18:	1 % of Policy Amount Shown in Schedule A or $5,000,00 (whichever is less)	$25,000.00
Covered Risk 19:	1 % of Policy Amount Shown in Schedule A or $5,000.00 (whichever is less)	$25,000.00
Covered Risk 21:	1 % of Policy Amount Shown in Schedule A or $2,500.00 (whichever is less)	$5,000.00

2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters

   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13 or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.

5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.

6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is

   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.

7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) that arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;
   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) that arise by reason of:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

AFFILIATED BUSINESS ARRANGEMENT DISCLOSURE STATEMENT

Date: March 31, 2014

To : _____

APN# 009-030-057
Property: Napa, California 94558

From: Stewart Title of California, Inc.

This is to give you notice that Stewart Title of California, Inc. ("Stewart Title") has a business relationship with Stewart Solutions, LLC, DBA – Stewart Specialty Insurance Services, LLC ("Stewart Insurance"). Stewart Information Services Corporation owns 100% of Stewart Insurance and Stewart Title of California. Because of this relationship, this referral may provide Stewart Title a financial or other benefit.

Set forth below is the estimated charge or range of charges for the settlement services listed. You are NOT required to use the listed provider(s) as a condition for purchase, sale, or refinance of the subject Property. THERE ARE FREQUENTLY OTHER SETTLEMENT SERVICE PROVIDERS AVAILABLE WITH SIMILAR SERVICES. YOU ARE FREE TO SHOP AROUND TO DETERMINE THAT YOU ARE RECEIVING THE BEST SERVICES AND THE BEST RATE FOR THESE SERVICES.

Stewart Insurance Settlement Service	***Charge or range of charges***
Hazard Insurance	$400.00 to $6,500.00
Home Warranty	$255.00 to $ 780.00
Natural Hazard Disclosure Report	$ 42.50 to 149.50

ACKNOWLEDGMENT

I/we have read this disclosure form, and understand that Stewart Title is referring me/us to purchase the above-described settlement service(s) and may receive a financial or other benefit as the result of this referral.

_____
Signature

_____
Signature

APPENDIX C

PHASE I QUESTIONNAIRE

USER QUESTIONNAIRE - Phase I Environmental Site Assessment

To the best of your ability please provide answers to the following questions:

(1.) Did a search of *recorded land title records* (or judicial records where appropriate, see below) identify any environmental liens filed or recorded against the p*roperty* under federal, tribal, state or local law?

Yes___

No ✓

(2.) Did a search of *recorded land title records* (or judicial records where appropriate, identify any activity use limitations (AULs), such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the *property* and/or have been filed or recorded against the *property* under federal, tribal, state or local law?

Yes___

No ✓

(3.) Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Yes___

No ✓

(4.) Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

Yes___

No ✓

(5.) Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example,

(a.) Do you know the past uses of the *property*?

Yes___

No ✓

(b.) Do you know of specific chemicals that are present or once were present at the *property*?

Yes___

No ✓

(c.) Do you know of spills or other chemical releases that have taken place at the *property*?

Yes___

No ✓

(d.) Do you know of any environmental cleanups that have taken place at the *property*?

Yes___

No ✓

(6.) Based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of releases at the *property*?

Yes___

No ✓

Signature :_____

Date: 3-5-18

APPENDIX D

EDR RADIUS MAP REPORT

Hunter Property
Adams Street
Saint Helena, CA 94574

Inquiry Number: 5167765.2s
January 25, 2018

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-LBD-CHM

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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

ADAMS STREET
SAINT HELENA, CA 94574

COORDINATES

Latitude (North):	38.5113800 - 38° 30' 40.96''
Longitude (West):	122.4645960 - 122° 27' 52.54''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	546680.1
UTM Y (Meters):	4262485.0
Elevation:	219 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5602436 SAINT HELENA, CA
Version Date:	2012
South Map:	5602434 RUTHERFORD, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140604, 20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
ADAMS STREET
SAINT HELENA, CA 94574

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	P.M. MORISOLI	940 HUNT AVE	SWEEPS UST	Higher	812, 0.154, SSW
A2	PM MORISOLI	940 HUNT AVE	HIST UST	Higher	812, 0.154, SSW
B3	JIM WHEELER PAINTING	1030 FULTON AVE	RCRA-SQG	Higher	1085, 0.205, WSW
C4	CALTRANS	UNKNOWN MITCHELL & P	LUST	Higher	1101, 0.209, SW
C5	TRIPOLI MARKET	607 29	LUST, HIST CORTESE	Higher	1101, 0.209, SW
6	SAFEWAY STORE #0762	1026 HUNT AVE	LUST	Higher	1105, 0.209, SSW
7	FACILITY 49-000-0059	1 SKAGGS ISLAND RD	UST	Higher	1226, 0.232, SSE
B8	ABRUZZINI PROPERTY	1030 FULTON LANE	UST, HIST UST	Higher	1243, 0.235, WSW
B9	RON ABRUZZINI	1030 FULTON LN	SWEEPS UST, CA FID UST	Higher	1243, 0.235, WSW
B10	ABRUZZINI PROPERTY	1030 FULTON LN	LUST, SLIC, HIST CORTESE	Higher	1243, 0.235, WSW
C11	UNION 76	1380 MAIN ST	LUST, HIST CORTESE	Higher	1335, 0.253, SW
D12	CHEVRON	1400 MAIN ST	LUST, HIST CORTESE	Higher	1359, 0.257, SW
E13	HELEN PASCHICH ESTAT	1078 FULTON LANE	LUST, UST, HIST UST, HIST CORTESE	Higher	1438, 0.272, WSW
E14	PRIVATE RESIDENCE	PRIVATE RESIDENCE	LUST	Higher	1443, 0.273, WSW
15	ST. HELENA, CITY OF,	1480 MAIN STREET	LUST, ENF, HIST CORTESE, NPDES	Higher	1444, 0.273, SW
D16	CHEVRON	1400 MAIN ST	LUST	Higher	1536, 0.291, SW
F17	HEUBLEIN FINE WINE G	8215 ST HELENA HWY	LUST, SWEEPS UST, HIST CORTESE	Higher	1686, 0.319, SSW
F18	SAINT HELENA PLAZA	1136 MAIN ST	LUST	Higher	1724, 0.327, SSW
19	OGLETREE'S MACHINE S	1017 POPE ST	LUST	Higher	1769, 0.335, South
F20	NOBLE PROPERTIES	1132 MAIN STREET	SLIC	Higher	1782, 0.338, SSW
G21	NAPA VALLEY PETROLEU	1153 MAIN ST	LUST, HIST CORTESE	Higher	1825, 0.346, SSW
F22	VALLEY CONVENIENCE S	1108 MAIN ST	LUST, HIST CORTESE	Higher	1843, 0.349, SSW
F23	CITY OF ST. HELENA S	1108 MAIN	LUST	Higher	1843, 0.349, SSW
H24	PACIFIC BELL	1240 OAK STREET	RCRA-SQG, LUST, FINDS, ECHO, HIST CORTESE	Higher	1907, 0.361, SSW
H25	PACIFIC BELL	1240 OAK AVENUE	LUST, EMI	Higher	1907, 0.361, SSW
G26	ST. HELENA/BEN FRANK	1111 MAIN ST	LUST, HAZNET	Higher	1929, 0.365, SSW
G27	BEN FRANKLIN VARIETY	1111 MAIN ST	LUST	Higher	1929, 0.365, SSW
I28	SIDEWALK-POPE AND MA	1080 MAIN ST	LUST	Higher	1984, 0.376, South
I29	VINTAGE BANK	1065 MAIN ST	LUST	Higher	2118, 0.401, South
J30	632 MCCORKLE REDEVEL	632 MCCORKLE AVENUE	SLIC	Higher	2183, 0.413, SE
J31	JOE MCGRATH	632 MCCORKLE ST	LUST	Higher	2183, 0.413, SE
K32	ST. HELENA PG & E	1301-1302 MITCHELL D	SLIC	Higher	2276, 0.431, SSW
K33	PG&E ST. HELENA	1301-1302 MITCHELL D	ENVIROSTOR, VCP, DEED	Higher	2323, 0.440, SSW
34	KAREN RECTOR	1410 ADAMS ST	LUST	Higher	2337, 0.443, SW
K35	PG AND E ST HELENA	MITCHELL DR AND OAK	EDR MGP	Higher	2341, 0.443, SSW
36	ST HELENA PETROLEUM	905 MAIN ST	ENVIROSTOR, LUST, HIST CORTESE	Higher	2746, 0.520, South

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
AST ..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ..... Waste Management Unit Database
SWRCY ..... Recycler Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites

EXECUTIVE SUMMARY

US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ..... RCRA - Non Generators / No Longer Regulated
FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines
FINDS ..... Facility Index System/Facility Registry System
UXO ..... Unexploded Ordnance Sites
ECHO ..... Enforcement & Compliance History Information
DOCKET HWC ..... Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ..... EPA Fuels Program Registered Listing

EXECUTIVE SUMMARY

CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JIM WHEELER PAINTING	1030 FULTON AVE	WSW 1/8 - 1/4 (0.205 mi.)	B3	9

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/30/2017 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG&E ST. HELENA Facility Id: 28490002 Status: Certified / Operation & Maintenance	***1301-1302 MITCHELL D***	***SSW 1/4 - 1/2 (0.440 mi.)***	***K33***	***72***
ST HELENA PETROLEUM Facility Id: 28290001 Status: Refer: Other Agency	***905 MAIN ST***	***S 1/2 - 1 (0.520 mi.)***	***36***	***92***

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 24 LUST sites within

EXECUTIVE SUMMARY

approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALTRANS	UNKNOWN MITCHELL & P	SW 1/8 - 1/4 (0.209 mi.)	C4	10
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Id: 28-0249 Facility Status: Case Closed Global Id: T0605500216 date9: 2/11/2004				
TRIPOLI MARKET	***607 29***	***SW 1/8 - 1/4 (0.209 mi.)***	***C5***	***12***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Id: 28-0172 Facility Status: Case Closed Global Id: T0605500156 date9: 7/25/2000				
SAFEWAY STORE #0762	1026 HUNT AVE	SSW 1/8 - 1/4 (0.209 mi.)	6	13
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017 Status: Open Permit ID: 248471				
ABRUZZINI PROPERTY	***1030 FULTON LN***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B10***	***16***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Id: 28-0002 Facility Status: Case Closed Global Id: T0605500001 date9: 5/15/1992				
UNION 76	***1380 MAIN ST***	***SW 1/4 - 1/2 (0.253 mi.)***	***C11***	***18***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Facility Id: 28-0175 Facility Id: 28-0295 Facility Status: Post remedial action monitoring Facility Status: Leak being confirmed Global Id: T0605500159 Global Id: T0605500251				
CHEVRON	***1400 MAIN ST***	***SW 1/4 - 1/2 (0.257 mi.)***	***D12***	***22***
Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed Global Id: T0605500190				
HELEN PASCHICH ESTAT	***1078 FULTON LANE***	***WSW 1/4 - 1/2 (0.272 mi.)***	***E13***	***25***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 28-0134 Facility Status: Case Closed date9: 12/10/1992				
PRIVATE RESIDENCE	PRIVATE RESIDENCE	WSW 1/4 - 1/2 (0.273 mi.)	E14	26
Database: LUST, Date of Government Version: 12/11/2017 Status: Completed - Case Closed				

EXECUTIVE SUMMARY

Global Id: T0605500123

ST. HELENA, CITY OF, ***1480 MAIN STREET*** ***SW 1/4 - 1/2 (0.273 mi.)*** ***15*** ***27***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 28-0210
Facility Status: Case Closed
Global Id: T0605500189
date9: 11/4/2003

CHEVRON 1400 MAIN ST SW 1/4 - 1/2 (0.291 mi.) D16 35
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Id: 28-0211
Facility Status: Preliminary site assessment underway

HEUBLEIN FINE WINE G ***8215 ST HELENA HWY*** ***SSW 1/4 - 1/2 (0.319 mi.)*** ***F17*** ***35***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 28-0068
Facility Status: Case Closed
Global Id: T0605500064
date9: 10/3/1995

SAINT HELENA PLAZA 1136 MAIN ST SSW 1/4 - 1/2 (0.327 mi.) F18 37
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Global Id: T10000000393

OGLETREE'S MACHINE S 1017 POPE ST S 1/4 - 1/2 (0.335 mi.) 19 39
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Open
Permit ID: 248458

NAPA VALLEY PETROLEU ***1153 MAIN ST*** ***SSW 1/4 - 1/2 (0.346 mi.)*** ***G21*** ***40***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 28-0064
Facility Status: Pollution Characterization
Global Id: T0605500061

VALLEY CONVENIENCE S ***1108 MAIN ST*** ***SSW 1/4 - 1/2 (0.349 mi.)*** ***F22*** ***45***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 28-0186
Facility Status: Remedial action (cleanup) Underway
Global Id: T0605500168

CITY OF ST. HELENA S 1108 MAIN SSW 1/4 - 1/2 (0.349 mi.) F23 62
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Closed
Permit ID: 248384

PACIFIC BELL ***1240 OAK STREET*** ***SSW 1/4 - 1/2 (0.361 mi.)*** ***H24*** ***62***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 12/11/2017
Status: Completed - Case Closed
Facility Id: 28-0128

EXECUTIVE SUMMARY

Facility Status: Case Closed
Global Id: T0605500117
date9: 8/8/1996

PACIFIC BELL ***1240 OAK AVENUE*** ***SSW 1/4 - 1/2 (0.361 mi.)*** ***H25*** ***65***
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Closed
Permit ID: 248171

ST. HELENA/BEN FRANK ***1111 MAIN ST*** ***SSW 1/4 - 1/2 (0.365 mi.)*** ***G26*** ***69***
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Closed
Permit ID: 9965

BEN FRANKLIN VARIETY 1111 MAIN ST SSW 1/4 - 1/2 (0.365 mi.) G27 70
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Closed
Permit ID: 248506

SIDEWALK-POPE AND MA 1080 MAIN ST S 1/4 - 1/2 (0.376 mi.) I28 70
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Open
Permit ID: 248382

VINTAGE BANK 1065 MAIN ST S 1/4 - 1/2 (0.401 mi.) I29 70
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Open
Permit ID: 248369

JOE MCGRATH 632 MCCORKLE ST SE 1/4 - 1/2 (0.413 mi.) J31 71
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Open
Permit ID: 318765

KAREN RECTOR 1410 ADAMS ST SW 1/4 - 1/2 (0.443 mi.) 34 92
Database: NAPA CO. LUST, Date of Government Version: 01/09/2017
Status: Closed
Permit ID: 248151

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 4 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ABRUZZINI PROPERTY	***1030 FULTON LN***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B10***	***16***
Database: SLIC, Date of Government Version: 12/11/2017 Facility Status: Completed - Case Closed Global Id: T10000002584				
NOBLE PROPERTIES	1132 MAIN STREET	SSW 1/4 - 1/2 (0.338 mi.)	F20	40
Database: SLIC, Date of Government Version: 12/11/2017 Facility Status: Completed - Case Closed Global Id: T10000000217 Global Id: SL0605588535				
632 MCCORKLE REDEVEL	632 MCCORKLE AVENUE	SE 1/4 - 1/2 (0.413 mi.)	J30	70
Database: SLIC, Date of Government Version: 12/11/2017				

EXECUTIVE SUMMARY

Facility Status: Open - Verification Monitoring
Global Id: T10000010047

ST. HELENA PG & E | 1301-1302 MITCHELL D | SSW 1/4 - 1/2 (0.431 mi.) | K32 | 71
Database: SLIC, Date of Government Version: 12/11/2017
Facility Status: Open - Remediation
Global Id: SL0605518541

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FACILITY 49-000-0059	1 SKAGGS ISLAND RD	SSE 1/8 - 1/4 (0.232 mi.)	7	14
Database: UST, Date of Government Version: 12/11/2017 Facility Id: 49-000-005917				
ABRUZZINI PROPERTY	***1030 FULTON LANE***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B8***	***14***
Database: NAPA CO. UST, Date of Government Version: 11/22/2017 Facility Id: NAPA0018				

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 10/30/2017 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG&E ST. HELENA	***1301-1302 MITCHELL D***	***SSW 1/4 - 1/2 (0.440 mi.)***	***K33***	***72***
Status: Certified / Operation & Maintenance Facility Id: 28490002				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no

longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
P.M. MORISOLI Status: A Tank Status: A Comp Number: 42320	940 HUNT AVE	SSW 1/8 - 1/4 (0.154 mi.)	A1	8
RON ABRUZZINI Comp Number: 54371	***1030 FULTON LN***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B9***	***15***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 2 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PM MORISOLI Facility Id: 00000042320	940 HUNT AVE	SSW 1/8 - 1/4 (0.154 mi.)	A2	8
ABRUZZINI PROPERTY Facility Id: 00000054371	***1030 FULTON LANE***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B8***	***14***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RON ABRUZZINI Facility Id: 28000007 Status: I	***1030 FULTON LN***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B9***	***15***

Local Land Records

DEED: The use of recorded land use restrictions is one of the methods the DTSC uses to protect the public from unsafe exposures to hazardous substances and wastes .

A review of the DEED list, as provided by EDR, and dated 12/04/2017 has revealed that there is 1 DEED site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG&E ST. HELENA Status: CERTIFIED / OPERATION & MAINTENANCE	***1301-1302 MITCHELL D***	***SSW 1/4 - 1/2 (0.440 mi.)***	***K33***	***72***

EXECUTIVE SUMMARY

Envirostor ID: 28490002

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 10 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
TRIPOLI MARKET Reg Id: 28-0172	***607 29***	***SW 1/8 - 1/4 (0.209 mi.)***	***C5***	***12***
ABRUZZINI PROPERTY Reg Id: 28-0002	***1030 FULTON LN***	***WSW 1/8 - 1/4 (0.235 mi.)***	***B10***	***16***
UNION 76 Reg Id: 28-0175 Reg Id: 28-0295	***1380 MAIN ST***	***SW 1/4 - 1/2 (0.253 mi.)***	***C11***	***18***
CHEVRON Reg Id: 28-0211	***1400 MAIN ST***	***SW 1/4 - 1/2 (0.257 mi.)***	***D12***	***22***
HELEN PASCHICH ESTAT Reg Id: 28-0134	***1078 FULTON LANE***	***WSW 1/4 - 1/2 (0.272 mi.)***	***E13***	***25***
ST. HELENA, CITY OF, Reg Id: 28-0210	***1480 MAIN STREET***	***SW 1/4 - 1/2 (0.273 mi.)***	***15***	***27***
HEUBLEIN FINE WINE G Reg Id: 28-0068	***8215 ST HELENA HWY***	***SSW 1/4 - 1/2 (0.319 mi.)***	***F17***	***35***
NAPA VALLEY PETROLEU Reg Id: 28-0064	***1153 MAIN ST***	***SSW 1/4 - 1/2 (0.346 mi.)***	***G21***	***40***
VALLEY CONVENIENCE S Reg Id: 28-0186	***1108 MAIN ST***	***SSW 1/4 - 1/2 (0.349 mi.)***	***F22***	***45***
PACIFIC BELL Reg Id: 28-0128	***1240 OAK STREET***	***SSW 1/4 - 1/2 (0.361 mi.)***	***H24***	***62***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the

EXECUTIVE SUMMARY

environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

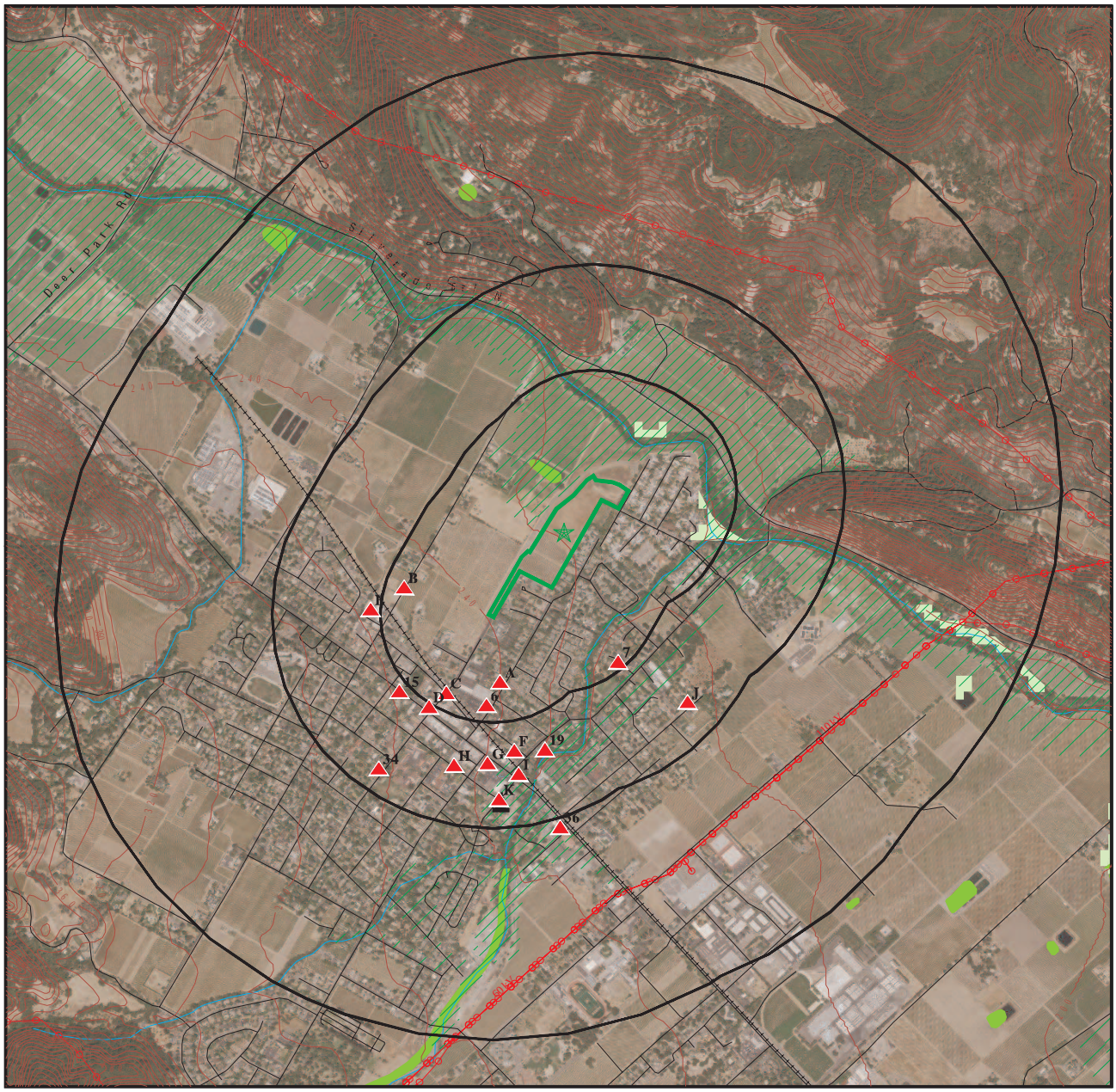
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PG AND E ST HELENA	MITCHELL DR AND OAK	SSW 1/4 - 1/2 (0.443 mi.)	K35	92

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
PG&E GAS PLANT ST HELENA	SEMS-ARCHIVE
PGE FORMER MFRD GAS PLANT	LUST
CORNER OF MITCHELL AND POPE ST	LUST

OVERVIEW MAP - 5167765.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hunter Property ADDRESS: Adams Street Saint Helena CA 94574 LAT/LONG: 38.51138 / 122.464596	CLIENT: EBA Engineering CONTACT: David Noren INQUIRY #: 5167765.2s DATE: January 25, 2018 9:43 am

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DETAIL MAP - 5167765.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hunter Property	CLIENT: EBA Engineering
ADDRESS: Adams Street Saint Helena CA 94574	CONTACT: David Noren
LAT/LONG: 38.51138 / 122.464596	INQUIRY #: 5167765.2s DATE: January 25, 2018 9:44 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	4	20	NR	NR	24

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	1	3	NR	NR	4
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	2	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	1	NR	NR	1
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	2	NR	NR	NR	2
HIST UST	0.250		0	2	NR	NR	NR	2
CA FID UST	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	1	NR	NR	1
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	2	8	NR	NR	10
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	0	NR	1
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	15	35	1	0	51

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
A1	**P.M. MORISOLI**	**SWEEPS UST**	**S106930253**
SSW	**940 HUNT AVE**		**N/A**
1/8-1/4	**SAINT HELENA, CA 94574**		
0.154 mi.			
812 ft.	**Site 1 of 2 in cluster A**		

Relative: Higher

Actual: 240 ft.

SWEEPS UST:

Status:	Active
Comp Number:	42320
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	06-30-89
Owner Tank Id:	1
SWRCB Tank Id:	28-000-042320-000001
Tank Status:	A
Capacity:	300
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	1

A2	**PM MORISOLI**	**HIST UST**	**U001598325**
SSW	**940 HUNT AVE**		**N/A**
1/8-1/4	**ST HELENA, CA 94574**		
0.154 mi.			
812 ft.	**Site 2 of 2 in cluster A**		

Relative: Higher

Actual: 240 ft.

HIST UST:

File Number:	0002B089
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002B089.pdf
Region:	STATE
Facility ID:	00000042320
Facility Type:	Other
Other Type:	FARM
Contact Name:	Not reported
Telephone:	7079632430
Owner Name:	P.M. MORISOLI
Owner Address:	1351 NIEBAUM LN.
Owner City,St,Zip:	RUTHERFORD, CA 94574
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1965
Tank Capacity:	00000300
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
B3 WSW 1/8-1/4 0.205 mi. 1085 ft.	**JIM WHEELER PAINTING 1030 FULTON AVE ST HELENA, CA 94574 Site 1 of 4 in cluster B**	**RCRA-SQG**	**1010313582 CAR000175349**

Relative:
Higher

Actual:
248 ft.

RCRA-SQG:

Date form received by agency:	07/07/2006
Facility name:	JIM WHEELER PAINTING
Facility address:	1030 FULTON AVE ST HELENA, CA 94574
EPA ID:	CAR000175349
Contact:	JIM WHEELER
Contact address:	1030 FULTON AVE ST HELENA, CA 94574
Contact country:	US
Contact telephone:	707-963-9377
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	JIM WHEELER
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	05/01/1989
Owner/Op end date:	Not reported

Owner/operator name:	TRIGEMINUS LLC
Owner/operator address:	1030 FULTON ST HELENA, CA 94571
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/12/2006
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

JIM WHEELER PAINTING (Continued) **1010313582**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

C4 **CALTRANS** **LUST** **S106610904**
SW **UNKNOWN MITCHELL & POPE ST** **N/A**
1/8-1/4 **ST HELENA, CA 94574**
0.209 mi.
1101 ft. **Site 1 of 3 in cluster C**

Relative:
Higher

Actual:
251 ft.

LUST:
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500216
Global Id: T0605500216
Latitude: 38.505939
Longitude: -122.469597
Status: Completed - Case Closed
Status Date: 02/11/2004
Case Worker: ZZZ
RB Case Number: 28-0249
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0615
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500216
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 02/11/2004
Action: Closure/No Further Action Letter - #2/11/2004

Global Id: T0605500216
Action Type: Other

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

CALTRANS (Continued) **S106610904**

Date: 11/13/1996
Action: Leak Discovery

Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 01/08/2004
Action: Site Visit / Inspection / Sampling - #1/8/2004

Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 06/26/2003
Action: Site Visit / Inspection / Sampling

Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 12/23/2003
Action: * No Action

Global Id: T0605500216
Action Type: Other
Date: 11/13/1996
Action: Leak Stopped

Global Id: T0605500216
Action Type: Other
Date: 11/13/1991
Action: Leak Reported

Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 10/08/2003
Action: Meeting

Global Id: T0605500216
Action Type: ENFORCEMENT
Date: 07/30/2003
Action: Technical Correspondence / Assistance / Other

LUST:
Global Id: T0605500216
Status: Open - Case Begin Date
Status Date: 11/13/1991

Global Id: T0605500216
Status: Open - Site Assessment
Status Date: 08/20/1996

Global Id: T0605500216
Status: Completed - Case Closed
Status Date: 02/11/2004

LUST REG 2:
Region: 2
Facility Id: 28-0249
Facility Status: Case Closed

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

CALTRANS (Continued) **S106610904**

Case Number: 0615
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: UNK
Date Leak Confirmed: 8/20/1996
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

C5 **TRIPOLI MARKET** **LUST** **S105026749**
SW **607 29** **HIST CORTESE** **N/A**
1/8-1/4 **ST HELENA, CA 94574**
0.209 mi.
1101 ft. **Site 2 of 3 in cluster C**

Relative: Higher

Actual: 251 ft.

LUST:
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500156
Global Id: T0605500156
Latitude: 38.505939
Longitude: -122.469597
Status: Completed - Case Closed
Status Date: 07/25/2000
Case Worker: JTN
RB Case Number: 28-0172
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0216
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500156
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500156
Action Type: Other
Date: 10/11/1990
Action: Leak Discovery

Global Id: T0605500156
Action Type: Other
Date: 10/11/1990
Action: Leak Stopped

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

MAP FINDINGS

TRIPOLI MARKET (Continued) **S105026749**

Global Id: T0605500156
Action Type: Other
Date: 10/17/1990
Action: Leak Reported

LUST:
Global Id: T0605500156
Status: Open - Case Begin Date
Status Date: 10/11/1990

Global Id: T0605500156
Status: Open - Site Assessment
Status Date: 06/25/1991

Global Id: T0605500156
Status: Completed - Case Closed
Status Date: 07/25/2000

LUST REG 2:
Region: 2
Facility Id: 28-0172
Facility Status: Case Closed
Case Number: 0216
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 6/25/1991
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0172

6
SSW
1/8-1/4
0.209 mi.
1105 ft.

SAFEWAY STORE #0762
1026 HUNT AVE
ST. HELENA, CA

LUST **S119102617**
N/A

Relative:
Higher

Actual:
244 ft.

NAPA CO. LUST:
Permit ID: 248471
Status: Open
Permit Type: Non-LOP
District: 0

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
7 **SSE** **1/8-1/4** **0.232 mi.** **1226 ft.**	**FACILITY 49-000-005917** **1 SKAGGS ISLAND RD** **SKAGGS ISLAND, CA 94574**	**UST**	**U004050402** **N/A**

Relative: Higher

Actual: 224 ft.

UST:
- Facility ID: 49-000-005917
- Permitting Agency: SONOMA COUNTY
- Latitude: 38.507
- Longitude: -122.46228

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
B8 **WSW** **1/8-1/4** **0.235 mi.** **1243 ft.**	**ABRUZZINI PROPERTY** **1030 FULTON LANE** **ST HELENA, CA**	**UST** **HIST UST**	**U001598334** **N/A**

Site 2 of 4 in cluster B

Relative: Higher

Actual: 252 ft.

NAPA CO. UST:
- Facility ID: NAPA0018
- Permit ID: Not reported
- Facility Status: Not reported
- Permit Type: Not reported
- District: Not reported
- Num of Tanks: 0

HIST UST:
- File Number: 00028F9C
- URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028F9C.pdf
- Region: STATE
- Facility ID: 00000054371
- Facility Type: Other
- Other Type: WAREHOUSE
- Contact Name: Not reported
- Telephone: 7072262674
- Owner Name: RON ABRUZZINI
- Owner Address: 1222 RIVER PARK BLVD.
- Owner City,St,Zip: NAPA, CA 94559
- Total Tanks: 0002

- Tank Num: 001
- Container Num: 1
- Year Installed: 1972
- Tank Capacity: 00001000
- Tank Used for: PRODUCT
- Type of Fuel: DIESEL
- Container Construction Thickness: Not reported
- Leak Detection: None

- Tank Num: 002
- Container Num: 2
- Year Installed: 1972
- Tank Capacity: 00001000
- Tank Used for: PRODUCT
- Type of Fuel: UNLEADED
- Container Construction Thickness: Not reported
- Leak Detection: None

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ABRUZZINI PROPERTY (Continued) **U001598334**

Click here for Geo Tracker PDF:

B9
WSW
1/8-1/4
0.235 mi.
1243 ft.

RON ABRUZZINI
1030 FULTON LN
ST HELENA, CA 94574

SWEEPS UST **S101624086**
CA FID UST **N/A**

Site 3 of 4 in cluster B

Relative:
Higher

Actual:
252 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	54371
Number:	Not reported
Board Of Equalization:	44-015453
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	28-000-054371-000001
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL
Number Of Tanks:	2

Status:	Not reported
Comp Number:	54371
Number:	Not reported
Board Of Equalization:	44-015453
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	28-000-054371-000002
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	REG UNLEADED
Number Of Tanks:	Not reported

CA FID UST:

Facility ID:	28000007
Regulated By:	UTNKI
Regulated ID:	00054371
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	7072262674
Mail To:	Not reported
Mailing Address:	1222 RIVER PARK BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	ST HELENA 94574
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

RON ABRUZZINI (Continued) **S101624086**

NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

B10 **ABRUZZINI PROPERTY** **LUST** **S104162284**
WSW **1030 FULTON LN** **SLIC** **N/A**
1/8-1/4 **ST HELENA, CA 94574** **HIST CORTESE**
0.235 mi.
1243 ft. **Site 4 of 4 in cluster B**

Relative:
Higher

Actual:
252 ft.

LUST:
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500001
Global Id: T0605500001
Latitude: 38.509196
Longitude: -122.472079
Status: Completed - Case Closed
Status Date: 05/15/1992
Case Worker: ZZZ
RB Case Number: 28-0002
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0018
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500001
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500001
Action Type: Other
Date: 04/02/1987
Action: Leak Stopped

Global Id: T0605500001
Action Type: Other
Date: 04/02/1987
Action: Leak Reported

Global Id: T0605500001
Action Type: Other
Date: 04/02/1987
Action: Leak Discovery

LUST:
Global Id: T0605500001

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

ABRUZZINI PROPERTY (Continued) **S104162284**

Status: Open - Case Begin Date
Status Date: 04/02/1987

Global Id: T0605500001
Status: Open - Site Assessment
Status Date: 06/19/1990

Global Id: T0605500001
Status: Open - Site Assessment
Status Date: 08/08/1990

Global Id: T0605500001
Status: Completed - Case Closed
Status Date: 05/15/1992

LUST REG 2:
Region: 2
Facility Id: 28-0002
Facility Status: Case Closed
Case Number: 0018
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 6/19/1990
Preliminary Site Assesment Began: 8/8/1990
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 05/23/2012
Global Id: T10000002584
Lead Agency: NAPA COUNTY
Lead Agency Case Number: E 5870
Latitude: 38.509236
Longitude: -122.472078
Case Type: Cleanup Program Site
Case Worker: JTN
Local Agency: NAPA COUNTY
RB Case Number: Not reported
File Location: Not reported
Potential Media Affected: Aquifer used for drinking water supply, Contaminated Surface / Structure, Soil
Potential Contaminants of Concern: Lead, Crude Oil, Diesel, Gasoline, Heating Oil / Fuel Oil
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HIST CORTESE:
Region: CORTESE

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ABRUZZINI PROPERTY (Continued) **S104162284**

Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0002

C11 **UNION 76** **LUST** **S102439588**
SW **1380 MAIN ST** **HIST CORTESE** **N/A**
1/4-1/2 **ST HELENA, CA 94574**
0.253 mi.
1335 ft. **Site 3 of 3 in cluster C**

Relative: Higher

Actual: 251 ft.

LUST:
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500159
Global Id: T0605500159
Latitude: 38.5052963506949
Longitude: -122.469990849495
Status: Completed - Case Closed
Status Date: 01/25/2011
Case Worker: JTN
RB Case Number: 28-0175
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0199
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline, Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T0605500159
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 01/25/2011
Action: Closure/No Further Action Letter

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 01/25/2011
Action: LOP Case Closure Summary to RB

Global Id: T0605500159
Action Type: Other
Date: 03/22/1989
Action: Leak Discovery

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 11/10/2009
Action: Staff Letter

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

UNION 76 (Continued) **S102439588**

Global Id: T0605500159
Action Type: Other
Date: 05/17/1989
Action: Leak Stopped

Global Id: T0605500159
Action Type: Other
Date: 05/08/1989
Action: Leak Reported

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 10/18/2010
Action: Staff Letter

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 11/15/1990
Action: Site Visit / Inspection / Sampling

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 02/15/1993
Action: Site Visit / Inspection / Sampling

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 09/22/2003
Action: Staff Letter

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 05/20/2009
Action: Staff Letter

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 12/16/2008
Action: Staff Letter

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 04/15/1998
Action: Site Visit / Inspection / Sampling

Global Id: T0605500159
Action Type: ENFORCEMENT
Date: 10/26/2010
Action: Staff Letter

LUST:
Global Id: T0605500159
Status: Open - Case Begin Date
Status Date: 03/22/1989

Global Id: T0605500159
Status: Open - Site Assessment

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

UNION 76 (Continued) **S102439588**

Status Date: 04/10/1989

Global Id: T0605500159
Status: Open - Site Assessment
Status Date: 01/11/1991

Global Id: T0605500159
Status: Open - Verification Monitoring
Status Date: 10/12/2006

Global Id: T0605500159
Status: Completed - Case Closed
Status Date: 01/25/2011

Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500251
Global Id: T0605500251
Latitude: 38.504962
Longitude: -122.469895
Status: Completed - Case Closed
Status Date: 04/09/1999
Case Worker: JTN
RB Case Number: 28-0295
Local Agency: NAPA COUNTY
File Location: Not reported
Local Case Number: 280295
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500251
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500251
Action Type: Other
Date: 12/14/1998
Action: Leak Discovery

Global Id: T0605500251
Action Type: Other
Date: 12/14/1998
Action: Leak Stopped

Global Id: T0605500251
Action Type: Other
Date: 12/14/1998
Action: Leak Reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

UNION 76 (Continued) **S102439588**

LUST:
Global Id: T0605500251
Status: Open - Case Begin Date
Status Date: 12/14/1998

Global Id: T0605500251
Status: Open - Site Assessment
Status Date: 12/14/1998

Global Id: T0605500251
Status: Completed - Case Closed
Status Date: 04/09/1999

LUST REG 2:
Region: 2
Facility Id: 28-0175
Facility Status: Post remedial action monitoring
Case Number: 0199
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: 4/10/1989
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 1/11/1991
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: 5/9/2000

Region: 2
Facility Id: 28-0295
Facility Status: Leak being confirmed
Case Number: 280295
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: UNK
Date Leak Confirmed: 12/14/1998
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0175

Region: CORTESE
Facility County Code: 28
Reg By: LTNKA

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	UNION 76 (Continued)		**S102439588**
	Reg Id: 28-0295		
D12	**CHEVRON**	**LUST**	**S110060455**
SW	**1400 MAIN ST**	**HIST CORTESE**	**N/A**
1/4-1/2	**ST HELENA, CA 94574**		
0.257 mi.			
1359 ft.	**Site 1 of 2 in cluster D**		
Relative:			
Higher			
Actual:			
254 ft.			

LUST:

Lead Agency:	NAPA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500190
Global Id:	T0605500190
Latitude:	38.5055648648583
Longitude:	-122.470232222229
Status:	Completed - Case Closed
Status Date:	04/14/2014
Case Worker:	JTN
RB Case Number:	28-0211
Local Agency:	NAPA COUNTY
File Location:	Local Agency
Local Case Number:	0255
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

LUST:

Global Id:	T0605500190
Contact Type:	Local Agency Caseworker
Contact Name:	James Newman, P.G., C.E.G.
Organization Name:	NAPA COUNTY
Address:	1195 THIRD STREET, SUITE 101
City:	NAPA
Email:	james.newman@countyofnapa.org
Phone Number:	Not reported

LUST:

Global Id:	T0605500190
Action Type:	ENFORCEMENT
Date:	07/07/2011
Action:	Staff Letter
Global Id:	T0605500190
Action Type:	Other
Date:	03/15/1997
Action:	Leak Discovery
Global Id:	T0605500190
Action Type:	RESPONSE
Date:	02/01/2013
Action:	Well Destruction Workplan - Regulator Responded
Global Id:	T0605500190
Action Type:	RESPONSE
Date:	11/08/2012
Action:	Well Destruction Workplan - Regulator Responded
Global Id:	T0605500190

Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

CHEVRON (Continued) **S110060455**

Action Type: ENFORCEMENT
Date: 08/03/2010
Action: Staff Letter

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 11/17/2011
Action: Staff Letter

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 10/02/2012
Action: LOP Case Closure Summary to RB

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 12/03/2012
Action: Staff Letter

Global Id: T0605500190
Action Type: Other
Date: 08/23/1991
Action: Leak Stopped

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 04/14/2014
Action: Closure/No Further Action Letter

Global Id: T0605500190
Action Type: Other
Date: 09/03/1991
Action: Leak Reported

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 05/12/2009
Action: Staff Letter

Global Id: T0605500190
Action Type: REMEDIATION
Date: 03/15/1997
Action: Excavation

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 10/02/2012
Action: Notification - Public Notice of Case Closure

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 02/20/2013
Action: Staff Letter

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 10/01/2012

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

CHEVRON (Continued) **S110060455**

Action: Staff Letter

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 08/24/2011
Action: Staff Letter

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 12/16/2008
Action: Staff Letter

Global Id: T0605500190
Action Type: REMEDIATION
Date: 07/28/1991
Action: Excavation

Global Id: T0605500190
Action Type: ENFORCEMENT
Date: 02/08/2011
Action: Staff Letter

LUST:
Global Id: T0605500190
Status: Open - Case Begin Date
Status Date: 08/23/1991

Global Id: T0605500190
Status: Open - Site Assessment
Status Date: 01/17/1992

Global Id: T0605500190
Status: Open - Site Assessment
Status Date: 05/15/1992

Global Id: T0605500190
Status: Open - Verification Monitoring
Status Date: 05/15/1992

Global Id: T0605500190
Status: Open - Verification Monitoring
Status Date: 01/01/2009

Global Id: T0605500190
Status: Open - Eligible for Closure
Status Date: 10/03/2012

Global Id: T0605500190
Status: Completed - Case Closed
Status Date: 04/14/2014

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	CHEVRON (Continued)		**S110060455**
	Reg Id: 28-0211		
E13 **WSW** **1/4-1/2** **0.272 mi.** **1438 ft.** **Relative:** **Higher** **Actual:** **256 ft.**	**HELEN PASCHICH ESTATE** **1078 FULTON LANE** **ST HELENA, CA** **Site 1 of 2 in cluster E**	**LUST** **UST** **HIST UST** **HIST CORTESE**	**U001596441** **N/A**

LUST REG 2:

Region:	2
Facility Id:	28-0134
Facility Status:	Case Closed
Case Number:	0200
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	8/12/1992
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

NAPA CO. UST:

Facility ID:	NAPA0200
Permit ID:	Not reported
Facility Status:	Not reported
Permit Type:	Not reported
District:	Not reported
Num of Tanks:	0

HIST UST:

File Number:	0002AFCF
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002AFCF.pdf
Region:	STATE
Facility ID:	00000048591
Facility Type:	Other
Other Type:	WAREHOUSE
Contact Name:	SAME
Telephone:	7079425800
Owner Name:	L.J. PASCHICH
Owner Address:	2130 PICKETT RD.
Owner City,St,Zip:	CALISTOGA, CA 94515
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

MAP FINDINGS

HELEN PASCHICH ESTATE (Continued) **U001596441**

Click here for Geo Tracker PDF:

HIST CORTESE:

Region:	CORTESE
Facility County Code:	28
Reg By:	LTNKA
Reg Id:	28-0134

E14 **PRIVATE RESIDENCE** **LUST** **S110654772**
WSW **PRIVATE RESIDENCE** **N/A**
1/4-1/2 **ST HELENA, CA 94574**
0.273 mi.
1443 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
256 ft.

LUST:

Lead Agency:	NAPA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500123
Global Id:	T0605500123
Latitude:	38.508767
Longitude:	-122.472848
Status:	Completed - Case Closed
Status Date:	12/10/1992
Case Worker:	ZZZ
RB Case Number:	28-0134
Local Agency:	NAPA COUNTY
File Location:	Local Agency
Local Case Number:	0200
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

LUST:

Global Id:	T0605500123
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	NAPA COUNTY
Address:	1195 THIRD ST., ROOM 101
City:	NAPA
Email:	Not reported
Phone Number:	7072534269

LUST:

Global Id:	T0605500123
Action Type:	Other
Date:	08/23/1989
Action:	Leak Discovery

Global Id:	T0605500123
Action Type:	Other
Date:	08/23/1989
Action:	Leak Stopped

Global Id:	T0605500123
Action Type:	Other
Date:	04/09/1990
Action:	Leak Reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PRIVATE RESIDENCE (Continued) **S110654772**

LUST:
Global Id: T0605500123
Status: Open - Case Begin Date
Status Date: 08/23/1989

Global Id: T0605500123
Status: Open - Site Assessment
Status Date: 08/12/1992

Global Id: T0605500123
Status: Completed - Case Closed
Status Date: 12/10/1992

15
SW
1/4-1/2
0.273 mi.
1444 ft.

ST. HELENA, CITY OF, CS **LUST** **S102438003**
1480 MAIN STREET **ENF** **N/A**
ST. HELENA, CA 94574 **HIST CORTESE**
NPDES

Relative:
Higher

Actual:
258 ft.

LUST:
Lead Agency: NAPA COUNTY
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500189
Global Id: T0605500189
Latitude: 38.506568
Longitude: -122.471426
Status: Completed - Case Closed
Status Date: 11/04/2003
Case Worker: ZZZ
RB Case Number: 28-0210
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0398
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500189
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500189
Action Type: ENFORCEMENT
Date: 11/04/2003
Action: Closure/No Further Action Letter

Global Id: T0605500189
Action Type: ENFORCEMENT
Date: 10/27/2003

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

Action: File review

Global Id: T0605500189
Action Type: Other
Date: 06/07/1991
Action: Leak Discovery

Global Id: T0605500189
Action Type: Other
Date: 06/07/1991
Action: Leak Stopped

Global Id: T0605500189
Action Type: Other
Date: 05/20/1991
Action: Leak Reported

Global Id: T0605500189
Action Type: REMEDIATION
Date: 02/15/1992
Action: Excavation

LUST:
Global Id: T0605500189
Status: Open - Case Begin Date
Status Date: 05/20/1991

Global Id: T0605500189
Status: Open - Site Assessment
Status Date: 08/20/1996

Global Id: T0605500189
Status: Completed - Case Closed
Status Date: 11/04/2003

LUST REG 2:
Region: 2
Facility Id: 28-0210
Facility Status: Case Closed
Case Number: 0398
How Discovered: Tank Closure
Leak Cause: UNK
Leak Source: Tank
Date Leak Confirmed: 8/20/1996
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

ENF:
Region: 2
Facility Id: 631038

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

Agency Name:	St. Helena City
Place Type:	Utility
Place Subtype:	Collection_System
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	SSOMUNISML
Program Category1:	SSO
Program Category2:	SSO
# Of Programs:	1
WDID:	2SSO10197
Reg Measure Id:	300362
Reg Measure Type:	Enrollee
Region:	2
Order #:	2006-0003-DWQ
Npdes# CA#:	Not reported
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	872
Status:	Active
Status Date:	11/17/2006
Effective Date:	11/17/2006
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	415745
Region:	2
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	08/14/2017
Adoption/Issuance Date:	08/14/2017
Achieve Date:	Not reported
Termination Date:	08/16/2017
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 08/14/2017 for St. Helena City
Description:	Not reported
Program:	SSOMUNISML
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	2
Facility Id:	631038
Agency Name:	St. Helena City
Place Type:	Utility
Place Subtype:	Collection_System
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	Not reported
Facility Waste Type:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	SSOMUNISML
Program Category1:	SSO
Program Category2:	SSO
# Of Programs:	1
WDID:	2SSO10197
Reg Measure Id:	300362
Reg Measure Type:	Enrollee
Region:	2
Order #:	2006-0003-DWQ
Npdes# CA#:	Not reported
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	872
Status:	Active
Status Date:	11/17/2006
Effective Date:	11/17/2006
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	388023
Region:	2
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	04/10/2012
Adoption/Issuance Date:	04/10/2012
Achieve Date:	Not reported
Termination Date:	05/16/2012
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 10-APR-12 for ST. HELENA CITY
Description:	Failure to complete, approve, and certify any of the required Sewer System Management Plan (SSMP) elements in CIWQS on time.
Program:	SSOMUNISML
Latest Milestone Completion Date:	2012-05-16
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0

Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

Project $ Completed: 0
Total $ Paid/Completed Amount: 0

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0210

NPDES:

Npdes Number:	Not reported
Facility Status:	Not reported
Agency Id:	Not reported
Region:	2
Regulatory Measure Id:	438476
Order No:	Not reported
Regulatory Measure Type:	Phase II Small MS4
Place Id:	Not reported
WDID:	2 28M2000050
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
RECEIVED DATE:	06/21/2013
PROCESSED DATE:	07/16/2013
STATUS CODE NAME:	Active
STATUS DATE:	07/16/2013
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	john ferons
FACILITY CONTACT TITLE:	Director of Public Works
FACILITY CONTACT PHONE:	707-968-2658
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	johnf@cityofsthelena.org
OPERATOR NAME:	City of St Helena MS4 Permit
OPERATOR ADDRESS:	1480 Main Street
OPERATOR CITY:	St Helena
OPERATOR STATE:	California
OPERATOR ZIP:	94574
OPERATOR CONTACT NAME:	Steven Palmer
OPERATOR CONTACT TITLE:	Director of Public Works
OPERATOR CONTACT PHONE:	707-968-2658
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	spalmer@cityofsthelena.org
OPERATOR TYPE:	City/Town Agency
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	California
DEVELOPER ZIP:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Erica Lorraine AhmannSmithies
CERTIFIER TITLE:	Director of Public Works
CERTIFICATION DATE:	20-SEP-17
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Npdes Number:	Not reported
Facility Status:	Active
Agency Id:	0
Region:	2
Regulatory Measure Id:	438476
Order No:	Not reported
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	2 28M2000050
Program Type:	Phase II Small MS4
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/16/2013
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	City of St Helena MS4 Permit
Discharge Address:	1480 Main Street
Discharge City:	St Helena
Discharge State:	California
Discharge Zip:	94574
RECEIVED DATE:	Not reported
PROCESSED DATE:	Not reported
STATUS CODE NAME:	Not reported
STATUS DATE:	Not reported
PLACE SIZE:	Not reported
PLACE SIZE UNIT:	Not reported
FACILITY CONTACT NAME:	Not reported
FACILITY CONTACT TITLE:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS	Database(s)	EDR ID Number EPA ID Number

ST. HELENA, CITY OF, CS (Continued) **S102438003**

FACILITY CONTACT PHONE:	Not reported
FACILITY CONTACT PHONE EXT:	Not reported
FACILITY CONTACT EMAIL:	Not reported
OPERATOR NAME:	Not reported
OPERATOR ADDRESS:	Not reported
OPERATOR CITY:	Not reported
OPERATOR STATE:	Not reported
OPERATOR ZIP:	Not reported
OPERATOR CONTACT NAME:	Not reported
OPERATOR CONTACT TITLE:	Not reported
OPERATOR CONTACT PHONE:	Not reported
OPERATOR CONTACT PHONE EXT:	Not reported
OPERATOR CONTACT EMAIL:	Not reported
OPERATOR TYPE:	Not reported
DEVELOPER NAME:	Not reported
DEVELOPER ADDRESS:	Not reported
DEVELOPER CITY:	Not reported
DEVELOPER STATE:	Not reported
DEVELOPER ZIP:	Not reported
DEVELOPER CONTACT NAME:	Not reported
DEVELOPER CONTACT TITLE:	Not reported
CONSTYPE LINEAR UTILITY IND:	Not reported
EMERGENCY PHONE NO:	Not reported
EMERGENCY PHONE EXT:	Not reported
CONSTYPE ABOVE GROUND IND:	Not reported
CONSTYPE BELOW GROUND IND:	Not reported
CONSTYPE CABLE LINE IND:	Not reported
CONSTYPE COMM LINE IND:	Not reported
CONSTYPE COMMERTIAL IND:	Not reported
CONSTYPE ELECTRICAL LINE IND:	Not reported
CONSTYPE GAS LINE IND:	Not reported
CONSTYPE INDUSTRIAL IND:	Not reported
CONSTYPE OTHER DESRIPTION:	Not reported
CONSTYPE OTHER IND:	Not reported
CONSTYPE RECONS IND:	Not reported
CONSTYPE RESIDENTIAL IND:	Not reported
CONSTYPE TRANSPORT IND:	Not reported
CONSTYPE UTILITY DESCRIPTION:	Not reported
CONSTYPE UTILITY IND:	Not reported
CONSTYPE WATER SEWER IND:	Not reported
DIR DISCHARGE USWATER IND:	Not reported
RECEIVING WATER NAME:	Not reported
CERTIFIER NAME:	Not reported
CERTIFIER TITLE:	Not reported
CERTIFICATION DATE:	Not reported
PRIMARY SIC:	Not reported
SECONDARY SIC:	Not reported
TERTIARY SIC:	Not reported

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
D16 **SW** **1/4-1/2** **0.291 mi.** **1536 ft.**	**CHEVRON** **1400 MAIN ST** **ST HELENA, CA 94574** **Site 2 of 2 in cluster D**	**LUST**	**S105030297** **N/A**

Relative:
Higher

Actual:
255 ft.

LUST REG 2:

Region:	2
Facility Id:	28-0211
Facility Status:	Preliminary site assessment underway
Case Number:	0255
How Discovered:	Tank Closure
Leak Cause:	Structure Failure
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	1/17/1992
Preliminary Site Assesment Began:	5/15/1992
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

F17 **SSW** **1/4-1/2** **0.319 mi.** **1686 ft.**	**HEUBLEIN FINE WINE GROUP** **8215 ST HELENA HWY** **RUTHERFORD, CA 94573** **Site 1 of 5 in cluster F**	**LUST** **SWEEPS UST** **HIST CORTESE**	**S105025936** **N/A**

Relative:
Higher

Actual:
229 ft.

LUST:

Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500064
Global Id:	T0605500064
Latitude:	38.50396
Longitude:	-122.466704
Status:	Completed - Case Closed
Status Date:	10/03/1995
Case Worker:	UUU
RB Case Number:	28-0068
Local Agency:	NAPA COUNTY
File Location:	Not reported
Local Case Number:	28-0068
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0605500064
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported
Global Id:	T0605500064
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

HEUBLEIN FINE WINE GROUP (Continued) **S105025936**

Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500064
Action Type: RESPONSE
Date: 05/16/1996
Action: Correspondence

Global Id: T0605500064
Action Type: Other
Date: 01/02/1991
Action: Leak Discovery

Global Id: T0605500064
Action Type: Other
Date: 01/02/1991
Action: Leak Stopped

Global Id: T0605500064
Action Type: Other
Date: 01/02/1991
Action: Leak Reported

Global Id: T0605500064
Action Type: ENFORCEMENT
Date: 10/03/1995
Action: Closure/No Further Action Letter

LUST:
Global Id: T0605500064
Status: Open - Case Begin Date
Status Date: 01/02/1991

Global Id: T0605500064
Status: Completed - Case Closed
Status Date: 10/03/1995

LUST REG 2:
Region: 2
Facility Id: 28-0068
Facility Status: Case Closed
Case Number: 28-0068
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

HEUBLEIN FINE WINE GROUP (Continued) **S105025936**

Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

SWEEPS UST:

Status:	Active
Comp Number:	54835
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	06-30-89
Owner Tank Id:	1
SWRCB Tank Id:	28-000-054835-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	1

Status:	Active
Comp Number:	67047
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	06-30-89
Owner Tank Id:	1
SWRCB Tank Id:	28-000-067047-000001
Tank Status:	A
Capacity:	Not reported
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	1

HIST CORTESE:

Region:	CORTESE
Facility County Code:	28
Reg By:	LTNKA
Reg Id:	28-0068

F18 **SAINT HELENA PLAZA** **LUST** **S109285405**
SSW **1136 MAIN ST** **N/A**
1/4-1/2 **SAINT HELENA, CA 94574**
0.327 mi.
1724 ft. **Site 2 of 5 in cluster F**

Relative:
Higher

Actual:
237 ft.

LUST:

Lead Agency:	NAPA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000393
Global Id:	T10000000393
Latitude:	38.50386
Longitude:	-122.467472

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

SAINT HELENA PLAZA (Continued) **S109285405**

Status: Completed - Case Closed
Status Date: 09/14/2011
Case Worker: JTN
RB Case Number: Not reported
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0736
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Diesel, Gasoline, Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

LUST:
Global Id: T10000000393
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 02/16/2010
Action: Staff Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 02/10/2011
Action: Staff Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 12/13/2010
Action: Staff Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 05/19/2011
Action: Staff Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 12/19/2008
Action: Notice of Responsibility

Global Id: T10000000393
Action Type: Other
Date: 12/31/1978
Action: Leak Stopped

Global Id: T10000000393
Action Type: Other
Date: 10/01/2007
Action: Leak Reported

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
	MAP FINDINGS		

SAINT HELENA PLAZA (Continued) **S109285405**

Global Id: T10000000393
Action Type: Other
Date: 12/31/1978
Action: Leak Began

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 07/16/2009
Action: Staff Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 06/14/2011
Action: Staff Letter

Global Id: T10000000393
Action Type: Other
Date: 10/01/2007
Action: Leak Discovery

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 09/14/2011
Action: Closure/No Further Action Letter

Global Id: T10000000393
Action Type: ENFORCEMENT
Date: 07/02/2010
Action: Staff Letter

LUST:
Global Id: T10000000393
Status: Open - Case Begin Date
Status Date: 10/07/2008

Global Id: T10000000393
Status: Open - Site Assessment
Status Date: 10/07/2008

Global Id: T10000000393
Status: Completed - Case Closed
Status Date: 09/14/2011

19
South
1/4-1/2
0.335 mi.
1769 ft.

OGLETREE'S MACHINE SHOP, INC.
1017 POPE ST
ST. HELENA, CA 94574

LUST **S119102608**
N/A

Relative:
Higher

Actual:
219 ft.

NAPA CO. LUST:
Permit ID: 248458
Status: Open
Permit Type: Non-LOP
District: 0

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
F20	**NOBLE PROPERTIES**	**SLIC**	**S108724701**
SSW	**1132 MAIN STREET**		**N/A**
1/4-1/2	**ST. HELENA, CA 94574**		
0.338 mi.			
1782 ft.	**Site 3 of 5 in cluster F**		

Relative: **Higher**

Actual: **234 ft.**

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/18/2009
Global Id:	T10000000217
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	38.503694
Longitude:	-122.467246
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	28S0064
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	03/18/2009
Global Id:	SL0605588535
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	38.503694
Longitude:	-122.467246
Case Type:	Cleanup Program Site
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	28S0064
File Location:	Regional Board
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

G21	**NAPA VALLEY PETROLEUM #2**	**LUST**	**S104162273**
SSW	**1153 MAIN ST**	**HIST CORTESE**	**N/A**
1/4-1/2	**ST HELENA, CA 94574**		
0.346 mi.			
1825 ft.	**Site 1 of 3 in cluster G**		

Relative: **Higher**

Actual: **238 ft.**

LUST:

Lead Agency:	NAPA COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500061
Global Id:	T0605500061
Latitude:	38.5035206050068
Longitude:	-122.467850446701
Status:	Completed - Case Closed
Status Date:	03/16/2015

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

NAPA VALLEY PETROLEUM #2 (Continued) **S104162273**

Case Worker: JTN
RB Case Number: 28-0064
Local Agency: NAPA COUNTY
File Location: Local Agency
Local Case Number: 0065
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0605500061
Contact Type: Local Agency Caseworker
Contact Name: James Newman, P.G., C.E.G.
Organization Name: NAPA COUNTY
Address: 1195 THIRD STREET, SUITE 101
City: NAPA
Email: james.newman@countyofnapa.org
Phone Number: Not reported

LUST:
Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 09/25/2003
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 08/21/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 05/24/2010
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 10/31/2002
Action: Site Visit / Inspection / Sampling

Global Id: T0605500061
Action Type: RESPONSE
Date: 06/24/2014
Action: Request for Closure - Regulator Responded

Global Id: T0605500061
Action Type: RESPONSE
Date: 03/21/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 09/24/2008
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

NAPA VALLEY PETROLEUM #2 (Continued) **S104162273**

Date: 09/11/2012
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 02/24/2009
Action: Staff Letter

Global Id: T0605500061
Action Type: RESPONSE
Date: 08/27/2013
Action: Corrective Action Plan / Remedial Action Plan - Regulator Responded

Global Id: T0605500061
Action Type: Other
Date: 08/07/1986
Action: Leak Stopped

Global Id: T0605500061
Action Type: Other
Date: 03/10/1998
Action: Leak Reported

Global Id: T0605500061
Action Type: RESPONSE
Date: 02/17/2012
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 08/21/2014
Action: Staff Letter

Global Id: T0605500061
Action Type: RESPONSE
Date: 03/21/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500061
Action Type: RESPONSE
Date: 03/21/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 12/29/2011
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 12/16/2011
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 10/20/2003
Action: Staff Letter

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

NAPA VALLEY PETROLEUM #2 (Continued) **S104162273**

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 04/14/2003
Action: Site Visit / Inspection / Sampling

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 05/27/2009
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 05/06/2009
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 06/14/2006
Action: File review

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 08/31/2010
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 09/09/2010
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 12/22/2008
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 10/20/2003
Action: * Historical Enforcement

Global Id: T0605500061
Action Type: RESPONSE
Date: 06/01/2011
Action: Interim Remedial Action Plan

Global Id: T0605500061
Action Type: Other
Date: 08/07/1986
Action: Leak Discovery

Global Id: T0605500061
Action Type: REMEDIATION
Date: 01/14/1998
Action: Excavation

Global Id: T0605500061
Action Type: RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

NAPA VALLEY PETROLEUM #2 (Continued) **S104162273**

Date: 10/28/2014
Action: Well Destruction Workplan - Regulator Responded

Global Id: T0605500061
Action Type: RESPONSE
Date: 03/11/2015
Action: Request for Closure - Regulator Responded

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 03/16/2015
Action: Closure/No Further Action Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 04/12/2011
Action: Staff Letter

Global Id: T0605500061
Action Type: ENFORCEMENT
Date: 08/24/2011
Action: Staff Letter

LUST:
Global Id: T0605500061
Status: Open - Case Begin Date
Status Date: 08/07/1986

Global Id: T0605500061
Status: Open - Site Assessment
Status Date: 02/02/1996

Global Id: T0605500061
Status: Open - Site Assessment
Status Date: 10/17/2002

Global Id: T0605500061
Status: Open - Site Assessment
Status Date: 04/14/2003

Global Id: T0605500061
Status: Open - Remediation
Status Date: 11/11/2011

Global Id: T0605500061
Status: Open - Eligible for Closure
Status Date: 07/25/2014

Global Id: T0605500061
Status: Completed - Case Closed
Status Date: 03/16/2015

LUST REG 2:
Region: 2
Facility Id: 28-0064

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

NAPA VALLEY PETROLEUM #2 (Continued) **S104162273**

Facility Status: Pollution Characterization
Case Number: 0065
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 2/2/1996
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: 4/14/2003
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0064

F22 **VALLEY CONVENIENCE STORE** **LUST** **S104025332**
SSW **1108 MAIN ST** **HIST CORTESE** **N/A**
1/4-1/2 **ST HELENA, CA 94574**
0.349 mi.
1843 ft. **Site 4 of 5 in cluster F**

Relative: Higher

Actual: 231 ft.

LUST:
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500168
Global Id: T0605500168
Latitude: 38.5034744266388
Longitude: -122.466922402382
Status: Completed - Case Closed
Status Date: 02/24/2016
Case Worker: Not reported
RB Case Number: 28-0186
Local Agency: Not reported
File Location: Regional Board
Local Case Number: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Currently, the Site in an operating 76-branded automotive fueling station with convenience store, two (2) operating 10,000-gal underground storage tanks (USTs) . Release of gasoline was first reported in Dec 1990. Groundwater monitoring began in June 1994, with off-Site groundwater monitoring wells advanced in Feb 1995. Five (5) single-walled USTs were removed in 1996. Elevated levels of petroleum hydrocarbon contaminants were discovered. Other gas service stations exist proximal to the Site; a Chevron and Exxon are both upgradient. Soil and groundwater extraction has been performed on and off Site. Five (5) monitoring wells and three (3) extraction wells currently operate on Site.

LUST:
Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/24/2016

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Action: Closure/No Further Action Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/14/2013
Action: Notification - Public Notice of Case Closure

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/24/2010
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 11/13/1992
Action: * Historical Enforcement

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/15/2002
Action: Meeting

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/21/1999
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 04/08/2011
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 10/27/2010
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 05/13/1994
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 06/25/1996
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/02/1997
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 10/02/2008
Action: Staff Letter

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 09/24/2008
Action: Staff Letter

Global Id: T0605500168
Action Type: REMEDIATION
Date: 09/25/2002
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 11/20/2012
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/12/2009
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 11/02/2009
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/18/2000
Action: Other Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/24/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/24/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 12/28/2005
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/09/2013
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/17/2004
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: ENFORCEMENT

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 01/23/2002
Action: Letter - Notice

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/24/1994
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/19/1992
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/22/1995
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 11/14/2011
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 11/18/1993
Action: Other Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/16/1992
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 08/06/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 04/19/2012
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 09/12/2013
Action: Staff Letter

Global Id: T0605500168
Action Type: Other
Date: 12/17/1990
Action: Leak Discovery

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/12/1995
Action: Monitoring Report - Quarterly

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/12/1998
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/16/1999
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 08/21/2003
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 06/05/1995
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/18/2000
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/10/1996
Action: Tank Removal Report / UST Sampling Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 08/06/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/29/2002
Action: Other Report / Document

Global Id: T0605500168
Action Type: Other
Date: 12/17/1990
Action: Leak Stopped

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/13/2010
Action: Email Correspondence

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 09/25/2007
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 02/05/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/28/2001
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/26/2005
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/31/2005
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/26/2001
Action: Well Installation Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/31/1995
Action: Other Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/12/2001
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/16/1997
Action: Soil and Water Investigation Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/13/1992
Action: Soil and Water Investigation Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/07/2002
Action: CAP/RAP - Other Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/22/1995
Action: Other Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/24/1990
Action: Correspondence

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/16/2001
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/04/2003
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/19/1994
Action: Other Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/20/1996
Action: Other Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/27/2004
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 07/25/1995
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 06/28/2000
Action: Other Report / Document

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 06/07/2010
Action: Staff Letter

Global Id: T0605500168
Action Type: Other
Date: 12/17/1990
Action: Leak Reported

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/08/1993
Action: Preliminary Site Assessment Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/18/1992
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 01/14/1994
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/24/1994
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/22/1993
Action: Other Report / Document

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 03/21/1994
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 06/02/1994
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 12/17/1990
Action: Letter - Notice

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 03/26/1993
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 12/13/2011
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE
Date: 06/07/1993
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/01/2002
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/24/1995
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 07/18/2001
Action: Monitoring Report - Quarterly

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/10/2002
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/24/2010
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/10/1996
Action: Tank Removal Report / UST Sampling Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 07/18/2001
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/03/1993
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/29/1998
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/13/2000
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 07/01/1992
Action: Other Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/04/2001
Action: Well Installation Workplan

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/28/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/01/2008
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 11/06/2008
Action: Email Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/22/1996
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/07/1997
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/15/2000
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 04/07/2011
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/28/1996
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/25/1991
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/10/2002
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/04/2003
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/03/1995
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/29/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 09/14/1998
Action: Other Workplan

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	05/07/2009
Action:	Staff Letter
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	08/05/2008
Action:	Clean Up Fund - 5-Year Review Summary
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	08/28/2009
Action:	Staff Letter
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	08/16/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	10/02/1995
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	01/26/2001
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	09/26/2000
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	03/11/1998
Action:	Soil and Water Investigation Report
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	10/20/1997
Action:	Monitoring Report - Other
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	08/19/2013
Action:	Other Report / Document
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	12/24/2007
Action:	Other Report / Document
Global Id:	T0605500168
Action Type:	RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 03/14/2012
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 05/02/2003
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/28/2001
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/07/1991
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 10/31/1991
Action: Proposed Plan

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/16/2010
Action: Staff Letter

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 10/30/2008
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE
Date: 08/20/2001
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/29/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/08/2002
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/21/1995
Action: Correspondence

Global Id: T0605500168
Action Type: RESPONSE
Date: 01/01/1994
Action: Other Report / Document

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id:	T0605500168
Action Type:	RESPONSE
Date:	01/13/1993
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	01/20/1993
Action:	Correspondence
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	02/24/1994
Action:	Soil and Water Investigation Workplan - Addendum
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	01/01/1993
Action:	Other Report / Document
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	07/21/1994
Action:	Monitoring Report - Quarterly
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	03/29/2006
Action:	Staff Letter
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	08/19/2015
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	08/24/2011
Action:	Staff Letter
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	01/15/1998
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	06/11/1996
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	03/06/1996
Action:	Other Report
Global Id:	T0605500168
Action Type:	RESPONSE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 05/03/2001
Action: Monitoring Report - Quarterly

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/11/1996
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/19/1997
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 08/01/1994
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/08/1993
Action: Soil and Water Investigation Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/08/1993
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/08/1995
Action: Other Report / Document

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/23/2009
Action: Staff Letter

Global Id: T0605500168
Action Type: RESPONSE
Date: 12/24/2001
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 03/26/1994
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 11/15/2001
Action: Other Report / Document

Global Id: T0605500168
Action Type: RESPONSE
Date: 04/19/2001
Action: Other Report / Document

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id:	T0605500168
Action Type:	RESPONSE
Date:	02/17/1995
Action:	Other Report / Document
Global Id:	T0605500168
Action Type:	REMEDIATION
Date:	06/25/1996
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	07/01/1996
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	02/19/1992
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	09/14/1992
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	02/17/1995
Action:	Other Report
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	12/21/1990
Action:	Unauthorized Release Form
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	01/29/1996
Action:	Other Report
Global Id:	T0605500168
Action Type:	RESPONSE
Date:	09/27/2013
Action:	Well Destruction Workplan - Regulator Responded
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	02/28/2003
Action:	File review
Global Id:	T0605500168
Action Type:	ENFORCEMENT
Date:	12/17/1990
Action:	Notice of Reimbursement
Global Id:	T0605500168
Action Type:	ENFORCEMENT

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Date: 12/17/1990
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 12/31/1991
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 08/27/1992
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/17/1999
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 09/12/1991
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 01/02/1997
Action: Other Report

Global Id: T0605500168
Action Type: RESPONSE
Date: 02/24/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/08/1991
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/18/1998
Action: Other Report

Global Id: T0605500168
Action Type: ENFORCEMENT
Date: 02/17/1999
Action: Other Report

LUST:
Global Id: T0605500168
Status: Open - Case Begin Date
Status Date: 12/17/1990

Global Id: T0605500168
Status: Open - Site Assessment
Status Date: 11/13/1992

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

VALLEY CONVENIENCE STORE (Continued) **S104025332**

Global Id: T0605500168
Status: Open - Remediation
Status Date: 11/22/1995

Global Id: T0605500168
Status: Open - Remediation
Status Date: 01/04/2002

Global Id: T0605500168
Status: Open - Remediation
Status Date: 04/26/2002

Global Id: T0605500168
Status: Open - Remediation
Status Date: 09/11/2002

Global Id: T0605500168
Status: Open - Verification Monitoring
Status Date: 11/01/2008

Global Id: T0605500168
Status: Open - Eligible for Closure
Status Date: 06/27/2013

Global Id: T0605500168
Status: Completed - Case Closed
Status Date: 02/24/2016

LUST REG 2:
Region: 2
Facility Id: 28-0186
Facility Status: Remedial action (cleanup) Underway
Case Number: 0243
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: 11/13/1992
Pollution Remediation Plan Submitted: 4/26/2002
Date Remediation Action Underway: 9/11/2002
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0186

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
F23	**CITY OF ST. HELENA SIDEWALK**	**LUST**	**S119102587**
SSW	**1108 MAIN**		**N/A**
1/4-1/2	**ST. HELENA, CA 94574**		
0.349 mi.			
1843 ft.	**Site 5 of 5 in cluster F**		

Relative:
Higher

Actual:
231 ft.

NAPA CO. LUST:
- Permit ID: 248384
- Status: Closed
- Permit Type: Non-LOP
- District: 0

H24	**PACIFIC BELL**	**RCRA-SQG**	**1000251880**
SSW	**1240 OAK STREET**	**LUST**	**CAT080029341**
1/4-1/2	**SAINT HELENA, CA 94574**	**FINDS**	
0.361 mi.		**ECHO**	
1907 ft.	**Site 1 of 2 in cluster H**	**HIST CORTESE**	

Relative:
Higher

Actual:
246 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PACIFIC BELL
Facility address:	1240 OAK STREET SAINT HELENA, CA 94574
EPA ID:	CAT080029341
Mailing address:	3707 KINGS WAY SEC A-6 SACRAMENTO, CA 95821
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	415-555-1212

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **1000251880**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/05/1981
Site name: PACIFIC BELL
Classification: Large Quantity Generator

Violation Status: No violations found

LUST:
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500117
Global Id: T0605500117
Latitude: 38.5033569
Longitude: -122.4691392
Status: Completed - Case Closed
Status Date: 08/08/1996
Case Worker: UUU
RB Case Number: 28-0128
Local Agency: NAPA COUNTY
File Location: Not reported
Local Case Number: 0054
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Diesel
Site History: Not reported

LUST:
Global Id: T0605500117
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **1000251880**

Email: Not reported
Phone Number: Not reported

Global Id: T0605500117
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: NAPA COUNTY
Address: 1195 THIRD ST., ROOM 101
City: NAPA
Email: Not reported
Phone Number: 7072534269

LUST:
Global Id: T0605500117
Action Type: Other
Date: 09/04/1986
Action: Leak Stopped

Global Id: T0605500117
Action Type: Other
Date: 09/04/1986
Action: Leak Reported

Global Id: T0605500117
Action Type: Other
Date: 09/04/1986
Action: Leak Discovery

LUST:
Global Id: T0605500117
Status: Open - Case Begin Date
Status Date: 09/04/1986

Global Id: T0605500117
Status: Completed - Case Closed
Status Date: 08/08/1996

LUST REG 2:
Region: 2
Facility Id: 28-0128
Facility Status: Case Closed
Case Number: 0054
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **1000251880**

FINDS:

Registry ID: 110058254696

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002955204

Environmental Interest/Information System
AIR EMISSIONS CLASSIFICATION UNKNOWN

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000251880
Registry ID: 110002955204
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002955204

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0128

H25 **PACIFIC BELL** **LUST** **S107621643**
SSW **1240 OAK AVENUE** **EMI** **N/A**
1/4-1/2 **SAINT HELENA, CA 90005**
0.361 mi.
1907 ft. **Site 2 of 2 in cluster H**

Relative:
Higher

Actual:
246 ft.

NAPA CO. LUST:
Permit ID: 248171
Status: Closed
Permit Type: Non-LOP
District: 0

EMI:
Year: 2004
County Code: 28

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **S107621643**

Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4810
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.009
Reactive Organic Gases Tons/Yr:	0.0075303
Carbon Monoxide Emissions Tons/Yr:	0.009
NOX - Oxides of Nitrogen Tons/Yr:	0.069
SOX - Oxides of Sulphur Tons/Yr:	0.002
Particulate Matter Tons/Yr:	0.001
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.000976

Year:	2005
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.009
Reactive Organic Gases Tons/Yr:	.0075303
Carbon Monoxide Emissions Tons/Yr:	.009
NOX - Oxides of Nitrogen Tons/Yr:	.069
SOX - Oxides of Sulphur Tons/Yr:	.002
Particulate Matter Tons/Yr:	.001
Part. Matter 10 Micrometers and Smllr Tons/Yr:	.000976

Year:	2006
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2007
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **S107621643**

Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2008
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.002
Reactive Organic Gases Tons/Yr:	.0016734
Carbon Monoxide Emissions Tons/Yr:	.002
NOX - Oxides of Nitrogen Tons/Yr:	.018
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2009
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5.0000000000000001E-3
Reactive Organic Gases Tons/Yr:	4.1834999999999997E-3
Carbon Monoxide Emissions Tons/Yr:	6.0000000000000001E-3
NOX - Oxides of Nitrogen Tons/Yr:	4.3999999999999997E-2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0.001
Part. Matter 10 Micrometers and Smllr Tons/Yr:	9.7599999999999998E-4

Year:	2010
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5.0000000000000001E-3
Reactive Organic Gases Tons/Yr:	4.1834999999999997E-3
Carbon Monoxide Emissions Tons/Yr:	6.0000000000000001E-3
NOX - Oxides of Nitrogen Tons/Yr:	4.3999999999999997E-2
SOX - Oxides of Sulphur Tons/Yr:	0

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PACIFIC BELL (Continued) **S107621643**

Particulate Matter Tons/Yr:	0.00102459016393442
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.001
Year:	2011
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.002
Reactive Organic Gases Tons/Yr:	0.0016734
Carbon Monoxide Emissions Tons/Yr:	0.002
NOX - Oxides of Nitrogen Tons/Yr:	0.018
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0
Year:	2012
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.002
Reactive Organic Gases Tons/Yr:	0.0016734
Carbon Monoxide Emissions Tons/Yr:	0.002
NOX - Oxides of Nitrogen Tons/Yr:	0.018
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0
Year:	2013
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.002
Reactive Organic Gases Tons/Yr:	0.0016734
Carbon Monoxide Emissions Tons/Yr:	0.002
NOX - Oxides of Nitrogen Tons/Yr:	0.018
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0
Year:	2014
County Code:	28
Air Basin:	SF

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

MAP FINDINGS

PACIFIC BELL (Continued) **S107621643**

Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.003546603
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0.0040173
NOX - Oxides of Nitrogen Tons/Yr:	0.029145724
SOX - Oxides of Sulphur Tons/Yr:	2.2838e-005
Particulate Matter Tons/Yr:	0.000578866
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.000555711

Year:	2015
County Code:	28
Air Basin:	SF
Facility ID:	13512
Air District Name:	BA
SIC Code:	4813
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.003546603
Reactive Organic Gases Tons/Yr:	0.003452935
Carbon Monoxide Emissions Tons/Yr:	0.0040173
NOX - Oxides of Nitrogen Tons/Yr:	0.02914572
SOX - Oxides of Sulphur Tons/Yr:	2.2838e-005
Particulate Matter Tons/Yr:	0.000578866
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0.000555711

G26 **ST. HELENA/BEN FRANKLIN** **LUST** **S112977461**
SSW **1111 MAIN ST** **HAZNET** **N/A**
1/4-1/2 **SAINT HELENA, CA 94574**
0.365 mi.
1929 ft. **Site 2 of 3 in cluster G**

Relative:
Higher

Actual:
234 ft.

NAPA CO. LUST:

Permit ID:	9965
Status:	Closed
Permit Type:	Non-LOP
District:	3

HAZNET:

envid:	S112977461
Year:	2009
GEPAID:	CAC002641691
Contact:	DON WESTERLAND
Telephone:	7079682900
Mailing Name:	Not reported
Mailing Address:	1230 SPRING ST STE G
Mailing City,St,Zip:	SAINT HELENA, CA 945742070
Gen County:	Not reported
TSD EPA ID:	CAD982042475
TSD County:	Not reported
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number
	ST. HELENA/BEN FRANKLIN (Continued)		**S112977461**
	Include On-Site Treatment And/Or Stabilization) Tons: 9.6 Cat Decode: Not reported Method Decode: Not reported Facility County: Napa		
G27 **SSW** **1/4-1/2** **0.365 mi.** **1929 ft.** **Relative:** **Higher** **Actual:** **234 ft.**	**BEN FRANKLIN VARIETY STORE** **1111 MAIN ST** **ST. HELENA, CA** **Site 3 of 3 in cluster G** NAPA CO. LUST: Permit ID: 248506 Status: Closed Permit Type: Non-LOP District: 0	**LUST**	**S119102631** **N/A**
I28 **South** **1/4-1/2** **0.376 mi.** **1984 ft.** **Relative:** **Higher** **Actual:** **227 ft.**	**SIDEWALK-POPE AND MAIN** **1080 MAIN ST** **ST. HELENA, CA** **Site 1 of 2 in cluster I** NAPA CO. LUST: Permit ID: 248382 Status: Open Permit Type: Non-LOP District: 0	**LUST**	**S119102586** **N/A**
I29 **South** **1/4-1/2** **0.401 mi.** **2118 ft.** **Relative:** **Higher** **Actual:** **227 ft.**	**VINTAGE BANK** **1065 MAIN ST** **ST. HELENA, CA** **Site 2 of 2 in cluster I** NAPA CO. LUST: Permit ID: 248369 Status: Open Permit Type: Non-LOP District: 0	**LUST**	**S119102580** **N/A**
J30 **SE** **1/4-1/2** **0.413 mi.** **2183 ft.** **Relative:** **Higher** **Actual:** **222 ft.**	**632 MCCORKLE REDEVELOPMENT** **632 MCCORKLE AVENUE** **ST HELENA, CA 94574** **Site 1 of 2 in cluster J** SLIC: Region: STATE **Facility Status: Open - Verification Monitoring** Status Date: 01/19/2017 Global Id: T10000010047	**SLIC**	**S119777520** **N/A**

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

MAP FINDINGS

632 MCCORKLE REDEVELOPMENT (Continued) **S119777520**

Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	38.50581
Longitude:	-122.45954
Case Type:	Cleanup Program Site
Case Worker:	JMJ
Local Agency:	Not reported
RB Case Number:	28S0068
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Lead
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

J31 **JOE MCGRATH** **LUST** **S119102679**
SE **632 MCCORKLE ST** **N/A**
1/4-1/2 **SAINT HELENA, CA 94574**
0.413 mi.
2183 ft. **Site 2 of 2 in cluster J**

Relative:
Higher

Actual:
222 ft.

NAPA CO. LUST:

Permit ID:	318765
Status:	Open
Permit Type:	Non-LOP
District:	0

K32 **ST. HELENA PG & E** **SLIC** **S118504520**
SSW **1301-1302 MITCHELL DRIVE AND OAK AVENUE** **N/A**
1/4-1/2 **ST. HELENA, CA 94574**
0.431 mi.
2276 ft. **Site 1 of 3 in cluster K**

Relative:
Higher

Actual:
232 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	04/23/2009
Global Id:	SL0605518541
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	28490002
Latitude:	38.502289
Longitude:	-122.467357
Case Type:	Cleanup Program Site
Case Worker:	DT
Local Agency:	DEPARTMENT OF TOXIC SUBSTANCES CONTROL
RB Case Number:	28S0057
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Other Solvent or Non-Petroleum Hydrocarbon
Site History:	A manufactured gas plant (MGP) operated at the site from 1883 until 1926. In 1930, PG&E acquired the site, dismantling the MGP upon introduction of natural gas to the region in 1931. Polycyclic aromatic hydrocarbons, petroleum hydrocarbons, arsenic, and lead have been detected during subsurface investigations at the site.

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ST. HELENA PG & E (Continued) **S118504520**

Click here to access the California GeoTracker records for this facility:

K33 **PG&E ST. HELENA** **ENVIROSTOR** **S107737029**
SSW **1301-1302 MITCHELL DRIVE** **VCP** **N/A**
1/4-1/2 **ST. HELENA, CA 94574** **DEED**
0.440 mi.
2323 ft. **Site 2 of 3 in cluster K**

Relative:
Higher

Actual:
229 ft.

ENVIROSTOR:

Facility ID:	28490002
Status:	Certified / Operation & Maintenance
Status Date:	07/18/2017
Site Code:	200257
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	0.75
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 2 - San Francisco Bay, NAPA COUNTY
Lead Agency:	SMBRP
Program Manager:	Lynn Nakashima
Supervisor:	Janet Naito
Division Branch:	Cleanup Berkeley
Assembly:	04
Senate:	03
Special Program:	Voluntary Cleanup Program
Restricted Use:	YES
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.50216
Longitude:	-122.4670
APN:	009263005000
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	Arsenic Benzene Lead Polynuclear aromatic hydrocarbons (PAHs TPH-diesel TPH-gas Ethylbenzene Toluene Xylenes
Confirmed COC:	Arsenic Benzene Lead Polynuclear aromatic hydrocarbons (PAHs TPH-diesel TPH-gas Ethylbenzene Toluene Xylenes
Potential Description:	OTH, SOIL
Alias Name:	TOWN GAS PLANT- SAINT HELENA #1
Alias Type:	Alternate Name
Alias Name:	009263005000
Alias Type:	APN
Alias Name:	110033611125
Alias Type:	EPA (FRS #)
Alias Name:	SL0605518541
Alias Type:	GeoTracker Global ID
Alias Name:	200257
Alias Type:	Project Code (Site Code)
Alias Name:	28490002
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	12/18/1996
Comments:	Signed Agreement with PG&E.

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/03/2017
Comments:	Letter affirming cost estimate submitted by PG&E and request to submit mechanism demonstrating financial assurance.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/03/2017
Comments:	Letter informs PG&E of name of new project manager
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operation & Maintenance Order/Agreement
Completed Date:	05/18/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	05/22/1987
Comments:	Completed Site Screening. Results of site investigations indicate that site soils contain elevated levels of arsenic, polycyclic aromatic hydrocarbons (PAHs), total extractable petroleum hydrocarbons, and total petroleum hydrocarbons as gasoline (TPH-g). Groundwater samples detected elevated concentrations of benzene, TPH-g, and PAHs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	04/20/2007
Comments:	Remedial Action Plan approved. Site remedy includes combination of excavation, dual-phase extraction and treatment, natural attenuation, and site management plans.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	08/08/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	11/25/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	11/23/2005
Comments:	Sampling to refine boundaries of remedial areas.
Completed Area Name:	PROJECT WIDE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	04/10/2006
Comments:	Approved report detailing additional investigation of soil beneath Mitchell Drive, soil on the MPP, and soil on the main project site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/17/2008
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	12/05/2006
Comments:	Fact sheet summarizes results of site investigations, cleanup goals, and cleanup recommendations.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	02/04/1987
Comments:	Site setting and historical uses identified. Twelve surface soil samples collected. Polycyclic aromatic hydrocarbon (PAH), lead, and arsenic levels quantified. Mercury and cyanide not detected.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	08/29/1991
Comments:	Site investigation indicated the presence of polycyclic aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs) from historic gas manufacturing activities. Total petroleum hydrocarbons were also detected. Risk assessment identified direct exposure to surface soil as the only plausible exposure pathway at the Site. Site determined to be secured and unoccupied. Further subsurface investigation and capping recommended.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Health & Safety Plan
Completed Date:	07/01/2000
Comments:	Site-specific plan for worker safety in accordance with federal and state regulations. Establishes personal protective equipment, site control, decontamination, and emergency response procedures for the site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	08/11/2004
Comments:	Approved supplemental remedial investigation. Report concluded that soil impacts extend to 30 feet below ground surface, while PAHs are present in groundwater to 65 feet bgs. Lateral and vertical migration of contaminants is limited by low permeability soils. Contaminants were not observed in nearby Sulphur Creek.

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot/Treatability Study Report
Completed Date:	01/10/2005
Comments:	Approved report of phase one pilot testing and work plan for phase two testing. Phase one testing included five-day dual phase extraction, bench-scale testing of chemical oxidation of contaminants in soil, and analysis of field data for indications of biodegradation. Phase Two testing to include dual-phase extraction with ethanol-enhanced recovery of NAPL.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	09/01/2005
Comments:	Approved groundwater monitoring report. Analytical results for contaminants in perched groundwater were generally consistent with historic results. Contaminant concentrations in groundwater zones A, B, and C were generally higher than historic results. No arsenic or PAHs were detected in surface water.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	10/19/2001
Comments:	Approved the site risk assessment report which concluded that PAHs, arsenic, and benzene are the primary COCs at the site. Potential exposure pathways were determined to be extraction of shallow groundwater and construction activities involving disruption of soils and/or groundwater. Impacts on Sulfur Creek were determined to be within acceptable limits, as COCs in shallow groundwater were determined to be present at concentrations below ecological screening levels.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Community Profile
Completed Date:	04/30/1991
Comments:	Community profile submitted to assist in identifying distribution points for Preliminary Endangerment Assessment.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Workplan
Completed Date:	07/20/2006
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	08/01/2006
Comments:	Installation of monitoring and extraction wells completed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	12/04/2006

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Comments:	Public notice finalized to announce public comment period.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Manual
Completed Date:	08/01/2008
Comments:	DTSC approved the Operation and Maintenance Manual for operation of the dual-phase extraction and treatment system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	10/23/2006
Comments:	Public Participation Plan completed detailing community interests and concerns regarding site cleanup. Anticipated future public participation activities also described.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Completion Report
Completed Date:	01/18/2007
Comments:	Approved well installation report.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	04/23/2008
Comments:	DTSC approved the Remedial Action Completion Report and no further action for soil cleanup.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	06/09/2015
Comments:	DTSC approved final Remedial Action Completion Report. Approximately 4,820 cubic yards of contaminated soil was removed from the Site and disposed to permitted landfills.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	06/11/2007
Comments:	Groundwater elevation data observed to reflect operation of dual-phase extraction and treatment system for May/June sampling event. Concentrations of contaminants of concern consistent with those previously reported.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	06/11/2007
Comments:	Approved destruction of MW-3, MW-4 and MW-5. Plan details the procedure to be followed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Date:	08/06/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	02/26/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/17/2008
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	10/23/2008
Comments:	Approved first half 2008 O&M Report. The Report presents the results of the May 2008 sampling of groundwater monitoring wells and documents the operation of the dual-phase extraction system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	01/18/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	06/30/2011
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	12/27/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	11/16/2011
Comments:	Report was accepted. There are no changes.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/09/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	01/25/2010

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	04/01/2011
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Plan
Completed Date:	03/06/2017
Comments:	O&M Plan with soil and groundwater management plan for the former MGP and Mitchell Drive right-of-ways.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	*Correspondence - Received
Completed Date:	01/13/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Work Notice
Completed Date:	12/17/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/28/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	10/16/2014
Comments:	Field remediation work completed with site restored and new fence.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	07/13/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	09/05/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	02/20/2013
Comments:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	04/20/2007
Comments:	Final CEQA Negative Declaration approved.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction
Completed Date:	03/21/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/23/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/14/2008
Comments:	DTSC annual oversight cost estimate to PRPs per HSC 25269.5.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	08/27/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/29/2009
Comments:	DTSC cost estimate sent 9/29/2009
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Amendment - Order/Agreement
Completed Date:	08/23/2006
Comments:	Provision for submittal of electronic documents added to cleanup agreement.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/30/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/12/2011
Comments:	Sent out annual cost estimate
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/29/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2013
Comments: Annual Oversight Cost Estimate

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 07/07/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/21/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/26/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 09/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 05/05/2014
Comments: Work notice for remedial action implementation for removing about

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

42,00o cubic yards of contaminated soil and disposal offsite.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/10/2015
Comments: DTSC approved groundwater monitoring program with the following minor revision. The groundwater wells will be developed after a minimum of 72 hours after construction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/27/2015
Comments: DTSC has no comments on the first 2015 semiannual groundwater monitoring report post remediation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 02/29/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 09/09/2016
Comments: Semiannual groundwater monitoring report with no significant change in concentration trend.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/14/2017
Comments: Post-remediation groundwater sampling results are consistent with previous results. The next sampling event will be performed in May 2017. Groundwater monitoring will continue through 2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/13/2016
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Operations and Maintenance Report

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Future Due Date:	2018
Future Area Name:	PROJECT WIDE
Future Sub Area Name:	Not reported
Future Document Type:	Operations and Maintenance Report
Future Due Date:	2019
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	28490002
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	0.75
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 2 - San Francisco Bay, NAPA COUNTY
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Lynn Nakashima
Supervisor:	Janet Naito
Division Branch:	Cleanup Berkeley
Site Code:	200257
Assembly:	04
Senate:	03
Special Programs Code:	Voluntary Cleanup Program
Status:	Certified / Operation & Maintenance
Status Date:	07/18/2017
Restricted Use:	YES
Funding:	Responsible Party
Lat/Long:	38.50216 / -122.4670
APN:	009263005000
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	30001, 30003, 30013, 30019, 30024, 30025, 30272, 30550, 30593
Confirmed COC:	30001,30003,30013,30019,30024,30025,30272,30550,30593
Potential Description:	OTH, SOIL
Alias Name:	TOWN GAS PLANT- SAINT HELENA #1
Alias Type:	Alternate Name
Alias Name:	009263005000
Alias Type:	APN
Alias Name:	110033611125
Alias Type:	EPA (FRS #)
Alias Name:	SL0605518541
Alias Type:	GeoTracker Global ID
Alias Name:	200257
Alias Type:	Project Code (Site Code)
Alias Name:	28490002
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	12/18/1996
Comments:	Signed Agreement with PG&E.

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/03/2017
Comments:	Letter affirming cost estimate submitted by PG&E and request to submit mechanism demonstrating financial assurance.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/03/2017
Comments:	Letter informs PG&E of name of new project manager
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operation & Maintenance Order/Agreement
Completed Date:	05/18/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	05/22/1987
Comments:	Completed Site Screening. Results of site investigations indicate that site soils contain elevated levels of arsenic, polycyclic aromatic hydrocarbons (PAHs), total extractable petroleum hydrocarbons, and total petroleum hydrocarbons as gasoline (TPH-g). Groundwater samples detected elevated concentrations of benzene, TPH-g, and PAHs.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Plan
Completed Date:	04/20/2007
Comments:	Remedial Action Plan approved. Site remedy includes combination of excavation, dual-phase extraction and treatment, natural attenuation, and site management plans.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	08/08/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	11/25/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	11/23/2005
Comments:	Sampling to refine boundaries of remedial areas.
Completed Area Name:	PROJECT WIDE

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	04/10/2006
Comments:	Approved report detailing additional investigation of soil beneath Mitchell Drive, soil on the MPP, and soil on the main project site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/17/2008
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fact Sheets
Completed Date:	12/05/2006
Comments:	Fact sheet summarizes results of site investigations, cleanup goals, and cleanup recommendations.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	02/04/1987
Comments:	Site setting and historical uses identified. Twelve surface soil samples collected. Polycyclic aromatic hydrocarbon (PAH), lead, and arsenic levels quantified. Mercury and cyanide not detected.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	08/29/1991
Comments:	Site investigation indicated the presence of polycyclic aromatic hydrocarbons (PAHs) and volatile organic compounds (VOCs) from historic gas manufacturing activities. Total petroleum hydrocarbons were also detected. Risk assessment identified direct exposure to surface soil as the only plausible exposure pathway at the Site. Site determined to be secured and unoccupied. Further subsurface investigation and capping recommended.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Health & Safety Plan
Completed Date:	07/01/2000
Comments:	Site-specific plan for worker safety in accordance with federal and state regulations. Establishes personal protective equipment, site control, decontamination, and emergency response procedures for the site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	08/11/2004
Comments:	Approved supplemental remedial investigation. Report concluded that soil impacts extend to 30 feet below ground surface, while PAHs are present in groundwater to 65 feet bgs. Lateral and vertical migration of contaminants is limited by low permeability soils. Contaminants were not observed in nearby Sulphur Creek.

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pilot/Treatability Study Report
Completed Date:	01/10/2005
Comments:	Approved report of phase one pilot testing and work plan for phase two testing. Phase one testing included five-day dual phase extraction, bench-scale testing of chemical oxidation of contaminants in soil, and analysis of field data for indications of biodegradation. Phase Two testing to include dual-phase extraction with ethanol-enhanced recovery of NAPL.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	09/01/2005
Comments:	Approved groundwater monitoring report. Analytical results for contaminants in perched groundwater were generally consistent with historic results. Contaminant concentrations in groundwater zones A, B, and C were generally higher than historic results. No arsenic or PAHs were detected in surface water.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	10/19/2001
Comments:	Approved the site risk assessment report which concluded that PAHs, arsenic, and benzene are the primary COCs at the site. Potential exposure pathways were determined to be extraction of shallow groundwater and construction activities involving disruption of soils and/or groundwater. Impacts on Sulfur Creek were determined to be within acceptable limits, as COCs in shallow groundwater were determined to be present at concentrations below ecological screening levels.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Community Profile
Completed Date:	04/30/1991
Comments:	Community profile submitted to assist in identifying distribution points for Preliminary Endangerment Assessment.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Feasibility Study Workplan
Completed Date:	07/20/2006
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	08/01/2006
Comments:	Installation of monitoring and extraction wells completed.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	12/04/2006

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Comments:	Public notice finalized to announce public comment period.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Manual
Completed Date:	08/01/2008
Comments:	DTSC approved the Operation and Maintenance Manual for operation of the dual-phase extraction and treatment system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Participation Plan / Community Relations Plan
Completed Date:	10/23/2006
Comments:	Public Participation Plan completed detailing community interests and concerns regarding site cleanup. Anticipated future public participation activities also described.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Well Completion Report
Completed Date:	01/18/2007
Comments:	Approved well installation report.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	04/23/2008
Comments:	DTSC approved the Remedial Action Completion Report and no further action for soil cleanup.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Completion Report
Completed Date:	06/09/2015
Comments:	DTSC approved final Remedial Action Completion Report. Approximately 4,820 cubic yards of contaminated soil was removed from the Site and disposed to permitted landfills.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	06/11/2007
Comments:	Groundwater elevation data observed to reflect operation of dual-phase extraction and treatment system for May/June sampling event. Concentrations of contaminants of concern consistent with those previously reported.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Action Implementation Workplan
Completed Date:	06/11/2007
Comments:	Approved destruction of MW-3, MW-4 and MW-5. Plan details the procedure to be followed.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Date:	08/06/2007
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Design/Implementation Workplan
Completed Date:	02/26/2014
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/17/2008
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	10/23/2008
Comments:	Approved first half 2008 O&M Report. The Report presents the results of the May 2008 sampling of groundwater monitoring wells and documents the operation of the dual-phase extraction system.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	01/18/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	06/30/2011
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	12/27/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	11/16/2011
Comments:	Report was accepted. There are no changes.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	06/09/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	01/25/2010

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Report
Completed Date:	04/01/2011
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Operations and Maintenance Plan
Completed Date:	03/06/2017
Comments:	O&M Plan with soil and groundwater management plan for the former MGP and Mitchell Drive right-of-ways.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	*Correspondence - Received
Completed Date:	01/13/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Work Notice
Completed Date:	12/17/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	03/28/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	10/16/2014
Comments:	Field remediation work completed with site restored and new fence.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Workplan
Completed Date:	07/13/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Monitoring Report
Completed Date:	09/05/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation Report
Completed Date:	02/20/2013
Comments:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	CEQA - Initial Study/ Neg. Declaration
Completed Date:	04/20/2007
Comments:	Final CEQA Negative Declaration approved.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Land Use Restriction
Completed Date:	03/21/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	04/23/2013
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/14/2008
Comments:	DTSC annual oversight cost estimate to PRPs per HSC 25269.5.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	08/27/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/29/2009
Comments:	DTSC cost estimate sent 9/29/2009
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Amendment - Order/Agreement
Completed Date:	08/23/2006
Comments:	Provision for submittal of electronic documents added to cleanup agreement.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	11/30/2010
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/12/2011
Comments:	Sent out annual cost estimate
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/29/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2013
Comments: Annual Oversight Cost Estimate

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 08/27/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 07/07/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Workplan
Completed Date: 05/21/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/26/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/05/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 09/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Work Notice
Completed Date: 05/05/2014
Comments: Work notice for remedial action implementation for removing about

Map ID Direction Distance Elevation	Site	MAP FINDINGS Database(s)	EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

42,00o cubic yards of contaminated soil and disposal offsite.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 08/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/10/2015
Comments: DTSC approved groundwater monitoring program with the following minor revision. The groundwater wells will be developed after a minimum of 72 hours after construction.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 08/27/2015
Comments: DTSC has no comments on the first 2015 semiannual groundwater monitoring report post remediation.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 02/29/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 09/09/2016
Comments: Semiannual groundwater monitoring report with no significant change in concentration trend.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Long Term Monitoring Report
Completed Date: 03/14/2017
Comments: Post-remediation groundwater sampling results are consistent with previous results. The next sampling event will be performed in May 2017. Groundwater monitoring will continue through 2019.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/13/2016
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: 5 Year Review Reports
Future Due Date: 2020
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Operations and Maintenance Report

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

PG&E ST. HELENA (Continued) **S107737029**

Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Operations and Maintenance Report
Future Due Date: 2019
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

DEED:
Envirostor ID: 28490002
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: VOLUNTARY CLEANUP
Status: CERTIFIED / OPERATION & MAINTENANCE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): 03/21/2017

34
SW
1/4-1/2
0.443 mi.
2337 ft.

KAREN RECTOR **LUST** **S119102545**
1410 ADAMS ST **N/A**
ST. HELENA, CA 94574

Relative: Higher

Actual: 263 ft.

NAPA CO. LUST:
Permit ID: 248151
Status: Closed
Permit Type: Non-LOP
District: 0

K35
SSW
1/4-1/2
0.443 mi.
2341 ft.

PG AND E ST HELENA **EDR MGP** **1008407746**
MITCHELL DR AND OAK AVENUE **N/A**
SAINT HELENA, CA 94574

Site 3 of 3 in cluster K

Relative: Higher

Actual: 231 ft.

Manufactured Gas Plants:
Pacific Gas and Electric Company's (PG AND E's) 1-acre property was formerly the location of a Manufactured Gas Plant (MGP). The MGP operated from between 1883 and 1930.

36
South
1/2-1
0.520 mi.
2746 ft.

ST HELENA PETROLEUM **ENVIROSTOR** **S104025320**
905 MAIN ST **LUST** **N/A**
ST HELENA, CA 94574 **HIST CORTESE**

Relative: Higher

Actual: 228 ft.

ENVIROSTOR:
Facility ID: 28290001
Status: Refer: Other Agency
Status Date: 02/18/1988
Site Code: Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ST HELENA PETROLEUM (Continued) **S104025320**

Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Assembly: 04
Senate: 03
Special Program: * Rural County Survey Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 38.50126
Longitude: -122.4648
APN: 009180008000
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 009180008000
Alias Type: APN
Alias Name: 28290001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/28/1988
Comments: SITE SCREENING DONE BASED ON DRIVE-BY AND SIC PAL REQUIRED

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 02/18/1988
Comments: FACILITY IDENTIFIED DHS DRIVE-BY GROUND PHOTOS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 01/22/1988
Comments: FACILITY IDENTIFIED NAPA ENVR HLTH-PROP 65- UNAUTHORIZED UNDERGROUND TANK RELEASE

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

ST HELENA PETROLEUM (Continued) **S104025320**

LUST:
- Lead Agency: NAPA COUNTY
- Case Type: LUST Cleanup Site
- Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605500109
- Global Id: T0605500109
- Latitude: 38.501259
- Longitude: -122.464849
- Status: Completed - Case Closed
- Status Date: 05/29/1997
- Case Worker: JTN
- RB Case Number: 28-0117
- Local Agency: NAPA COUNTY
- File Location: Local Agency
- Local Case Number: 0145
- Potential Media Affect: Soil
- Potential Contaminants of Concern: Gasoline
- Site History: Not reported

LUST:
- Global Id: T0605500109
- Contact Type: Local Agency Caseworker
- Contact Name: James Newman, P.G., C.E.G.
- Organization Name: NAPA COUNTY
- Address: 1195 THIRD STREET, SUITE 101
- City: NAPA
- Email: james.newman@countyofnapa.org
- Phone Number: Not reported

LUST:
- Global Id: T0605500109
- Action Type: ENFORCEMENT
- Date: 04/04/1990
- Action: * Historical Enforcement

- Global Id: T0605500109
- Action Type: Other
- Date: 02/27/1990
- Action: Leak Discovery

- Global Id: T0605500109
- Action Type: Other
- Date: 02/27/1990
- Action: Leak Stopped

- Global Id: T0605500109
- Action Type: Other
- Date: 02/23/1990
- Action: Leak Reported

LUST:
- Global Id: T0605500109
- Status: Open - Case Begin Date
- Status Date: 03/04/1987

- Global Id: T0605500109
- Status: Open - Site Assessment

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number
EPA ID Number

ST HELENA PETROLEUM (Continued) **S104025320**

Status Date: 03/04/1987

Global Id: T0605500109
Status: Open - Site Assessment
Status Date: 03/03/1992

Global Id: T0605500109
Status: Completed - Case Closed
Status Date: 05/29/1997

LUST REG 2:
Region: 2
Facility Id: 28-0117
Facility Status: Case Closed
Case Number: 0145
How Discovered: Tank Closure
Leak Cause: Structure Failure
Leak Source: Tank
Date Leak Confirmed: 3/4/1987
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: 3/3/1992
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 28
Reg By: LTNKA
Reg Id: 28-0117

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SAINT HELENA	S119102669	PGE FORMER MFRD GAS PLANT	MITCHELL DR	94574	LUST
ST HELENA	1003878942	PG&E GAS PLANT ST HELENA	MAIN ST BR BRIDGE	94574	SEMS-ARCHIVE
ST. HELENA	S119102567	CORNER OF MITCHELL AND POPE ST	0 MITCHELL AND POPE STREETS	94574	LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 14

Source: EPA
Telephone: N/A
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/05/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017
Date Data Arrived at EDR: 06/13/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 94

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/08/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/13/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 23

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 31
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/23/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/20/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 11/09/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 08/21/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 05/31/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 76
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/03/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/30/2017
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/31/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 08/18/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 34

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 01/08/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 11/27/2017
Date Data Arrived at EDR: 11/29/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 19
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24
Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 41
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 37

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 09/21/2017
Number of Days to Update: 57

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 30

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/22/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/17/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/17/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/27/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/22/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 21
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/12/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 10/26/2017
Next Scheduled EDR Contact: 02/05/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 8
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 63

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System
The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program
DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites
Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/22/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 10/10/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 10/29/2017
Date Data Arrived at EDR: 11/28/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 45

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/28/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 24

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 9

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/27/2017
Date Data Arrived at EDR: 11/21/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/20/2017
Number of Days to Update: 44
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 53
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 01/19/2018
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/21/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 08/15/2017
Number of Days to Update: 147
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/22/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 34

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 52

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/09/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/08/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 37

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/20/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 37
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/10/2017
Date Data Arrived at EDR: 10/10/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 7
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 01/09/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 31
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/29/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 42
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/13/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 23
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 42
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 35
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 12/15/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 32
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/11/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 36
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/12/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/12/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 09/22/2017
Date Data Arrived at EDR: 09/22/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 18

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 12/08/2017
Date Data Arrived at EDR: 12/12/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 15

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 08/31/2017
Date Data Arrived at EDR: 09/05/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 64

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/20/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 08/07/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/20/2017
Date Data Arrived at EDR: 11/29/2017
Date Made Active in Reports: 01/19/2018
Number of Days to Update: 51

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 10/31/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 11/14/2017
Number of Days to Update: 13

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/06/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 21

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/30/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 40

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 10/25/2017
Date Data Arrived at EDR: 10/27/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 19

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/03/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 69

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 22

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/20/2017
Number of Days to Update: 43

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 28

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 5

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 07/24/2017
Date Data Arrived at EDR: 07/26/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 82

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

LOS ANGELES COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 5
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 10/17/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 51
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 171
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 31
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/17/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/10/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 13

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 10/26/2017
Date Data Arrived at EDR: 10/27/2017
Date Made Active in Reports: 11/06/2017
Number of Days to Update: 10

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 01/05/2018
Date Made Active in Reports: 01/17/2018
Number of Days to Update: 12

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 10/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 14

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 11/21/2017
Date Data Arrived at EDR: 11/27/2017
Date Made Active in Reports: 12/27/2017
Number of Days to Update: 30

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2017
Date Data Arrived at EDR: 09/15/2017
Date Made Active in Reports: 11/28/2017
Number of Days to Update: 74

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/20/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 11/22/2017
Date Data Arrived at EDR: 11/27/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 8

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/09/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 28

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/09/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 36

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/07/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/05/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 63

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/30/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/15/2017
Number of Days to Update: 12

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/11/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/09/2017
Number of Days to Update: 28

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/15/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 10/12/2017
Date Made Active in Reports: 11/08/2017
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/15/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 3

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/03/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 10/03/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 44

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/03/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 11/17/2017
Number of Days to Update: 14

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/01/2017
Date Made Active in Reports: 01/16/2018
Number of Days to Update: 46

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/06/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 12/04/2017
Date Data Arrived at EDR: 12/05/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 37

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/05/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/29/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/07/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 4

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 04/02/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 12/12/2017
Date Data Arrived at EDR: 12/14/2017
Date Made Active in Reports: 01/11/2018
Number of Days to Update: 28
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/06/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2017
Date Data Arrived at EDR: 12/14/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 29
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 12/13/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 11/14/2017
Date Data Arrived at EDR: 11/16/2017
Date Made Active in Reports: 01/04/2018
Number of Days to Update: 49
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/21/2017
Next Scheduled EDR Contact: 03/12/2018
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 12/15/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 28

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 12/15/2017
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 34

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/08/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/27/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 50
Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/19/2017
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/03/2017
Date Data Arrived at EDR: 10/06/2017
Date Made Active in Reports: 11/10/2017
Number of Days to Update: 35
Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/04/2018
Next Scheduled EDR Contact: 04/09/2018
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 11/01/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 6
Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/01/2017
Date Data Arrived at EDR: 12/04/2017
Date Made Active in Reports: 12/19/2017
Number of Days to Update: 15
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/01/2017
Next Scheduled EDR Contact: 03/19/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List
Cupa facilities

Date of Government Version: 11/16/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 31
Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/23/2017
Date Data Arrived at EDR: 10/24/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 23
Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

TULARE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa program facilities

Date of Government Version: 09/27/2017
Date Data Arrived at EDR: 09/28/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 18

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 12/18/2017
Next Scheduled EDR Contact: 02/19/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 22

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 43

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/26/2017
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/08/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 10/25/2017
Date Made Active in Reports: 12/07/2017
Number of Days to Update: 43

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/22/2018
Next Scheduled EDR Contact: 05/07/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/27/2017
Date Data Arrived at EDR: 12/13/2017
Date Made Active in Reports: 01/19/2018
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/11/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 01/09/2018
Date Made Active in Reports: 01/19/2018
Number of Days to Update: 10
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/02/2018
Next Scheduled EDR Contact: 04/16/2018
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 11/08/2017
Date Data Arrived at EDR: 11/10/2017
Date Made Active in Reports: 11/16/2017
Number of Days to Update: 6
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/25/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2017
Date Data Arrived at EDR: 11/14/2017
Date Made Active in Reports: 12/18/2017
Number of Days to Update: 34
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/14/2017
Next Scheduled EDR Contact: 02/26/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/05/2018
Next Scheduled EDR Contact: 04/23/2018
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 10/01/2017
Date Data Arrived at EDR: 11/01/2017
Date Made Active in Reports: 11/13/2017
Number of Days to Update: 12

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/01/2017
Next Scheduled EDR Contact: 02/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/16/2018
Next Scheduled EDR Contact: 04/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/16/2017
Next Scheduled EDR Contact: 03/05/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2017
Next Scheduled EDR Contact: 03/26/2018
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX E

NAPA COUNTY PESTICIDE USE REPORT

Permit #	Permitee	Site Location	Site Name	Meridian	Township	Range	Section	Application Date	Application Time	Commodity Code	Commodity	Pre-plant	Planted Amount	Planted Units	EPA Reg No	Product Name	Quantity Used	Quantity Units	Treated Amount	Treated Units	Appl. Method	Fume Code	Applicator Name	Document#	Submitted By	Submitted Date	Entered By	Time Stamp Date	Time Stamp Time	Rpt Status	Sub Status
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	2/20/2013	8:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	524-549-AA	ROUNDUP POWERMAX	1.1700	Gallon	2.7400	ACRES	Ground		Grower Applied	3377	KENDALL-JACKSON	3/12/2013	cardinale	3/12/2013	12:00 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	2/20/2013	8:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	59639-99-AA	CHATEAU	1.8700	Pounds	2.7400	ACRES	Ground		Grower Applied	3377	KENDALL-JACKSON	3/12/2013	cardinale	3/12/2013	12:00 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/26/2013	6:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-AA	PURE SPRAY GREEN	3.0000	Gallon	7.5300	ACRES	Ground		Grower Applied	3440	KENDALL-JACKSON	5/8/2013	cardinale	5/8/2013	6:44 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/1/2015	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	2.5200	Gallon	5.0300	ACRES	Ground		Grower Applied	4418707	GROWER APPLIED	8/12/2015	agrian_data	8/12/2015	7:27 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/19/2015	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	4.0000	Gallon	8.0000	ACRES	Ground		Grower Applied	4423247	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:05 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/19/2015	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	62719-410-ZC	RALLY 40 WSP	2.0000	Pounds	8.0000	ACRES	Ground		Grower Applied	4423247	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:05 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/18/2015	10:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	8.0000	Gallon	8.0000	ACRES	Ground		Grower Applied	4423250	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:10 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/18/2015	10:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-199-AA	PRISTINE(R) FUNGICID	9.0000	Pounds	8.0000	ACRES	Ground		Grower Applied	4423250	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:10 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/10/2015	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	80289-8-AA	METTLE 125 ME	0.2500	Gallon	8.0000	ACRES	Ground		Grower Applied	4423254	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:13 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/10/2015	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50189-AA	SYL-COAT	0.2500	Gallon	8.0000	ACRES	Ground		Grower Applied	4423254	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:13 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	7/2/2015	9:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	8.0000	Gallon	8.0000	ACRES	Ground		Grower Applied	4423260	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:19 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	7/2/2015	9:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-199-AA	PRISTINE(R) FUNGICID	9.0000	Pounds	8.0000	ACRES	Ground		Grower Applied	4423260	GROWER APPLIED	8/13/2015	agrian_data	8/13/2015	7:19 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	1/18/2016	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	524-549-AA	ROUNDUP POWERMAX HER	2.5200	Gallon	5.0300	ACRES	Ground		Grower Applied	4775946	GROWER APPLIED	2/3/2016	agrian_data	2/3/2016	4:20 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	1/18/2016	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	59639-99-AA	CHATEAU(R) HERBICIDE	3.7700	Pounds	5.0300	ACRES	Ground		Grower Applied	4775946	GROWER APPLIED	2/3/2016	agrian_data	2/3/2016	4:20 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/11/2016	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	15.0900	Pounds	5.0300	ACRES	Ground		Grower Applied	5171221	GROWER APPLIED	6/8/2016	agrian_data	6/8/2016	10:55 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/11/2016	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-199-AA	PRISTINE(R) FUNGICID	3.7700	Pounds	5.0300	ACRES	Ground		Grower Applied	5171221	GROWER APPLIED	6/8/2016	agrian_data	6/8/2016	10:55 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/23/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-284-AA	VIVANDO(R) FUNGICIDE	0.5900	Gallon	5.0300	ACRES	Ground		Grower Applied	5178133	GROWER APPLIED	6/9/2016	agrian_data	6/9/2016	10:01 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/23/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	15.0900	Pounds	5.0300	ACRES	Ground		Grower Applied	5178133	GROWER APPLIED	6/9/2016	agrian_data	6/9/2016	10:01 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/23/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50189-AA	SYL-COAT	0.0900	Gallon	5.0300	ACRES	Ground		Grower Applied	5178133	GROWER APPLIED	6/9/2016	agrian_data	6/9/2016	10:01 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/7/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	264-777-AA	FLINT FUNGICIDE	0.6300	Pounds	5.0300	ACRES	Ground		Grower Applied	5320748	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:13 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/7/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	5.0300	Gallon	5.0300	ACRES	Ground		Grower Applied	5320748	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:13 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/7/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50189-AA	SYL-COAT	0.1300	Gallon	5.0300	ACRES	Ground		Grower Applied	5320748	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:13 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/29/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	5.0300	Gallon	5.0300	ACRES	Ground		Grower Applied	5320771	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:14 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/29/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	400-518-ZD	VITICURE (003/061209	0.3100	Gallon	5.0300	ACRES	Ground		Grower Applied	5320771	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:14 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/29/2016	1:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50189-AA	SYL-COAT	0.1300	Gallon	5.0300	ACRES	Ground		Grower Applied	5320771	GROWER APPLIED	7/11/2016	agrian_data	7/11/2016	3:14 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	3/1/2017	6:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	524-549-AA	ROUNDUP POWERMAX HER	2.5200	Gallon	5.0300	ACRES	Ground		Grower Applied	5966775	GROWER APPLIED	3/22/2017	agrian_data	3/22/2017	1:05 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	3/1/2017	6:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	59639-99-AA	CHATEAU(R) HERBICIDE	3.7700	Pounds	5.0300	ACRES	Ground		Grower Applied	5966775	GROWER APPLIED	3/22/2017	agrian_data	3/22/2017	1:05 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/20/2017	2:30 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	25.1500	Pounds	5.0300	ACRES	Ground		Grower Applied	6357301	GROWER APPLIED	6/29/2017	agrian_data	6/29/2017	1:06 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/20/2017	2:30 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50200-AA	RAINIER-EA	0.1600	Gallon	5.0300	ACRES	Ground		Grower Applied	6357301	GROWER APPLIED	6/29/2017	agrian_data	6/29/2017	1:06 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/28/2017	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	10.0600	Pounds	5.0300	ACRES	Ground		Grower Applied	6222662	GROWER APPLIED	5/31/2017	agrian_data	5/31/2017	3:27 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/28/2017	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50200-AA	RAINIER-EA	0.1600	Gallon	5.0300	ACRES	Ground		Grower Applied	6222662	GROWER APPLIED	5/31/2017	agrian_data	5/31/2017	3:27 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/24/2017	1:00 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50200-AA	RAINIER-EA	0.1600	Gallon	5.0300	ACRES	Ground		Grower Applied	6246967	GROWER APPLIED	6/6/2017	agrian_data	6/6/2017	9:23 AM	ACC	DPR
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4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/24/2017	2:30 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	25.1500	Pounds	5.0300	ACRES	Ground		Grower Applied	6358000	GROWER APPLIED	6/29/2017	agrian_data	6/29/2017	2:10 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/24/2017	2:30 PM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50200-AA	RAINIER-EA	0.1600	Gallon	5.0300	ACRES	Ground		Grower Applied	6358000	GROWER APPLIED	6/29/2017	agrian_data	6/29/2017	2:10 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/18/2017	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	51036-352-AA-2935	SULFUR DF	15.0900	Pounds	5.0300	ACRES	Ground		Grower Applied	6407307	GROWER APPLIED	7/10/2017	agrian_data	7/10/2017	12:17 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/18/2017	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50200-AA	RAINIER-EA	0.3100	Gallon	5.0300	ACRES	Ground		Grower Applied	6407307	GROWER APPLIED	7/10/2017	agrian_data	7/10/2017	12:17 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/18/2017	7:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	264-777-AA	FLINT FUNGICIDE	0.6200	Pounds	5.0300	ACRES	Ground		Grower Applied	6407307	GROWER APPLIED	7/10/2017	agrian_data	7/10/2017	12:17 PM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/10/2013	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	3.0000	Gallon	7.5300	ACRES	Ground			WEB132449162			cardinale	6/6/2013	8:14 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/10/2013	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	80289-8-AA	METTLE 125 ME FUNGICIDE	1.2500	Quart	7.5300	ACRES	Ground			WEB132449162			cardinale	6/6/2013	8:14 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/5/2013	2:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	69526-9-ZA	PURESPRAY GREEN	1.2500	Gallon	8.0000	ACRES	Ground			WEB132470313			cardinale	7/17/2013	10:27 AM	ACC	DPR
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4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/14/2014	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-61-AA-2935	SULFUR DF	15.0000	Pounds	5.5300	ACRES	Ground			WEB142570148			cardinale	4/28/2014	11:04 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	4/14/2014	4:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50185-AA	R-56	20.0000	Ounce	7.5300	ACRES	Ground			WEB142570148			cardinale	4/28/2014	11:04 AM	ACC	DPR
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4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	6/28/2014	5:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	264-108-AA	LUNA EXPERIENCE	2.0000	Quart	7.5300	ACRES	Ground			WEB142652914			cardinale	11/5/2014	8:46 AM	ACC	DPR
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4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/29/2014	5:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-61-AA-2935	SULFUR DF	22.5000	Pounds	8.0000	ACRES	Ground			WEB142654741			cardinale	11/11/2014	9:15 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/29/2014	5:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50161-AA	SYLGARD 309	1.8800	Pint	8.0000	ACRES	Ground			WEB142654741			cardinale	11/11/2014	9:15 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/29/2014	5:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-199-AA	PRISTINE FUNGICIDE	5.6500	Pounds	8.0000	ACRES	Ground			WEB142654741			cardinale	11/11/2014	9:15 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	5/1/2014	3:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	7969-61-AA-2935	SULFUR DF	22.0000	Pounds	8.0000	ACRES	Ground			WEB142655961			cardinale	11/17/2014	12:53 PM	ACC	DPR
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4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	2/1/2015	9:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	524-549-AA	ROUNDUP POWERMAX HERBICIDE	150.0000	Ounce	8.0000	ACRES	Ground			WEB152680193			cardinale	3/5/2015	8:58 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	2/1/2015	9:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	2935-50171-AA	CAYUSE PLUS	32.0000	Ounce	8.0000	ACRES	Ground			WEB152680193			cardinale	3/5/2015	8:58 AM	ACC	DPR
4903045	CARDINALE WINERY	VAN Z VINEYARD	N END OF ADAMS	M	08N	05W	30	2/1/2015	9:00 AM	29143-0	GRAPE, WINE	No	8.0000	ACRES	59639-99-AA	CHATEAU HERBICIDE SW	30.0000	Ounce	8.0000	ACRES	Ground			WEB152680193			cardinale	3/5/2015	8:58 AM	ACC	DPR
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APPENDIX F

HISTORICAL AERIAL PHOTOGRAPHS

Hunter Property
Adams Street
Saint Helena, CA 94574

Inquiry Number: 5167765.5
January 25, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

01/25/18

Site Name:

Hunter Property
Adams Street
Saint Helena, CA 94574
EDR Inquiry # 5167765.5

Client Name:

EBA Engineering
825 Sonoma Avenue
Santa Rosa, CA 95404
Contact: David Noren

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: July 10, 1993	USGS/DOQQ
1982	1"=500'	Flight Date: July 08, 1982	USDA
1973	1"=500'	Flight Date: September 27, 1973	USGS
1968	1"=500'	Flight Date: April 18, 1968	USGS
1958	1"=500'	Flight Date: October 02, 1958	USDA
1953	1"=500'	Flight Date: April 24, 1953	USDA
1947	1"=500'	Flight Date: March 01, 1947	USGS

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= 500'
N
EDR


INQUIRY #: 5167765.5
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 5167765.5
YEAR: 2006
= 500'
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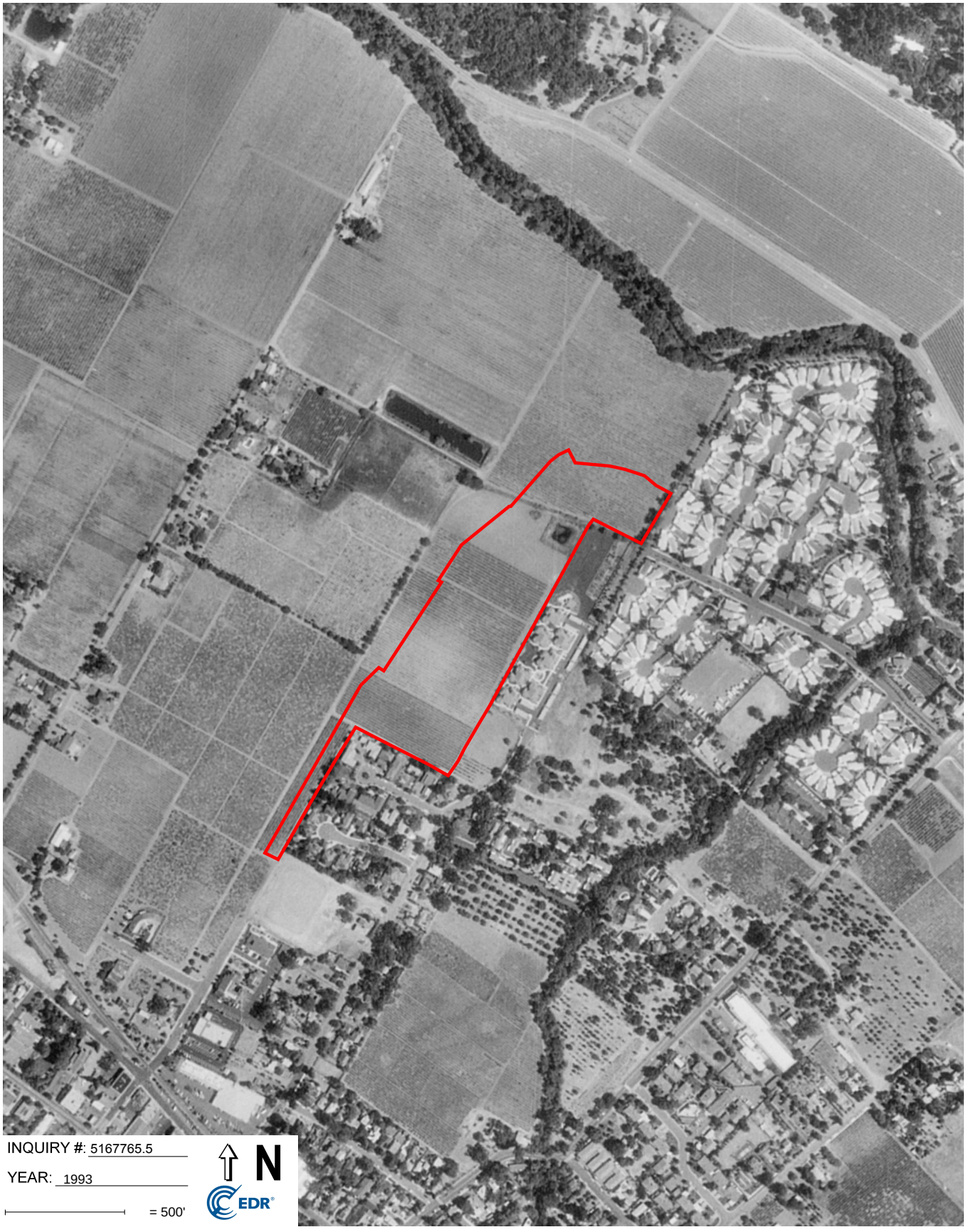
EDR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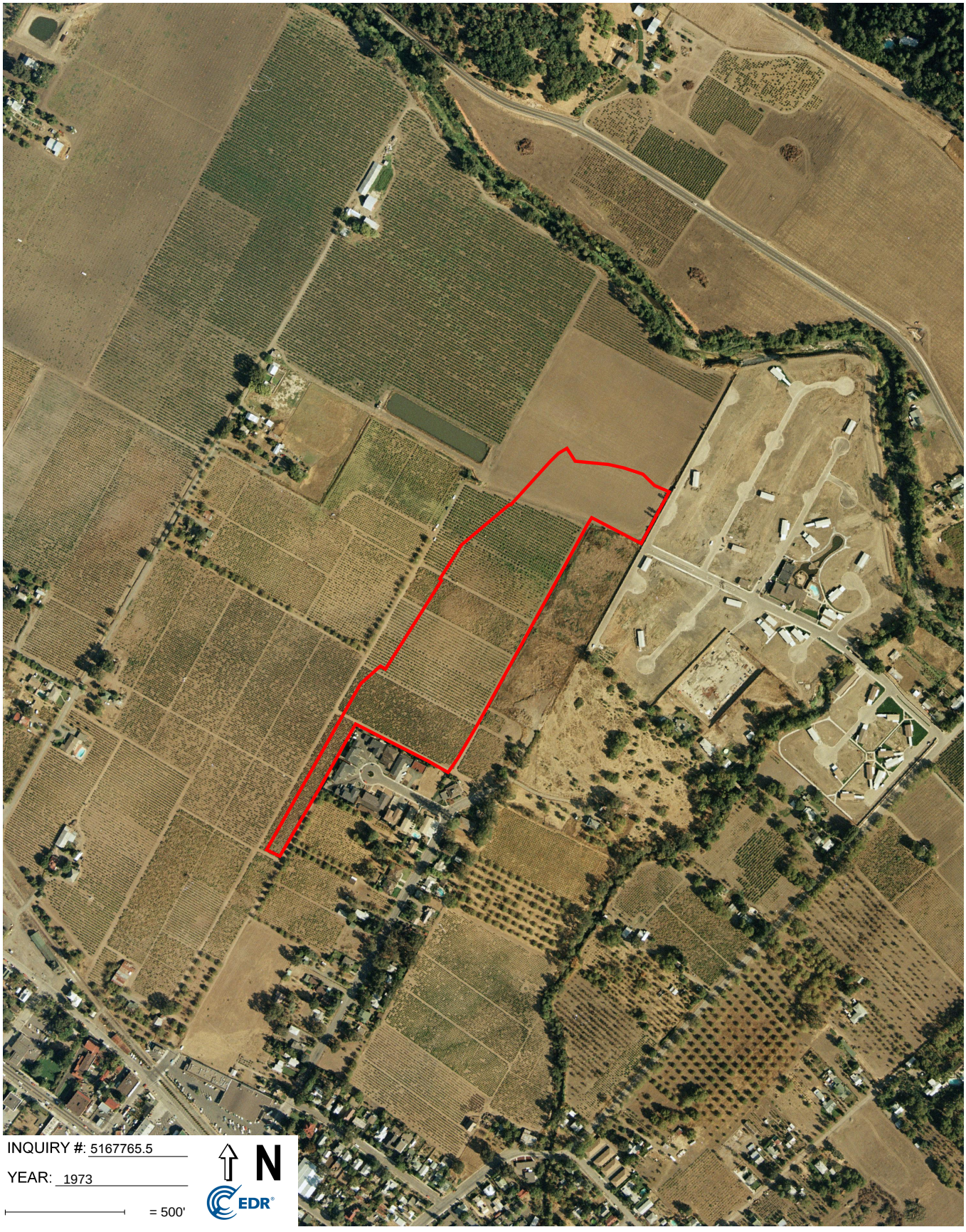
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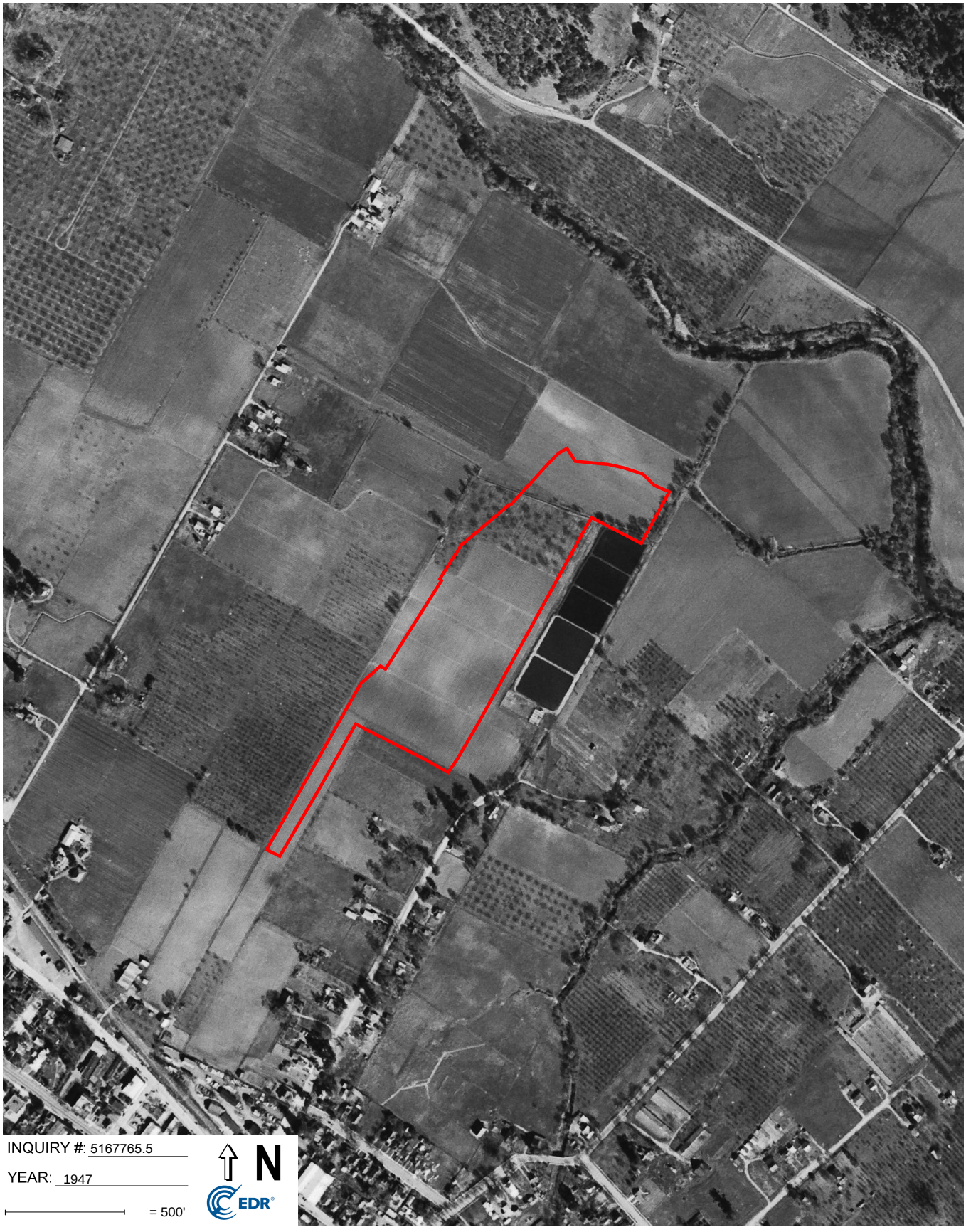
EDR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YEAR: 1947
= 500'
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EDR

APPENDIX G

PROFESSIONAL QUALIFICATIONS

DAVID M. NOREN

MANAGER, ENVIRONMENTAL SERVICES

PROFESSIONAL CERTIFICATIONS/MEMBERSHIPS

Registered Environmental Assessor, California
OSHA 40 Hour Hazardous Waste Operations & Emergency Response Training
OSHA 8 Hour Hazardous Waste Activities Management Training
Supervisor Training in Hazardous Waste Operations
American Red Cross First Aid and CPR

Board Member North Coast Regional Water Quality Control Board

EDUCATIONAL BACKGROUND

M.Sc., Environmental Management
University of San Francisco, San Francisco, California

B.Sc., Agricultural Science & Management
University of California Davis, Davis, California

EXPERIENCE SUMMARY

Mr. Noren is a Registered Environmental Assessor with over 25 years of experience in the field of environmental assessments and investigations. Prior experience includes technical and management services for a wide range of environmental, hydrogeologic, and solid waste landfill projects. The nature and scope of these projects have included field and management positions for property assessments, assessments of surface and subsurface geologic investigations, underground fuel storage tank investigations and remediation, hydrogeologic characterization investigations, remedial action design and implementation of soil, groundwater, and landfill gas corrective action programs and storm water management sampling and reporting.

At EBA Engineering, Mr. Noren is the Manager of Environmental Services and oversees a number of projects including site investigations and monitoring, environmental assessments, as well as providing technical support and management services for solid waste management projects. The management requirements include the oversight of project budgets, client interactions, site investigation activities and field and reporting programs.

Mr. Noren has experience in the application of numerous investigative and treatment methodologies in a wide range of geologic environments including performing the investigation and remediation of a diverse range of contaminated sites and municipal solid waste facilities.

HYDROLOGY ANALYSIS

For

HUNTER SUBDIVISION
ST. HELENA, CA

APN: 009-030-057



Project #4110047.0

January 25, 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY

EXHIBIT A

Proposed Conditions - Impervious Areas Exhibit

EXHIBIT B

Agreement of Purchase and Sale

EXHIBIT C

Figure No. 6 – Overall Site Map Sub Basin Delineation Map
Mead & Hunt – Interior Drainage Analysis Final Report

EXECUTIVE SUMMARY

This report is intended to respond to the City of St. Helena's Second Notification of Identified Issues - Hunter Residential Subdivision Tentative Map Application Comment number 2a. which asks us to, "Complete Hydrologic analysis identifying existing drainage features and patterns; modeling pre- and post- project run off rates and volumes; and substantiating applicants claim of adequate detention basin capacity made in the draft EIR..."

In order to substantiate the claim that the detention basin has adequate capacity we have included the January 2009 agreement of sale between The City of St. Helena and Dennis Hunter. Section 1.7c of the above agreement states, "The City will size, at no additional cost to Hunter, storm water drainage handling facilities downstream of the site, to be constructed as part of the [St. Helena Comprehensive Flood Control Protection Project], based upon projected build-out of the Hunter Remainder and the 3.58 acres, zoned Medium-density residential (MR) as of the Effective Date of this Agreement (as defined in the St. Helena Municipal Code Section 17.40), expressed as a 70% impervious drainage watershed". See Exhibit B for the full agreement.

We have also included portions of the previous City of St. Helena Comprehensive Flood Protection Project's Interior Drainage Analysis Final Report for the Miller Property/Hunter Property/Hunt Avenue. The sections included in Exhibit C demonstrates the existing and proposed conditions for the Hunter property referred to as Sub-basin 4 in Figure 6 of the report. The section included in Exhibit B show that for the existing 10-year storm event, sub-basin 4 was assigned an impervious percentage of 0, which matches the pre-project condition of the site. This same sub-basin was assigned a value of 70% impervious in the proposed 100-year storm event model. This proposed condition matches the agreement language for the Hunter property.

Per the Agreement with the City of St. Helena and the City of St. Helena Comprehensive Flood Protection Project's Interior Drainage Analysis Final Report for the Miller Property/Hunter Property/Hunt Avenue, it is assumed that the detention system installed as part of the Comprehensive Flood Protection Project accounts for the future development of the Hunter parcel to an extent of 70% impervious. The proposed Hunter parcel development has been shown to be only 58% impervious, and thus meets both the agreement and the condition analyzed in the Mead & Hunt report. As such no additional storm water volume control facilities should be required as part of the proposed Hunter subdivision. See Exhibit A for the proposed impervious area exhibit.

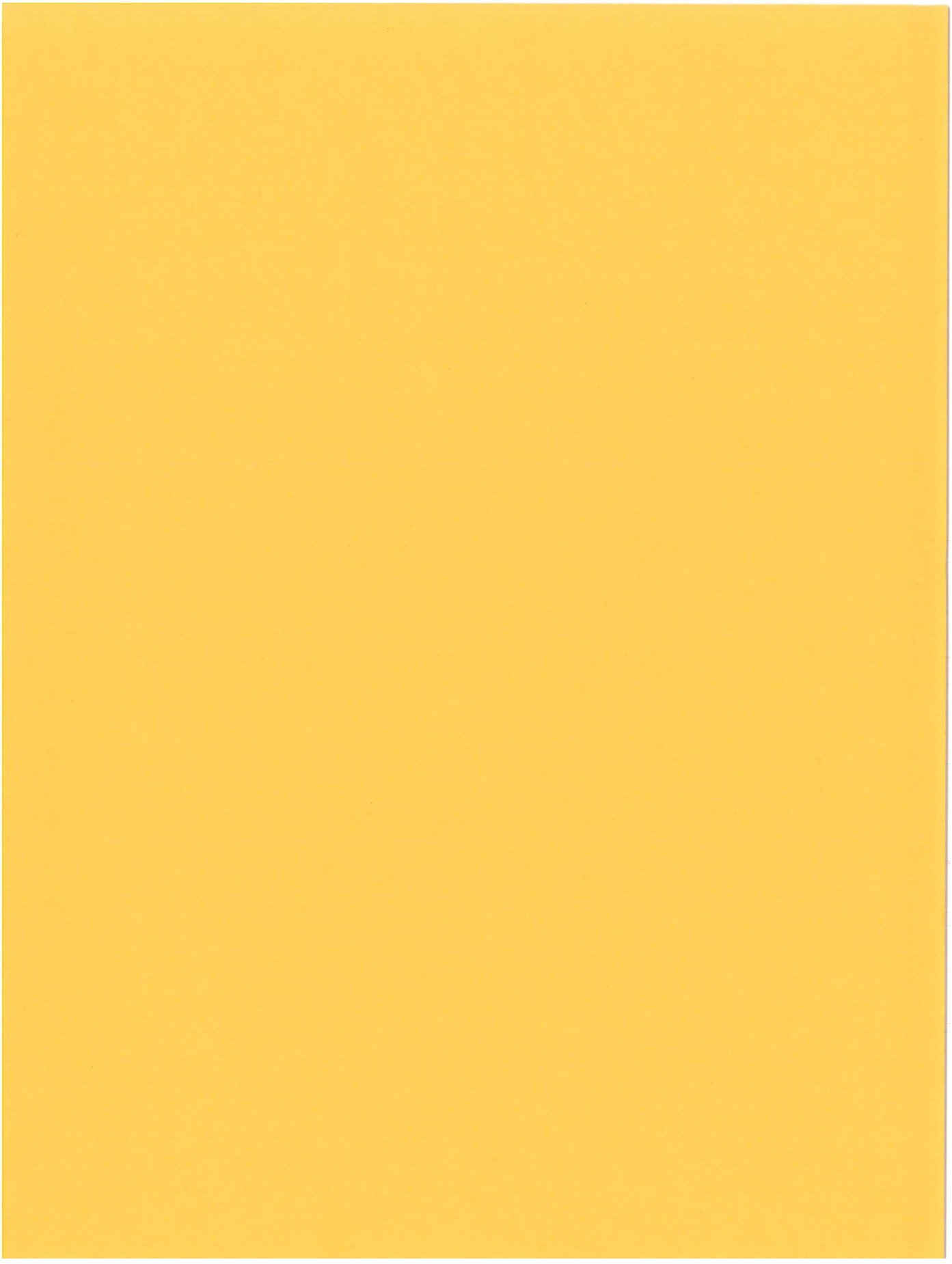


EXHIBIT A

IMPERVIOUS AREAS EXHIBIT

HUNTER SUBDIVISION
PROPOSED IMPERVIOUS AREAS

LEGEND

DRIVEWAY AREAS = 0.57 AC

BUILDING AREAS = 4.76 AC

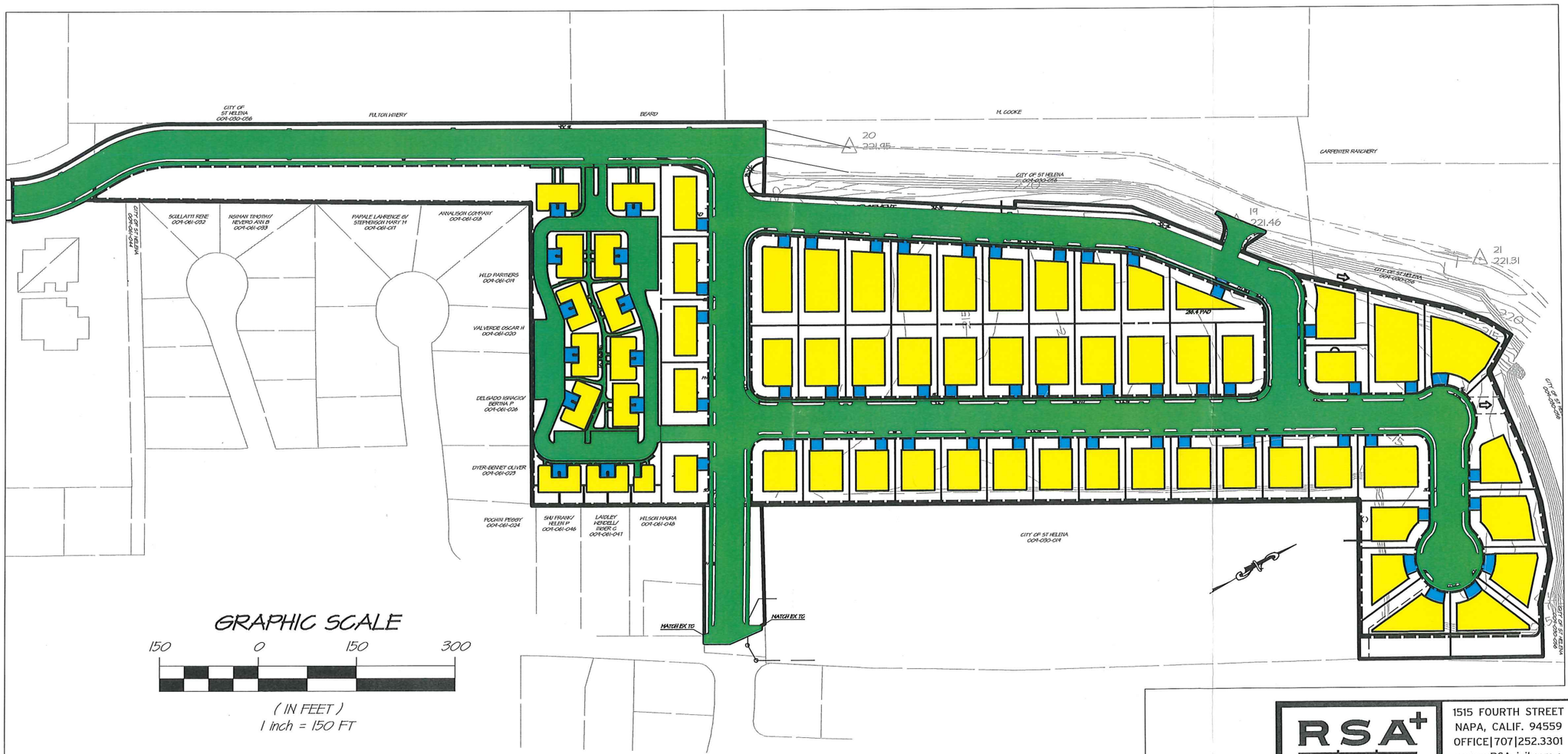
STREETS AND SIDEWALK AREAS = 5.58 AC

PROJECT BOUNDARY LINE (TOTAL AREA =18.80 AC)

CALCULATION

IMP AREAS = 10.91 AC
TOT AREA= 18.80 AC

% IMPERVIOUS = 10.91 AC / 18.80 AC = 58% IMPERVIOUS



GRAPHIC SCALE

150 0 150 300

(IN FEET)
1 inch = 150 FT

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11/20/2018

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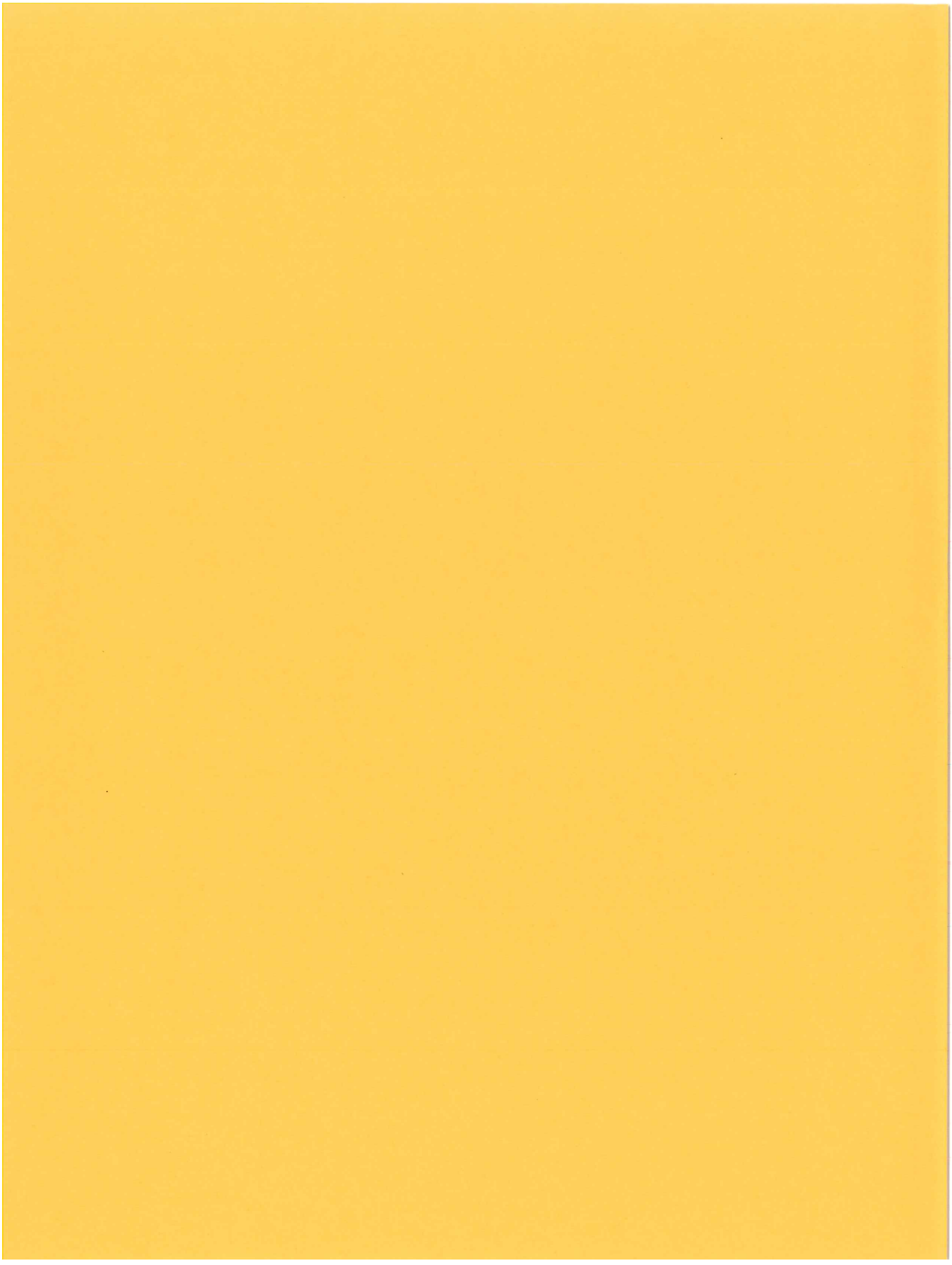

EXHIBIT B

CITY OF ST. HELENA AND HUNTER AGREEMENT

AGREEMENT OF PURCHASE AND SALE

THIS AGREEMENT OF PURCHASE AND SALE ("**Agreement**") is made and entered into as of January ___, 2009 (the "**Effective Date**"), by and between the City of St. Helena (the "**City**"), and Dennis R. Hunter ("**Hunter**").

RECITALS

A. Hunter owns that certain real property located in the City of St. Helena, State of California, consisting of approximately 3.69 acres, together with all appurtenant improvements, rights, interests, easements, tenements and estates, a portion of APN No. 009-030-020, more fully described on Exhibit A (the "**Hunter Property**").

B. A portion of the Hunter Property, consisting of approximately 1.20 acres, as shown on Exhibit B, is located below the flood plain (the "**1.20 Acres**"). The remaining portion of the Hunter Property, consisting of approximately 2.39 acres as shown on Exhibit B, is located above the flood plain (the "**2.39 Acres**"). A .10 acre portion of the Hunter Property located below the floodplain is not shown on Exhibit B

C. The City owns that certain real property located in the City of St. Helena, State of California, consisting of approximately 3.58 acres located below the flood plain, together with all appurtenant improvements, rights, interests, easements, tenements and estates, as more fully described on Exhibit C (the "**3.58 Acres**"). The Hunter Property and the 3.58 Acres may be referred to individually as a "property" and collectively as the "properties."

D. The Hunter Property and the 3.58 Acres are designated in the City's general plan as MR / Medium Density Residential 5.1 to 16 units per acre.

E. The City intends to use the 3.58 Acres for the advancement of the St. Helena Comprehensive Flood Control Protection Project (the "**Project**") based on the City's desire to acquire the Hunter Property from Hunter and Hunter's desire to acquire the 3.58 Acres from the City, in accordance with the terms and conditions set forth in this Agreement.

F. In furtherance of the Project, the City has secured a loan from the State Revolving Fund of the State Water Resources Control Board, the terms of which require that the City request funds for property acquisition thirty to forty-five (30-45) days before the close of escrow on the purchase of such property.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements contained in this Agreement, and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged by the parties hereby agree as follows:

ARTICLE 1: LOT LINE ADJUSTMENT; EASEMENTS

1.1 Lot Line Adjustment. The City hereby covenants and agrees to promptly process and cause to be recorded at Closing (as defined below) the lot line adjustments required to establish the property configurations shown on Exhibit D, Following the Lot Line Adjustment,

the City will own 15.691 acres and Hunter will own 16.903 acres. The Lot Line Adjustment shall have been recorded in the Official Records of the County such that the Property can be transferred to Hunter in accordance with California Government Code Section 66410 et seq. (the "Map Condition"). In light of the decision in *Black Hills Investments, Inc. v. Albertson's Inc.* (2007) 146 Cal. App. 4th 883.

1.2 Grant of Temporary Easement. For good and valuable consideration, Hunter hereby grants to the City an exclusive easement (the "**Temporary Easement**") to use the Hunter Property prior to the Close of Escrow (as defined below) for the purposes set forth in the St. Helena Comprehensive Flood Control Protection Project. The Temporary Easement herein granted shall commence upon the Effective Date and shall merge into the grant deed upon Hunter's conveyance of the Hunter Property to the City.

1.3 Grant of Construction Easement. For good and valuable consideration, Hunter hereby grants to the City a temporary, non-exclusive easement (the "**Construction Easement**"), in accordance with the terms of that certain Construction Easement in the form attached hereto as Exhibit E, over, under, across, above and through that certain real property shown on Exhibit E hereto (the "**Construction Easement Area**") for ingress and egress and for construction related purposes in connection with the Project. This Construction Easement is intended to be temporary in nature and shall terminate on December 31, 2012.

1.4 Grant of Utility Easement. For good and valuable consideration, Hunter hereby grants to the City a non-exclusive perpetual easement (the **Utility Easement**"), in accordance with the terms of that certain Utility Easement in the form attached hereto as Exhibit F, over under, across, above and through that certain real property shown on Exhibit F hereto (the "**Utility Easement Area**") for the purposes of installing, constructing, operating, using, maintaining, repairing, and replacing utility facilities, lines or connections and any uses incidental thereto.

1.5 Depositing of Dirt. Hunter hereby grants to the City the right, at no additional cost to the City and at no cost to Hunter, to deposit dirt, excavated by the City in connection with the Project, on that certain real property (the "**Fill Area**") described on the Soil Stockpile Grading Plan attached hereto as Exhibit G. City and its contractors and agents shall prepare the Fill Area to receive the dirt by removing vines and other vineyard improvements and place the fill in a good and workman-like manner.

1.6 Well Access License. Hunter hereby grants to the City a license at no additional cost to the City and at no cost to Hunter, to access and use water from the existing well shown on Exhibit G in connection with the Project. For good and valuable consideration, Hunter hereby grants to the City a temporary, non-exclusive license (the "**Well Access License**") over, under, across, above and through properties to be owned by Hunter, including the 3.58 Acres. This Well Access License is intended to be temporary in nature and to continue only during the performance of the Project. The Well Access License shall terminate, without the necessity of further documentation, upon completion of the Project.

1.7 Drainage Improvements. The City intends as a part of the Project to build certain retention and drainage facilities as specifically described as follows:

(a) The City will construct a compacted earth fill pad on the remainder of APN No. 009-030-020 ("**Hunter Remainder**") (exclusive of the Hunter Property) and on the 3.58 Acres in accordance with the enclosed Exhibit G. The source of the soil material to construct the pad shall be the City's Flood Protection Project, with unsuitable material (defined as organic content in excess of 3.5%) segregated and placed in areas outside of the useable pad area shown on Exhibit G. Pad construction will comply with the notes on the exhibit and finish graded to provide positive drainage in accordance with Exhibit G. The level of the pad may vary based upon the amount of material generated from the Project with the elevation of the pad adjusted uniformly.

(b) Upon completion of the Project, the then existing drainage patterns for the Hunter Remainder and the 3.58 Acres shall remain undisturbed by the City, with exception of the new pad drainage. Drainage ditches on the pad will be routed to the new detention basin shown on Exhibit G. The City will modify its existing detention basin inlet from the storm drain system to provide a storm drain inlet for pad drainage.

(c) The City will size, at no additional cost to Hunter, storm water drainage handling facilities downstream of the site, to be constructed as part of the Project, based upon projected build-out of the Hunter Remainder and the 3.58 Acres, zoned Medium-density Residential (MR) as of the Effective Date of this Agreement (as defined in the St. Helena Municipal Code Section 17.40), expressed as a 70% impervious drainage watershed.

(d) The City agrees to reroute the existing water main crossing the Hunter Remainder in Easement 895 (OR 383 NCR), as shown on the enclosed Exhibit H. Relocation will be completed by the City prior to development of the Hunter Remainder and the 3.58 Acres. The City's easement for the section of pipe being abandoned will be quit-claimed and returned to Hunter once the relocation is complete.

1.8 Sewer Connection. Upon any application for development of the Hunter Property as referenced in this Agreement, City will not unreasonably withhold its permission for Hunter to cross City property to access a sewer connection. Nothing in this section shall be construed as an entitlement to development under the current medium density residential zoning, and Hunter is responsible for obtaining all necessary development approvals from the City and any other agencies with jurisdiction over the Hunter Property.

1.9 Covenants Running with the Land. The terms and conditions contained in this Article 1 shall (a) constitute covenants running with the land, (b) survive the Close of Escrow, and (c) bind the parties hereto, their heirs, successors and assigns.

1.10 Payment of Taxes. All real property taxes and assessments on the Hunter Property (prior to Close of Escrow) and the Construction Easement Area shall be payable by Hunter.

ARTICLE 2: PURCHASE AND SALE

2.1 Hunter Property. The parties hereby acknowledge and agree that the City requires the Hunter Property in connection with the Project. Accordingly, the City has forced a sale of the Hunter Property by Hunter under the threat of condemnation, on the terms and conditions set forth herein.

2.2 3.58 Acres. As partial consideration for the sale of the Hunter Property pursuant to Section 2.1, above, the City hereby agrees to convey the 3.58 Acres to Hunter, on the terms and conditions set forth herein.

ARTICLE 3: PURCHASE PRICE

3.1 Purchase Price. The parties hereby acknowledge and agree that the fair market value of the 1.20 Acres and the 3.58 Acres is Three Hundred Twenty Five Thousand Dollars ($325,000) per acre and that the fair market value of the 2.39 Acres is Seven Hundred Thousand Dollars ($700,000) per acre. Consequently, the agreed upon value of each property is as follows:

Property	Value	
3.58 Acres	$1,163,500	(valued at $325,000 per acre)
1.20 Acres	$390,000	(valued at $325,000 per acre)
2.39 Acres	$1,673,000	(valued at $700,000 per acre)

Thus, the balance of the purchase price to be paid by the City at Closing shall be **$899,500** [the value of the 1.20 acres and the 2.39 acres ($1,673,000 + $390,000) minus the credit received by the City for the 3.58 acres ($1,163,500)].

ARTICLE 4: CLOSING

4.1 Closing. Hunter hereby covenants and agrees to cooperate with the City in connection with the City's application for a loan from the State Revolving Fund of the State Water Resources Control Board and satisfying all requirements thereof. The consummation of the transactions contemplated herein (the "**Closing**" or "**Close of Escrow**") shall occur on or before February 1, 2008 at the office of North Bay Title Co, Santa Rosa, California ("**Escrow Agent**"); provided, however, that the date for the Close of Escrow shall be subject to extension to the extent required by the State Revolving Fund. Upon satisfaction or completion of all closing conditions and deliveries, the parties shall direct Escrow Agent to immediately record and deliver the closing documents to the appropriate parties and make disbursements according to the closing statements executed by the City and Hunter.

4.2 Escrow Fee. Except as expressly provided herein to the contrary, the escrow fee, if any, charged by Escrow Agent, shall be paid in accordance with customary practices in Napa County.

4.3 Hunter's Deliveries into Escrow. At least one (1) business day prior to the Closing Date, Hunter shall deliver to Escrow Agent for distribution to the appropriate party(ies) at Closing, the following:

(a) Grant Deed. A grant deed in conformity with the custom in the State of California, executed and acknowledged by Hunter, conveying to the City fee simple title to the Hunter Property.

(b) Prorations. Hunter's share of any prorations or expenses.

(c) Tax Certificates. A Foreign Investment in Real Property Tax Act affidavit and a California Form 593-C, executed by Hunter.

(d) State Law Disclosures. Such disclosures and reports as are required by applicable state and local law in connection with the conveyance of real property.

(e) Additional Documents. Any additional documents that the City or the Escrow Agent may reasonably require for the proper consummation of the transactions contemplated by this Agreement.

4.4 The City's Deliveries into Escrow. At least one (1) business day prior to the Closing Date, the City shall deliver to Escrow Agent for distribution to the appropriate party(ies) at Closing, the following:

(a) Purchase Price. The balance of the purchase price, if any, plus or minus applicable prorations and expenses.

(b) Grant Deed. A grant deed in conformity with the custom in the State of California, executed and acknowledged by the City, conveying to Hunter fee simple title to the 3.58 Acres.

(c) State Law Disclosures. Such disclosures and reports as are required by applicable state and local law in connection with the conveyance of real property.

(d) Additional Documents. Any additional documents that Hunter or the Escrow Agent may reasonably require for the proper consummation of the transactions contemplated by this Agreement.

4.5 Closing Statements. At least one (1) business day prior to the Closing Date, Hunter and the City shall deposit with Escrow Agent executed closing statements consistent with this Agreement in the form required by Escrow Agent.

ARTICLE 5: PRORATIONS AND EXPENSES

5.1 Prorations.

(a) Taxes and Assessments. All non-delinquent real estate taxes and non-delinquent assessments on the properties shall be prorated as of 12:01 a.m. on the day of the Close of Escrow based on the actual current tax bill. All delinquent taxes and all delinquent assessments, interest and penalties (if any) with respect to a property, shall be paid at the Close of Escrow by the party conveying such property. If any information needed for the final proration of any item is not available as reasonably determined by Escrow Agent and the parties are notified of the same prior to Closing, the parties shall re-prorate such item after Closing and payment shall be made promptly to the party entitled thereto. The provisions of this Section 5.1(a) shall survive the Close of Escrow

(b) Sales, Transfer, and Documentary Taxes. The parties shall pay, in accordance with customary practices in Napa County, all sales, gross receipts, compensating, stamp, excise, documentary, transfer, deed or similar taxes and fees imposed in connection with the transactions contemplated hereunder.

5.2 No Brokers. Hunter and the City represent and warrant each to the other that they have not dealt with any real estate broker, sales person or finder in connection with this Agreement. In the event of any claim for broker's or finder's fees or commissions in connection with the negotiation, execution or consummation of this Agreement or the transactions contemplated hereby, each party shall indemnify and hold harmless the other party from and against any such claim based upon any statement, representation or agreement of such party.

ARTICLE 6: REPRESENTATIONS AND WARRANTIES

6.1 Hunter's Representations and Warranties. Hunter represents and warrants to the City that:

(a) Conflicts and Pending Actions or Proceedings. There is no agreement to which Hunter is a party or, to Hunter 's knowledge, binding on Hunter which is in conflict with this Agreement. There is no action or proceeding pending or, to Hunter's knowledge, threatened against Hunter or relating to the Hunter Property which challenges or impairs Hunter's ability to execute or perform its obligations under this Agreement.

(b) No Encumbrances. Hunter has not alienated, encumbered, transferred, mortgaged, assigned, pledged, or otherwise conveyed its interest in the Hunter Property or any portion thereof, nor entered into any agreement to do so, and there are no liens, encumbrances, mortgages, covenants, conditions, reservations, restrictions, easements or other matters affecting the Hunter Property, except as disclosed in the preliminary title report delivered to the City. Hunter shall not, directly or indirectly, alienate, encumber, transfer, mortgage, assign, pledge, or otherwise convey its interest prior to the Close of Escrow, as long as this Agreement is in force. Any encumbrances which are recorded against the property prior to the Close of Escrow must include a release provision that will permit the sale to close and must provide for the removal of the encumbrance before Close of Escrow. The removal of all encumbrances is a condition precedent to the Close of Escrow.

(c) Contractors and Suppliers. All contractors, subcontractors, suppliers, architects, engineers, and others who have performed services or labor or have supplied materials in connection with Hunter's acquisition, development, ownership, or management of the Hunter Property have been paid in full and all liens arising therefrom (or claims which with the passage of time or the giving of notice, or both, could mature into liens) have been satisfied and released.

6.2 City's Representations and Warranties. The City represents and warrants to Hunter that the City has the full right, capacity, power and authority to enter into and carry out the terms of this Agreement The City represents that the 3.58 Acres has a current zoning of medium-density residential as shown on the City's current zoning map. This Agreement has been duly executed by the City, and upon delivery to and execution by Hunter shall be a valid and binding agreement of the City.

6.3 Survival of Representations and Warranties. The representations and warranties set forth in this Article 6 are made as of the Effective Date and are remade as of the Closing Date and shall not be deemed to be merged into or waived by the instruments of Closing, but shall survive the Closing. However, the representation of the zoning of the 3.58 Acres is a representation of the zoning at the time of Close of Escrow only and such representation shall not survive this Agreement. Each party agrees to defend and indemnify the other against any claim, liability, damage or expense asserted against or suffered by such other party arising out of the breach or inaccuracy of any such representation or warranty.

ARTICLE 7: DEFAULT AND REMEDIES

7.1 Default. If the transactions contemplated hereunder fail to close as a result of a party's default, the non-defaulting party shall be entitled to such remedies for breach of contract as may be available at law and/or in equity including, without limitation, the remedy of specific performance.

7.2 Notice of Default. Except for a party's failure to close on the Closing Date, neither party shall have the right to declare a default by the other party and terminate this Agreement because of a failure by such other party to perform under the terms of this Agreement unless the other party shall fail to cure such failure to perform within ten (10) days after its receipt of written notice of such failure to perform.

7.3 Other Expenses. If this Agreement is terminated due to the default of a party, such defaulting party shall pay any fees due to Escrow Agent.

ARTICLE 8: DUE DILIGENCE; AS-IS; RELEASE

8.1 Due Diligence Investigation. Hunter acknowledges that it has had an opportunity to conduct its due diligence investigation of the 3.58 Acres, and hereby approves the condition and suitability of the 3.58 Acres for Hunter's purposes. Hunter has determined that the 3.58 Acres is currently zoned medium-density residential and acknowledges that nothing in this Agreement shall be construed as an entitlement to development under the current medium density residential zoning, and Hunter is responsible for obtaining all necessary development approvals from the City and any other agencies with jurisdiction over the Hunter Property.. The

City acknowledges that it has had an opportunity to conduct its due diligence investigation of the Hunter Property, and hereby approves the condition and suitability of the Hunter Property for the City's purposes. The parties shall continue to operate and maintain their respective properties, prior to the Close of Escrow, in substantially the same manner that such were operated and maintained as of the Effective Date.

(a) Hunter has reviewed a preliminary title report for the 3.58 Acres and approved all of the following exceptions to title: (a) standard printed exceptions in the preliminary title report; (b) general and special real property taxes and assessments constituting a lien not yet due and payable; and (c) the title exceptions listed on Exhibit I attached hereto. The City shall deliver title to the 3.58 Acres to Hunter at the Closing subject only to the foregoing approved exceptions.

(b) The City has reviewed a preliminary title report for the Hunter Property and approved all of the following exceptions to title: (a) standard printed exceptions in the preliminary title report; (b) general and special real property taxes and assessments constituting a lien not yet due and payable; and (c) the title exceptions listed on Exhibit J attached hereto. Hunter shall deliver title to the Hunter Property to the City at the Closing subject only to the foregoing approved exceptions.

8.2 "As-Is" Sale. Each party hereby acknowledges and agrees that, neither the other party, nor anyone acting for or on behalf of such other party, has made any representations, warranties, or promises, concerning the condition of the properties or any other aspect of the properties. Each party further acknowledges that HE OR IT WILL BE ACQUIRING THE PROPERTIES, AS APPLICABLE, BASED UPON THEIR "AS-IS" CONDITION AND THEIR STATE OF REPAIR INCLUSIVE OF ALL FAULTS AND DEFECTS, WHETHER KNOWN OR UNKNOWN, AS MAY EXIST AS OF THE CLOSE OF ESCROW, AND EACH PARTY EXPRESSLY ASSUMES THE RISK THAT ADVERSE PHYSICAL, ENVIRONMENTAL, FINANCIAL AND LEGAL CONDITIONS MAY NOT BE REVEALED BY SUCH PARTY'S DUE DILIGENCE INVESTIGATION (IF ANY).

8.3 Disclaimer. Except for a breach of this Agreement, each party hereby fully and forever waives and disclaims, all warranties of whatever type or kind with respect to the property acquired by him or it, whether express, implied or otherwise including, without limitation, those of fitness for a particular purpose, tenantability, habitability or use.

8.4 Release and Waiver. Each party hereby fully and forever releases, acquits and discharges the other party of and from, and hereby fully and forever waives any and all claims, actions, causes of action, suits, proceedings, demands, rights, damages, costs, expenses or other compensation whatsoever, whether known or unknown, direct or indirect, foreseeable or unforeseeable, absolute or contingent ("**Claims**"), that such party now has or may have or which may arise in the future arising out of, directly or indirectly, or in any way connected with the condition of the property acquired by him or it. The parties hereby agree that the matters released in this Section 8.4 are not limited to matters which are known or disclosed and, with respect to the foregoing release, each party hereby waives any and all rights and benefits which he or it now has, or in the future may have, conferred upon him or it, by virtue of the provisions

of Section 1542 of the Civil Code of the State of California (or any other statute or common law principles of similar effect), which Section provides as follows:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

In this connection, each party acknowledges and agrees that it understands that factual matters relating directly to the properties now unknown to him or it may have given or may hereafter give rise to claims that are presently unknown, unanticipated and unsuspected, and such party further acknowledges and agrees that the releases herein have been negotiated and agreed upon in light of that realization and that it nevertheless intends to release, discharge and acquit the other party from any such unknown claims.

Hunter's Initials: _____ City's Initials: _____

8.5 Delivery of Title Policy. At Hunter's request, the Title Company shall deliver to Hunter an owner's policy of title insurance issued by the Title Company as of the Closing Date, insuring Hunter as owner of fee simple title to the 3.58 Acres. At the City's request, the Title Company shall deliver to the City an owner's policy of title insurance issued by the Title Company as of the Closing Date, insuring the City as owner of fee simple title to the Hunter Property. Notwithstanding the foregoing, the Title Company's delivery or willingness to deliver the foregoing title policies shall not be a condition precedent to either party's obligation to close hereunder. Each party shall pay the premium for their respective title policies.

ARTICLE 9: NOTICES

9.1 Notices. All notices required or permitted hereunder shall be in writing and shall be served on the parties at the addresses set forth below. Any such notices shall be either (a) sent by overnight delivery using a nationally recognized overnight courier, in which case notice shall be deemed delivered one business day after deposit with such courier, (b) sent by facsimile, in which case notice shall be deemed delivered upon transmission of such notice, or (c) sent by personal delivery, in which case notice shall be deemed delivered upon receipt. A party's address may be changed by written notice to the other party; provided, however, that no notice of a change of address shall be effective until actual receipt of such notice. Copies of notices are for informational purposes only, and a failure to give or receive copies of any notice shall not be deemed a failure to give notice.

(a) If to Hunter:

Dennis R. Hunter
P. O. Box 9069
Santa Rosa, CA 95405

Telephone: (707)579-1007
Facsimile: (707) 527-6151

With a copy to:

Clement, Fitzpatrick & Kenworthy
3333 Mendocino Avenue, Suite 200
Santa Rosa, California 95403
Attn: Clayton E. Clement
Telephone: (707)523-1181
Facsimile: (707) 546-1360

(b) If to the City:

City of St. Helena
1480 Main Street
St. Helena, CA 94574
St. Helena, CA
Attn:City Manager
Telephone: (707) 967-2792
Facsimile: (707) 963-7748

With a copy to:

Miller Starr Regalia
Attn: Ethan Friedman
1331 North California Boulevard, Fifth Floor
Walnut Creek, CA 94596
Telephone: (925) 935-9400
Facsimile: (925) 933-4126

(c) If to Title Company or Escrow Agent:

North Bay Title Company
431 E Street
Santa Rosa, CA 95404
Attn: Sandy Veveiros
Telephone: (707) 526-2000
Facsimile: (707) 526-4782

ARTICLE 10: MISCELLANEOUS

10.1 Parties Bound. This Agreement shall bind and shall inure to the benefit of the City, Hunter and their respective successors and assigns. Notwithstanding the foregoing, neither

party may assign this Agreement without the prior written consent of the other, and any such prohibited assignment shall be void.

10.2 Headings. The article and paragraph headings of this Agreement are for convenience only and in no way limit or enlarge the scope or meaning of the language hereof.

10.3 Invalidity and Waiver. If any portion of this Agreement is held invalid or inoperative, then so far as is reasonable and possible the remainder of this Agreement shall be deemed valid and operative, and, to the greatest extent legally possible, effect shall be given to the intent manifested by the portion held invalid or inoperative. The failure by either party to enforce against the other any term or provision of this Agreement shall not be deemed to be a waiver of such party's right to enforce against the other party the same or any other such term or provision in the future.

10.4 Governing Law. This Agreement shall, in all respects, be governed, construed, applied, and enforced in accordance with the law of the State of California.

10.5 Survival. The provisions of this Agreement that contemplate performance after the Closing and the obligations of the parties not fully performed at the Closing shall survive the Closing and shall not be deemed to be merged into or waived by the instruments of Closing.

10.6 No Third Party Beneficiary. This Agreement is not intended to give or confer any benefits, rights, privileges, claims, actions, or remedies to any person or entity as a third party beneficiary, decree, or otherwise.

10.7 Entirety and Amendments. This Agreement, together with all exhibits attached hereto and incorporated herein, embodies the entire agreement between the parties and supersede all prior agreements and understandings relating to the subject matter hereof. This Agreement may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought.

10.8 Time. Time is of the essence in the performance of this Agreement.

10.9 Attorneys' Fees. Should either party employ attorneys to enforce any of the provisions hereof, the party against whom any final judgment is entered agrees to pay the prevailing party all reasonable costs, charges, and expenses, including reasonable attorneys' fees, expended or incurred in connection therewith.

10.10 Construction. The parties acknowledge that the parties and their counsel have reviewed and revised this Agreement and agree that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any exhibits or amendments hereto.

10.11 Calculation of Time Periods. Unless otherwise specified, in computing any period of time described herein, the day of the act or event after which the designated period of time begins to run is not to be included and the last day of the period so computed is to be included at, unless such last day is a Saturday, Sunday or legal holiday for national banks in the

location where the properties are located, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday, or legal holiday. The last day of any period of time described herein shall be deemed to end at 5:00 p.m. Pacific time.

10.12 Further Assurances. In addition to the acts and deeds recited herein and contemplated to be performed, executed and/or delivered by either party at Closing, each party agrees to perform, execute and deliver, but without any obligation to incur any additional liability or expense, on or after the Closing any further deliveries and assurances as may be reasonably necessary to consummate the transactions contemplated hereby or to further perfect the conveyance, transfer and assignment of the properties hereunder.

10.13 Execution in Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of such counterparts shall constitute one Agreement. To facilitate execution of this Agreement, the parties may execute and exchange by email or facsimile counterparts of the signature pages.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the Effective Date.

Dennis R. Hunter

CITY OF ST. HELENA

By: _____
Name: Bert Johansson
Title: City Manager

Approved as to form:

Amy L. Valukevich, City Attorney

EXHIBIT A

Exhibit A

Hunter Property

City of St Helena
County of Napa

HUNTER
101-1

Exhibit "A"

That certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portion being more particularly described as follows:

BEGINNING at the southwestern corner of said lands; thence along the general northwestern line of said lands N29°14'27"E, 944.57 feet; thence leaving last said line S60°46'20"E, 79.83 feet; thence S47°03'45"W, 97.46 feet; thence S29°14'27"W, 851.75 feet to the southwestern line of said parcel; thence along last said line N60°50'08"W, 50.00 feet to the **Point of Beginning**.

Containing 48,611 sq. ft. more or less.

All bearings, distances and coordinates described herein are based upon (NAD-83) California State Plane Coordinate System, Zone 2 (U.S. feet), Epoch 1991.35. Multiply distances described herein by 0.99996247 to obtain ground distances.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 6/13/08

REGISTERED PROFESSIONAL ENGINEER * EDWARD A. KRUMREI * No. 23922 EXPIRES 12-31-09 CIVIL * STATE OF CALIFORNIA

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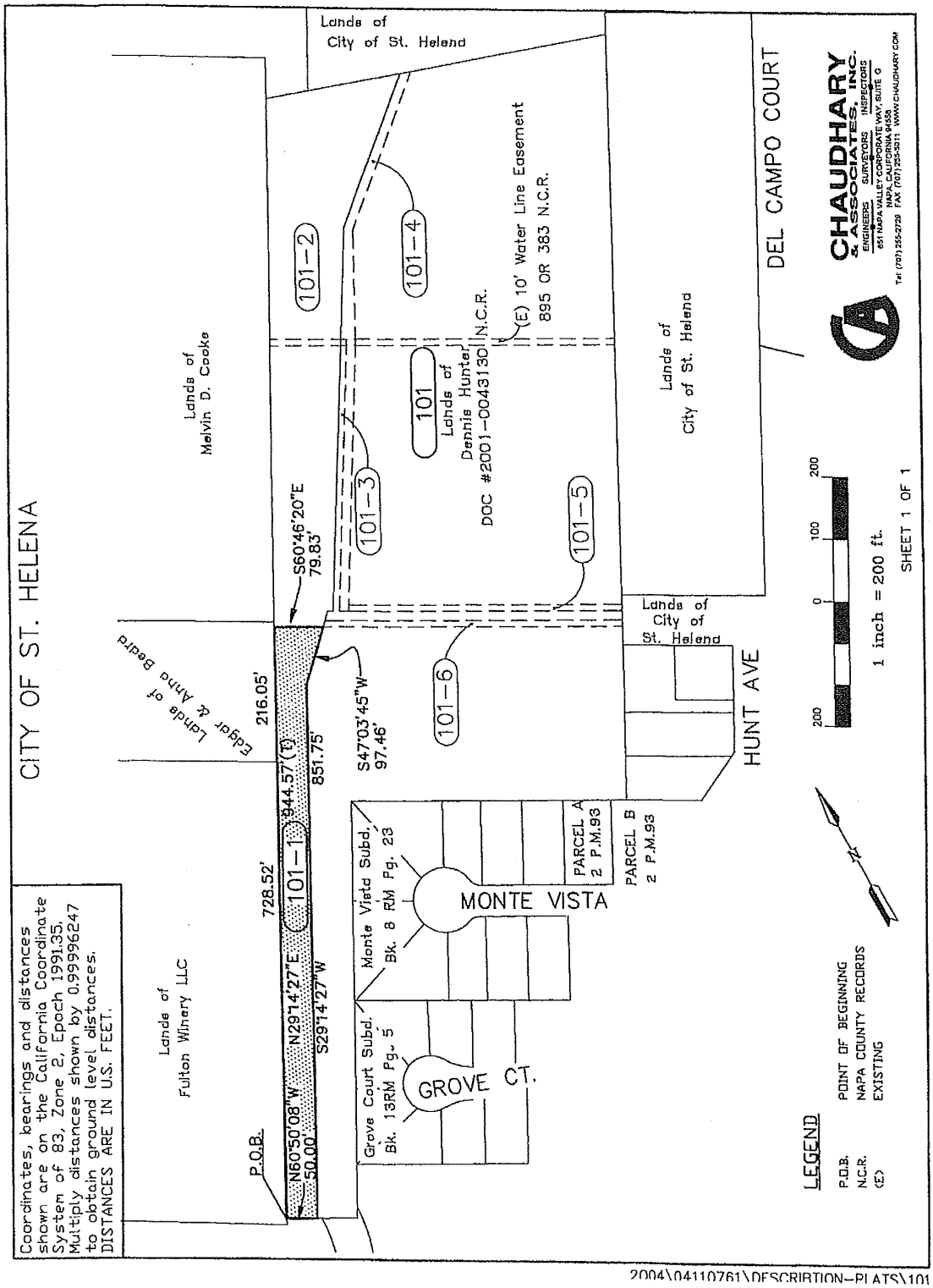
CITY OF ST. HELENA
Lands of City of St. Helena
Lands of Melvin D. Cooke
Lands of Fulton Winery LLC
Lands of City of St. Helena
DEL CAMPO COURT
HUNT AVE
MONTE VISTA
GROVE CT.
Monte Vista Subd. Bk. 8 RM Pg. 23
Grove Court Subd. Bk. 13RM Pg. 5
PARCEL A 2 P.M.93
PARCEL B 2 P.M.93
Lands of Dennis Hunter DOC #2001-0043130
(E) 10' Water Line Easement 895 OR 383 N.C.R.
N.C.R.
101
101-1
101-2
101-3
101-4
101-5
101-6
S60°46'20"E 79.83'
S47°03'45"W 97.46'
N29°14'27"E 844.57'(T)
S29°14'27"W 851.75'
N60°50'08"W 50.00'
728.52'
216.05'
Landa of Edgar & Anna Bedrd
P.O.B.
Coordinates, bearings and distances shown are on the California Coordinate System of 83, Zone 2, Epoch 1991.35. Multiply distances shown by 0.99996247 to obtain ground level distances. DISTANCES ARE IN U.S. FEET.
LEGEND
P.O.B. POINT OF BEGINNING
N.C.R. NAPA COUNTY RECORDS
(E) EXISTING
200 0 100 200
1 inch = 200 ft.
SHEET 1 OF 1
CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
651 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel (707) 255-2729 FAX (707) 255-3011 WWW.CHAUDHARY.COM
2004\04110761\DESCRIPTION-PLATS\101

City of St Helena
County of Napa

HUNTER
101-2

Exhibit "A"

That certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portion being more particularly described as follows:

COMMENCEING at the southwestern corner of said lands; thence along the general northwestern line of said lands N29°14'27"E, 944.57 feet to the **True Point of Beginning**; thence continuing along last said line N29°14'27"E, 8.06 feet; thence continuing along last said line N29°46'48"E, 835.20 feet to the northern line of said lands; thence along last said line S71°07'20"E, 223.50 feet; thence leaving last said line S50°49'49"W, 264.81 feet; thence S32°22'33"W, 177.79 feet; thence S60°54'21"E, 10.02 feet; thence S32°22'33"W, 450.36 feet; thence N60°46'20"W, 22.90 feet; thence S47°03'45"W, 10.50 feet; thence N60°46'20"W, 79.83 to the **True Point of Beginning**.

Containing 112,310 square feet, more or less.

All bearings, distances and coordinates described herein are based upon (NAD-83) California State Plane Coordinate System, Zone 2 (U.S. feet), Epoch 1991.35. Multiply distances described herein by 0.99996247 to obtain ground distances.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 8/29/08

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. KRUMREI
No. 23922
EXPIRES 12-31-09
CIVIL
STATE OF CALIFORNIA

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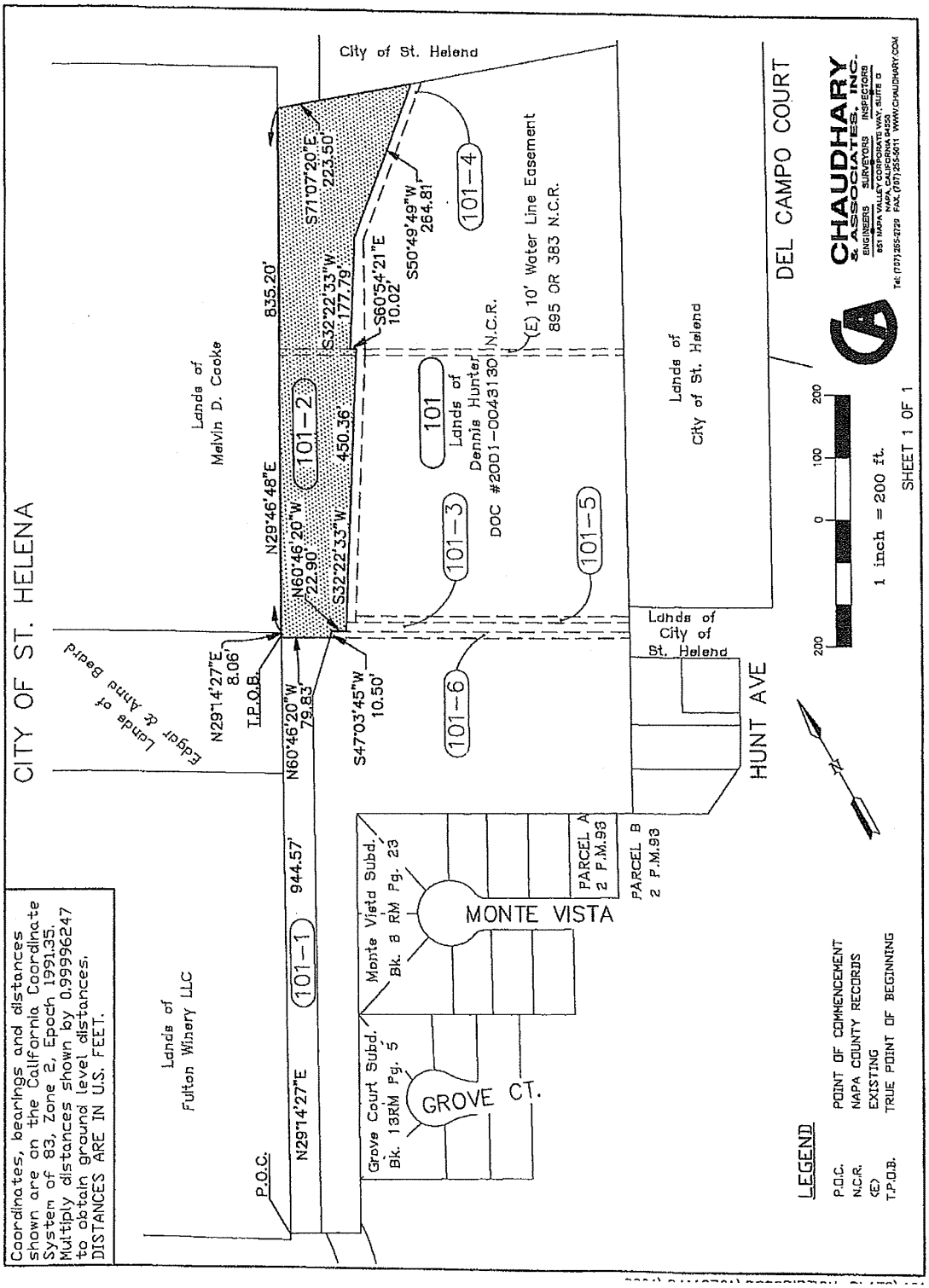
CITY OF ST. HELENA
Coordinates, bearings and distances shown are on the California Coordinate System of 83, Zone 2, Epoch 1991.35. Multiply distances shown by 0.99996247 to obtain ground level distances. DISTANCES ARE IN U.S. FEET.
Lands of Fulton Winery LLC
Lands of Edgar & Anna Bedd
Lands of Melvin D. Cooke
City of St. Helena
Lands of Dennis Hunter DOC #2001-0043130
Lands of City of St. Helena
Lands of City of St. Helena
DEL CAMPO COURT
HUNT AVE
MONTE VISTA
GROVE CT.
Monte Vista Subd. Bk. 8 RM Pg. 23
Grove Court Subd. Bk. 13RM Pg. 5
PARCEL A 2 P.M.93
PARCEL B 2 P.M.93
P.O.C.
I.P.O.B.
N29°14'27"E 944.57'
N29°14'27"E 8.06'
N60°46'20"W 79.83'
S47°03'45"W 10.50'
N60°46'20"W 722.90'
N29°46'48"E 835.20'
S32°22'33"W 450.36'
S32°22'33"W 177.79'
S60°54'21"E 10.02'
S50°49'49"W 264.81'
S71°07'20"E 223.50'
101-1
101-2
101-3
101-4
101-5
101-6
101
(E) 10' Water Line Easement 895 OR 383 N.C.R.
N.C.R.
1 inch = 200 ft.
200 0 100 200
LEGEND
P.O.C. POINT OF COMMENCEMENT
N.C.R. NAPA COUNTY RECORDS
(E) EXISTING
T.P.O.B. TRUE POINT OF BEGINNING
CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
651 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel: (707) 255-9729 FAX: (707) 255-9011 WWW.CHAUDHARY.COM
SHEET 1 OF 1

EXHIBIT B

Exhibit B

1.20 Acres & 2.39 Acres

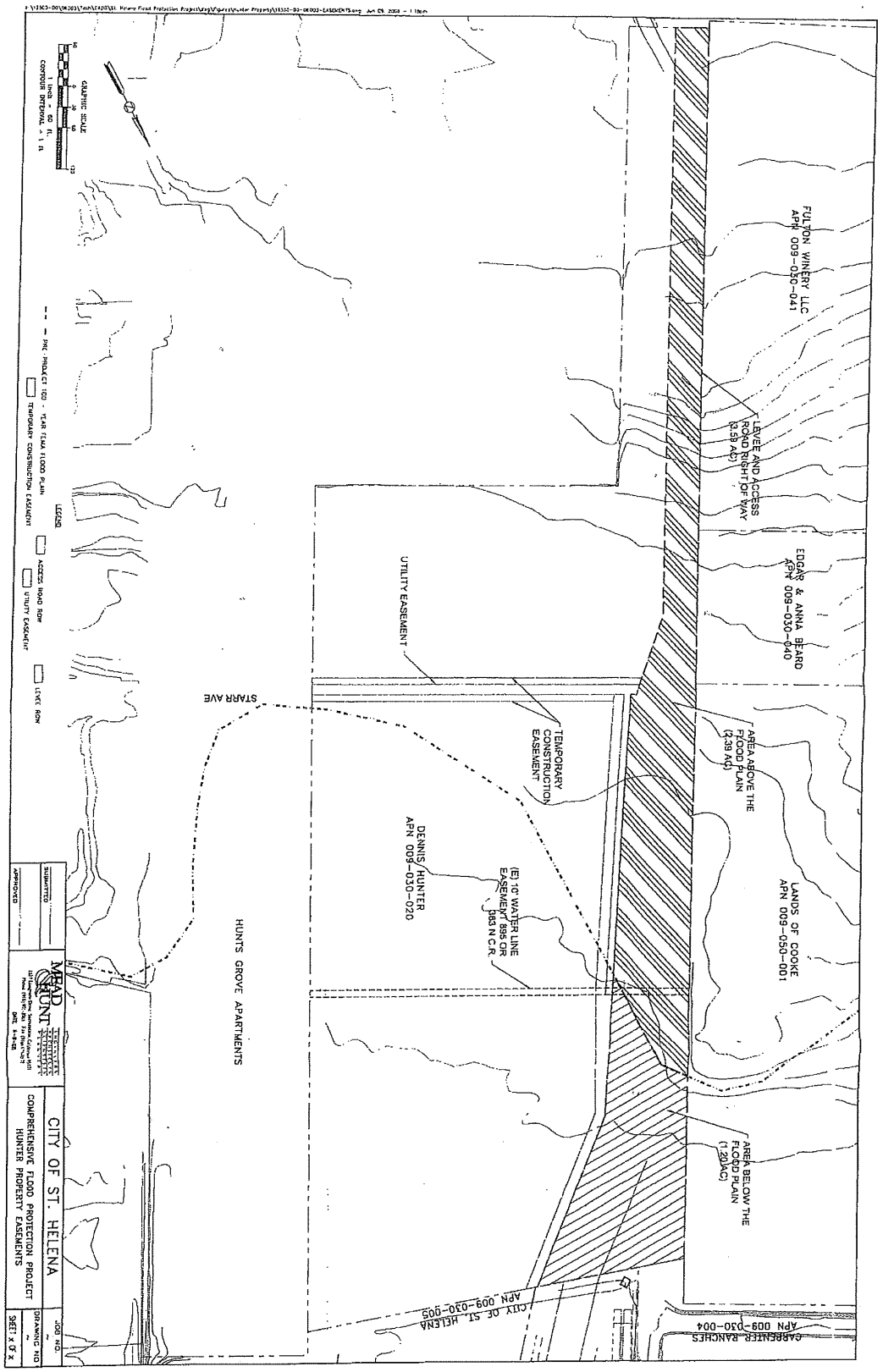
FULTON WINERY LLC
APN 009-050-041
LEVEE AND ACCESS ROAD RIGHT OF WAY (3.59 AC)
EDGAR & ANNA BEARD
APN 009-030-040
AREA ABOVE THE FLOOD PLAIN (2.39 AC)
LANDS OF COOKE
APN 009-050-001
AREA BELOW THE FLOOD PLAIN (1.20 AC)
CARPENTER RANCHES
APN 009-030-004
CITY OF ST. HELENA
APN 009-030-005
UTILITY EASEMENT
TEMPORARY CONSTRUCTION EASEMENT
(E) 10' WATER LINE EASEMENT 895 OR 383 N C.R.
DENNIS HUNTER
APN 009-030-020
STARR AVE
HUNTS GROVE APARTMENTS
GRAPHIC SCALE
LEGEND
PRE-PROJECT 100 - YEAR FEMA FLOOD PLAIN
TEMPORARY CONSTRUCTION EASEMENT
ACCESS ROAD ROW
UTILITY EASEMENT
LEVEE ROW
SUBMITTED
APPROVED
MEAD HUNT
CITY OF ST. HELENA
COMPREHENSIVE FLOOD PROTECTION PROJECT
HUNTER PROPERTY EASEMENTS
JOB NO.
DRAWING NO.
SHEET x OF x

EXHIBIT C

Exhibit C

3.58 Acres

City of St Helena
County of Napa

City of St. Helena
102-2

Exhibit "A"

A portion of that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of Parcel One described in the Grant Deed to the City of St Helena recorded March 15, 2005 at Document No. 2005-0009620 Official Records Napa County, said portion being more particularly described as follows:

BEGINNING at the southern most corner of the above referenced Parcel One; thence along the general southwestern line of said Parcel One N60°46'20"W, 234.63 feet; thence continuing along last said line S29°13'40"W, 35.00 feet; thence continuing along last said line N71°07'20"W, 343.36 feet; thence leaving last said line N41°18'58"E, 254.98 feet; thence N49°42'50"E, 48.52 feet; thence N60°38'24"E, 44.19 feet; thence S°29°32'38"E, 64.19 feet; thence S84°21'35"E, 142.68 feet; thence S78°16'37"E, 64.79 feet; thence S70°20'25"E, 86.57 feet; thence S47°50'36"E, 68.79 feet; thence S62°05'04"E, 77.73 feet to a point on the southeastern line of said Parcel One; thence along last said line S28°56'09"W, 279.89 feet to the **Point of Beginning.**

Containing 3.582 acres, more or less.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 9/20/07

REGISTERED PROFESSIONAL ENGINEER * EDWARD A. KRUMREI * No. 23922 EXPIRES 12-31-07 CIVIL * STATE OF CALIFORNIA

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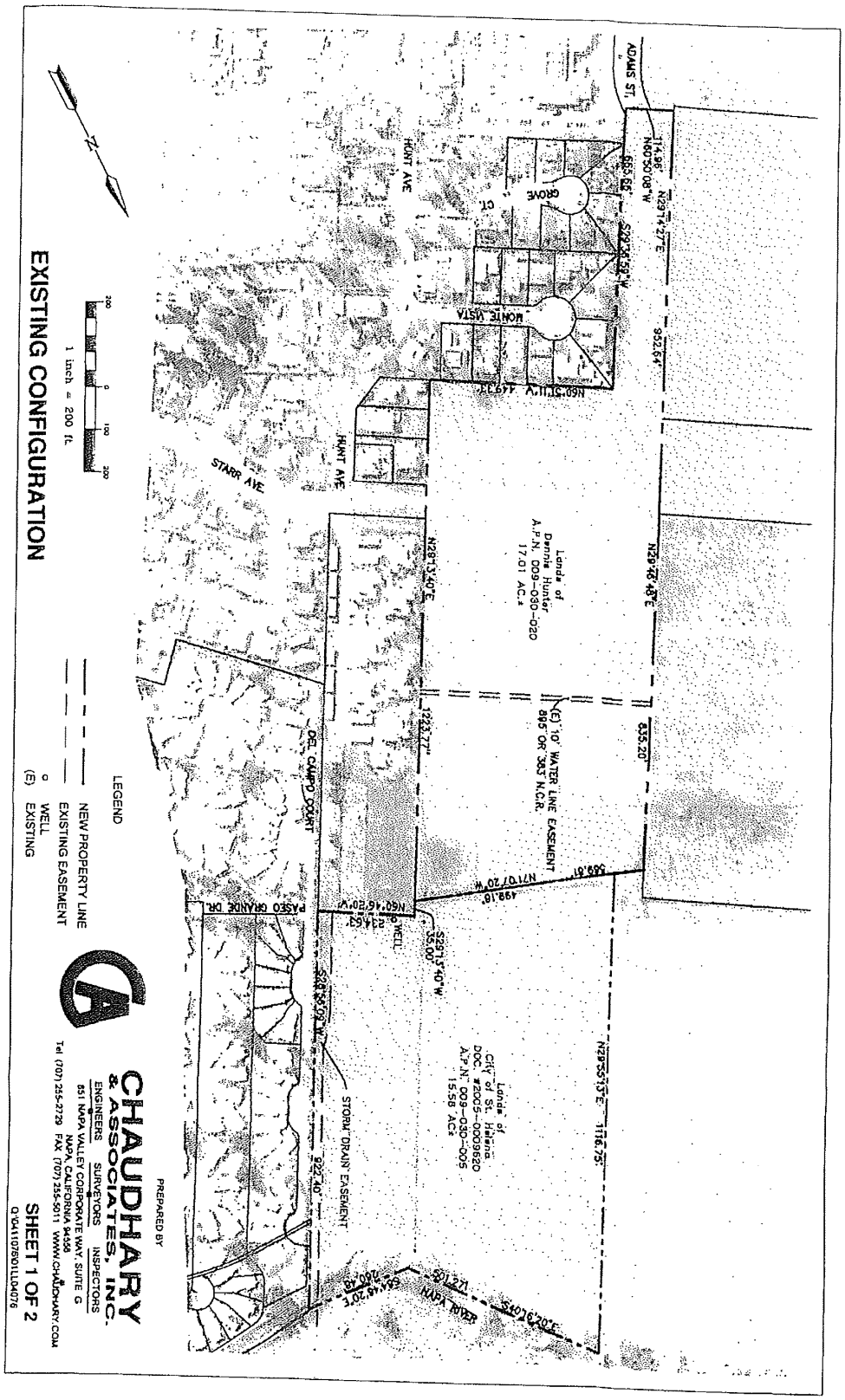
EXHIBIT D

Exhibit D

Lot Line Adjustment


ADAMS ST.
HUNT AVE
STARR AVE
MONTE VISTA
GROVE
CT
Lands of
Dennis Hunter
A.P.N. 009-030-020
17.01 AC.±
(E) 10' WATER LINE EASEMENT
869 OR 383 N.C.R.
Lands of
City of St. Helena
DOC. #2005-0009620
A.P.N. 009-030-005
15.58 AC±
DEL CAMPO COURT
PASEO GRANDE DR.
(E) WELL
STORM DRAIN EASEMENT
NAPA RIVER
N29°48'48"E
N28°13'40"E
S29°13'40"W
N71°07'20"W
S40°16'20"E
N29°53'13"E
N60°30'08"W
N29°14'27"E
S22°33'32"W
N60°30'11"W
S38°32'09"W
N60°46'20"W
S40°46'30"E
952.64'
835.20'
1223.77'
499.18'
1116.75'
922.40'
449.73'
665.55'
114.96'
200
0
100
200
1 inch = 200 ft.
LEGEND
NEW PROPERTY LINE
EXISTING EASEMENT
WELL
(E) EXISTING
EXISTING CONFIGURATION
PREPARED BY
CHAUDHARY
& ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
851 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel (707) 255-2729 FAX (707) 255-5011 WWW.CHAUDHARY.COM
SHEET 1 OF 2
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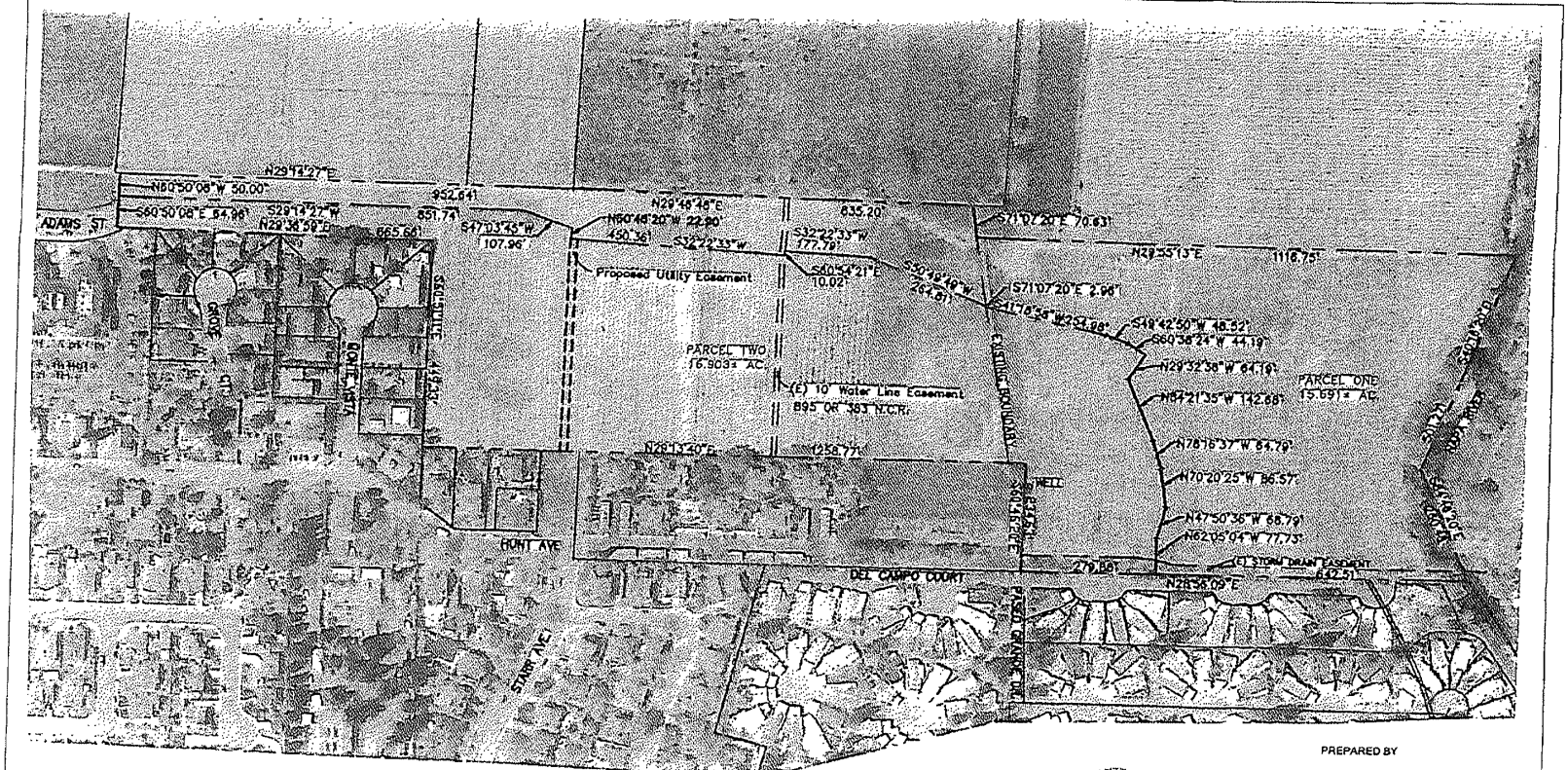

200 0 100 200

1 inch = 200 ft.

LEGEND

- NEW PROPERTY LINE
- PROPOSED EASEMENT
- EXISTING EASEMENT
- OLD PROPERTY LINE
- o WELL
- (E) EXISTING

PREPARED BY

CHAUDHARY & ASSOCIATES, INC.

ENGINEERS SURVEYORS INSPECTORS

851 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel: (707) 255-2729 FAX. (707) 255-5011 WWW.CHAUDHARY.COM

PROPOSED CONFIGURATION

SHEET 2 OF 2

Q:\0411076\02LL04076

City of St Helena
County of Napa

City of St. Helena

Exhibit "A"

Portions of that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of Parcel One described in the Grant Deed to the City of St Helena recorded March 15, 2005 at Document No. 2005-0009620 Official Records Napa County and a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portions being more particularly described as follows:

COMMENCING at the southern most corner of the above referenced Parcel One; thence along the southeastern line of said Parcel One N28°56'09"E, 279.88 feet to the **True Point of Beginning**; thence leaving last said line N62°05'04"W, 77.73 feet; thence N47°50'36" W, 68.79 feet; thence N70°20'25"W, 86.57 feet; thence N78°16'37"W, 64.79 feet; thence N84°21' 35"W, 142.68 feet; thence N29°32'38"W, 64.19 feet; thence S60°38'24"W, 44.19 feet; thence S49°42'50"W, 48.52 feet; thence S41°18'58"W, 254.98 feet to the northern line of the above reference Lands of Dennis R. Hunter; thence along said northern line N71°07'20"W, 2.96 feet; thence leaving last said line S50°49'49"W, 264.81 feet; thence S32°22'33"W, 177.79 feet; thence S60°54'21"E, 10.02 feet; thence S32°22'33"W, 450.36 feet; thence N60°46'20"W, 22.90 feet; thence S47 03'45"W, 107.96 feet; thence S29°14'27"W, 851.74 feet to the southwestern line of the above referenced lands to Dennis R. Hunter; thence along the southwestern, northwestern and northeastern lines of said lands to Dennis R. Hunter N60°50'08"W, 50.00 feet; thence N29°14'27" E, 952.64 feet; thence N29°46'48"E, 835.20 feet; thence S71°07'20"E, 70.63 feet to the southwest corner of said Parcel One to City of St Helena; thence along the northwestern line of said Pa rcel One N29°55'13"E, 1116.75 feet more or less to the center of the Napa River; thence along general northeastern line of said Parcel One following the centerline of the Napa River and the meanderings thereof the following two courses S40°16'20"E, 501.27 feet; thence S84°46'20"E, 260.48 feet; thence along the southeastern line of said Parcel One S28°56'09"W, 642.51 feet to the **True Point of Beginning.**

Containing 15.691 acres, more or less.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Edward A. Krumrei

Registered Professional Engineer

Date 8/29/08

REGISTERED PROFESSIONAL ENGINEER * EDWARD A. KRUMREI * No. 23922 EXPIRES 12-31-09 CIVIL * STATE OF CALIFORNIA

1

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City of St Helena
County of Napa

Dennis R. Hunter

Exhibit "A"

Portions of that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of Parcel One described in the Grant Deed to the City of St Helena recorded March 15, 2005 at Document No. 2005-0009620 Official Records Napa County and a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said portions being more particularly described as follows:

COMMENCING at the southwestern corner of the above reference lands to Dennis R. Hunter; thence along the southwestern line of said lands S60°50'08"E, 50.00 feet to the **True Point of Beginning**; thence leaving last said line N29°14'27"E, 851.74 feet; thence N47°03'45"E, 107.96 feet; thence S60°46'20"E, 22.90 feet; thence N32°22'33"E, 450.36 feet; thence N60°54'21"W, 10.02 feet; thence N32°22'33"E, 177.79 feet; thence N50°49'49"E, 264.81 feet to the general southwestern line of the above referenced Parcel One to the City of St Helena; thence along said general southwestern line S71°07'20"E, 2.96 feet; thence leaving last said line N41°18'58"E, 254.98 feet; thence N49°42'50"E, 48.52 feet; thence N60°38'24"E, 44.19 feet; thence S29°32'38"E, 64.19 feet; thence S84°21'35"E, 142.68 feet; thence S78°16'37"E, 64.79 feet; thence S70°20'25"E, 86.57 feet; thence S47°50'36"E, 68.79 feet; thence S62°05'04"E, 77.73 feet to the southeastern line of said Parcel One to the City of St. Helena; thence along last said line S28°56'09"W, 279.88 feet to the northeastern corner of said lands to Dennis R. Hunter; thence along the general southeastern and southwestern lines of said lands to Dennis R. Hunter N60°46'20"W, 234.63 feet; thence S29°13'40"W, 1258.77 feet; thence N60°51'11"W, 449.33 feet; thence S29°36'59"W, 665.66 feet; thence N60°50'08"W, 64.96 feet to the **True Point of Beginning.**

Containing 16.903 acres, more or less.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 8/29/08

REGISTERED PROFESSIONAL ENGINEER * EDWARD A. KRUMREI * No. 23922 EXPIRES 12-31-09 CIVIL STATE OF CALIFORNIA

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EXHIBIT E

Exhibit E

Construction Easement

Recording requested by,
and when recorded return to:

Miller Starr Regalia
Attn: Ethan Friedman
1331 North California Boulevard, Fifth Floor
Walnut Creek, CA 94596

TEMPORARY CONSTRUCTION EASEMENT

THIS TEMPORARY CONSTRUCTION EASEMENT (the "**Easement Agreement**") dated as of _____, 2008 is entered into by and between the City of St. Helena (the "**Grantee**"), and Dennis R. Hunter ("**Grantor**").

W I T N E S S E T H:

WHEREAS, Grantor is the owner of that certain real property described on Exhibit A, attached hereto and incorporated herein by this reference, in the City of St. Helena, Napa County, California (the "**Easement Property**").

WHEREAS, Grantee desires to perform certain work (the "**Work**") on the Easement Property in connection with the St. Helena Comprehensive Flood Control Protection Project (the "**Project**").

WHEREAS, Grantor is willing to grant certain easements to Grantee for the purposes of performing the Work on the Easement Property, on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, paid by Grantee, the receipt and sufficiency of which is hereby acknowledged by Grantor, Grantor hereby grants, bargains, sells and conveys to Grantee, its successors and assigns, full and free right and authority for a non-exclusive easement for the performance of the Work on the Easement Property.

It is mutually covenanted and agreed by and between the parties hereto as follows:

1. Construction Easement. Grantor hereby grants and conveys to Grantee, its successors, assigns, and agents, a temporary, non-exclusive easement over, under, across, above and through the Easement Property for the purpose of performing the Work. Grantor and Grantee expressly agree that the Construction Easement shall be temporary in nature. The Easement shall terminate on December 31, 2012.

2. Ingress and Egress. Subject to the terms and provisions set forth herein, Grantee shall have the right of ingress and egress in, to, over, through and across the Easement Property for any purpose necessary or desirable for the full enjoyment of the rights granted to Grantee under this Easement Agreement.

3. Covenants of Grantor.

(a) Grantor shall not interfere with the use of or obstruct the operation of or access to the Easement Property. Any structure or building located on the Easement Property, or any grass, sod, shrubs, woody plants, other crops, trees or nursery stock located on the Easement Property which interferes with the use of or obstructs the operation of or access to the Easement Property may be removed by Grantee without liability for damages arising therefrom.

(b) Grantor covenants and agrees to remain fully liable and shall pay before delinquency all real estate taxes and assessments on the Easement Property.

4. Covenants of Grantee. Grantee represents, covenants, and warrants in favor of Grantor and its successors and assigns, as follows:

(a) Neither Grantee nor any licensee, agent, employee or independent contractor of Grantee (collectively, the "**Grantee Parties**") shall do or fail to do anything which could cause any charge, lien or encumbrance, including but not limited to any laborer's, mechanic's, vendor's, supplier's or materialman's lien, to attach to or otherwise encumber any part or all of the Easement Property and Grantee, at its sole cost and expense, shall immediately pay, discharge or otherwise cause to be removed any and all such charges, liens, and encumbrances.

(b) Grantee agrees to indemnify, defend and hold harmless the Easement Property and Grantor, and any successors and assigns of Grantor, from any costs, expenses, damages, claims or demands incurred or asserted against Grantor to the extent arising out of the activities or omissions of Grantee and/or the Grantee Parties in the performance of the Work and/or use of the Easement Property, except those due to (i) hazardous materials or conditions that are not (x) caused or (y) placed on the Easement Property or the adjacent lands of Grantor by Grantee or the Grantee Parties, (ii) latent defects on the Easement Property not related to Grantee's or the Grantee Parties' activities thereon, or (iii) the actions or omissions of Grantor, its directors, officers, members, agents or employees.

5. Binding Effect. The Construction Easement and the provisions of this Easement Agreement shall be covenants upon and shall run with the Easement Property. This Easement Agreement shall be binding upon and inure to the benefit of Grantor and Grantee, their respective successors and assigns and all future owners and lessees of any part or all of the Easement Property.

6. Governing Law. This Easement Agreement shall be governed and controlled as to validity, construction, interpretation, effect, enforcement and in all other respects by the statutes and the decisions of the courts of the State of California.

7. Amendment. This Easement Agreement may not be amended or modified except in a writing executed by both Grantor and Grantee.

8. Severability. The provisions of this Easement Agreement are separate and severable. If any provision of this Easement Agreement is held to be invalid, unenforceable, illegal or in conflict with any law, that provision shall be severed from this Easement Agreement and the remainder of this Easement Agreement shall not be impaired or otherwise affected by such severance, shall be construed, interpreted and enforced as if it did not contain such provision and shall remain in full force and effect.

9. Attorneys' Fees. If any action or proceeding is instituted to (i) enforce or interpret any provision of this Easement Agreement or (ii) as a result of the breach by a party to any of the terms hereof, then the prevailing party therein shall be entitled to recover its attorneys' fees and costs from the losing party.

10. Further Assurances. Each of the parties shall execute and deliver any and all additional papers, documents, and other assurances, and shall do any and all acts and things reasonably necessary in connection with the performance of their obligations hereunder and to carry out the intent of this Easement Agreement.

IN WITNESS WHEREOF the parties have executed this Easement Agreement the day and year first written above.

GRANTOR:

_____
Dennis R. Hunter

GRANTEE:

CITY OF ST. HELENA

By: _____
Name: Bert Johansson
Title: City Manager

Approved as to form:

_____
Amy L. Valukevich, City Attorney

City of St Helena
County of Napa

HUNTER
101-4, 101-5, 101-6

Exhibit "A"

Parcel 101-4

A variable width Temporary Construction Easement over upon and across that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said Temporary Easement being more particularly described as follows:

COMMENCING at the northwestern corner of said lands; thence along the northeastern line of said lands S71°07'20"E, 223.50 feet to the **True Point of Beginning;** thence continuing along last said line S71°07'20"E, 17.68 feet; thence leaving last said line S50°49'49"W, 271.73 feet; thence S29°15'50"W, 184.20 feet; thence S32°22'33"W, 425.36 feet; thence N60°46'20"W, 15.02 feet; thence N32°22'33"E, 435.34 feet; thence N60°54'21"W, 10.02 feet; thence N32°22'33"E, 177.79 feet; thence N50°49'49"E, 264.81 feet to the **True Point of Beginning**

Containing 14,019 square feet, more or less.

Parcel 101-5

A 10 foot wide Temporary Construction Easement over upon and across that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said Temporary Easement being more particularly described as follows:

COMMENCING at the northeastern corner of said lands; thence along the general southeastern line of said lands S29°13'40"W, 910.60' feet to the **True Point of Beginning**; thence continuing along last said line S29°13'40"W, 10.00 feet; thence leaving last said line N60°46'20"W, 446.80 feet; thence N32°22'33"E, 10.02 feet; thence S60°46"20" E, 446.25 feet to the **True point of Beginning**.

Containing 4,465 square feet, more or less.

Parcel 101-6

A 10 foot wide Temporary Construction Easement over upon and across that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said Temporary Easement being more particularly described as follows:

City of St Helena
County of Napa

HUNTER
101-4, 101-5, 101-6

COMMENCING at the northeastern corner of said lands; thence along the general southeastern line of said lands S29°13'40"W, 935.60' feet to the **True Point of Beginning**; thence continuing along last said line S29°13'40"W, 10.00 feet; thence leaving last said line N60°46'20"W, 488.76 feet; thence N47°03'45"E, 10.50 feet; thence S60°46"20" E, 485.55 feet to the **True point of Beginning**.

Containing 4,872 square feet, more or less.

All bearings, distances and coordinates described herein are based upon (NAD-83) California State Plane Coordinate System, Zone 2 (U.S. feet), Epoch 1991.35. Multiply distances described herein by 0.99996247 to obtain ground distances.

This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 6/13/08

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. KRUMREI
No. 23922
EXPIRES 12-31-09
CIVIL
STATE OF CALIFORNIA

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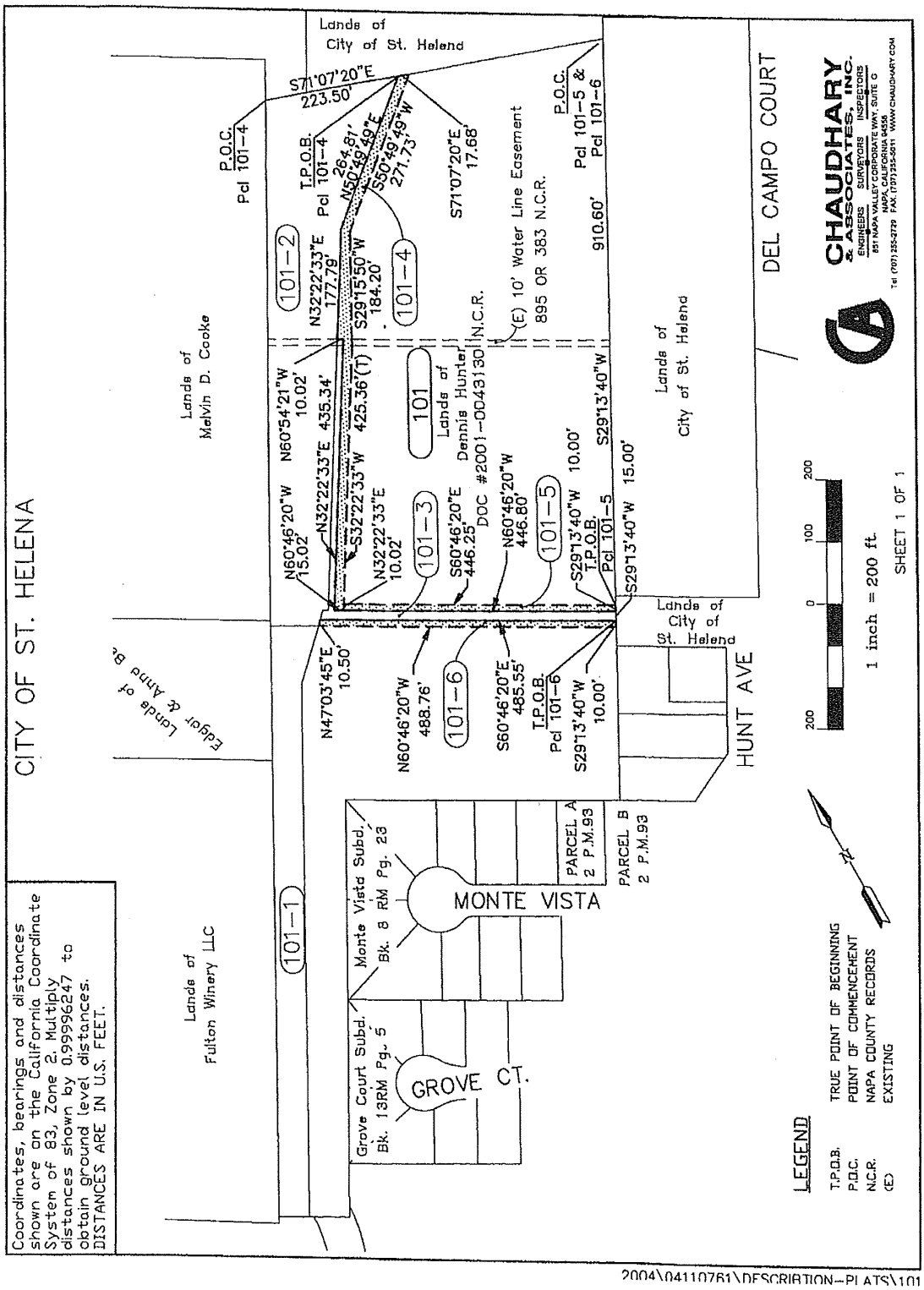

CITY OF ST. HELENA
Lands of Melvin D. Cooke
Lands of Fulton Winery LLC
Lands of Taylor & Anna Be
Lands of City of St. Helena
DEL CAMPO COURT
HUNT AVE
MONTE VISTA
GROVE CT.
Monte Vista Subd. Bk. 8 RM Pg. 28
Grove Court Subd. Bk. 13RM Pg. 5
PARCEL A 2 P.M.93
PARCEL B 2 P.M.93
Lands of Dennis Hunter DOC #2001-0043130
(E) 10' Water Line Easement 895 OR 383 N.C.R.
N.C.R.
P.O.C. Pcl 101-4
T.P.O.B. Pcl 101-4
P.O.C. Pcl 101-5 & Pcl 101-6
T.P.O.B. Pcl 101-5
T.P.O.B. Pcl 101-6
101-1
101-2
101-3
101-4
101-5
101-6
101
S71°07'20"E 223.50'
N60°46'20"W 15.02'
N60°54'21"W 10.02'
N32°22'33"E 435.34'
N32°22'33"E 177.79'
S32°22'33"W 425.36'(T)
S29°15'50"W 184.20'
N50°49'49"E 264.81'
S50°49'49"W 271.73'
S71°07'20"E 17.68'
910.60'
S29°13'40"W
N32°22'33"E 10.02'
S60°46'20"E 446.25'
N60°46'20"W 446.80'
S29°13'40"W 10.00'
S29°13'40"W 15.00'
N47°03'45"E 10.50'
N60°46'20"W 488.76'
S60°46'20"E 485.55'
S29°13'40"W 10.00'
1 inch = 200 ft.
SHEET 1 OF 1
LEGEND
T.P.O.B. TRUE POINT OF BEGINNING
P.O.C. POINT OF COMMENCEMENT
N.C.R. NAPA COUNTY RECORDS
(E) EXISTING
CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
851 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel (707) 255-2729 FAX (707) 255-5011 WWW.CHAUDHARY.COM
Coordinates, bearings and distances shown are on the California Coordinate System of 83, Zone 2. Multiply distances shown by 0.99996247 to obtain ground level distances. DISTANCES ARE IN U.S. FEET.
2004\04110761\DESCRIPTION-PLATS\101

STATE OF CALIFORNIA)
) ss.
COUNTY OF _____)

On _____, 2008 before me, _____, Notary Public, personally appeared

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Notary Public

EXHIBIT F

Exhibit F

Utility Easement

Recording requested by,
and when recorded return to:

Miller Starr Regalia
Attn: Ethan Friedman
1331 North California Boulevard, Fifth Floor
Walnut Creek, CA 94596

UTILITY EASEMENT AGREEMENT

THIS UTILITY EASEMENT AGREEMENT (the "**Easement Agreement**") dated as of _____, 2008 is entered into by and between the City of St. Helena (the "**Grantee**"), and Dennis R. Hunter ("**Grantor**").

W I T N E S S E T H:

WHEREAS, Grantor is the owner of that certain real property described on Exhibit A, attached hereto and incorporated herein by this reference, in the City of St. Helena, Napa County, California (the "**Easement Property**").

WHEREAS, Grantee desires to install and maintain certain utility facilities (the "**Work**") on the Easement Property in connection with the St. Helena Comprehensive Flood Control Protection Project (the "**Project**").

WHEREAS, Grantee and Grantor have entered into a Agreement of Purchase and Sale of even date herewith pursuant to which Grantee will acquire from Grantor certain real property ("**Grantee's Property**") in the vicinity of the Easement Property for purposes of the Project.

WHEREAS, Grantor is willing to grant certain easements to Grantee for the purposes of performing the Work on the Easement Property, on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, paid by Grantee, the receipt and sufficiency of which is hereby acknowledged by Grantor, Grantor hereby grants, bargains, sells and conveys to Grantee, its successors and assigns, full and free right and authority for a non-exclusive easement for the performance of the Work on the Easement Property.

It is mutually covenanted and agreed by and between the parties hereto as follows:

1. Utility Easement. Grantor hereby grants and conveys to Grantee, its successors, assigns, and agents a non-exclusive, perpetual easement (the "**Utility Easement**") over, under, across, above and through the Easement Property for the purpose of installing, constructing, operating, using, maintaining, repairing, and replacing utility facilities, lines or connections and any

uses incidental thereto. The Utility Easement is appurtenant to and for the benefit of the Grantee's Property and constitutes a servitude on the Easement Property.

2. Ingress and Egress. Subject to the terms and provisions set forth herein, Grantee shall have the right of ingress and egress in, to, over, through and across the Easement Property for any purpose necessary or desirable for the full enjoyment of the rights granted to Grantee under this Easement Agreement.

3. Covenants of Grantor.

(a) Grantor shall not interfere with the use of or obstruct the operation of or access to the Easement Property. Any structure or building located on the Easement Property, or any grass, sod, shrubs, woody plants, other crops, trees or nursery stock located on the Easement Property which interferes with the use of or obstructs the operation of or access to the Easement Property may be removed by Grantee without liability for damages arising therefrom.

(b) Grantor covenants and agrees to remain fully liable and shall pay before delinquency all real estate taxes and assessments on the Easement Property.

4. Covenants of Grantee. Grantee represents, covenants, and warrants in favor of Grantor and its successors and assigns, as follows:

(a) Neither Grantee nor any licensee, agent, employee or independent contractor of Grantee (collectively, the "**Grantee Parties**") shall do or fail to do anything which could cause any charge, lien or encumbrance, including but not limited to any laborer's, mechanic's, vendor's, supplier's or materialman's lien, to attach to or otherwise encumber any part or all of the Easement Property and Grantee, at its sole cost and expense, shall immediately pay, discharge or otherwise cause to be removed any and all such charges, liens, and encumbrances.

(b) Grantee agrees to indemnify, defend and hold harmless the Easement Property and Grantor, and any successors and assigns of Grantor, from any costs, expenses, damages, claims or demands incurred or asserted against Grantor to the extent arising out of the activities or omissions of Grantee and/or the Grantee Parties in the performance of the Work and/or use of the Easement Property, except those due to (i) hazardous materials or conditions that are not (x) caused or (y) placed on the Easement Property or the adjacent lands of Grantor by Grantee or the Grantee Parties, (ii) latent defects on the Easement Property not related to Grantee's or the Grantee Parties' activities thereon, or (iii) the actions or omissions of Grantor, its directors, officers, members, agents or employees.

5. Binding Effect. The Utility Easement and the provisions of this Easement Agreement shall be covenants upon and shall run with the Easement Property. This Easement Agreement shall be binding upon and inure to the benefit of Grantor and Grantee, their respective successors and assigns and all future owners and lessees of any part or all of the Easement Property.

6. Governing Law. This Easement Agreement shall be governed and controlled as to validity, construction, interpretation, effect, enforcement and in all other respects by the statutes and the decisions of the courts of the State of California.

7. Amendment. This Easement Agreement may not be amended or modified except in a writing executed by both Grantor and Grantee.

8. Severability. The provisions of this Easement Agreement are separate and severable. If any provision of this Easement Agreement is held to be invalid, unenforceable, illegal or in conflict with any law, that provision shall be severed from this Easement Agreement and the remainder of this Easement Agreement shall not be impaired or otherwise affected by such severance, shall be construed, interpreted and enforced as if it did not contain such provision and shall remain in full force and effect.

9. Attorneys' Fees. If any action or proceeding is instituted to (i) enforce or interpret any provision of this Easement Agreement or (ii) as a result of the breach by a party to any of the terms hereof, then the prevailing party therein shall be entitled to recover its attorneys' fees and costs from the losing party.

10. Further Assurances. Each of the parties shall execute and deliver any and all additional papers, documents, and other assurances, and shall do any and all acts and things reasonably necessary in connection with the performance of their obligations hereunder and to carry out the intent of this Easement Agreement.

IN WITNESS WHEREOF the parties have executed this Easement Agreement the day and year first written above.

GRANTOR:

_____
Dennis R. Hunter

GRANTEE:

CITY OF ST. HELENA

By: _____
Name: Bert Johansson
Title: City Manager

Approved as to form:

_____
Amy L. Valukevich, City Attorney

City of St Helena
County of Napa

HUNTER
101-3

Exhibit "A"

A Utility Easement over upon and across that certain real property situate in the City of St Helena, County of Napa, State of California being a portion of the lands described in the Grant Deed to Dennis R. Hunter recorded December 7, 2001, at Document No. 2001-0043130 Official Records Napa County, said Easement being more particularly described as follows:

COMMENCING at the northeastern corner of said lands; thence along the general southeastern line of said lands S29°13'40"W, 920.60 feet to the **True Point of Beginning**; thence continuing along last said line S29°13'40"W, 15.00 feet; thence leaving last said line N60°46'20"W, 462.65 feet; thence N32°22'33" E, 15.02 feet; thence S60°46'20"E, 461.82 feet to the **True Point of Beginning;**

Containing 6,934 square feet, more or less.

All bearings, distances and coordinates described herein are based upon (NAD-83) California State Plane Coordinate System, Zone 2 (U.S. feet), Epoch 1991.35. Multiply distances described herein by 0.99996247 to obtain ground distances.

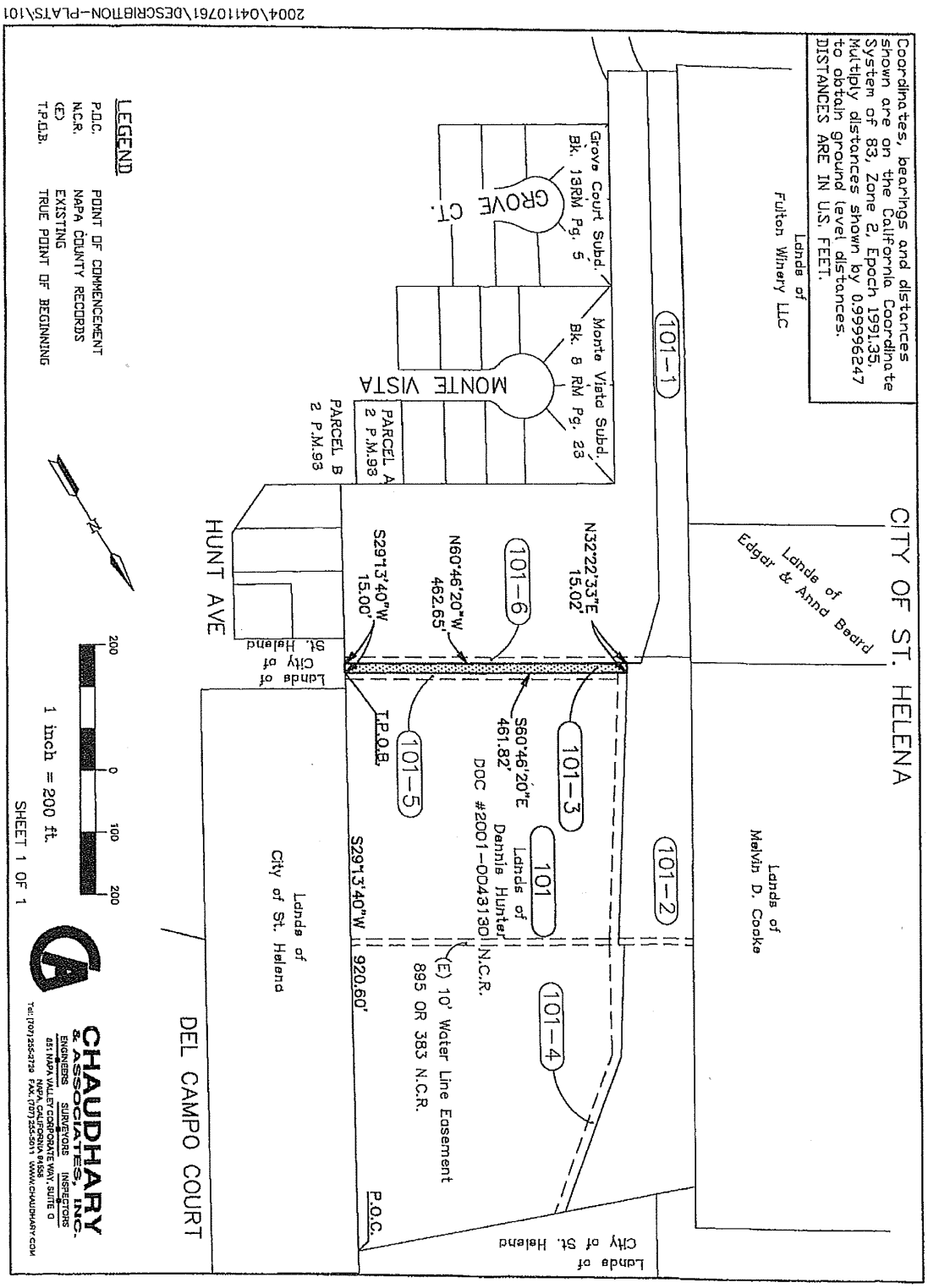
This real property description has been prepared by me or under my direction in conformance with the Professional Land Surveyors Act.

Registered Professional Engineer

Date 8/29/08

REGISTERED PROFESSIONAL ENGINEER
EDWARD A. KRUMREI
No. 23922
Expires 12-31-09
CIVIL
STATE OF CALIFORNIA

Q:\2004\0411076-PBQD St Helena\DESCRIPTIONS AND PLATS\101-3.doc


2004\041107\61\DESCRIPTION-PLATS\101
Coordinates, bearings and distances shown are on the California Coordinate System of 83, Zone 2, Epoch 1991.35. Multiply distances shown by 0.99996247 to obtain ground level distances. DISTANCES ARE IN U.S. FEET.
CITY OF ST. HELENA
Lands of Fulton Winery LLC
Lands of Edgar & Anne Bedrd
Lands of Melvin D. Cooke
Grove Court Subd. Bk. 13RM Pg. 5
Monte Vista Subd. Bk. 8 RM Pg. 23
GROVE Ct.
MONTE VISTA
PARCEL A 2 P.M.93
PARCEL B 2 P.M.93
HUNT AVE
Lands of City of St. Helena
DEL CAMPO COURT
Lands of City of St. Helena
101-1
101-2
101-3
101
101-4
101-5
101-6
N32°22'33"E 15.02'
S60°46'20"E 461.82'
N60°46'20"W 462.65'
S29°13'40"W 15.00'
S29°13'40"W 920.60'
T.P.O.B.
P.O.C.
Lands of Dennis Hunter DOC #2001-0043130 N.C.R.
(E) 10' Water Line Easement 895 OR 383 N.C.R.
LEGEND
P.O.C. POINT OF COMMENCEMENT
N.C.R. NAPA COUNTY RECORDS
(E) EXISTING
T.P.O.B. TRUE POINT OF BEGINNING
200 0 100 200
1 inch = 200 ft.
SHEET 1 OF 1
CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
851 NAPA VALLEY CORPORATE WAY, SUITE G
NAPA, CALIFORNIA 94558
Tel: (707)255-6729 FAX: (707)255-5011 WWW.CHAUDHARY.COM

STATE OF CALIFORNIA)
) ss.
COUNTY OF _____)

On _____, 2008 before me, _____, Notary Public, personally appeared

_____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Notary Public

EXHIBIT G

Exhibit G

Soil Stockpile Grading Plan

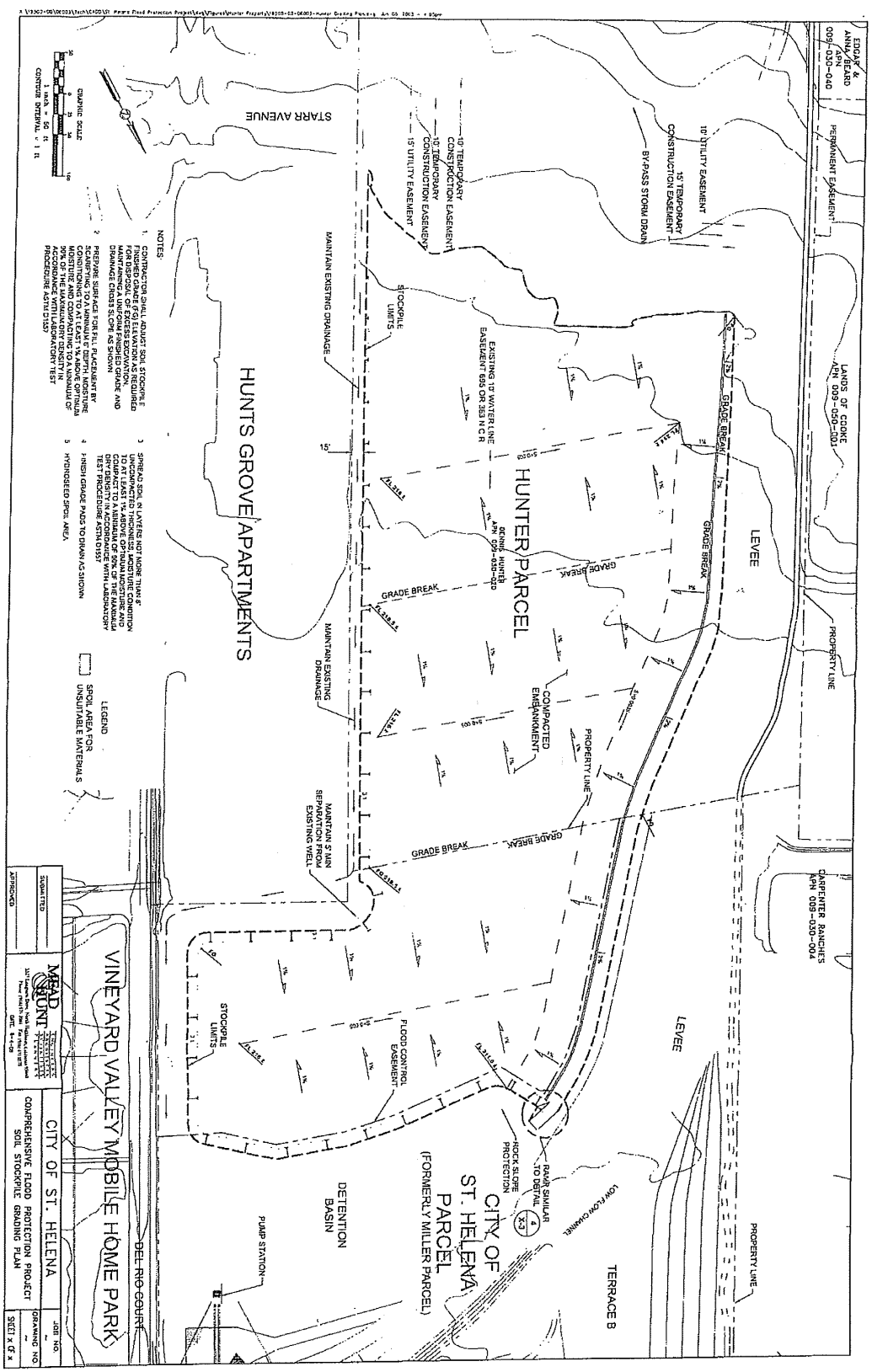

HUNTS GROVE APARTMENTS
HUNTER PARCEL
CITY OF ST. HELENA PARCEL (FORMERLY MILLER PARCEL)
VINEYARD VALLEY MOBILE HOME PARK
STARR AVENUE
DEL RIO COURT
LEVEE
TERRACE B
DETENTION BASIN
PUMP STATION
LOW FLOW CHANNEL
PROPERTY LINE
GRADE BREAK
STOCKPILE LIMITS
COMPACTED EMBANKMENT
MAINTAIN EXISTING DRAINAGE
MAINTAIN 5' MIN SEPARATION FROM EXISTING WELL
EXISTING 15' WATER LINE EASEMENT 695 OR 353 N C R
10' TEMPORARY CONSTRUCTION EASEMENT
15' UTILITY EASEMENT
15' TEMPORARY CONSTRUCTION EASEMENT
BY-PASS STORM DRAIN
PERMANENT EASEMENT
FLOOD CONTROL EASEMENT
ROCK SLOPE PROTECTION
RAMP SIMILAR TO DETAIL
EDGAR & ANNA BEARD APN 009-030-040
LANDS OF COOKE APN 009-050-001
CARPENTER RANCHES APN 009-030-004
GRAPHIC SCALE
CONTOUR INTERVAL = 1 ft
NOTES:
LEGEND
SPOIL AREA FOR UNSUITABLE MATERIALS
SUBMITTED
APPROVED
MEAD & HUNT
CITY OF ST. HELENA
COMPREHENSIVE FLOOD PROTECTION PROJECT
SOIL STOCKPILE GRADING PLAN
JOB NO.
DRAWING NO.
SHEET x OF x

EXHIBIT H

Exhibit H

Water Line Relocation

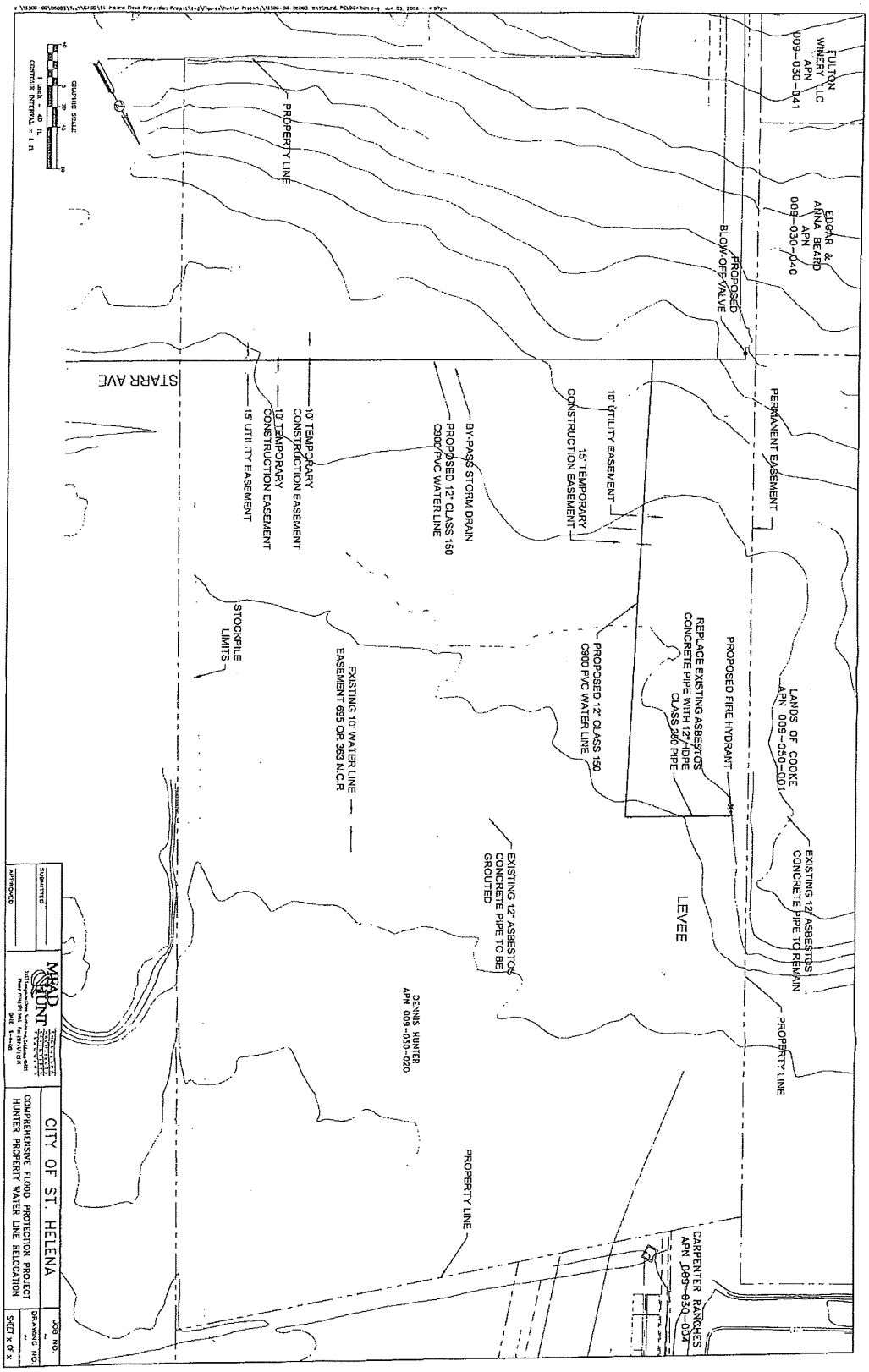

FULTON WINERY, LLC APN 009-030-041
EDGAR & ANNA BEARD APN 009-030-040
PROPERTY LINE
PROPOSED BLOW-OFF VALVE
STARR AVE
10' UTILITY EASEMENT
15' TEMPORARY CONSTRUCTION EASEMENT
PERMANENT EASEMENT
BY-PASS STORM DRAIN
PROPOSED 12" CLASS 150 C900 PVC WATER LINE
10' TEMPORARY CONSTRUCTION EASEMENT
15' UTILITY EASEMENT
STOCKPILE LIMITS
PROPOSED 12" CLASS 150 C900 PVC WATER LINE
REPLACE EXISTING ASBESTOS CONCRETE PIPE WITH 12" HDPE CLASS 200 PIPE
PROPOSED FIRE HYDRANT
LANDS OF COOKE APN 009-050-001
EXISTING 12" ASBESTOS CONCRETE PIPE TO REMAIN
PROPERTY LINE
EXISTING 10" WATER LINE EASEMENT 695 OR 363 N.C.R
EXISTING 12" ASBESTOS CONCRETE PIPE TO BE GROUTED
LEVEE
DENNIS HUNTER APN 009-050-020
PROPERTY LINE
CARPENTER RANCHES APN 009-030-004
GRAPHIC SCALE
1 inch = 40 ft.
CONTOUR INTERVAL = 1 ft.
SUBMITTED
APPROVED
MEAD & HUNT
CITY OF ST. HELENA
COMPREHENSIVE FLOOD PROTECTION PROJECT
HUNTER PROPERTY WATER LINE RELOCATION
JOB NO.
DRAWING NO.
SHEET X OF X

EXHIBIT I

Exhibit I

Approved Title Exceptions (3.58 Acres)

First American Title Company of Napa

ORDER NO: T0011053-

PRELIMINARY REPORT

FIRST AMERICAN TITLE INSURANCE COMPANY

First American Title Company of Napa

1700 Second Street, Suite 120, P. O. Box 388
Napa, CA 94559
Phone: (707) 254-4500 Fax: (707) 226-9346

Property Address:
009-030-005
St. Helena, California
Assessor's Parcel Number:
009-030-005
Seller/Owner:
City of St. Helena

Direct Title Inquiries to:
Mitchell Glotzer
E-mail: MGlotzer@FirstAmNapa.com
Phone: (707) 254 4500

In response to the above referenced application for a policy of title insurance, this Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance, describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception below or not excluded from coverage pursuant to the printed schedules, conditions and stipulations of said policy forms.

The printed exceptions and exclusions from the coverage of said policy or policies are set forth in Exhibit A attached. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered. It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a binder or commitment should be requested.

Dated as of July 17, 2008 at 7:30 A. M.

By: _____
Authorized Signatory

First American Title
Company of Napa

ORDER NO: T0011053-

The form of policy of title insurance contemplated by this report is:

ALTA Owner's Policy (6/17/06) with Regional Exceptions (Standard Coverage)

Title to said estate or interest at the date hereof is vested in:

CITY OF ST. HELENA,
A MUNICIPAL CORPORATION

The estate or interest in the land hereinafter described or referred to covered by this report is:

A FEE

At the date hereof exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2008-09, a lien not yet due or payable.
2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
3. Any easement for water course over that portion of said land lying within Napa River, together with any rights, interests and easements in favor of the public which exist, or are claimed to exist, over any portion of said land covered by water.
4. The terms and provisions contained in the document entitled "Deed" recorded December 12, 1901 as Book 71 of Deeds at page 278 of Official Records.
5. An easement for poleline and incidental purposes in the document recorded March 28, 1930 as Book 49 at page 169 of Official Records.
6. The terms and provisions contained in the document entitled "Grant of Storm Drain Easement" recorded May 28, 1993 as Series Number 1993 016818 of Official Records.
7. The terms and provisions contained in the document entitled "Hunt Avenue Storm Drain Reimbursement Agreement" recorded November 29, 1995 as Series Number 1995 026769 of Official Records.

- END OF EXCEPTIONS -

First American Title Company of Napa

ORDER NO: T0011053-

LEGAL DESCRIPTION

The land referred to in this report is situated in the City of St. Helena, County of Napa, State of California, and is described as follows:

PARCEL ONE:
Commencing at an iron pipe monument on the Northwestern line of the 1-2/3 acre tract of land conveyed to the Town of St. Helena, a municipal corporation, by Deed of record in Book 67 of Deeds at page 331, said Napa County Records, said monument being at the Northeastern corner of the 10.08 acre tract of land conveyed to Josephine K. Jackse by Deed of record in Book 204 at page 244 of Official Records of Napa County; thence North 72° 21' West along the Northern line of said 10.08 acre tract and the Westerly extension thereof 499.2 feet; thence North 28° 41' 33" East 1116.8 feet to the center of the Napa River; thence down the center of said river following the meanderings thereof, South 41° 30' East 501.3 feet and South 86° East 265.6 feet to the intersection thereof with the Southeastern line of the lands formerly of D. O. Hunt; thence South 28° West along said Southeastern line 924.5 feet to the most Eastern corner of the 1-2/3 acre tract of the Town of St. Helena above referred to; thence North 62° West along the Northeastern line of said 1-2/3 acre tract 234.6 feet to the most Northern corner thereof; thence South 28° West along the Northwestern line thereof, 35 feet to the point of commencement.

APN 009-030-005

PARCEL TWO:
Two Rights of Way and Easements for private road purposes and all other uses and rights usually incidental thereto, including the right to maintain thereon power, light and telephone poles, lines, pipelines, and other facilities for the transmission of public utility services, as granted in the Deed from John E. Zimmermann to Robert Hartley, et ux, recorded January 15, 1946 in Book 236 at page 309 of Official Records of Napa County, described as follows:

a) Commencing at a 1-1/4 inch iron pipe monument, said monument being South 60° 45' East 463.7 feet from the Southwestern corner of the tract of land conveyed to George K. Gluyas by Deeds of record in Book 30 of Deeds at page 452 and in Book 29 of Deeds at page 341, said Napa County Records; thence North 28° 48' East 24 feet; thence South 60° 45' East 607.2 feet, more or less, to the Northwestern line of the tract above described; thence South 28° 41' 33" West along said Northwestern line 46.4 feet; thence North 68° 46' 15" West 71.37 feet, more or less, to the Southeastern line of the 15.5 acre tract of land conveyed to Percy V. Gordon, et ux, by Deed of record in Book 9 at page 349 of Official Records of Napa County; thence North 28° 45' West 32.2 feet to the most Eastern corner of said Gordon 15.5 acre tract; thence North 60° 45' West 537.3 feet to the point of commencement.

b) Commencing at a point on the Southeasterly line of Fulton Lane which point is located South 60° 45' East 25.0 feet from the 1-1/4 inch diameter iron pipe monument at the Southwesterly corner of the tract of land described in Deeds to George K. Glyuas of record in Book 29 of Deeds at page 341, said Napa County Records, and in Book 30 of Deeds at page 452, said Napa County Records; running thence South 60° 45' East 438.7 feet to a 1-1/4 inch

First American Title Company of Napa

ORDER NO: T0011053-

iron pipe monument; thence North 28° 48' East 16.5 feet; thence North 60° 45' West 463.7 feet; thence South 28° 45' West 16.5 feet; and thence South 60° 45' East 25.0 feet to the point of commencement.

WARNING

The Map attached hereto may or may not be a survey of the land depicted thereon. You should not rely upon it for any purpose other than orientation to the general location of the parcel or parcels depicted. First American expressly disclaims any liability for alleged loss or damage which may result from reliance upon such map.

First American Title Company of Napa

ORDER NO: T0011053-

Information Notes:

a. General and special taxes and assessments for the fiscal year 2007-08.

First Installment	:	$0.00
Second Installment	:	$0.00
Tax Rate Area	:	3000
A. P. No.	:	009-030-005

b. The Assessor's Parcel Number(s), if any, contained in the legal description herein, are for quick identification purposes only, and are not a part of the actual legal descriptions.

c. Any statement regarding the acreage of the herein described land contained within the legal description in this report is derived from the public record and is for recorded deed purposes only. The Policy of Title Insurance contemplated by this report provides no insurance with respect to acreage and no acreage statement will appear within the legal description of such policy.

d. The County Recorder may charge an additional $20.00 recording fee, if not provided with a "Preliminary Change of Ownership Report" Form, for each Deed to be recorded. The purchaser is responsible for completing and signing this form.

e. Before an escrow can close, or funds placed in a Savings Account, the Seller must furnish a Taxpayer Identification Number to us so that we can file an IRS Form 1099S or its equivalent, with the Internal Revenue Service. This procedure is required by Section 6045 of the Internal Revenue Code.

f. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

Lenders Supplemental Report:

g. According to the public records, there has been no conveyance of the land within a period of two years prior to the date of this report, except as follows:

NONE

esn
exn
07/18/08
kb/am
2cc: COOMBS & DUNLAP LLP, 1211 Division St, Napa, CA 94559 – Amy Valukevich

Form No. 1068-1 (Rev. 06/17/06) ORDER NO: T0011053-

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (By Policy Type)

1. CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

2. CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (10/22/03)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning:

   a. building
   b. zoning
   c. Land use
   d. Improvements on the Land
   e. Land division
   f. environmental protection

This Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.

This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.

3. The right to take the Land by condemning it, unless:

   a. a notice of exercising the right appears in the Public Records at the Policy Date; or
   b. the taking happened before the Policy Date and is binding on You if You bought the Land without Knowing of the taking.

4. Risks:

   a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.d, 22, 23, 24 or 25.

5. Failure to pay value for Your Title.

6. Lack of a right:

   a. to any Land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

For Covered Risk 14, 15, 16 and 18, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 14: (Subdivision Law Violation)	1% of Policy Amount or $ 2,500 (whichever is less)	$ 10,000
Covered Risk 15: (Building Permit)	1% of Policy Amount or $ 5,000 (whichever is less)	$ 25,000
Covered Risk 16: (Zoning)	1% of Policy Amount or $ 5,000 (whichever is less)	$ 25,000
Covered Risk 18: (Encroachment of Boundary Walls or Fences)	1% of Policy Amount or $ 2,500 (whichever is less)	$ 5,000

3. AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-1-87)

EXCLUSIONS

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:
   - land use
   - improvements on the land
   - land division
   - environmental protection

This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.

This exclusion does not limit the zoning coverage described in Items 12 and 13 of Covered Title Risks.

2. The right to take the land by condemning it, unless:
   - a notice of exercising the right appears in the public records
   - on the Policy Date
   - the taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking

3. Title Risks:
   - that are created, allowed, or agreed to by you
   - that are known to you, but not to us, on the Policy Date -- unless they appeared in the public records
   - that result in no loss to you
   - that first affect your title after the Policy Date -- this does not limit the labor and material lien coverage in Item 8 of Covered Title Risks

4. Failure to pay value for your title.

5. Lack of a right:
   - to any land outside the area specifically described and referred to in Item 3 of Schedule A
     OR
   - in streets, alleys, or waterways that touch your land

This exclusion does not limit the access coverage in Item 5 of Covered Title Risks.

4. AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92)
WITH ALTA ENDORSEMENT-FORM 1 COVERAGE

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material or to the extent insurance is afforded herein as to assessments for street improvements under construction or completed at Date of Policy); or

   e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.

7. Any claim, which arises out of the transaction creating the interest of the mortgagee insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

   (i) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer; or

   (ii) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine or equitable subordination; or

   (iii) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:

      (a) to timely record the instrument of transfer; or

      (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Easements, claims of easement or encumbrances which are not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof, water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the public records.

5. 2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters

   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.

5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.

6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is

   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.

Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

1. The lien of real estate taxes or assessments imposed on the Title by a governmental authority that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or in the Public Records.

2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.

3. Easements, claims of easement or encumbrances that are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.

5. Unpatented mining claims; reservations or exception in patents or in acts authorizing the issuance thereof; water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

6. AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.

4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

   (i) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or

   (ii) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:

      (a) to timely record the instrument of transfer; or

      (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage Policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

2. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Easements, claims of easement or encumbrances which are not shown by the public records.

5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof, water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the public records.

7. 2006 ALTA OWNER'S POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.

4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.

5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. The lien of real estate taxes or assessments imposed on the Title by a governmental authority that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or in the Public Records.

2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.

3. Easements, claims of easement or encumbrances that are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.

5. Unpatented mining claims; reservations or exception in patents or in acts authorizing the issuance thereof; water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

8. ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (10/13/01)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the Land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the Land; (iii) a separation in ownership or a change in the dimensions or areas of the Land or any parcel of which the Land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the Land has been recorded in the Public Records at Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 12, 13, 14, and 16 of this policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the Land has been recorded in the Public Records at Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 12, 13, 14, and 16 of this policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the Public Records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without Knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the Insured Claimant;

   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

   (c) resulting In no loss or damage to the Insured Claimant;

   (d) attaching or created subsequent to Date of Policy (this paragraph does not limit the coverage provided under Covered Risks 8, 16, 18, 19, 20, 21, 22, 23, 24, 25 and 26); or

   (e) resulting in loss or damage which would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of the Insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the Land is situated.

5. Invalidity or unenforceability of the lien of the Insured Mortgage, or claim thereof, which arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, except as provided in Covered Risk 27, or any consumer credit protection or truth in lending law.

6. Real property taxes or assessments of any governmental authority which become a lien on the Land subsequent to Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 7, 8(e) and 26.

7. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This exclusion does not limit the coverage provided in Covered Risk 8.

8. Lack of priority of the lien of the Insured Mortgage as to each and every advance made after Date of Policy, and all interest charged thereon, over liens, encumbrances and other matters affecting the title, the existence of which are Known to the Insured at:

   (a) The time of the advance; or

   (b) The time a modification is made to the terms of the Insured Mortgage which changes the rate of interest charged, if the rate of Interest is greater as a result of the modification than it would have been before the modification. This exclusion does not limit the coverage provided in Covered Risk 8.

9. The failure of the residential structure, or any portion thereof to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at Date of Policy.

ORDER NO: T0011053-



First American Title Company of Napa

The First American Corporation

First American Title Company of Napa

Privacy Policy

We Are Committed to Safeguarding Customer Information

In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information – particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, together with our parent company, The First American Corporation, we have adopted this Privacy Policy to govern the use and handling of your personal information.

Applicability

This Privacy Policy governs our use of the information which you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from a public record or from another person or entity. First American has also adopted broader guidelines that govern our use of personal information regardless of its source. First American calls these guidelines its *Fair Information Values*, a copy of which can be found on our website at www.firstam.com.

Types of Information

Depending upon which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, by telephone or any other means;
- Information about your transactions with us, our affiliated companies, or others; and
- Information we receive from a consumer reporting agency.

Use of Information

We request information from you for our own legitimate business purposes and not for the benefit of any nonaffiliated party. Therefore, we will not release your information to nonaffiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may, however, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purpose, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic personal information listed above to one or more of our affiliated companies. Such affiliated companies include financial service providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies, and escrow companies. Furthermore, we may also provide all the information we collect, as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies, or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

Former Customers

Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

Confidentiality and Security

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products or services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy and First American's *Fair Information Values*. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

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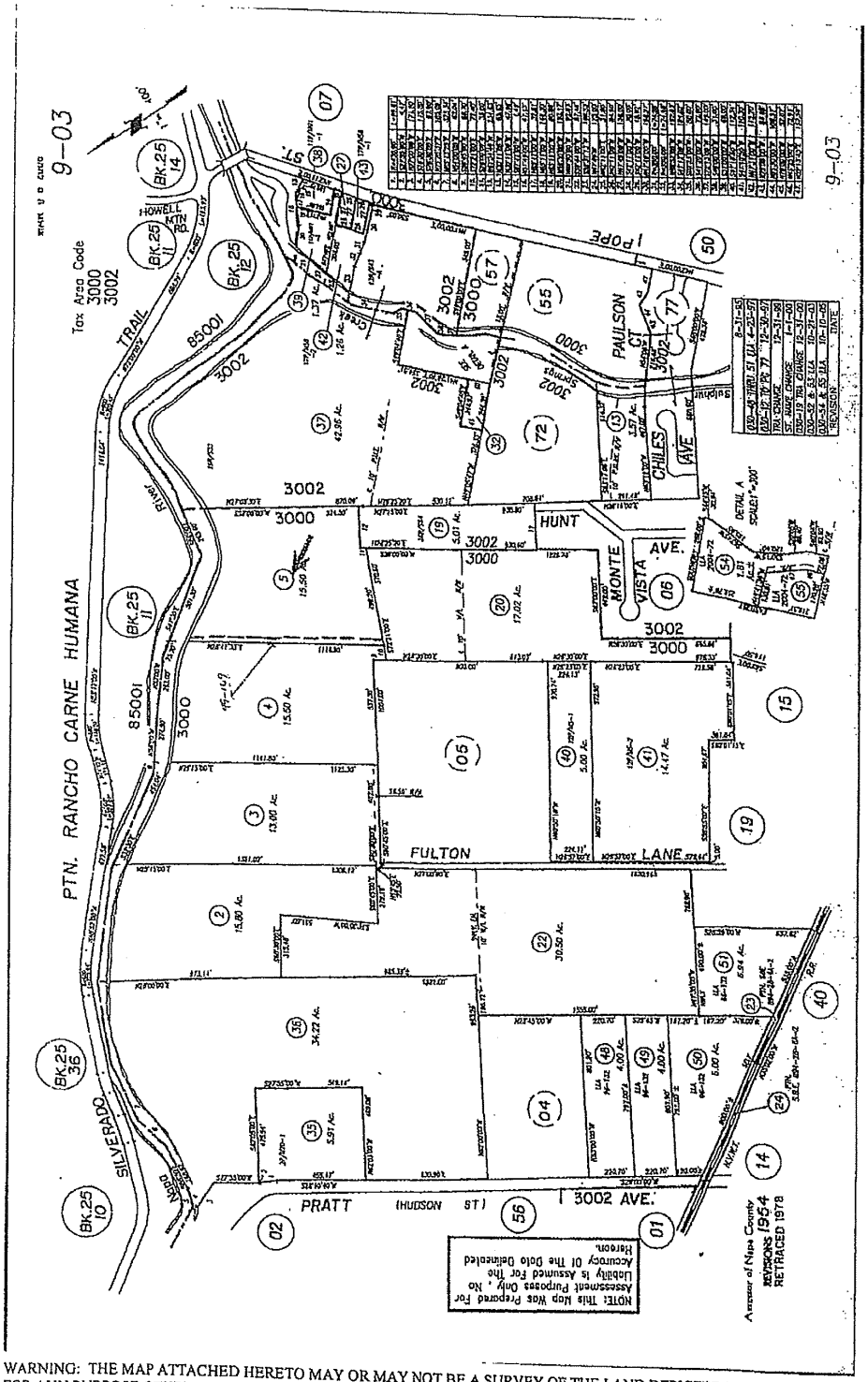

WARNING: THE MAP ATTACHED HERETO MAY OR MAY NOT BE A SURVEY OF THE LAND DEPICTED THEREON. YOU SHOULD NOT RELY UPON IT FOR ANY PURPOSE OTHER THAN ORIENTATION TO THE GENERAL LOCATION OF THE PARCEL OR PARCELS DEPICTED. FIRST AMERICAN EXPRESSLY DISCLAIMS ANY LIABILITY FOR ALLEGED LOSS OR DAMAGE WHICH MAY RESULT FROM RELIANCE UPON THIS MAP.

Order No: T0011053-

Exhibit J

Approved Title Exceptions (Hunter Property)

First American Title
Company of Napa

ORDER NO: T0011052-

PRELIMINARY REPORT

FIRST AMERICAN TITLE INSURANCE COMPANY

First American Title Company of Napa

1700 Second Street, Suite 120/P.O. Box 388
Napa, CA 94559
Phone: (707) 254-4500 Fax (707) 226-9346

Property Address:
None Assigned
St. Helena, California
Assessor's Parcel Number:
009-030-020
Seller/Owner:
Dennis R. Hunter

Direct Title Inquiries to:
Mitchell Glotzer
E-mail: MGlotzer@FirstAmNapa.com
Phone: (707) 254 4500

In response to the above referenced application for a policy of title insurance, this Company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance, describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception below or not excluded from coverage pursuant to the printed schedules, conditions and stipulations of said policy forms.

The printed exceptions and exclusions from the coverage of said policy or policies are set forth in Exhibit A attached. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered. It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a binder or commitment should be requested.

Dated as of July 21, 2008 at 7:30 A. M.

By: _____
Authorized Signatory

First American Title
Company of Napa

ORDER NO: T0011052-

The form of policy of title insurance contemplated by this report is:

ALTA Owner's Policy (6/17/06) with Regional Exceptions (Standard Coverage)

Title to said estate or interest at the date hereof is vested in:

DENNIS R. HUNTER,
AN UNMARRIED MAN

The estate or interest in the land hereinafter described or referred to covered by this report is:

A FEE

At the date hereof exceptions to coverage in addition to the printed exceptions and exclusions contained in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2008-09, a lien not yet due or payable.
2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
3. An easement for underground water pipelines and incidental purposes in the document recorded December 5, 1972 as Book 895 at page 383 of Official Records.
4. The terms and provisions contained in the document entitled "Hunt Avenue Storm Drain Reimbursement Agreement" recorded November 29, 1995 as Series Number 1995 026769 of Official Records.
5. The terms and provisions contained in the document entitled "Certificate of Completion" recorded July 26, 2002 as Series Number 2002-0029720 of Official Records.
6. The lack of a right of access to and from the land.
7. Rights of parties in possession.

- END OF EXCEPTIONS -

First American Title Company of Napa

ORDER NO: T0011052-

LEGAL DESCRIPTION

The land referred to in this report is situated in the City of St. Helena, County of Napa, State of California, and is described as follows:

COMMENCING at a point on the northwestern line of the land formerly of D. O. Hunt where the same is intersected by the northeastern line of the 5 acre tract of land described in the Deed to Stephen Jackse recorded March 17, 1919 in Book 125 of Deeds at page 227, said Napa County Records; and running thence along said northwestern line of Hunt, North 28` 30' East 813.03 feet to the southwestern line of the 17.22 acre tract of land described in the Deed to Thomas Q. Swortfiguer of record in Book 117 of Deeds at page 257, said Napa County Records; thence along said line of Swortfiguer South 72` 21' East 570.6 feet to the northwestern line of the 1-2/3 acre tract of land described in the Deed to the Town of St. Helena, a municipal corporation, of record in Book 66 of Deeds at page 401, said Napa County Records; running along said northwestern line of the production thereof South 28` West 1226.78 feet to the southwestern line of the 3.95 acre tract of land described in the Deed to Stephen Jackse of record in Book 129 of Deeds at page 478, said Napa County Records; thence along said southwestern line North 62` West 449.0 feet to the southeastern line of the aforesaid 5 acre tract; thence along said southeastern line of said 5 acre tract South 28` 30' West 665.86 feet; thence North 62` West 114.5 feet to the northwestern line of said 5 acres; thence along las mentioned line North 28` 30' East 976.33 feet to the point of commencement.

APN 009-030-020

WARNING

The Map attached hereto may or may not be a survey of the land depicted thereon. You should not rely upon it for any purpose other than orientation to the general location of the parcel or parcels depicted. First American expressly disclaims any liability for alleged loss or damage which may result from reliance upon such map.

First American Title Company of Napa

ORDER NO: T0011052-

Information Notes:

a. General and special taxes and assessments for the fiscal year 2007-08.

First Installment	:	$8,876.85 PAID
Second Installment	:	$8,876.85 PAID
Tax Rate Area	:	3000
A. P. No.	:	009-030-020

b. The Assessor's Parcel Number(s), if any, contained in the legal description herein, are for quick identification purposes only, and are not a part of the actual legal descriptions.

c. Any statement regarding the acreage of the herein described land contained within the legal description in this report is derived from the public record and is for recorded deed purposes only. The Policy of Title Insurance contemplated by this report provides no insurance with respect to acreage and no acreage statement will appear within the legal description of such policy.

d. The County Recorder may charge an additional $20.00 recording fee, if not provided with a "Preliminary Change of Ownership Report" Form, for each Deed to be recorded. The purchaser is responsible for completing and signing this form.

e. Before an escrow can close, or funds placed in a Savings Account, the Seller must furnish a Taxpayer Identification Number to us so that we can file an IRS Form 1099S or its equivalent, with the Internal Revenue Service. This procedure is required by Section 6045 of the Internal Revenue Code.

f. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

Lenders Supplemental Report:

g. According to the public records, there has been no conveyance of the land within a period of two years prior to the date of this report, except as follows:

NONE

esn
exn
07/22/08
bv/am
2cc: COOMBS & DUNLAP LLP, 1211 Division St, Napa, CA 94559 – Amy Valukevich

ORDER NO: T0011052-

Form No. 1068-1 (Rev. 06/17/06)

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (By Policy Type)

1. CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.

3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

2. CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (10/22/03)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning:

   a. building
   b. zoning
   c. Land use
   d. Improvements on the Land
   e. Land division
   f. environmental protection

This Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.

This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.

3. The right to take the Land by condemning it, unless:

   a. a notice of exercising the right appears in the Public Records at the Policy Date; or
   b. the taking happened before the Policy Date and is binding on You if You bought the Land without Knowing of the taking.

4. Risks:

   a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.d, 22, 23, 24 or 25.

5. Failure to pay value for Your Title.

6. Lack of a right:

   a. to any Land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

For Covered Risk 14, 15, 16 and 18, Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 14: (Subdivision Law Violation)	1% of Policy Amount or $ 2,500 (whichever is less)	$ 10,000
Covered Risk 15: (Building Permit)	1% of Policy Amount or $ 5,000 (whichever is less)	$ 25,000
Covered Risk 16: (Zoning)	1% of Policy Amount or $ 5,000 (whichever is less)	$ 25,000
Covered Risk 18: (Encroachment of Boundary Walls or Fences)	1% of Policy Amount or $ 2,500 (whichever is less)	$ 5,000

3. AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-1-87)

EXCLUSIONS

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:
   - land use
   - improvements on the land
   - land division
   - environmental protection

   This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.

   This exclusion does not limit the zoning coverage described in Items 12 and 13 of Covered Title Risks.

2. The right to take the land by condemning it, unless:
   - a notice of exercising the right appears in the public records
   - on the Policy Date
   - the taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking

3. Title Risks:
   - that are created, allowed, or agreed to by you
   - that are known to you, but not to us, on the Policy Date -- unless they appeared in the public records
   - that result in no loss to you
   - that first affect your title after the Policy Date -- this does not limit the labor and material lien coverage in Item 8 of Covered Title Risks

4. Failure to pay value for your title.

5. Lack of a right:
   - to any land outside the area specifically described and referred to in Item 3 of Schedule A
     OR
   - in streets, alleys, or waterways that touch your land

   This exclusion does not limit the access coverage in Item 5 of Covered Title Risks.

4. AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92)
WITH ALTA ENDORSEMENT-FORM 1 COVERAGE

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material or to the extent insurance is afforded herein as to assessments for street improvements under construction or completed at Date of Policy); or

   e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage.

4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.

5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.

6. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.

7. Any claim, which arises out of the transaction creating the interest of the mortgagee insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

   (i) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer; or

   (ii) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine or equitable subordination; or

   (iii) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:

      (a) to timely record the instrument of transfer; or

      (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Easements, claims of easement or encumbrances which are not shown by the public records.

4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof, water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the public records.

5. 2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.

   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters

   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.

5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.

6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is

   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.

Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

1. The lien of real estate taxes or assessments imposed on the Title by a governmental authority that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or in the Public Records.

2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.

3. Easements, claims of easement or encumbrances that are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.

5. Unpatented mining claims; reservations or exception in patents or in acts authorizing the issuance thereof; water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

6. AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the insured claimant;

   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;

   (c) resulting in no loss or damage to the insured claimant;

   (d) attaching or created subsequent to Date of Policy; or

   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.

4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

   (i) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or

   (ii) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:

      (a) to timely record the instrument of transfer; or

      (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage Policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

2. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.

3. Easements, claims of easement or encumbrances which are not shown by the public records.

5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.

5. Unpatented mining claims, reservations or exceptions in patents or in acts authorizing the issuance thereof, water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the public records.

7. 2006 ALTA OWNER'S POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;
   (iii) the subdivision of land; or
   (iv) environmental protection;

   or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
   (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.

3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.

4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
   (a) a fraudulent conveyance or fraudulent transfer; or
   (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.

5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. The lien of real estate taxes or assessments imposed on the Title by a governmental authority that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or in the Public Records.

2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or by making inquiry of persons in possession of the Land.

3. Easements, claims of easement or encumbrances that are not shown by the Public Records.

4. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title including discrepancies, conflicts in boundary lines, shortage in area, or any other facts that would be disclosed by an accurate and complete land survey of the Land, and that are not shown in the Public Records.

5. Unpatented mining claims; reservations or exception in patents or in acts authorizing the issuance thereof; water rights, claims or title to water.

6. Any lien, or right to a lien, for services, labor or material theretofore or hereafter furnished, imposed by law and not shown by the Public Records.

8. ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (10/13/01)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the Land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the Land; (iii) a separation in ownership or a change in the dimensions or areas of the Land or any parcel of which the Land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that s notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the Land has been recorded in the Public Records at Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 12, 13; 14, and 16 of this policy.

   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the Land has been recorded in the Public Records at Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 12, 13, 14, and 16 of this policy.

2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the Public Records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without Knowledge.

3. Defects, liens, encumbrances, adverse claims or other matters:

   (a) created, suffered, assumed or agreed to by the Insured Claimant;

   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;

   (c) resulting In no loss or damage to the Insured Claimant;

   (d) attaching or created subsequent to Date of Policy (this paragraph does not limit the coverage provided under Covered Risks 8, 16, 18, 19, 20, 21, 22, 23, 24, 25 and 26); or

   (e) resulting in loss or damage which would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.

4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of the Insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the Land is situated.

5. Invalidity or unenforceability of the lien of the Insured Mortgage, or claim thereof, which arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, except as provided in Covered Risk 27, or any consumer credit protection or truth in lending law.

6. Real property taxes or assessments of any governmental authority which become a lien on the Land subsequent to Date of Policy. This exclusion does not limit the coverage provided under Covered Risks 7, 8(e) and 26.

7. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This exclusion does not limit the coverage provided in Covered Risk 8.

8. Lack of priority of the lien of the Insured Mortgage as to each and every advance made after Date of Policy, and all interest charged thereon, over liens, encumbrances and other matters affecting the title, the existence of which are Known to the Insured at:

   (a) The time of the advance; or

   (b) The time a modification is made to the terms of the Insured Mortgage which changes the rate of interest charged, if the rate of Interest is greater as a result of the modification than it would have been before the modification. This exclusion does not limit the coverage provided in Covered Risk 8.

9. The failure of the residential structure, or any portion thereof to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at Date of Policy.

ORDER NO: T0011052-



First American Title Company of Napa

The First American Corporation

First American Title Company of Napa

Privacy Policy

We Are Committed to Safeguarding Customer Information

In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information – particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, together with our parent company, The First American Corporation, we have adopted this Privacy Policy to govern the use and handling of your personal information.

Applicability

This Privacy Policy governs our use of the information which you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from a public record or from another person or entity. First American has also adopted broader guidelines that govern our use of personal information regardless of its source. First American calls these guidelines its *Fair Information Values*, a copy of which can be found on our website at www.firstam.com.

Types of Information

Depending upon which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, by telephone or any other means;
- Information about your transactions with us, our affiliated companies, or others; and
- Information we receive from a consumer reporting agency.

Use of Information

We request information from you for our own legitimate business purposes and not for the benefit of any nonaffiliated party. Therefore, we will not release your information to nonaffiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may, however, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purpose, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic personal information listed above to one or more of our affiliated companies. Such affiliated companies include financial service providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies, and escrow companies. Furthermore, we may also provide all the information we collect, as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies, or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

Former Customers

Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

Confidentiality and Security

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products or services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy and First American's *Fair Information Values*. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

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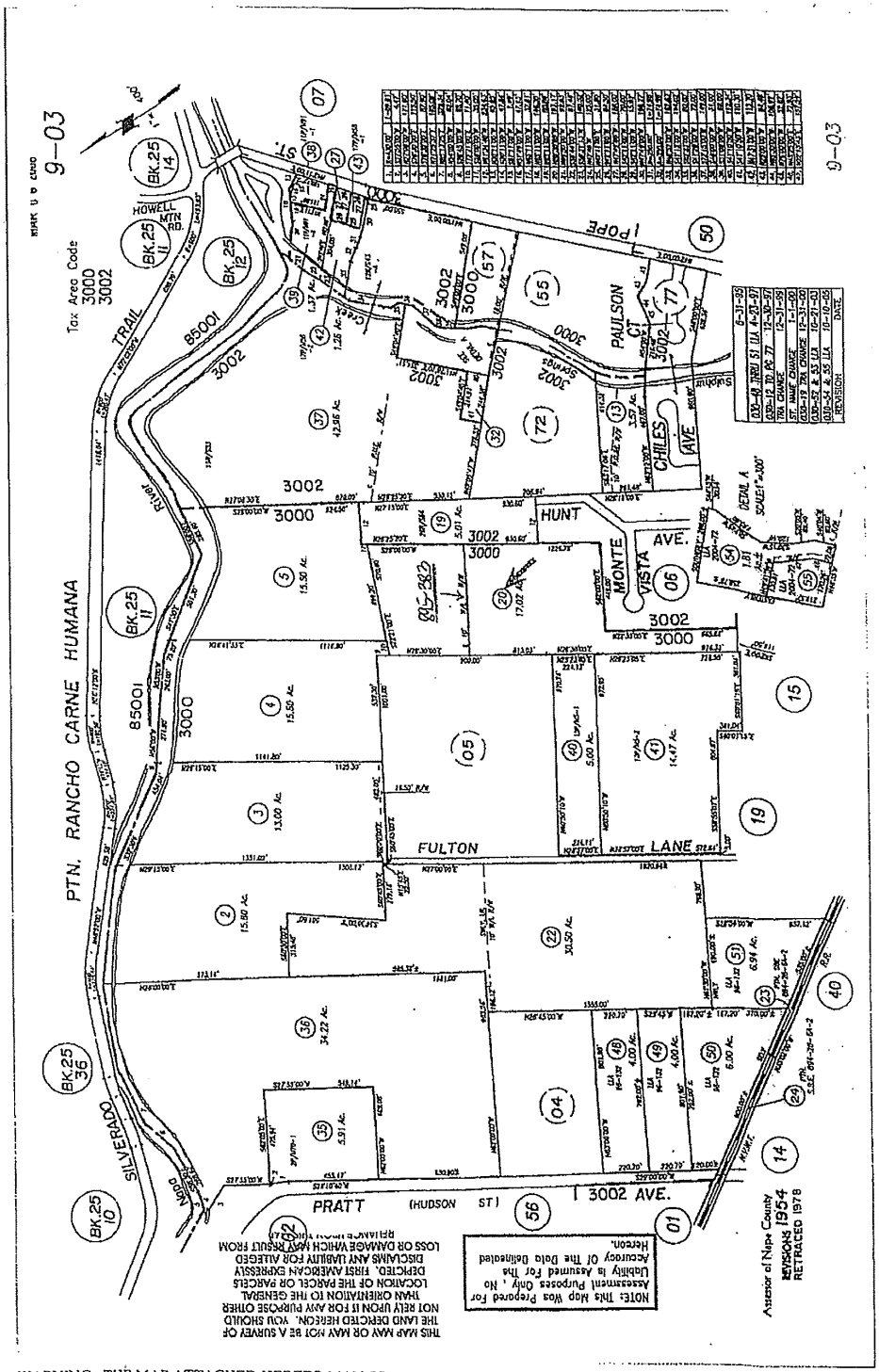

WARNING: THE MAP ATTACHED HERETO MAY OR MAY NOT BE A SURVEY OF THE LAND DEPICTED THEREON. YOU SHOULD NOT RELY UPON IT FOR ANY PURPOSE OTHER THAN ORIENTATION TO THE GENERAL LOCATION OF THE PARCEL OR PARCELS DEPICTED. FIRST AMERICAN EXPRESSLY DISCLAIMS ANY LIABILITY FOR ALLEGED LOSS OR DAMAGE WHICH MAY RESULT FROM RELIANCE UPON THIS MAP.

Order No: T0011052-

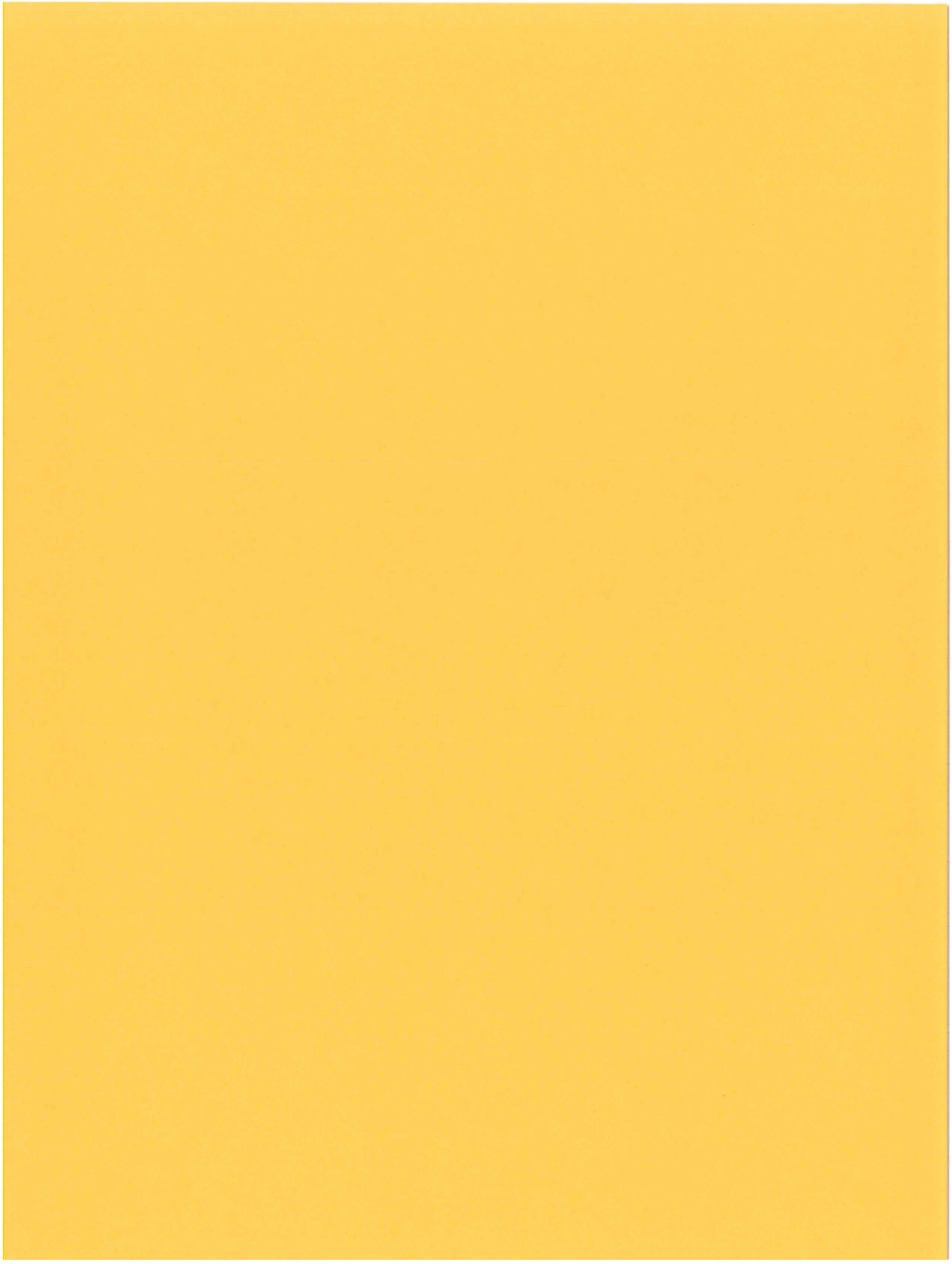

EXHIBIT C

FIGURE NO. 6 – OVERALL SITE MAP SUB BASIN DELINEATION MAP MEAD & HUNT – INTERIOR DRAINAGE ANALYSIS FINAL REPORT

SUBMITTED / APPROVED	MEAD & HUNT	ST. HELENA FLOOD PROTECTION PROJECT OVERALL SITE MAP SUB-BASIN DELINEATION MAP	JOB NO. 16190-05001 FIGURE NO. 6

X:\Vallejo\Jobs\Job\Job 05 - Helena\Dwg\Figures\16190-00-00001-SUBBASINS.dwg Feb 07, 2011 - 10:27am





Interior Drainage Analysis

Miller Property/Hunter Property/Hunt Avenue

Final Report

City of St. Helena
Comprehensive Flood Protection Project

Report prepared by

MEAD & HUNT

Offices Nationwide
www.meadhunt.com

February 2012

Existing Conditions SWMM Model Output
10 year Storm Event

MEAD & HUNT

```
#####################################
# Rainfall input summary from Runoff #
#####################################

 Total rainfall for gage #     1 is     6.2357 inches

   ############################
   #        Data Group F1     #
   # Evaporation Rate (in/month)#
   ############################

  JAN.   FEB.   MAR.   APR.   MAY   JUN.   JUL.   AUG.   SEP.   OCT.   NOV
DEC.
  ----   ----   ----   ----   ----   ----   ----   ----   ----   ----
---- ----
  0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00

   ############################
   #        Data Group F1     #
   # Evaporation Rate (in/day) #
   ############################

  JAN.   FEB.   MAR.   APR.   MAY   JUN.   JUL.   AUG.   SEP.   OCT.   NOV
DEC.
  ----   ----   ----   ----   ----   ----   ----   ----   ----   ----
---- ----
 0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000  0.000
0.000  0.000


  ##################################################
  #  Table R1.  S U B C A T C H M E N T  D A T A   #
  #            Physical Hydrology Data             #
  ##################################################


Deprs Deprs Prcnt

Per-                        -sion -sion  Zero
       Subcatchment                    Channel      Width     Area
cent  Slope   "n"    "n"  Storge Strge Deten
  Number           Name              or inlet       (ft)     (ac)
Imperv ft/ft Imprv  Perv Imprv  Perv -tion
  ====== ================ ================ ======== ========
====== ===== ===== ===== ===== ===== =====
      1              N1#1                  N1 4835.0     11.100
70.00 0.000 0.014 0.060 0.000 0.000  0.00
      2              N2#1                  N2 6000.0     22.900
70.00 0.000 0.014 0.060 0.000 0.000  0.00
      3              N2#2                  N2 431.00     9.9000
30.00 0.001 0.014 0.060 0.000 0.000  0.00
```

```
     4              N7#1                N7 600.00     15.000
0.00 0.024 0.014 0.030 0.000 0.000  0.00
     5              N7#2                N7 3703.0     8.5000
0.00 0.000 0.014 0.030 0.000 0.000  0.00
     6              N4#1                N4 2100.0     4.8000
42.40 0.000 0.014 0.060 0.000 0.000  0.00


##########################################################################
#####################################
#          Table R2.  SUBCATCHMENT  DATA
#
#                     Infiltration or Time of Concentration Data
#
#
#
# Infiltration Type       Infl #1(#5)        Infl #2(#6)
Infl #3(#7)               Infl #4(#8)  #
# SCS                   ->   Comp CN          Time Conc
Shape Factor         Depth or Fraction  #
# SBUH                  ->   Comp CN          Time Conc
N/A                       N/A  #
# Green Ampt            ->   Suction          Hydr Cond
Initial MD                      N/A  #
# Horton                ->  Max Rate           Min Rate   Decay
Rate (1/sec)       Max. Infilt. Volume  #
# Proportional          ->  Constant                N/A
N/A                       N/A  #
# Initial/Cont Loss     ->   Initial         Continuing
N/A                       N/A  #
# Initial/Proportional ->   Initial           Constant
N/A                       N/A  #
# Laurenson Parameters ->   B Value       Pervious "n"
Impervious Cont                 Exponent  #
# Rational Formula      -> Tc Method   Flow Path Length      Flow
Path Slope  Roughness or Retardance  #
#                                 (#1 - #4 is Impervious Data / #5
- #8 is Pervious Data)             #
#                     Rational Formula Tc Method: 1 = Constant
#
#                                                 2 = Friend's
Equation                                  #
#                                                 3 = Kinematic
Wave                                     #
#                                                 4 = Alameda
Method                                     #
#                                                 5 = Izzard's
Formula                                   #
#                                                 6 = Kerby's
Equation                                   #
#                                                 7 = Kirpich's
Equation                                 #
```

Proposed Conditions SWMM Model Output
100 year Storm Event

MEAD & HUNT

```
#####################################
# Rainfall input summary from Runoff #
#####################################

 Total rainfall for gage #     1 is     8.9995 inches

   ############################
   #        Data Group F1     #
   # Evaporation Rate (in/month)#
   ############################

  JAN.  FEB.  MAR.  APR.  MAY   JUN.  JUL.  AUG.  SEP.  OCT.  NOV
DEC.
  ----  ----  ----  ----  ----  ----  ----  ----  ----  ----
---- ----
  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
0.00  0.00

   ############################
   #        Data Group F1     #
   # Evaporation Rate (in/day) #
   ############################

  JAN.  FEB.  MAR.  APR.  MAY   JUN.  JUL.  AUG.  SEP.  OCT.  NOV
DEC.
  ----  ----  ----  ----  ----  ----  ----  ----  ----  ----
---- ----
 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
0.000 0.000


  ###################################################
  #  Table R1.  S U B C A T C H M E N T  D A T A    #
  #            Physical Hydrology Data              #
  ###################################################


Deprs Deprs Prcnt

Per-                        -sion -sion  Zero
       Subcatchment                    Channel      Width     Area
cent  Slope  "n"   "n"  Storge Strge Deten
  Number          Name          or inlet       (ft)     (ac)
Imperv ft/ft Imprv  Perv Imprv  Perv -tion
  ====== =============== =============== ======== ========
====== ===== ===== ===== ===== ===== =====
      1             N1#1                 N1 4835.0    11.100
70.00 0.000 0.014 0.060 0.000 0.000  0.00
      2             N2#1                 N2 6000.0    22.900
70.00 0.000 0.014 0.060 0.000 0.000  0.00
      3             N2#2                 N2 431.00    9.9000
```

```
30.00 0.001 0.014 0.060 0.000 0.000  0.00
      4              N7#1                N7 15000.    15.000
70.00 0.010 0.014 0.030 0.000 0.000  0.00
      5              N9#1                N9 14750.    8.5000
70.00 0.010 0.014 0.060 0.000 0.000  0.00
      6              N9#2                N9 545.00    1.2500
0.00 0.006 0.014 0.030 0.000 0.000  0.00
      7              N4#1                N4 2100.0    4.8000
42.40 0.000 0.014 0.060 0.000 0.000  0.00


##########################################################################
#####################################
#          Table R2.  SUBCATCHMENT  DATA
#
#                     Infiltration or Time of Concentration Data
#
#
#
# Infiltration Type       Infl #1(#5)        Infl #2(#6)
Infl #3(#7)               Infl #4(#8)  #
# SCS                   ->   Comp CN          Time Conc
Shape Factor         Depth or Fraction  #
# SBUH                  ->   Comp CN          Time Conc
N/A                        N/A  #
# Green Ampt            ->   Suction          Hydr Cond
Initial MD                      N/A  #
# Horton                ->  Max Rate           Min Rate   Decay
Rate (1/sec)       Max. Infilt. Volume  #
# Proportional          ->  Constant                N/A
N/A                        N/A  #
# Initial/Cont Loss     ->   Initial         Continuing
N/A                        N/A  #
# Initial/Proportional ->   Initial           Constant
N/A                        N/A  #
# Laurenson Parameters ->   B Value       Pervious "n"
Impervious Cont                 Exponent  #
# Rational Formula     -> Tc Method   Flow Path Length      Flow
Path Slope  Roughness or Retardance  #
#                                  (#1 - #4 is Impervious Data / #5
- #8 is Pervious Data)                #
#                     Rational Formula Tc Method: 1 = Constant
#
#                                                 2 = Friend's
Equation                                  #
#                                                 3 = Kinematic
Wave                                     #
#                                                 4 = Alameda
Method                                     #
#                                                 5 = Izzard's
Formula                                   #
#                                                 6 = Kerby's
```

Noise Appendix – Field Data Sheets

Hunter Subdivision | Location LT1 | 24-Hour Noise Levels
CNEL Calculation

Leq	Time	Adjustment					
36.3	Midnight	10	46.3	46.3			
37	1	10	47	47			
38.8	2	10	48.8	48.8			
36.4	3	10	46.4	46.4			
38.7	4	10	48.7	48.7			
42.8	5	10	52.8	52.8			
43.5	6	10	53.5	53.5			
45.6	7am		45.6	45.6			
45	8		45	45			
42.4	9		42.4	42.4			
40.7	10		40.7	40.7			
42.4	11		42.4	42.4			
51.7	noon		51.7	51.7			
41.5	1		41.5	41.5			
43.1	2		43.1	43.1			
40.9	3		40.9	40.9			
42.6	4		42.6	42.6			
40.3	5		40.3	40.3			
45.9	6		45.9	45.9			
39.3	7	5	44.3	39.3			
39.5	8	5	44.5	39.5			
38.7	9	5	43.7	38.7			
43	10	10	53	53			
36.6	11	10	46.6	46.6			
			47.7	47.5			
			CNEL	LDN			

Hunter Subdivision | Location LT2 | 24-Hour Noise Levels
CNEL Calculation

Leq	Time	Adjustment					
39	Midnight	10	49	49			
39.4	1	10	49.4	49.4			
39.9	2	10	49.9	49.9			
40	3	10	50	50			
43.7	4	10	53.7	53.7			
46.1	5	10	56.1	56.1			
46.9	6	10	56.9	56.9			
47.2	7am		47.2	47.2			
43.3	8		43.3	43.3			
41.7	9		41.7	41.7			
41.7	10		41.7	41.7			
42.7	11		42.7	42.7			
40.7	noon		40.7	40.7			
41.8	1		41.8	41.8			
40.1	2		40.1	40.1			
40.2	3		40.2	40.2			
40.5	4		40.5	40.5			
39.9	5		39.9	39.9			
42.7	6		42.7	42.7			
41.8	7	5	46.8	41.8			
42.5	8	5	47.5	42.5			
47.4	9	5	52.4	47.4			
41	10	10	51	51			
39.4	11	10	49.4	49.4			
			49.6	49.2			
			CNEL	LDN			

Hunter Subdivision | Location LT3 | 24-Hour Noise Levels
CNEL Calculation

Leq	Time	Adjustment					
38.9	Midnight	10	48.9	48.9			
40.3	1	10	50.3	50.3			
39.9	2	10	49.9	49.9			
39.6	3	10	49.6	49.6			
41.2	4	10	51.2	51.2			
42.8	5	10	52.8	52.8			
45.6	6	10	55.6	55.6			
45.9	7am		45.9	45.9			
43.6	8		43.6	43.6			
42.6	9		42.6	42.6			
40.3	10		40.3	40.3			
43.1	11		43.1	43.1			
60.9	noon		60.9	60.9			
46.5	1		46.5	46.5			
44.1	2		44.1	44.1			
46	3		46	46			
46.7	4		46.7	46.7			
48.2	5		48.2	48.2			
46.6	6		46.6	46.6			
51.2	7	5	56.2	51.2			
51.3	8	5	56.3	51.3			
46.2	9	5	51.2	46.2			
43.7	10	10	53.7	53.7			
40.2	11	10	50.2	50.2			
			52.2	51.4			
			CNEL	LDN			

Hunter Subdivision | Location LT1 | 24-Hour Measurement with Hourly Statistics

Rec 1 to 24	Slow Response	
Date hh:mm:ss	LeqPeriod	Leq
10/16/2018 11:58	1.0 hour	51.7
10/16/2018 12:58	1.0 hour	41.5
10/16/2018 13:58	1.0 hour	43.1
10/16/2018 14:58	1.0 hour	40.9
10/16/2018 15:58	1.0 hour	42.6
10/16/2018 16:58	1.0 hour	40.3
10/16/2018 17:58	1.0 hour	45.9
10/16/2018 18:58	1.0 hour	39.3
10/16/2018 19:58	1.0 hour	39.5
10/16/2018 20:58	1.0 hour	38.7
10/16/2018 21:58	1.0 hour	43
10/16/2018 22:58	1.0 hour	36.6
10/16/2018 23:58	1.0 hour	36.3
10/17/2018 0:58	1.0 hour	37
10/17/2018 1:58	1.0 hour	38.8
10/17/2018 2:58	1.0 hour	36.4
10/17/2018 3:58	1.0 hour	38.7
10/17/2018 4:58	1.0 hour	42.8
10/17/2018 5:58	1.0 hour	43.5
10/17/2018 6:58	1.0 hour	45.6
10/17/2018 7:58	1.0 hour	45
10/17/2018 8:58	1.0 hour	42.4
10/17/2018 9:58	1.0 hour	40.7
10/17/2018 10:58	1.0 hour	42.4

Hunter Subdivision | Location LT2 | 24-Hour Measurement with Hourly Statistics

Rec 1 to 24	Slow Response	dBA weighting
Date hh:mm:ss	LeqPeriod	Leq
10/16/2018 11:26	1.0 hour	42.7
10/16/2018 12:26	1.0 hour	40.7
10/16/2018 13:26	1.0 hour	41.8
10/16/2018 14:26	1.0 hour	40.1
10/16/2018 15:26	1.0 hour	40.2
10/16/2018 16:26	1.0 hour	40.5
10/16/2018 17:26	1.0 hour	39.9
10/16/2018 18:26	1.0 hour	42.7
10/16/2018 19:26	1.0 hour	41.8
10/16/2018 20:26	1.0 hour	42.5
10/16/2018 21:26	1.0 hour	47.4
10/16/2018 22:26	1.0 hour	41
10/16/2018 23:26	1.0 hour	39.4
10/17/2018 0:26	1.0 hour	39
10/17/2018 1:26	1.0 hour	39.4
10/17/2018 2:26	1.0 hour	39.9
10/17/2018 3:26	1.0 hour	40
10/17/2018 4:26	1.0 hour	43.7
10/17/2018 5:26	1.0 hour	46.1
10/17/2018 6:26	1.0 hour	46.9
10/17/2018 7:26	1.0 hour	47.2
10/17/2018 8:26	1.0 hour	43.3
10/17/2018 9:26	1.0 hour	41.7
10/17/2018 10:26	1.0 hour	41.7

Hunter Subdivision | Location LT3 | 24-Hour Measurement with Hourly Statistics

Rec 1 to 24	Slow Response	dBA weighting
Date hh:mm:ss	LeqPeriod	Leq
10/16/2018 11:44	1.0 hour	60.9
10/16/2018 12:44	1.0 hour	46.5
10/16/2018 13:44	1.0 hour	44.1
10/16/2018 14:44	1.0 hour	46
10/16/2018 15:44	1.0 hour	46.7
10/16/2018 16:44	1.0 hour	48.2
10/16/2018 17:44	1.0 hour	46.6
10/16/2018 18:44	1.0 hour	51.2
10/16/2018 19:44	1.0 hour	51.3
10/16/2018 20:44	1.0 hour	46.2
10/16/2018 21:44	1.0 hour	43.7
10/16/2018 22:44	1.0 hour	40.2
10/16/2018 23:44	1.0 hour	38.9
10/17/2018 0:44	1.0 hour	40.3
10/17/2018 1:44	1.0 hour	39.9
10/17/2018 2:44	1.0 hour	39.6
10/17/2018 3:44	1.0 hour	41.2
10/17/2018 4:44	1.0 hour	42.8
10/17/2018 5:44	1.0 hour	45.6
10/17/2018 6:44	1.0 hour	45.9
10/17/2018 7:44	1.0 hour	43.6
10/17/2018 8:44	1.0 hour	42.6
10/17/2018 9:44	1.0 hour	40.3
10/17/2018 10:44	1.0 hour	43.1

Hunter Subdivision | Location LT1 | 24-Hour Noise Data

Rec 1 to 28	Slow Response		dBA weighting	0.5 dB resolution stats						
Date hh:mm:ss	LeqPeriod	Leq	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%	
10/16/2018 11:58	1.0 hour	51.7	81.9	36.5	55	46	42	38	36.5	
10/16/2018 12:58	1.0 hour	41.5	61	35.5	50.5	45	43	38.5	36.5	
10/16/2018 13:58	1.0 hour	43.1	65.2	36.7	53	47.5	44	38.5	36.5	
10/16/2018 14:58	1.0 hour	40.9	66.3	36.7	50	44	41.5	38.5	36.5	
10/16/2018 15:58	1.0 hour	42.6	57.6	36.7	51	46.5	44.5	39.5	36.5	
10/16/2018 16:58	1.0 hour	40.3	54.7	36.7	48	43.5	42	38.5	36.5	
10/16/2018 17:58	1.0 hour	45.9	65.2	36.7	58.5	52	45.5	39.5	38.5	
10/16/2018 18:58	1.0 hour	39.3	53	35.3	47.5	42.5	40.5	38.5	36.5	
10/16/2018 19:58	1.0 hour	39.5	53.9	33.8	46	42.5	41	38.5	36.5	
10/16/2018 20:58	1.0 hour	38.7	56.1	33.8	45.5	41.5	40	36.5	36.5	
10/16/2018 21:58	1.0 hour	43	65.9	33.8	51.5	44	41	36.5	35	
10/16/2018 22:58	1.0 hour	36.6	45.5	33.8	42	39	38	36.5	35	
10/16/2018 23:58	1.0 hour	36.3	46.1	33.8	42	38.5	37.5	36	35	
10/17/2018 0:58	1.0 hour	37	52.7	33.8	41.5	39.5	38.5	36.5	35	
10/17/2018 1:58	1.0 hour	38.8	54.3	33.8	48	44	40.5	36.5	35	
10/17/2018 2:58	1.0 hour	36.4	46.8	33.8	43	38.5	36.5	36	35	
10/17/2018 3:58	1.0 hour	38.7	47.8	33.8	43.5	41.5	40.5	38	35	
10/17/2018 4:58	1.0 hour	42.8	57.4	36.7	48	45	44	42.5	38.5	
10/17/2018 5:58	1.0 hour	43.5	53.4	38.5	47.5	45.5	45	43	41	
10/17/2018 6:58	1.0 hour	45.6	67.3	40.6	50.5	47	46	44	42	
10/17/2018 7:58	1.0 hour	45	63.2	39.7	52.5	47.5	46.5	43.5	41	
10/17/2018 8:58	1.0 hour	42.4	50.2	38.9	46	44	43.5	42	40.5	
10/17/2018 9:58	1.0 hour	40.7	54.2	36.7	48.5	43	42	39.5	37	
10/17/2018 10:58	1.0 hour	42.4	59.4	36.7	52	47	45	39	38	
10/17/2018 11:58	1.0 hour	42	64.4	36.7	54	45.5	42.5	38.5	36.5	
10/17/2018 12:58	1.0 hour	43.6	65.2	36.3	55	48.5	45.5	38.5	36.5	
10/17/2018 13:58	1.0 hour	41	60.6	36.2	50	45.5	43	38	36.5	
10/17/2018 14:58	25.1 min	49	76.9	36.7	50.5	45.5	42.5	38.5	36.5	

Hunter Subdivision | Location LT2 | 24-Hour Data

Rec 1 to 29	Slow Response		dBA weighting		0.5 dB resolution stats				
Date hh:mm:ss	LeqPeriod	Leq	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%
10/16/2018 11:26	1.0 hour	42.7	69.7	37.3	50	42	40	39	39
10/16/2018 12:26	1.0 hour	40.7	54.3	37.3	47.5	43	42	40	39
10/16/2018 13:26	1.0 hour	41.8	56.2	37.3	49.5	45	43.5	40	39
10/16/2018 14:26	1.0 hour	40.1	53.7	37.2	46	42	41	39	38.5
10/16/2018 15:26	1.0 hour	40.2	50.7	37.3	45	42.5	42	39	37.5
10/16/2018 16:26	1.0 hour	40.5	62.6	37.3	49.5	42.5	40.5	39	37
10/16/2018 17:26	1.0 hour	39.9	64.5	37.2	45.5	41.5	40	38.5	37
10/16/2018 18:26	1.0 hour	42.7	53	37.3	47.5	45	44.5	42	40
10/16/2018 19:26	1.0 hour	41.8	51.3	37.2	47.5	45	44	41	38.5
10/16/2018 20:26	1.0 hour	42.5	54.8	37.3	48	45.5	44.5	41.5	39
10/16/2018 21:26	1.0 hour	47.4	72	37.3	50	45.5	44.5	41	39
10/16/2018 22:26	1.0 hour	41	52.8	37	47.5	44.5	43	39.5	37
10/16/2018 23:26	1.0 hour	39.4	50.8	34.3	45	42.5	41.5	38.5	37
10/17/2018 0:26	1.0 hour	39	47.1	34.3	43.5	42	41	38	35.5
10/17/2018 1:26	1.0 hour	39.4	48.4	34.3	45	42.5	41.5	38.5	37
10/17/2018 2:26	1.0 hour	39.9	49.4	34.3	46.5	44	42.5	38.5	37
10/17/2018 3:26	1.0 hour	40	55.6	37.1	46	43	42	39	37
10/17/2018 4:26	1.0 hour	43.7	56.7	37.3	51	47	46	42	40
10/17/2018 5:26	1.0 hour	46.1	52.8	40.2	50	49	48	45.5	42.5
10/17/2018 6:26	1.0 hour	46.9	55.6	42.5	50	48.5	48	46.5	45
10/17/2018 7:26	1.0 hour	47.2	60.9	44.3	51.5	49	48	46.5	45
10/17/2018 8:26	1.0 hour	43.3	58.9	40.3	49	45.5	44.5	42	41
10/17/2018 9:26	1.0 hour	41.7	58.8	39.1	49	43.5	42	40	40
10/17/2018 10:26	1.0 hour	41.7	59.8	39	49	44.5	42	40	39
10/17/2018 11:26	1.0 hour	40.8	51.2	38.8	47	43.5	42	40	39
10/17/2018 12:26	1.0 hour	43.9	60.6	38.6	54	47	44.5	41	39.5
10/17/2018 13:26	1.0 hour	41.6	58	37.3	49	44.5	42.5	40	39
10/17/2018 14:26	1.0 hour	41.2	51.2	37.3	46.5	43.5	42.5	40.5	39
10/17/2018 15:26	5.6 min	45.1	62.1	38.8	58.5	45.8	42.7	41	40

Hunter Subdivision | Location LT3 | 24-Hour Noise Data

Rec 1 to 24	Slow Response		dBA weighting		0.5 dB resolution stats				
Date hh:mm:ss	LeqPeriod	Leq	Lmax	Lmin	L1%	L5%	L10%	L50%	L90%
10/16/2018 11:44	1.0 hour	60.9	91.9	35.7	59	51.5	49.5	42.5	38.5
10/16/2018 12:44	1.0 hour	46.5	64.4	38.3	57.5	50	47.5	43	40.5
10/16/2018 13:44	1.0 hour	44.1	64.8	38.5	51	47	45.5	42.5	40
10/16/2018 14:44	1.0 hour	46	61.6	38.6	53.5	49.5	48	44.5	42.5
10/16/2018 15:44	1.0 hour	46.7	63.6	38.6	57	51	48	44	41.5
10/16/2018 16:44	1.0 hour	48.2	69.5	38.5	60	54.5	48	42.5	40.5
10/16/2018 17:44	1.0 hour	46.6	63.7	38.4	57.5	50	48	43.5	40.5
10/16/2018 18:44	1.0 hour	51.2	72.5	39.8	59.5	55	54.5	47.5	42.5
10/16/2018 19:44	1.0 hour	51.3	56.1	38.6	55	54	53	50.5	50
10/16/2018 20:44	1.0 hour	46.2	60.6	35.7	52.5	51	50.5	42.5	39
10/16/2018 21:44	1.0 hour	43.7	64	35.7	52	45	44	40.5	38.5
10/16/2018 22:44	1.0 hour	40.2	50.8	35.7	47	44	42.5	38.5	35.5
10/16/2018 23:44	1.0 hour	38.9	49.1	35.7	44	42	41	38.5	35.5
10/17/2018 0:44	1.0 hour	40.3	58	35.7	47	43	42	38.5	35.5
10/17/2018 1:44	1.0 hour	39.9	51.1	35.7	46.5	43.5	42	38.5	35.5
10/17/2018 2:44	1.0 hour	39.6	55.8	35.7	46.5	43	41	38.5	36
10/17/2018 3:44	1.0 hour	41.2	59	35.7	48.5	44.5	43.5	39.5	38.5
10/17/2018 4:44	1.0 hour	42.8	51.7	38.3	48	46	45	41.5	38.5
10/17/2018 5:44	1.0 hour	45.6	50.6	40.3	48.5	47.5	47	45	43
10/17/2018 6:44	1.0 hour	45.9	65.2	36.7	58.5	52	45.5	39.5	38.5
10/17/2018 7:44	1.0 hour	43.6	65.2	36.3	55	48.5	45.5	38.5	36.5
10/17/2018 8:44	1.0 hour	42.6	57.6	36.7	51	46.5	44.5	39.5	36.5
10/17/2018 9:44	1.0 hour	40.3	54.7	36.7	48	43.5	42	38.5	36.5
10/17/2018 10:44	1.0 hour	43.1	65.2	36.7	53	47.5	44	38.5	36.5

Noise Appendix – RCNM Inputs/Outputs

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/30/2019
Case Description: Hunter Sub. - Site Preparation

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Adjacent Resid.	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	20	0
Dozer	No	40		81.7	20	0
Dozer	No	40		81.7	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0

		Results Calculated (dBA)	
Equipment		*Lmax	Leq
Dozer		89.6	85.6
Dozer		89.6	85.6
Dozer		89.6	85.6
Backhoe		85.5	81.5
Backhoe		85.5	81.5
Backhoe		85.5	81.5
Backhoe		85.5	81.5
	Total	89.6	92.2

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Adjacent MHP	Residential	55	50	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	65	0
Dozer	No	40		81.7	65	0
Dozer	No	40		81.7	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		79.4	75.4
Dozer		79.4	75.4
Dozer		79.4	75.4
Backhoe		75.3	71.3
Backhoe		75.3	71.3
Backhoe		75.3	71.3
Backhoe		75.3	71.3
	Total	79.4	82

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Acoustic Center	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	97	0
Dozer	No	40		81.7	97	0
Dozer	No	40		81.7	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0

Results

Equipment		Calculated (dBA) *Lmax	Leq
Dozer		75.9	71.9
Dozer		75.9	71.9
Dozer		75.9	71.9
Backhoe		71.8	67.8
Backhoe		71.8	67.8
Backhoe		71.8	67.8
Backhoe		71.8	67.8
	Total	75.9	78.5

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/30/2019
Case Description: Hunter Sub. - Grading

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Adjacent Resid.	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	20	0
Excavator	No	40		80.7	20	0
Excavator	No	40		80.7	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Grader	No	40	85		20	0
Scraper	No	40		83.6	20	0
Scraper	No	40		83.6	20	0

		Results Calculated (dBA)	
Equipment		*Lmax	Leq
Dozer		89.6	85.6
Excavator		88.7	84.7
Excavator		88.7	84.7
Backhoe		85.5	81.5
Backhoe		85.5	81.5
Grader		93	89
Scraper		91.5	87.6
Scraper		91.5	87.6
	Total	93	95

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Adjacent MHP	Residential	55	50	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	65	0
Excavator	No	40		80.7	65	0
Excavator	No	40		80.7	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Grader	No	40	85		65	0
Scraper	No	40		83.6	65	0
Scraper	No	40		83.6	65	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Dozer		79.4	75.4
Excavator		78.4	74.5
Excavator		78.4	74.5
Backhoe		75.3	71.3
Backhoe		75.3	71.3
Grader		82.7	78.7
Scraper		81.3	77.3
Scraper		81.3	77.3
	Total	82.7	84.8

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Acoustic Center	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	97	0
Excavator	No	40		80.7	97	0
Excavator	No	40		80.7	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0
Grader	No	40	85		97	0
Scraper	No	40		83.6	97	0
Scraper	No	40		83.6	97	0

Results

	Calculated (dBA)	
Equipment	*Lmax	Leq
Dozer	75.9	71.9
Excavator	75	71
Excavator	75	71
Backhoe	71.8	67.8
Backhoe	71.8	67.8
Grader	79.2	75.3
Scraper	77.8	73.8
Scraper	77.8	73.8
Total	79.2	81.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/30/2019
Case Description: Hunter Sub. - Grading

		Baselines (dBA)		---- Receptor #1 ----
Description	Land Use	Daytime	Evening	Night
Adjacent Resid.	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	20	0
Welder / Torch	No	40		74	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Gradall	No	40		83.4	20	0
Gradall	No	40		83.4	20	0
Gradall	No	40		83.4	20	0
Generator	No	50		80.6	20	0

Results

		Calculated (dBA)	
Equipment		*Lmax	Leq
Crane		88.5	80.6
Welder / Torch		82	78
Backhoe		85.5	81.5
Backhoe		85.5	81.5
Backhoe		85.5	81.5
Gradall		91.4	87.4
Gradall		91.4	87.4
Gradall		91.4	87.4
Generator		88.6	85.6
	Total	91.4	94.2

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Adjacent MHP	Residential	55	50	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	65	0
Welder / Torch	No	40		74	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Backhoe	No	40		77.6	65	0
Gradall	No	40		83.4	65	0
Gradall	No	40		83.4	65	0
Gradall	No	40		83.4	65	0
Generator	No	50		80.6	65	0

Results

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	78.3	70.3
Welder / Torch	71.7	67.7
Backhoe	75.3	71.3
Backhoe	75.3	71.3
Backhoe	75.3	71.3
Gradall	81.1	77.1
Gradall	81.1	77.1
Gradall	81.1	77.1
Generator	78.4	75.3
Total	81.1	83.9

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustic Center	Residential	55	50	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	97	0
Welder / Torch	No	40		74	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0
Backhoe	No	40		77.6	97	0
Gradall	No	40		83.4	97	0
Gradall	No	40		83.4	97	0
Gradall	No	40		83.4	97	0
Generator	No	50		80.6	97	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Crane		74.8	66.8
Welder / Torch		68.2	64.3
Backhoe		71.8	67.8
Backhoe		71.8	67.8
Backhoe		71.8	67.8
Gradall		77.6	73.7
Gradall		77.6	73.7
Gradall		77.6	73.7
Generator		74.9	71.9
	Total	77.6	80.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/30/2019
Case Description: Hunter Sub. - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Adjacent Resid.	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	20	0
Paver	No	50		77.2	20	0
Dump Truck	No	40		76.5	20	0
Dump Truck	No	40		76.5	20	0
Roller	No	20		80	20	0
Roller	No	20		80	20	0

Results

Equipment	Calculated (dBA) *Lmax	Leq
Paver	85.2	82.2
Paver	85.2	82.2
Dump Truck	84.4	80.4
Dump Truck	84.4	80.4
Roller	88	81
Roller	88	81
Total	88	89

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Adjacent MHP	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	65	0
Paver	No	50		77.2	65	0
Dump Truck	No	40		76.5	65	0
Dump Truck	No	40		76.5	65	0

Roller		No	20	80	65	0
Roller		No	20	80	65	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Paver		74.9	71.9
Paver		74.9	71.9
Dump Truck		74.2	70.2
Dump Truck		74.2	70.2
Roller		77.7	70.7
Roller		77.7	70.7
	Total	77.7	78.8

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustic Center	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	97	0
Paver	No	50		77.2	97	0
Dump Truck	No	40		76.5	97	0
Dump Truck	No	40		76.5	97	0
Roller	No	20		80	97	0
Roller	No	20		80	97	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Paver		71.5	68.5
Paver		71.5	68.5
Dump Truck		70.7	66.7
Dump Truck		70.7	66.7
Roller		74.2	67.3
Roller		74.2	67.3
	Total	74.2	75.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 3/30/2019
Case Description: Hunter Sub. - Architectural Coatings

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Adjacent Resid.	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	20	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		85.6	81.6
	Total	85.6	81.6

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Adjacent MHP	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	65	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		75.4	71.4
	Total	75.4	71.4

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Acoustic Center	Residential	55	50	45

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	97	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		71.9	67.9
	Total	71.9	67.9

*Calculated Lmax is the Loudest value.

Noise Appendix – Traffic Noise Worksheets

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street North/West of Adams			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	7,360			PK HR VOL	736
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.6	60.7	58.9	52.9	62.1
MEDIUM TRUCKS	54.3	52.9	46.5	43.5	53.0
HEAVY TRUCKS	63.1	61.8	52.8	52.6	61.8
VEHICULAR NOISE	**66.2**	64.6	60.0	56.0	65.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street North/West of Adams			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	7,500			PK HR VOL	750
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.7	60.8	59.0	53.0	62.2
MEDIUM TRUCKS	54.3	53.0	46.6	43.6	53.1
HEAVY TRUCKS	63.2	61.9	52.9	52.7	61.9
VEHICULAR NOISE	**66.2**	64.7	60.1	56.1	65.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street North/West of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Proejct**			BY:	J. Leech
ADT	7,960			PK HR VOL	796
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.0	61.0	59.2	53.2	62.4
MEDIUM TRUCKS	54.6	53.2	46.9	43.8	53.3
HEAVY TRUCKS	63.4	62.1	53.2	52.9	62.1
VEHICULAR NOISE	**66.5**	64.9	60.4	56.4	65.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street North/West of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Proejct**			BY:	J. Leech
ADT	8,100			PK HR VOL	810
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.0	61.1	59.3	53.3	62.5
MEDIUM TRUCKS	54.7	53.3	46.9	43.9	53.4
HEAVY TRUCKS	63.5	62.2	53.3	53.0	62.2
VEHICULAR NOISE	**66.6**	65.0	60.5	56.4	65.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street South/East of Adams			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	6,960			PK HR VOL	696
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.4	60.5	58.6	52.7	61.9
MEDIUM TRUCKS	54.0	52.6	46.3	43.2	52.7
HEAVY TRUCKS	62.8	61.5	52.6	52.4	61.6
VEHICULAR NOISE	**65.9**	64.3	59.8	55.8	65.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street South/East of Adams			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	7,210			PK HR VOL	721
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	62.5	60.6	58.8	52.8	62.0
MEDIUM TRUCKS	54.2	52.8	46.4	43.4	52.9
HEAVY TRUCKS	63.0	61.7	52.7	52.5	61.7
VEHICULAR NOISE	**66.1**	64.5	60.0	55.9	65.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street South/East of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Proejct**			BY:	J. Leech
ADT	8,200			PK HR VOL	820
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.1	61.2	59.4	53.4	62.6
MEDIUM TRUCKS	54.7	53.3	47.0	43.9	53.4
HEAVY TRUCKS	63.5	62.3	53.3	53.1	62.3
VEHICULAR NOISE	**66.6**	65.1	60.5	56.5	65.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Main Street South/East of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Proejct**			BY:	J. Leech
ADT	8,450			PK HR VOL	845
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	45.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	63.2	61.3	59.5	53.5	62.7
MEDIUM TRUCKS	54.9	53.5	47.1	44.1	53.6
HEAVY TRUCKS	63.7	62.4	53.4	53.2	62.4
VEHICULAR NOISE	**66.8**	65.2	60.6	56.6	65.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Adams North of Railroad			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	7,340			PK HR VOL	734
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.7	58.8	57.0	51.0	60.2
MEDIUM TRUCKS	52.6	51.3	44.9	41.9	51.4
HEAVY TRUCKS	62.1	60.8	51.8	51.6	60.8
VEHICULAR NOISE	**64.7**	63.2	58.4	54.6	63.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Adams North of Railroad			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	7,440			PK HR VOL	744
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.8	58.9	57.1	51.1	60.3
MEDIUM TRUCKS	52.7	51.3	45.0	41.9	51.4
HEAVY TRUCKS	62.1	60.9	51.9	51.7	60.9
VEHICULAR NOISE	**64.8**	63.3	58.4	54.6	63.8

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Adams North of Railroad			DATE:	4/5/2019
Scenario:	**Year 2040**			BY:	J. Leech
ADT	7,810			PK HR VOL	781
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.0	59.1	57.3	51.3	60.5
MEDIUM TRUCKS	52.9	51.5	45.2	42.1	51.6
HEAVY TRUCKS	62.4	61.1	52.1	51.9	61.1
VEHICULAR NOISE	**65.0**	63.5	58.6	54.8	64.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Adams North of Railroad			DATE:	4/5/2019
Scenario:	**Year 2040 + Project**			BY:	J. Leech
ADT	7,910			PK HR VOL	791
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				

SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.1	59.1	57.3	51.3	60.5
MEDIUM TRUCKS	53.0	51.6	45.2	42.2	51.7
HEAVY TRUCKS	62.4	61.1	52.2	51.9	61.1
VEHICULAR NOISE	**65.1**	63.5	58.7	54.9	64.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Railroad (Adams to Hunt)			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	9,360			PK HR VOL	936
SPEED	28				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.9	59.0	57.2	51.2	60.4
MEDIUM TRUCKS	53.0	51.6	45.2	42.2	51.7
HEAVY TRUCKS	62.7	61.4	52.5	52.2	61.4
VEHICULAR NOISE	**65.2**	63.7	58.7	55.0	64.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Railroad (Adams to Hunt)			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	9,720			PK HR VOL	972
SPEED	28				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.1	59.2	57.4	51.4	60.6
MEDIUM TRUCKS	53.1	51.8	45.4	42.4	51.9
HEAVY TRUCKS	62.9	61.6	52.6	52.4	61.6
VEHICULAR NOISE	**65.4**	63.8	58.8	55.2	64.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Railroad (Adams to Hunt)			DATE:	4/5/2019
Scenario:	**Year 2040**			BY:	J. Leech
ADT	9,790			PK HR VOL	979
SPEED	28				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.1	59.2	57.4	51.4	60.6
MEDIUM TRUCKS	53.2	51.8	45.4	42.4	51.9
HEAVY TRUCKS	62.9	61.6	52.7	52.4	61.6
VEHICULAR NOISE	**65.4**	63.9	58.9	55.2	64.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Railroad (Adams to Hunt)			DATE:	4/5/2019
Scenario:	**Year 2040 + Project**			BY:	J. Leech
ADT	10,150			PK HR VOL	1,015
SPEED	28				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	61.3	59.4	57.6	51.6	60.8
MEDIUM TRUCKS	53.3	52.0	45.6	42.6	52.0
HEAVY TRUCKS	63.1	61.8	52.8	52.6	61.8
VEHICULAR NOISE	**65.5**	64.0	59.0	55.3	64.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Library East of Adams			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	1,350			PK HR VOL	135
SPEED	25				
PK HR %	10				
DIST CTL	50				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		49.9
DIST WALL	0		MED TRUCK SLE DIST		49.7
DIST W/OB	50		HVY TRUCK SLE DIST		49.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-10				
RT ANGLE	10				
DF ANGLE	20				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	46.9	44.9	43.1	37.2	46.4
MEDIUM TRUCKS	39.0	37.7	31.3	28.3	37.8
HEAVY TRUCKS	46.2	44.9	36.0	35.7	44.9
VEHICULAR NOISE	**49.9**	48.3	44.1	39.8	49.1

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Library East of Adams			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	1,570			PK HR VOL	157
SPEED	25				
PK HR %	10				
DIST CTL	50				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		49.9
DIST WALL	0		MED TRUCK SLE DIST		49.7
DIST W/OB	50		HVY TRUCK SLE DIST		49.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-10				
RT ANGLE	10				
DF ANGLE	20				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.5	45.6	43.8	37.8	47.0
MEDIUM TRUCKS	39.7	38.3	32.0	28.9	38.4
HEAVY TRUCKS	46.9	45.6	36.6	36.4	45.6
VEHICULAR NOISE	**50.6**	49.0	44.8	40.5	49.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Library East of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Project**			BY:	J. Leech
ADT	1,410			PK HR VOL	141
SPEED	25				
PK HR %	10				
DIST CTL	50				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		49.9
DIST WALL	0		MED TRUCK SLE DIST		49.7
DIST W/OB	50		HVY TRUCK SLE DIST		49.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-10				
RT ANGLE	10				
DF ANGLE	20				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.1	45.1	43.3	37.3	46.5
MEDIUM TRUCKS	39.2	37.9	31.5	28.5	38.0
HEAVY TRUCKS	46.4	45.1	36.2	35.9	45.1
VEHICULAR NOISE	**50.1**	48.5	44.3	40.0	49.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Library East of Adams			DATE:	4/5/2019
Scenario:	**Year 2040 No Project**			BY:	J. Leech
ADT	1,630			PK HR VOL	163
SPEED	25				
PK HR %	10				
DIST CTL	50				
DIST N/F	12	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		49.9
DIST WALL	0		MED TRUCK SLE DIST		49.7
DIST W/OB	50		HVY TRUCK SLE DIST		49.7
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-10				
RT ANGLE	10				
DF ANGLE	20				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9800
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0100

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	47.7	45.8	44.0	38.0	47.2
MEDIUM TRUCKS	39.9	38.5	32.1	29.1	38.6
HEAVY TRUCKS	47.0	45.7	36.8	36.6	45.8
VEHICULAR NOISE	**50.8**	49.2	45.0	40.7	49.9

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Starr (Hunt to Pope)			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	2,050			PK HR VOL	205
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.1	55.1	53.3	47.3	56.6
MEDIUM TRUCKS	48.7	47.3	41.0	37.9	47.4
HEAVY TRUCKS	57.5	56.2	47.3	47.0	56.2
VEHICULAR NOISE	**60.6**	59.0	54.5	50.5	59.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Starr (Hunt to Pope)			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	2,300			PK HR VOL	230
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0	AUTOMOBILES =	0.00		
ROAD	0.0	MEDIUM TRUCKS=	2.30		
		HEAVY TRUCKS =	8.01		
GRADE:	0.0 %	GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)	

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.6	55.6	53.8	47.8	57.1
MEDIUM TRUCKS	49.2	47.8	41.5	38.4	47.9
HEAVY TRUCKS	58.0	56.7	47.8	47.5	56.7
VEHICULAR NOISE	**61.1**	59.5	55.0	51.0	60.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Starr (Hunt to Pope)			DATE:	4/5/2019
Scenario:	**Year 2040**			BY:	J. Leech
ADT	2,950			PK HR VOL	295
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.6	56.7	54.9	48.9	58.1
MEDIUM TRUCKS	50.3	48.9	42.5	39.5	49.0
HEAVY TRUCKS	59.1	57.8	48.9	48.6	57.8
VEHICULAR NOISE	**62.2**	60.6	56.1	52.0	61.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Starr (Hunt to Pope)			DATE:	4/5/2019
Scenario:	**Year 2040 + Project**			BY:	J. Leech
ADT	3,200			PK HR VOL	320
SPEED	35				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	59.0	57.1	55.3	49.3	58.5
MEDIUM TRUCKS	50.6	49.3	42.9	39.9	49.4
HEAVY TRUCKS	59.5	58.2	49.2	49.0	58.2
VEHICULAR NOISE	**62.5**	61.0	56.4	52.4	61.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Hunt (North of Railroad)			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	2,450			PK HR VOL	245
SPEED	32				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	56.7	54.8	53.0	47.0	56.2
MEDIUM TRUCKS	48.5	47.2	40.8	37.8	47.3
HEAVY TRUCKS	57.7	56.4	47.5	47.3	56.4
VEHICULAR NOISE	**60.6**	59.0	54.3	50.4	59.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL
(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Hunt (North of Railroad)			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	2,700			PK HR VOL	270
SPEED	32				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	57.2	55.2	53.4	47.5	56.7
MEDIUM TRUCKS	49.0	47.6	41.2	38.2	47.7
HEAVY TRUCKS	58.2	56.9	47.9	47.7	56.9
VEHICULAR NOISE	**61.0**	59.4	54.7	50.8	60.0

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Hunt (North of Railroad)			DATE:	4/5/2019
Scenario:	**Year 2040**			BY:	J. Leech
ADT	3,550			PK HR VOL	355
SPEED	32				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.4	56.4	54.6	48.6	57.8
MEDIUM TRUCKS	50.2	48.8	42.4	39.4	48.9
HEAVY TRUCKS	59.3	58.0	49.1	48.9	58.1
VEHICULAR NOISE	**62.2**	60.6	55.9	52.0	61.2

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Hunt (North of Railroad)			DATE:	4/5/2019
Scenario:	**Year 2040 + Project**			BY:	J. Leech
ADT	3,800			PK HR VOL	380
SPEED	32				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	58.7	56.7	54.9	48.9	58.1
MEDIUM TRUCKS	50.5	49.1	42.7	39.7	49.2
HEAVY TRUCKS	59.6	58.3	49.4	49.2	58.4
VEHICULAR NOISE	**62.5**	60.9	56.2	52.3	61.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Paseo Grande East of Hunt			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	5,210			PK HR VOL	521
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	59.2	57.3	55.5	49.5	58.7
MEDIUM TRUCKS	51.2	49.8	43.4	40.4	49.9
HEAVY TRUCKS	60.6	59.3	50.4	50.1	59.3
VEHICULAR NOISE	**63.3**	61.7	56.9	53.1	62.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Paseo Grande East of Hunt			DATE:	4/5/2019
Scenario:	**Existing + Project**			BY:	J. Leech
ADT	5,420			PK HR VOL	542
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	59.4	57.5	55.7	49.7	58.9
MEDIUM TRUCKS	51.3	49.9	43.6	40.5	50.0
HEAVY TRUCKS	60.8	59.5	50.5	50.3	59.5
VEHICULAR NOISE	**63.4**	61.9	57.0	53.3	62.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Paseo Grande East of Hunt			DATE:	4/5/2019
Scenario:	**Year 2040**			BY:	J. Leech
ADT	6,520			PK HR VOL	652
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.2	58.3	56.5	50.5	59.7
MEDIUM TRUCKS	52.1	50.8	44.4	41.3	50.8
HEAVY TRUCKS	61.6	60.3	51.3	51.1	60.3
VEHICULAR NOISE	**64.2**	62.7	57.8	54.1	63.3

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Paseo Grande East of Hunt			DATE:	4/5/2019
Scenario:	**Year 2040 + Project**			BY:	J. Leech
ADT	6,730			PK HR VOL	673
SPEED	30				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-45				
RT ANGLE	45				
DF ANGLE	90				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.127	0.096	0.9700
MEDIUM TRUCKS	0.874	0.051	0.075	0.0100
HEAVY TRUCKS	0.891	0.028	0.081	0.0200

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	60.3	58.4	56.6	50.6	59.8
MEDIUM TRUCKS	52.3	50.9	44.5	41.5	51.0
HEAVY TRUCKS	61.7	60.4	51.5	51.2	60.4
VEHICULAR NOISE	**64.4**	62.8	58.0	54.2	63.4

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Silverado South of Mountain			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	11,120			PK HR VOL	1,112
SPEED	42				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-60				
RT ANGLE	60				
DF ANGLE	120				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.134	0.096	0.9400
MEDIUM TRUCKS	0.872	0.053	0.075	0.0250
HEAVY TRUCKS	0.889	0.030	0.081	0.0350

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	66.9	65.0	63.4	57.2	66.4
MEDIUM TRUCKS	62.3	60.9	54.8	51.5	61.0
HEAVY TRUCKS	68.9	67.6	58.9	58.4	67.6
VEHICULAR NOISE	**71.5**	70.0	65.1	61.3	70.6

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Silverado South of Mountain			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	11,560			PK HR VOL	1,156
SPEED	42				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-60				
RT ANGLE	60				
DF ANGLE	120				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.134	0.096	0.9400
MEDIUM TRUCKS	0.872	0.053	0.075	0.0250
HEAVY TRUCKS	0.889	0.030	0.081	0.0350

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	67.1	65.1	63.6	57.3	66.6
MEDIUM TRUCKS	62.5	61.1	55.0	51.7	61.2
HEAVY TRUCKS	69.0	67.7	59.0	58.5	67.7
VEHICULAR NOISE	**71.7**	70.2	65.3	61.5	70.7

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Silverado South of Mountain			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	13,720			PK HR VOL	1,372
SPEED	42				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-60				
RT ANGLE	60				
DF ANGLE	120				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.134	0.096	0.9400
MEDIUM TRUCKS	0.872	0.053	0.075	0.0250
HEAVY TRUCKS	0.889	0.030	0.081	0.0350

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	67.8	65.9	64.3	58.1	67.3
MEDIUM TRUCKS	63.2	61.8	55.7	52.4	62.0
HEAVY TRUCKS	69.8	68.5	59.8	59.3	68.5
VEHICULAR NOISE	**72.5**	70.9	66.0	62.2	71.5

FHWA - HIGHWAY TRAFFIC NOISE PREDICTION MODEL

(modified for CNEL)

DUDEK

PROJECT:	Hunter Subdivision EIR			JN:	10839
ROADWAY:	Silverado South of Mountain			DATE:	4/5/2019
Scenario:	**Existing**			BY:	J. Leech
ADT	14,160			PK HR VOL	1,416
SPEED	42				
PK HR %	10				
DIST CTL	50				
DIST N/F	76	(M=76,P=52,S=36,C=12)	AUTO SLE DISTANCE		32.9
DIST WALL	0		MED TRUCK SLE DIST		32.6
DIST W/OB	50		HVY TRUCK SLE DIST		32.6
HTH WALL	0.0	********			
HTH OBS	5.0				
AMBIENT	40.0				
ROADWAY VIEW:					
LF ANGLE	-60				
RT ANGLE	60				
DF ANGLE	120				
SITE CONDITIONS:		(15=HARD SITE, 10=SOFT SITE)			
AUTOM	15.0				
MED TR	15.0				
HVY TR	15.0				
BARRIER	0	(0=WALL,1=BERM)			
ELEVATIONS:					
PAD	0.0		AUTOMOBILES =	0.00	
ROAD	0.0		MEDIUM TRUCKS=	2.30	
			HEAVY TRUCKS =	8.01	
GRADE:	0.0 %		GRADE ADJUSTM=	0.0	(TO HEAVY TRUCKS)

VEHICLE DISTRIBUTION:

	DAY	EVE	NIGHT	DAILY
AUTOMOBILES	0.770	0.134	0.096	0.9400
MEDIUM TRUCKS	0.872	0.053	0.075	0.0250
HEAVY TRUCKS	0.889	0.030	0.081	0.0350

NOISE IMPACTS WITHOUT TOPO OR BARRIER SHIELDING:

	LEQ PK HR	LEQ DAY	LEQ EVE	LEQ NIGHT	CNEL
AUTOMOBILES	68.0	66.0	64.4	58.2	67.5
MEDIUM TRUCKS	63.4	62.0	55.8	52.6	62.1
HEAVY TRUCKS	69.9	68.6	59.9	59.4	68.6
VEHICULAR NOISE	**72.6**	71.1	66.2	62.4	71.6

WATER NEUTRAL REPORT

Technical Memorandum
Results of Preliminary Water Calculations

For:

Hunter Subdivision
St. Helena, CA

APN: 009-030-057



Project No. 4110047.0

September 10, 2020

1515 Fourth Street, Napa, CA 94559 www.rsacivil.com (707) 252-3301 v. (707) 252-4966 f.

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I. Background 1
II. Existing Theoretical Domestic Water Demand 1
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IV. Landscape Water Demand 2
V. Proposed Mitigation 2
VI. In-Lieu Retrofit Fees 2
VII. Conclusion 5

ATTACHMENTS

1. Water Neutrality Calculations
2. Conceptual Landscape Water Use Calculations – Spatial Design Group
3. Municipal Water Saving Measures

I. BACKGROUND

In order to comply with the City of St. Helena's Water Neutral Policy, RSA+ is submitting to you this water analysis for the proposed Hunter Subdivision. This analysis documents the theoretical proposed water consumption for the new development and the options for water off-set mitigation.

II. EXISTING THEORETICAL DOMESTIC WATER DEMAND

There is no current connection to the City of St. Helena domestic water system. Therefore, the existing demand is zero gallons per day.

III. PROPOSED THEORETICAL DOMESTIC WATER DEMAND

It is our understanding based on communications with the City of St. Helena that the assumed water demand has been established to its satisfaction. The basis is repeated here for continuity.

The proposed development consists of 51 lots with detached 4-bedroom single-family residences, and an additional 25 two-bedroom multi-family residential units will be included in the development. The proposed water demand is calculated based upon water usage from water fixtures and appliances based on the number of occupants as laid out by The City of St. Helena Water Neutral Policy for Development. A list of the water performance requirements for fixtures and appliances follows.

A.	Showerheads	8 min/shower/day/occupant
B.	Lavatory faucets	0.25 min/3 times/day/occupant
C.	Kitchen faucets	4 min/day/occupant
D.	Toilets	3 flushes/day/occupant
E.	Clothes Washer	0.37 load/day/occupant
F.	Dish Washer	0.1 load/day/occupant

Water usage from water fixtures and appliances that meet the minimum requirements of the 2010 California Green Building Standards Code (Title 24, Part 11) and the City of St. Helena Water Neutral Policy.

A.	Showerheads	2.0 gallons per minute
B.	Lavatory faucets	1.5 gallons per minute
C.	Kitchen faucets	1.8 gallons per minute
D.	Toilets	1.3 gallons per flush
E.	Clothes Washer	19.7 gallons per load
F.	Dish Washer	6.3 gallons per load

Following the guidelines of the City of St. Helena policy, the analysis is to be completed based on two occupants per bedroom. Based on the City of St. Helena Water Neutral Policy for Development we have calculated the theoretical domestic water demand to be 17,752 gallons

per day (19.88 acre-feet per year) for the total development. These calculations can be found attached.

IV. LANDSCAPE WATER DEMAND

Landscape irrigation will be provided by an existing well located at the site, thus landscape usage will not be included in this water neutrality study, as provided for in Municipal Code Section 13.12.010. Preliminary landscape water usage calculations prepared by Spatial Design Group indicated that irrigation will require 17.16 acre-feet. See Conceptual Landscape Water Use Calculations by Spatial Design Group in Attachment 2.

V. PROPOSED MITIGATION

A variety of specific water offset mitigations were listed in our 2017 Report in summary form. Attached here is the detailed Report with the supporting documentation cited. These may be items that are pursued.

City of St. Helena Staff has asked us to review alternatives similar to those in American Canyon. Some of these options are converting parks to recycled water and expanding recycled water to other areas are discussed in American Canyon, however we don't believe that these options are as readily available in the City of St. Helena.

We discussed alternative options with City of St. Helena Public Works Director, Erica Ahmann Smithies, and understand there may be a few projects that could drastically increase the water savings to the City, and provide the offset the project needs. These options include the following and would be funded by payment of the in-lieu fee provided for by City Ordinance:

1. Assist the City in fixing the leaking transmission line between the City and Rutherford. It's our understanding there is a substantial amount of water lost as part of the old pipeline.
2. Place/replace water meters that are not in place or functioning improperly.
3. Paying the in-lieu fee to be used by the City for any of the options identified in the attached Report or otherwise selected by the City.

VI. IN-LIEU RETROFIT FEES

The proposed project will result in the use of approximately 17,752 gallons per day. Since the existing parcel had no existing water usage, conservation measures on the site will not be able to achieve neutrality. Therefore, the project proposes to pay an in-lieu retrofit fee equivalent to the cost of retrofitting showerheads, sink and kitchen faucets, and toilets in existing residences to achieve the required water savings.

The theoretical residential water usage for homes with old fixtures are summarized in the table below:

Table 1 - Theoretical Water Use with Old Fixtures

Fixture	Flow Rate (gal/min or gal/flush)	Flow Duration (min., flush, load, etc.)	Daily Uses per Occupant	Number of Occupants	Gallons per Day
Showerheads	2.5	8	1	6	120
Sink Faucets	2.2	0.25	3	6	9.9
Kitchen Faucets	2.2	4	1	6	52.8
Toilet	2.2	1	3	6	39.6
				Total	**222**

The theoretical residential water usage for homes with retrofitted low flow fixtures are summarized in the table below:

Table 2 - Theoretical Water Use with Retrofitted Low Flow Fixtures

Fixture	Flow Rate (gal/min or gal/flush)	Flow Duration (min., flush, load, etc.)	Daily Uses per Occupant	Number of Occupants	Gallons per Day
Showerheads	2	8	1	6	96
Sink Faucets	1.5	0.25	3	6	6.75
Kitchen Faucets	1.8	4	1	6	43.2
Toilet	1.28	1	3	6	23.04
				Total	**169**

A residence with old fixtures uses 222 gallons per day (gpd), while a residence that has been retrofitted with low fixtures will use 169 gpd. An overall savings of 53 gpd.

The calculation for number of residences which would need to be retrofitted based on the anticipated demand for The Hunter Subdivision are shown in the tables below:

Table 3 - Proposed Water Use Savings

	Gallons	
	Daily	**Annual**
Theoretical Water Use with Old Fixtures	222	81140
Theoretical Water Use with Retrofits	169	61681
Savings	**53**	**19458**

Table 4 – Retrofits Required for Hunter Subdivision

	Gallons	
	Daily	**Annual**
Hunter Subdiv. New Water Demand	17752	6479480
Water Savings per Residence w/Retrofit	53	19458
Number of Residences to Retrofit	**333**	**333**

In order to offset the anticipated water demand at The Hunter Subdivision, 333 residences will need to be retrofitted.

The anticipated material and installation costs to retrofit a residence are shown in the tables below:

Table 5 - Retrofit Material Costs Anticipated

Material Cost per Residence	**Qty**	***Cost per Unit**	**Total Cost**
Toilet	2	$265.68	$531.36
Lavatory Faucet	2	$140.40	$280.80
Kitchen Faucet	1	$150.12	$150.12
Shower Head	1	$309.96	$309.96
Total Estimated Material Cost per Residence*			**$1,272.24**

Table 6 - Retrofit Installation Costs Anticipated

Installation Cost per residence	**Hours**	**Qty**	***Cost per hour**	**Total Cost**
Toilet	1.5	2	$65.00	$195.00
Lavatory Faucet	1.5	2	$65.00	$195.00
Kitchen Faucet	1.5	1	$65.00	$97.50
Shower Head	0.5	1	$65.00	$32.50
Total Estimated Labor Cost per Residence*				**$520.00**

Table 7 – Total Estimated Costs of Retrofits

Total estimated cost to retrofit each residence *	$ 1,792.24
Number of residences to retrofit	$333.00
Total Estimated In-Lieu Fee Retrofit Cost*	**$596,808.19**

Material costs cited in the tables above are based upon sources found on www.amazon.com on August 28, 2020 with an 8% markup for tax for the following fixtures:

- Toilet - Kohler Cimarron Comfort Height two-piece 1.28gpf with Aqua Piston Tech Model #K-3887-0
- Lavatory Faucet - American Standard Tropic Centerset Model #7038201
- Kitchen Faucet - American Standard Monterrey Model #6409170
- Shower Head - American Standard Berwick Model #T430501

Labor costs cited in Tables 5-7 above for cost per hour are based upon estimates found at http://www.angieslist.com/articles/how-much-does-it-cost-hire-handyman.htm

VII. CONCLUSION

The proposed project will result in the use of approximately 17,752 gallons per day. The proposed development will use water efficient fixtures and conservation measures to the maximum extent practicable. The offset of the project water demands may be best met through assisting the City of St. Helena with existing water system improvements via in-lieu fees. The project will pay $596,808 as an in-lieu retrofit fee equal to the cost of retrofitting enough residences with low flow fixtures to achieve savings equal to the proposed use.

ATTACHMENT 1

WATER NEUTRALITY CALCULATIONS

Hunter Subdivision
Water Neutrality Calculations

1. Occupant Calculation:

Single Family Residences

Total 51 units	4 bedroom homes. Assume 2:1 ratio.		Number of Bedrooms	Number of Occupants @ 2 per bedroom
	4 bedroom units:	51	204	408
			Total number of occupants	**408**

Apartment Units

Total 25 units	2 bedroom units. Assume 2:1		Number of Bedrooms	Number of Occupants @ 2
	2 bedroom units:	25	50	100
			Total number of occupants	**100**

2. Proposed Water Usage:

Single Family Residences

Fixture	Flow Rate gal/min. or gal/flush		Flow Duration (min., flush, load, etc.)		Daily Uses per Occupant		Number of Occupants		Gallons per Day
Showerheads	2	x	8	x	1	x	408	=	6528
Sink Faucets	1.5	x	0.25	x	3	x	408	=	459
Kitchen Faucet	1.5	x	4	x	1	x	408	=	2448
Toilet	1.3	x	1	x	3	x	408	=	1591
Clothes Waher	19.7	x	1	x	0.37	x	408	=	2974
Dish Washer	6.3	x	1	x	0.1	x	408	=	257
									14257

Apartment Units

Fixture	Flow Rate gal/min. or gal/flush		Flow Duration (min., flush, load, etc.)		Daily Uses per Occupant		Number of Occupants		Gallons per Day
Showerheads	2	x	8	x	1	x	100	=	1600
Sink Faucets	1.5	x	0.25	x	3	x	100	=	113
Kitchen Faucet	1.5	x	4	x	1	x	100	=	600
Toilet	1.3	x	1	x	3	x	100	=	390
Clothes Waher	19.7	x	1	x	0.37	x	100	=	729
Dish Washer	6.3	x	1	x	0.1	x	100	=	63
									3494

Total Development Daily Water Usage (gpd) = 17752

ATTACHMENT 2

CONCEPTUAL LANDSCAPE WATER USE CALCULATIONS
SPATIAL DESIGN GROUP

SPATIAL DESIGN GROUP
Planning - Urban Design - Landscape Architecture

August 2, 2019

Ben VanZutphen
237 Lorraine Ct.
Healdsburg, CA 95448

RE: Hunter Residential Subdivision
Technical Memo - Conceptual Landscape Water Use Calculations
Adams Street & Starr Avenue, Saint Helena, CA (City File No. PL 10-040)
Job No.: 181002

Spatial Design Group (SDG) is pleased to provide you with Conceptual Landscape Water Use Calculations and an Estimated Landscape Water Use Demand. Methodology is based on the State of California's Model Water Efficient Landscape Ordinance, adopted by the City of Saint Helena. Calculations are provided in the attached Appendix B and are based on hydrozones shown on the prepared Conceptual Water Use Plan.

The estimated total landscape water use (ETWU) for the project is: 17.16 acre feet (5,592,210 gal./ yr)

The following assumptions were used to estimate landscape water use:

1. The project will consist of single family residential homes and attached townhomes.
2. Street tree selections will be moderate or low water use varieties as shown on the TM.
3. Homes shown on the water use plans are worst case estimates , most likely smaller than the future homes. This results in a conservative estimate of total landscape areas.
4. Future landscape plan plant selections will be compliant with WELO and listed by WUCOLS. Plant factors used in the calculation are conservative and representative of climate adaptive and native plant species. Reference Evapotranspiration (ETo) for the project is 44.0 in/ yr.
5. Each single family home is estimated to have an approximate 200 sf lawn. Actual lawn sizes and locations to be determined and will comply with the City's WELO.

Sincerely,

Spatial Design Group

Dustin Maxam, RLA
Principal, Planner/ Landscape Architect

Joe Turner, PE
Principal, Engineer

325 Carrillo Street, Santa Rosa, CA 95401
Ph 707-569-6739

SpatialDG.com

Appendix B – Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (Eto) 44.1 in./ year

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
1 - Public Low	0.3	Drip	0.81	0.37	31593	11701.11	319931.78
2 - Pulic Moderate	0.6	Bubbler	0.81	0.74	23455	17374.07	475041.93
3 - Private Low	0.3	Drip	0.81	0.37	236095	87442.59	2390855.37
4 - Private Mod	0.6	Bubbler	0.81	0.74	103207	76449.63	2090285.77
5 - Private high	0.9	Spray	0.75	1.20	9634	11560.80	316095.39
				Totals	**403984**	**204528.21**	
Special Landscape Areas							
7 - Edibles (Beds)				1.00	0	0	0
8 - Orchard				1.00	0	0	0
9 -				1.00	0	0	0
				Totals	**0**	**0**	
						ETWU Total	**5592210.25**
						Maximum Allowed Water Allowance (MAWA)[e]	**6075151.79**

The ETWU is less than the MAWA, the proposed water budget complies with the Water Efficient Landscape Ordinance.

[a]Hydrozone #/Planting Description
E.g
1.) front lawn
2.) low water use plantings
3.) moderate water use planting

[b]Irrigation Method
overhead spray or drip or subsurface bubbler

[c]Irrigation Efficiency
0.75 for spray head
0.81 for drip
0.81 for subsruface bubbler well

***[d]ETWU* (Annual Gallons Required) =**
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e]MAWA (Annual Gallons Allowed) = (*Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet,
and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

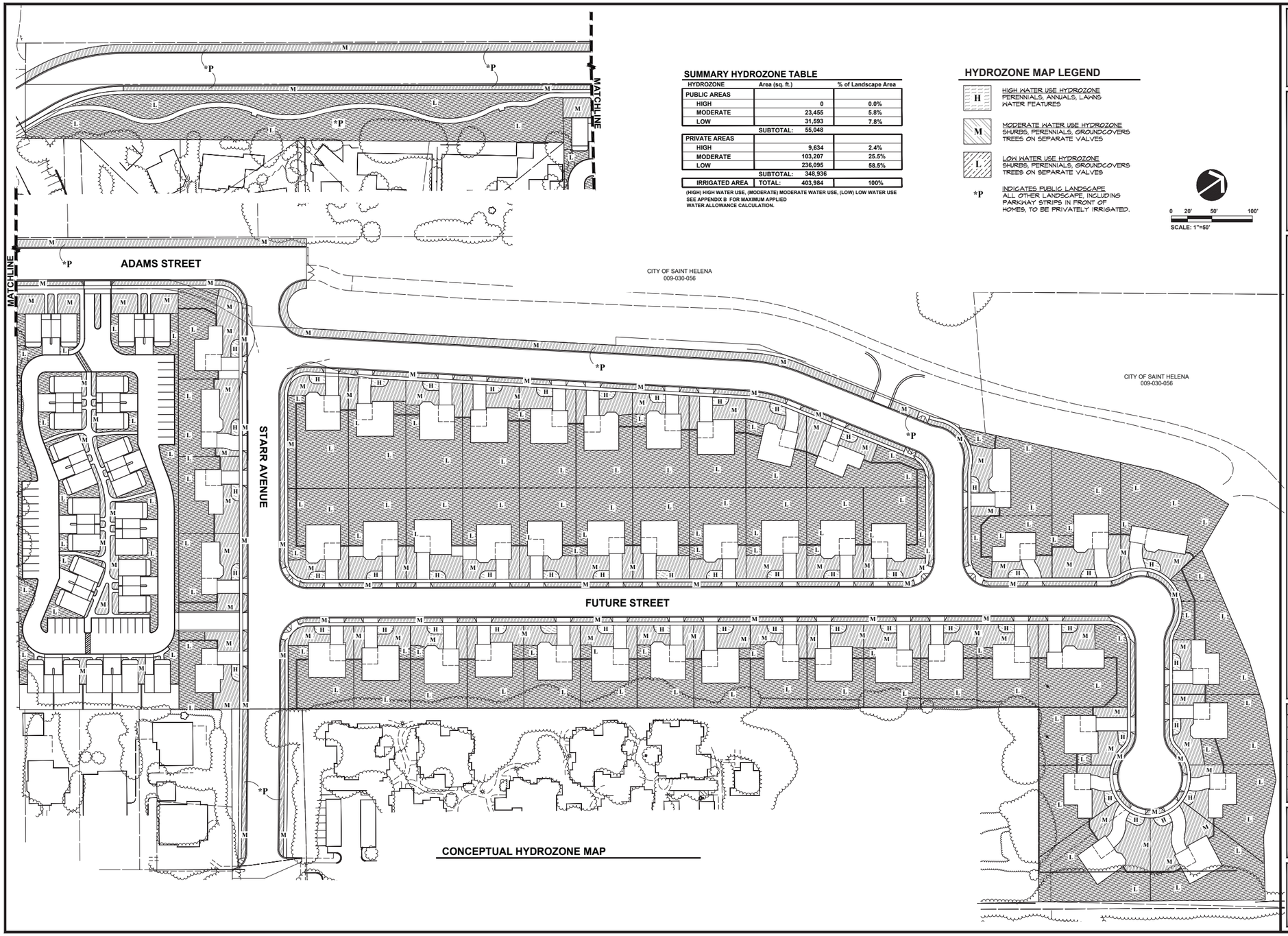
Regular Landscape Areas

Total ETAF x Area	204528
Total Area	403984
Average ETAF	**0.51**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	204528.21
Total Area	403984
Average ETAF	**0.51**



CONCEPTUAL HYDROZONE MAP

SUMMARY HYDROZONE TABLE

HYDROZONE	Area (sq. ft.)	% of Landscape Area
PUBLIC AREAS		
HIGH	0	0.0%
MODERATE	23,455	5.8%
LOW	31,593	7.8%
SUBTOTAL:	55,048	
PRIVATE AREAS		
HIGH	9,634	2.4%
MODERATE	103,207	25.5%
LOW	236,095	58.5%
SUBTOTAL:	348,936	
IRRIGATED AREA	TOTAL: 403,984	100%

(HIGH) HIGH WATER USE, (MODERATE) MODERATE WATER USE, (LOW) LOW WATER USE
SEE APPENDIX B FOR MAXIMUM APPLIED WATER ALLOWANCE CALCULATION.

HYDROZONE MAP LEGEND

H — HIGH WATER USE HYDROZONE
PERENNIALS, ANNUALS, LAWNS
WATER FEATURES

M — MODERATE WATER USE HYDROZONE
SHURBS, PERENNIALS, GROUNDCOVERS
TREES ON SEPARATE VALVES

L — LOW WATER USE HYDROZONE
SHURBS, PERENNIALS, GROUNDCOVERS
TREES ON SEPARATE VALVES

*P — INDICATES PUBLIC LANDSCAPE
ALL OTHER LANDSCAPE, INCLUDING PARKWAY STRIPS IN FRONT OF HOMES, TO BE PRIVATELY IRRIGATED.

0 20' 50' 100'
SCALE: 1"=50'

SDG
SPATIAL DESIGN GROUP
PLANNERS, ENGINEERS, LANDSCAPE ARCHITECTS
707-569-6739
325 CARRILLO STREET
SANTA ROSA, CA

APN: 009-030-057

CONCEPTUAL LANDSCAPE WATER USE PLAN
HUNTER SUBDIVISION
ADAMS STREET AND STARR AVENUE
SAINT HELENA, CALIFORNIA

Submittal / Revision:

Job No:	18-1002
Drawn By:	DM
Checked By:	JT
Date:	08-02-2019

Sheet Number
WU 1
1 of 1

ATTACHMENT 3

MUNICIPAL WATER SAVING MEASURES

Water saving measures for the City of St. Helena

February 2017

The following outlines opportunities for the City of St. Helena to reduce water consumption and reliance on local water supplies. Measures include indoor and outdoor residential water efficiency upgrades, metering households, providing pre-rinse fixtures to restaurants and industrial kitchens, irrigation system audits and component replacements at public facilities, and aiding wine production facilities to reduce and recapture water used in production. These water saving measures would not only decrease St. Helena's water demand but would also reduce water and sewer bills. This may be particularly desirable given the February 2017 rate increases[1], which have on average increased a family's water bill annually by $432 or 24%.

Though water use in St. Helena has decreased in recent years, comparisons to nearby communities with similar weather patterns and use requirements suggests that there are likely opportunities for implementing water efficiency measures. The 2016 St. Helena Water and Wastewater Rate Study reports 2015 city water use at 502 million gallons or 1,540 acre-feet, well below the "safe yield water supply" of 1,950 acre-feet (AF)[2]. Given the City's population of around 6,000, the per capita water use for St. Helena in 2015 is approximately 220 gallons/day. According to California Regional Water Use Targets, the San Francisco Bay Region, of which St. Helena is included, has an interim water use target of 144 gallons per capita per day[3]. The Sonoma-Marin Saving Water Partnership has lead an effort over the past years to reduce per capita water use. This campaign has resulted an average 2015 per capita water use of 100 gallons/day among partner cities. Another comparison is average residential single-family home water use. The 2016 St. Helena Water & Wastewater Rate Study assumes average monthly water use in single family homes to be 8,228 gallons/month. The 2015 Santa Rosa Water Rate Study[4] estimates monthly water use in single family homes to be 7,000 gallons/month. All of this suggests that it is reasonable to assume that reducing water use St. Helena is an achievable goal.

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[1] City of St. Helena Water and Wastewater Rate Study. Hansford Economic Consulting. 2016. http://cityofsthelena.org/sites/default/files/2016%20Rate%20Study%20FINAL.pdf

[2] St. Helena General Plan Update 2030. http://www.ci.st-helena.ca.us/sites/default/files/04_Public%20Facilities%20and%20Services_040215_0.pdf

[3] Urban Water Management Plan, City of American Canyon. Figure 3-1: Region Water Use Targets. 2010. http://www.water.ca.gov/urbanwatermanagement/2010uwmps/American%20Canyon,%20City%20of/American%20Canyon%20Final%20UWMP%202010%20Volume%20I.pdf

[4] Santa Rosa Water, Water and Wastewater Study. The Reed Group. 2015. http://santa-rosa.granicus.com/MetaViewer.php?view_id=9&clip_id=763&meta_id=80712

This report provides descriptions of the most advantageous water saving projects for the City of St. Helena. A summary of these addressable water savings are listed below.

Water Saving Measure	Annual Savings (AF)	Assumptions
Turf replacement	16.7	Assume 5 acres replaced
School/park Irrigation audits/upgrades	5	Assume 2 parks/schools upgraded
Greywater/rainwater harvesting residential	0.65	Assume systems installed at 20 homes
Swimming pool covers	0.25	Assume 10 covers installed
Residential household metering	5.8	Assume meters on 247 mobile homes
Indoor water efficiency upgrades, residential	8.1	Assume 200 homes upgraded
Pre-rinse valves for commercial/ industrial kitchens	1.3	Assume upgrades to 10% of commercial kitchens
Winery production water recapture	4.6	Assume moderate production facility
Cumulative savings:	42.4	

Outdoor Water Efficiency Upgrades & Landscape Conversion

Replacing turf with water efficient landscaping and auditing existing irrigation systems can reduce peak water use in summer months, resulting not just water savings but also reducing the need for capital expenditures to meet future demand.

According to a 2015 California Urban Water Conservation Council report on Turf Removal & Replacement[5], average turf-replacement water savings in California rage from between 18-83%, depending largely on climate. California Drought Executive Order B-29-15[6] notes water savings from turf replacement projects can be between 13-70 gallons/year/square foot (sqft). For the City of Napa, projected savings from turf conversion projects was estimated at 25 gallons/year/sqft. Assuming a conservative water saving estimate of 25 gallons/sqft of lawn replaced, **replacing 5 acres of turf could save over 5 million gallons of water or 16.7 AF/ year.**

---

[5] Turf Removal & Replacement, Lessons Learned. California Urban Water Conservation Council. Briana Seapy. March 2015. https://cuwcc.org/Portals/0/Document%20Library/Resources/Publications/Council%20Reports/Turf%20Removal%20_%20Replacement%20-%20Lessons%20Learned.pdf

[6] California Drought Executive Order B-29-15, Directive #3, April 1, 2015. average water savings per square foot turf conversion lawn. Accessed February 12 2017.

Landscape irrigation audits at commercial and institutional sites can identify the need for simple changes to controller scheduling or emitter maintenance that can save customers tens of thousands of gallons per year. Smart irrigation controllers, which utilize real time data to optimize irrigation schedules. In the City of Napa, a project installing smart controllers at 25 City parks and 21 school fields saved over 600 AF between 2005 and 2010 at city parks and schools[7]. This represents an average of over 2.5 AF of annual water savings at each park or school location. St. Helena Unified School District has 4 school campuses and a District Office, and there are 10 City parks that could potentially benefit from irrigation audits and improvements. Given the example from the City of Napa, it is not unreasonable to predict that the City of St. Helena could experience similar water savings. **Upgrading irrigation systems at just 2 parks or schools in St. Helena may realize 5 AF/year of water savings per year.**

Laundry to landscape systems that use greywater to irrigate landscapes can put to use the 60 gallons/day of water generated from the washing machine to save a family of 4 40,000 gallons of water per year[8]. Changes to local and California code[9] have made it simple to install basic residential greywater systems. **Installing greywater systems at 20 homes could save 800,000 gallons of water or 0.25 AF/year.**

Rainwater harvesting both at a residential level or for commercial applications also has potential to reduce City water use. The City of St. Helena provides a rebate program for rainwater barrels or cisterns installed over 100 gallons. A 530 gallon Bushman tank filled 6 months out of the year could save 3,000 gallons of water per year. **20 households so equipped could save 0.4 AF/ year.** Commercially, rainwater collected in cisterns can be used to augment water needed in landscaping and potentially wine production or other industrial washing purposes. The amount of water saved will depend on weather patterns and how many times the cisterns can be filled in a year, but the savings could be significant.

Covers on swimming pools can also result in water savings. Swimming pool evaporation is reduced by 50% when the pool is covered. Assuming an average sized pool (430 square feet) this coulee mean over 8,000 gallons of water savings per year per newly covered pool[10]. From a google map search, there appear to be over 100 outdoor pools in St. Helena. **Covering just 10 of these pools, therefore, could save 0.25 AF/year.**

Metering Residential Households

There is evidence that installing volumetric water meters on previously unmetered single-family homes can result in substantial water savings. In a recent study done on three Northern and

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[7] City of Napa Urban Water Management Plan. 2010. http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Napa,%20City%20of/Napa,%20City%20of/UWMP%202010%20-%20NAPA.pdf

[8] http://watersprout.org/wp-content/uploads/2016/04/Integrated-GW-System-Info-Packet-1.pdf. Accessed February 12 2017.

[9] http://www.thegreywaterguide.com/california.html. Accessed February 12 2017.

[10] http://www.poolspanews.com/how-to/maintenance/evaporation-study-compares-water-savings-of-covers_o. Accessed February 14 2017.

Central California cities, monthly water consumption dropped by 13-21% after six months of metering on previously unmetered homes[11]. According to the 2016 Rate Study, there are 920 multi-family and mobile home units that are not individually metered, all with an average water use of 5,236 gallons/month. Installing individual meters across these accounts assuming a 13% reduction in water use could save over 23 AF of water per year. **Installing meters only at the 247 mobile homes could result in a water savings of 5.8 AF/year.**

Indoor Residential Water Efficiency Upgrades

Replacing old water fixtures and toilets is a proven technique for realizing lasting water savings. The 2016 residential toilet and water fixture program in Santa Rosa, CA, for example, provides a recent example of how homes in St. Helena could be quickly retrofitted. It is estimated that customers on average save 1,100 gallons of water per month after toilets, shower heads, and sink aerators are replaced with water efficient alternatives (assuming toilets replaced are 1.6gallons/flush or higher)[12]. In Santa Rosa, water efficient toilets, shower heads, and bathroom/ kitchen faucet aerators were installed at 5,500 residential sites in 2016 to realize a water savings of approximately 72.6 million gallons/year[13].

Residential developments such as mobile home parks and multi-family dwellings would be particularly advantageous partners to benefit members of the community on on the lowest income scale. There are 920 multi-family and mobile home units in St. Helena. **Retrofitting 200 of these homes could realize a water savings of 2.64 million gallons, or 8.1 AF/year.**

Pre-Rinse Valves for Commercial & Industrial Water Customers

30% of water in restaurants and industrial kitchens is typically used to pre-rinse dishes. Water efficient pre-rinse valves save 60 gallons of water for every hour of use[14]. The City of Santa Rosa recently replaced 250 pre-rinse valves in restaurants and commercial kitchens, estimating a water savings of over approximately 36,000 gallons/year for each replaced nozzle[15]. Restaurants, schools, industrial kitchens, and tasting rooms in St. Helena could all benefit from water efficient pre-rinse valves. According to Yelp there are over 50 restaurants in St. Helena and over 115 public winery facilities. **Providing water efficient pre-rinse valves to just 10% of these facilities could save over 1.3 AF/year**.

Water Recapture in Wine Production

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[11] Impacts of Metering on Residential Water Use in California. Tanverakul, Stephanie A. Department of Civil and Environmental Engineering, San Jose State University. 2015.

[12] Santa Rosa Board of Public Utilities Memorandum Agenda Item 7.1, January 7 2016. http://santa-rosa.granicus.com/MetaViewer.php?view_id=9&clip_id=713&meta_id=68623

[13] Santa Rosa Board of Public Utilities Agenda Item 7.1 Presentation, January 7 2016. http://santa-rosa.granicus.com/MetaViewer.php?view_id=9&clip_id=713&meta_id=68626

[14] http://conserve.restaurant.org/Best-Practices/Save-Water/Pre-rinse-spray-valves

[15] Santa Rosa Board of Public Utilities Agenda for January 2 2016, Item 7.1. http://santa-rosa.granicus.com/GeneratedAgendaViewer.php?view_id=9&clip_id=713

Wineries in St. Helena are the biggest water users. Water use for wine production, particularly during the 60 days of harvest can be particularly high when tanks and vats are washed and sterilized. Between 2.6-6 gallons of water is typically used for each gallon of wine produced just during the wine production phase (does not include water used for irrigation or harvest).

Water purification techniques have been able to successfully recapture up to 99% of wine production process water, resulting in huge water savings. For example, Free Flow Wines in Napa, CA successfully installed a recapture system in 2015, realizing a savings of 1.5 million gallons of rinse water per year[16]. **Installing this type and size of rinse water recapture system could result in a savings of over 4.6 AF/year**. Wine industry municipal water customers in St. Helena such as Trinchero Family Estates could benefit from this type of water upgrade.

Conclusion

This is a preliminary investigation on the most feasible measures that could be taken to reduce water use in St. Helena. Further data and analysis would likely identify additional partnerships and opportunities. Though per capita water use in St. Helena has dropped significantly in recent years, comparisons to local counterparts show there are likely many opportunities to further reduce the City's water demand. This report outlines various water efficiency measures to cumulatively save 42 AF/year. All of this suggests that reducing water use by 12 acre-feet/year in St. Helena is a reasonable goal to achieve.

[16] California's Wineyard Pressed to Turn Less Water Into Wine. Alastair Bland. October 1, 2015. http://www.npr.org/sections/thesalt/2015/10/07/446096090/california-s-vineyards-pressed-to-turn-less-water-into-wine. Accessed February 12 2017.

Traffic Impact Study
Hunter Subdivision
St. Helena, CA

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1 INTRODUCTION

The purpose of this Traffic Impact Study (TIS) is to identify potential traffic operations deficiencies associated with a proposed residential development known as the Hunter Subdivision (proposed project) located in the eastern portion of the City of St. Helena (City). The TIS will also determine whether the proposed project would be consistent with the City's level of service (LOS) standards contained in their *Traffic Impact Study Scoping Agreement* form. The project's scoping agreement has been approved by the City's Engineering Division and is provided as Appendix A. If LOS deficiencies are found, improvements are identified that would offset or reduce vehicle delay, or improve LOS.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which changed the way transportation impacts are analyzed under the California Environmental Quality Act (CEQA). SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Under the new transportation guidelines, an evaluation of LOS, or vehicle delay, is no longer considered an environmental impact under CEQA. The updates to the CEQA Guidelines required under SB 743 were approved by the California Natural Resources Agency on December 28, 2018. Under the new guidelines, vehicle miles traveled (VMT) has been adopted as the most appropriate metric to evaluate transportation impacts under CEQA. The OPR's regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines must be implemented statewide by July 1, 2020.

A separate VMT analysis has been prepared, and its methodology, analysis results, findings, and mitigation measures (if any) are provided in the environmental impact report (EIR).

1.1 Purpose and Scope of the TIS

This TIS has been prepared per the City's *Traffic Impact Study Scoping Agreement* which contains guidelines for the preparation of a TIS. In addition, this TIS complies with the City's 1993 General Plan Transportation Element as well as the City's General Plan Update 2040, Circulation Element (2018) that was approved in June 2019.

The objectives of this TIS are:

- Document existing traffic conditions, including intersection levels of service in the study area;
- Estimate trip generation, distribution, and assignment characteristics for the proposed project;

- Analyze the traffic impacts that would occur as a result of project traffic under the Existing and Buildout Year (2040) conditions;
- Describe the potential impacts under the Existing and Buildout Year (2040) conditions;
- Identify improvements for any transportation facilities that would be inconsistent with the City's LOS policies;
- Describe the adequacy of project access locations;
- Analyze vehicular queuing to identify storage length issues;
- Analyze vehicle collisions within the past 5 years for major intersections; and
- Describe active transportation and transit facilities in the vicinity of the project site.

Dudek analyzed the following scenarios to identify potential LOS deficiencies and queuing and site circulation impacts associated with the proposed project:

Existing Conditions

The TIS includes a description of existing traffic conditions in the site vicinity, including the existing roadway system, existing weekday AM and PM peak hour traffic volumes, existing Saturday peak hour traffic volumes, existing weekday and Saturday roadway segment daily traffic volumes, and traffic operations. The existing condition is representative of the year (2018) when traffic counts were collected.

Existing plus Project

This condition includes analysis of traffic operations under existing conditions with project-related traffic added to the existing weekday AM and PM peak hour traffic volumes, and existing Saturday peak hour traffic volumes.

Buildout Year (2040)

This condition includes analysis of traffic operation under Buildout Year (2040) conditions within a long-term planning horizon period, consistent with the City's General Plan Update 2040 (General Plan Update), when the proposed project would be constructed and fully occupied. This scenario assumes buildout of the land uses designated in the City's General Plan Update because this is the most current information available. The proposed project is consistent with the site's residential land use types designated in the 1993 General Plan and the General Plan Update. Buildout (2040) volumes were derived from the Year 2040 Conditions analysis prepared by Fehr & Peers included in the *Draft Environmental Impact Report (DEIR) for the St. Helena General Plan Update, Chapter 3.13 Transportation and Traffic* (Dyett & Bhatia 2018).

1.2 Project Description

Figure 1 illustrates the project location and study area. The proposed project would be located on a 16.9-acre vacant site within the City along the eastern terminus of Adams Street and along the northern terminus of Starr Avenue. The project site is undeveloped with the exception of a small vineyard generally located in the southwestern portion of the site. The project site plan is shown in Figure 2.

The proposed project includes a residential subdivision tentative map consisting of 51 single-family residences, 25 affordable multifamily units, and 11 accessory dwelling units (ADUs) for a total of 87 dwelling units. Therefore, a cumulative total of 87 residential dwelling units is assumed for the purposes of this analysis. The project site is zoned for medium-density residential and is adjacent to other residential uses to its south and west, and vineyards and undeveloped/vacant parcels to its north and east.

Currently, the project site is located without access to roadways; however, as part of the project Adams Street and Starr Avenue would be extended to serve the site. Primary access to the project site would be provided via the eastern extension of Adams Street, as well as the northern extension of Starr Avenue. Parking for future residences would be provided via private individual garages and driveways for single-family residences, covered carports for multifamily units, and publicly available on-street parking along the interior streets within the project site (as permitted).

1.3 Study Area and Scope

The scope of this TIS has been prepared in coordination with the City (see Appendix A), and focuses on the weekday AM (7:00 a.m. to 9:00 a.m.), PM (3:00 p.m. to 6:00 p.m.), and Saturday (2:00 p.m. to 4:00 p.m.) peak hour periods. These peak hour periods are analyzed for the hour of highest traffic volume between 7:00 to 9:00 AM, 4:00 to 6:00 PM; and, Saturday 2:00 to 4:00 PM. These periods represent the highest cumulative total traffic for the adjacent street system.

Per the approved Scoping Agreement, the study intersections include:

1. Main Street (State Route 29 – SR-29)/Fulton Lane – Madrona Avenue
2. Main Street (SR-29)/Adams Street
3. Main Street (SR-29)/Hunt Avenue
4. Main Street (SR-29)/Pope Street – Mitchell Drive
5. Railroad Avenue/Fulton Lane
6. Railroad Avenue/Adams Street

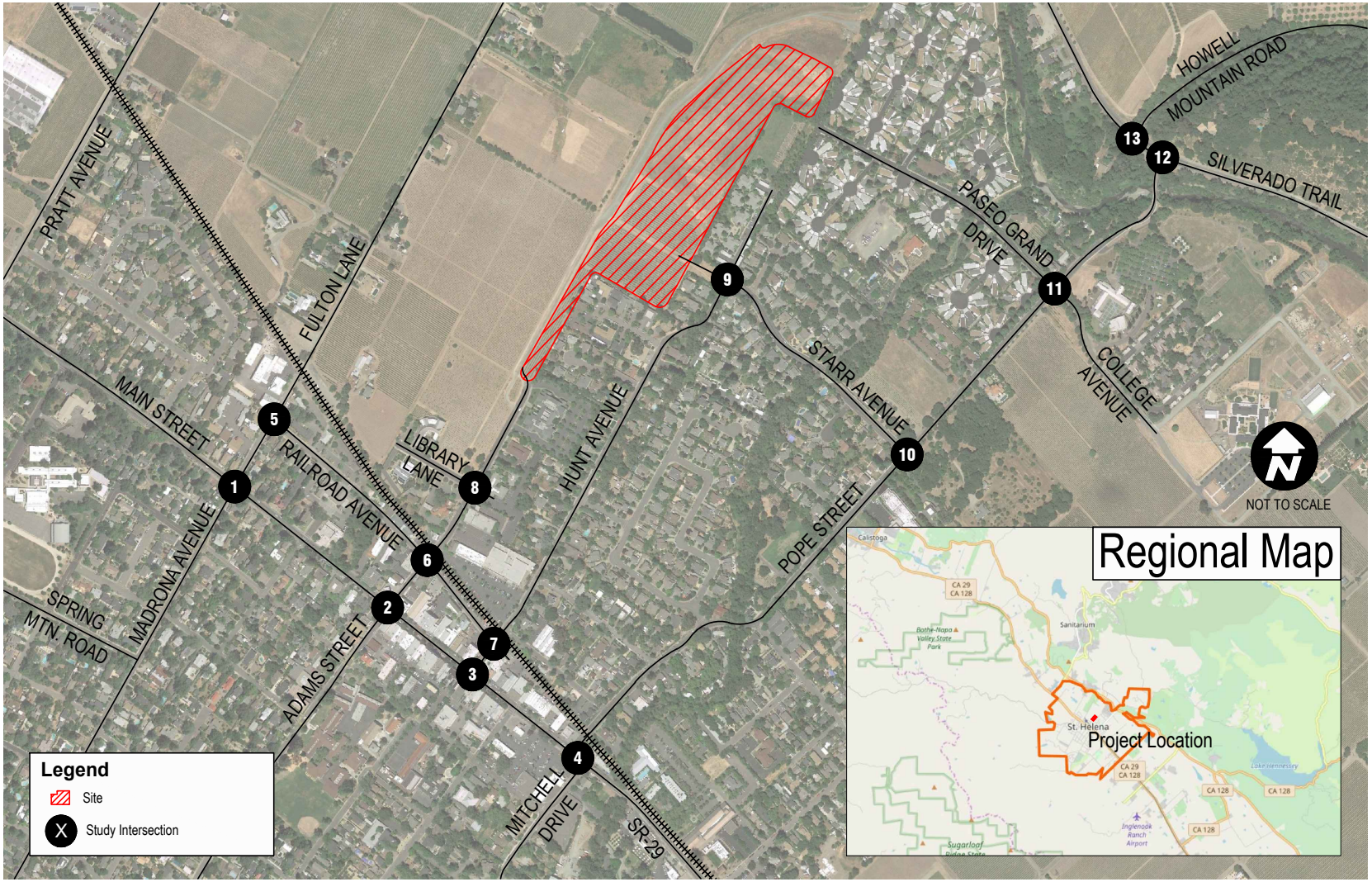
7. Railroad Avenue/Hunt Avenue
8. Library Lane/Adams Street
9. Starr Avenue/Hunt Avenue
10. Starr Avenue/Pope Street
11. Paseo Grand Drive – College Avenue/Pope Street
12. Silverado Trail/Pope Street
13. Silverado Trail/Howell Mountain Road

Further analysis for the 95th percentile queues for all intersections was also analyzed in order to evaluate existing storage lane lengths, especially in regard to left-turn lane queues at Main Street (SR-29).

The study intersections above were analyzed for the following study scenarios:

- Existing Conditions (2018)
- Existing plus Project
- Buildout (2040)

This TIS includes a description of existing conditions in the site vicinity, including roadway network, existing and buildout baseline weekday AM, PM, and Saturday peak hour traffic volumes, and traffic operations.



Source: Google Maps,05/2017; Open Street Map, 01/2018

Project Site Location and Study Area

FIGURE 1

Hunter Subdivision - St. Helena

DUDEK

Apr 15, 2019 - 12:22pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_04.15.19.dwg Layout: fig1-site location and study area

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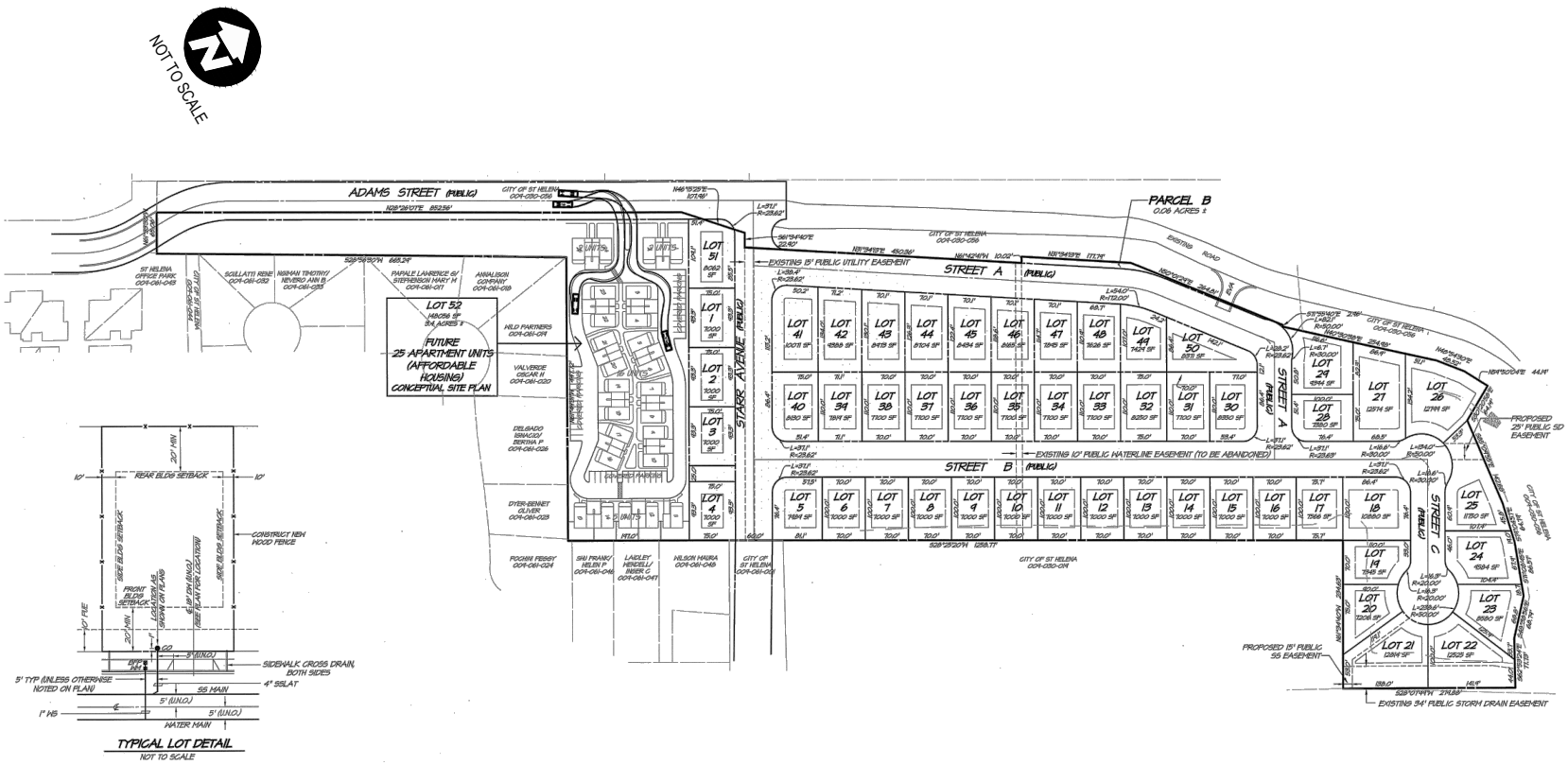

Source: RSA+, 01/2019

Project Site Plan

Hunter Subdivision - St. Helena

FIGURE **2**

DUDEK

Apr 30, 2019 - 11:30am mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_04.15.19.dwg Layout: fig2-SitePlan

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1.4 Congestion Management Program

The Napa Valley Transportation Authority (NVTA) is designated as the Congestion Management Agency (CMA) in Napa County. However, NVTA does not have an adopted Congestion Management Program (CMP). Instead, NVTA works with the region's Metropolitan Transportation Commission (MTC) to prepare the Napa County section of the Regional Transportation Plan (RTP). Currently, the NVTA does not have a LOS standard specific to traffic.

1.5 Methodology

The City's intersection evaluation methodology and impact criteria is based on the *Highway Capacity Manual* (HCM), HCM 6th Edition, methodology for signalized and unsignalized intersections, including intersections under Caltrans jurisdiction.

1.5.1 Intersections

The operational characteristics of an intersection are determined by calculating the intersection's LOS. The intersection, as a whole and its individual turning movements, can be described alphabetically with a range of levels of service (A through F), with LOS A indicating free-flow traffic and LOS F indicating extreme congestion and long vehicle delays. The intersection LOS was calculated using the HCM 6th Edition methodology. In the HCM, LOS is expressed in terms of the average intersection delay per vehicle for the peak 15-minute period within the analyzed hour.

At two-way, stop sign-controlled intersections, the LOS is defined in terms of the average vehicle delay of an individual movement. This is the industry standard method used to evaluate the performance of a two-way, stop sign-controlled intersection because the average vehicle delay is more closely reflected in terms of individual movements, rather than its performance overall. For this reason, LOS for a two-way, stop sign-controlled intersection is defined in terms of its individual movement. With this in mind, the total average vehicle delay (i.e., average delay of all movements) for a two-way, stop sign-controlled intersections should be viewed with discretion and for that reason is not what is reported within the peak hour intersection LOS tables in the following sections. Table 1 shows the relationship of the average control delay and LOS for signalized and unsignalized intersections.

Table 1
Level of Service Criteria for Intersections using HCM Methodology

Level of Service	Average Control Delay (sec/veh)		General Description
	Signalized	*Unsignalized*	
A	0–10	0–10	Free flow
B	>10–20	>10–15	Stable flow (slight delays)
C	>20–35	>15–25	Stable flow (acceptable delays)

Table 1
Level of Service Criteria for Intersections using HCM Methodology

Level of Service	Average Control Delay (sec/veh)		General Description
	Signalized	*Unsignalized*	
D	>35–55	>25–35	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55–80	>35–50	Unstable flow (intolerable delay)
F	>80	>50	Forced flow (jammed)

Source: Highway Capacity Manual, Transportation Research Board, 2016.

1.5.2 Future Traffic Forecasts

Future traffic volumes for year 2040 were obtained from the General Plan Update EIR Section 3.13, Transportation and Traffic section. Based on review of the traffic modeling/forecasting data of the General Plan Update, the 2040 forecast traffic volumes have incorporated traffic generated by the proposed project. In addition, traffic generated by the project ADUs was added to the Buildout (2040) scenario.

1.5.3 Impact Criteria

City of St. Helena

The City's impact criteria is provided in the TIS Scoping Agreement form (Appendix A). The following LOS impact criteria are applicable to study area intersections:

- Operations at a signalized intersection along State Route 29 to deteriorate from LOS D, under conditions without the project, to LOS E or F, or, operations at other signalized intersections to deteriorate from LOS C under conditions without the project to LOS D, E or F.
- The LOS to deteriorate to LOS F for signalized intersections that operate at LOS E under conditions without the project.
- The average intersection delay to increase by more than five (5.0) seconds for signalized intersections that operate at LOS F under conditions without the project.
- The LOS to deteriorate to LOS D, E or F for unsignalized intersections operating at LOS C or better under conditions without the project, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation. For unsignalized intersections on State Route 29 operating at LOS D or better under conditions without the project, the impact would be inconsistent with the City's LOS policies if the project would cause the LOS to deteriorate to LOS E or F, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation.

- Average delay to increase by five (5.0) or more seconds for unsignalized intersections operating at unacceptable levels (LOS D, E or F; or LOS E or F on State Route 29) under conditions without the project, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation.

A peak traffic signal warrant per the California Manual of Uniform Traffic Control Devices (CA MUTCD) was reviewed to determine whether the installation of a traffic signal may be warranted at unsignalized intersections with unsatisfactory LOS. The signal warrant compares the total traffic from both major street approaches, to the traffic of the single highest minor street approach. The signal warrant analysis is intended to provide guidance in determining the need to install a traffic signal based on data collected in the Federal Highway Administration Manual on Uniform Traffic Control Devices (FHWA MUTCD) and CA MUTCD guidelines. An intersection meeting a signal warrant itself does not constitute the only basis for installation of a traffic signal and instead serves as a tool, in addition to collision and engineering data, to provide guidance towards traffic signal installation.

Caltrans

All study area intersections along Main Street, also fall under Caltrans jurisdiction as Main Street is also listed as a state route under Caltrans jurisdiction; SR-29. As stated in the Caltrans *Guide for the Preparation of Traffic Impact Studies* (December 2002), the level of service for operating State highway facilities is based upon measures of effectiveness (MOEs). These MOEs describe the measures best suited for analyzing State highway facilities (i.e., freeway segments, signalized intersections, on- or off-ramps, etc.). Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and if an existing State highway facility is operating at less than the appropriate target LOS, the existing MOE should be maintained.

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2 EXISTING CONDITIONS

This section describes existing conditions within the identified study area. Descriptions are provided for the characteristics of the study area roadway network, peak hour traffic volumes, traffic operations, traffic safety, non-motorized facilities, and transit.

2.1 Existing Street System

Characteristics of the existing street system in the proposed project vicinity are shown in Table 2. Street classification data is derived from the Circulation Element of the draft *St. Helena General Plan Update 2040* (2018). As shown on Figure 2, the primary access points to the project site is provided via Adams Street or Starr Avenue. The existing traffic controls and geometrics at the study area intersections are shown on Figure 3.

Table 2
Study Area Existing Street System Summary

Roadway	Street Classification	Posted Speed Limit (MPH)[1]	# of Travel Lanes	Parking	Sidewalks	Bicycle Lanes
Main Street (SR-29)	Regional Connector	25	2	Yes – along some sections	Yes	No
Fulton Lane/Madrona Avenue	Open Space/Rural Street	25	2	Yes – except for east of railroad tracks	Yes – except for east of railroad tracks	No
Adams Street	Downtown/Mixed-Use Street	25	2	Yes – along some sections	Yes	No
Hunt Avenue	Residential Street	25	2	Yes – along some sections	Yes – along some sections	Yes – Class III
Railroad Avenue	Downtown/Mixed-Use Street	25	2	Yes – along some sections	Yes – along some sections	No
Pope Street	Downtown/Mixed-Use Street	25	2	Yes – along some sections	Yes – along some sections	Yes – Class II and Class III
Starr Avenue	Residential Street	25	2	Yes – along some sections	Yes	Yes – Class II
Howell Mountain Road	Open Space/Rural Street	35	2	No	No	No
Silverado Trail	Rural Throughway[2]	50	2	No	No	Yes – Class II

Notes: MPH = miles per hour
[1] Speed limit information derived from §10.08.010-0.20 of the City of St. Helena Municipal Code.
[2] Obtained from the Circulation Element of the *Napa County General Plan* (2008).

2.2 Pedestrian Facilities

The pedestrian infrastructure within the study area depends largely on the types of land uses, as agricultural or open space land uses generally lack pedestrian amenities, as seen in segments of Adams Street near the edge of the project site boundary. Around the perimeter of developed land along Starr Avenue and Hunt Avenue, the study area generally contains sidewalks, lighting, landscaping, signage, and Americans with Disabilities Act (ADA)-compliant curb ramps. Railroad crossings are generally in good condition to allow safe crossings for pedestrians. Near the project site, Adams Street and Starr Avenue would be extended to provide vehicle, bicycle and pedestrian access to the site. Sidewalks would be provided along both sides of the street allowing safe pedestrian access to the site. The project site would facilitate accessibility to the downtown St. Helena corridor by way of existing sidewalks that would provide access to several neighborhood services such as Main Street, retail and grocery stores, and the St. Helena Public Library.

2.3 Bicycle Facilities

As shown in Table 2, there are a number of bicycle facilities within the study area. Class I bikeways, also known as bike paths or shared-use paths, are facilities with an exclusive right-of-way for bicyclists and pedestrians, separated from roadways. The project is not proposing any Class I bike paths. Class II bicycle lanes, which are striped and demarcated areas of roadway that separate bicyclists from motorists, are available along the entirety of Starr Avenue and Silverado Trail and the majority of Pope Street from Railroad Avenue to Paseo Grand Drive-College Avenue. Class III bicycle routes, are shared roadways where vehicles and bicyclists equally share the road, but do not contain a striped bike lane. Class III bicycle routes are provided along Hunt Avenue and portions of Pope Street, east of Railroad Avenue and west of Paseo Grand Drive-College Avenue, towards the approach to the Pope Street Bridge. Along the project access, Starr Avenues connects the site to the larger St. Helena bicycle network via Pope Street or Hunt Avenue. The City's Bicycle Plan was adopted in 2012 as part of the wider Napa County Transportation and Planning Agency's Bicycle Master Plan. Several improvements were identified such as Class III bicycle routes along Main Street and Class II bicycle lanes along Adams Street.

2.4 Transit System

The NVTA manages Vine Transit, which provides transit service in the greater Napa County region and most closely serves the project study area and site. The St. Helena Shuttle, Vine Route 10, and Vine Route 29 all provide differing levels of frequency and connectivity to transit riders within the study area.

The St. Helena Shuttle route operates every weekday for one morning and one afternoon on a fixed route starting at 7:50 a.m. and then again, at 3:15 p.m., circulating throughout the City and stopping

directly adjacent to the project site at the intersection of Starr Avenue/Hunt Avenue. The shuttle provides access to several schools in the City as well as an east-west connection through the city. Outside of the fixed route, the shuttle operates as an on-demand, door-to-door service within much of the city limits Monday to Thursday from 7:45 a.m. to 6:00 p.m. with extended hours Friday until 11:00 p.m. Weekend service is also provided with service on Saturdays from 10:00 a.m. to 11:00 p.m., and on Sundays from 12:00 p.m. to 7:00 p.m. Service is not provided on major holidays.

Vine Route 10 is a regional transit route that connects the cities of Calistoga and Napa, with stops within the study area along Main Street at Adams Street and at Pope Street/Mitchell Drive. Weekday service generally occurs every 45 minutes starting at 6:15 a.m. and ending at 10:44 p.m. Weekend service is provided every hour and is truncated during the morning and night periods. Service is not provided on weekends or major holidays.

Vine Route 29 connects Calistoga southward towards the greater Napa County residential core, connecting to the Vallejo Ferry and finally the El Cerrito BART station. The nearest stop within the study area is the St. Helena Post Office located on Main Street. Service is primarily provided twice during the morning and afternoon periods starting at 5:22 a.m. and ending at 6:35 p.m. Service is not provided on weekends or major holidays.

The Napa Valley Wine Train also passes through the city; however, it is mainly utilized as a tourist attraction and not for commuting purposes. Stops are limited and occur on an irregular basis in the city. The Wine Train's proximity to Main Street can result in increased congestion and vehicle queueing, as well as the potential to impede emergency access across Adams Street and Hunt Avenue. The Wine Train blocks egress and ingress at Adams Street and Hunt Avenue for up to two minutes at a time departing and arriving, therefore these crossings will be closed or delayed for a maximum of eight minutes per day. The Wine Train is mandated to keep all grade crossings clear; therefore, the limited speed in the area is what constitutes the delay described above.

2.5 Pope Street Bridge

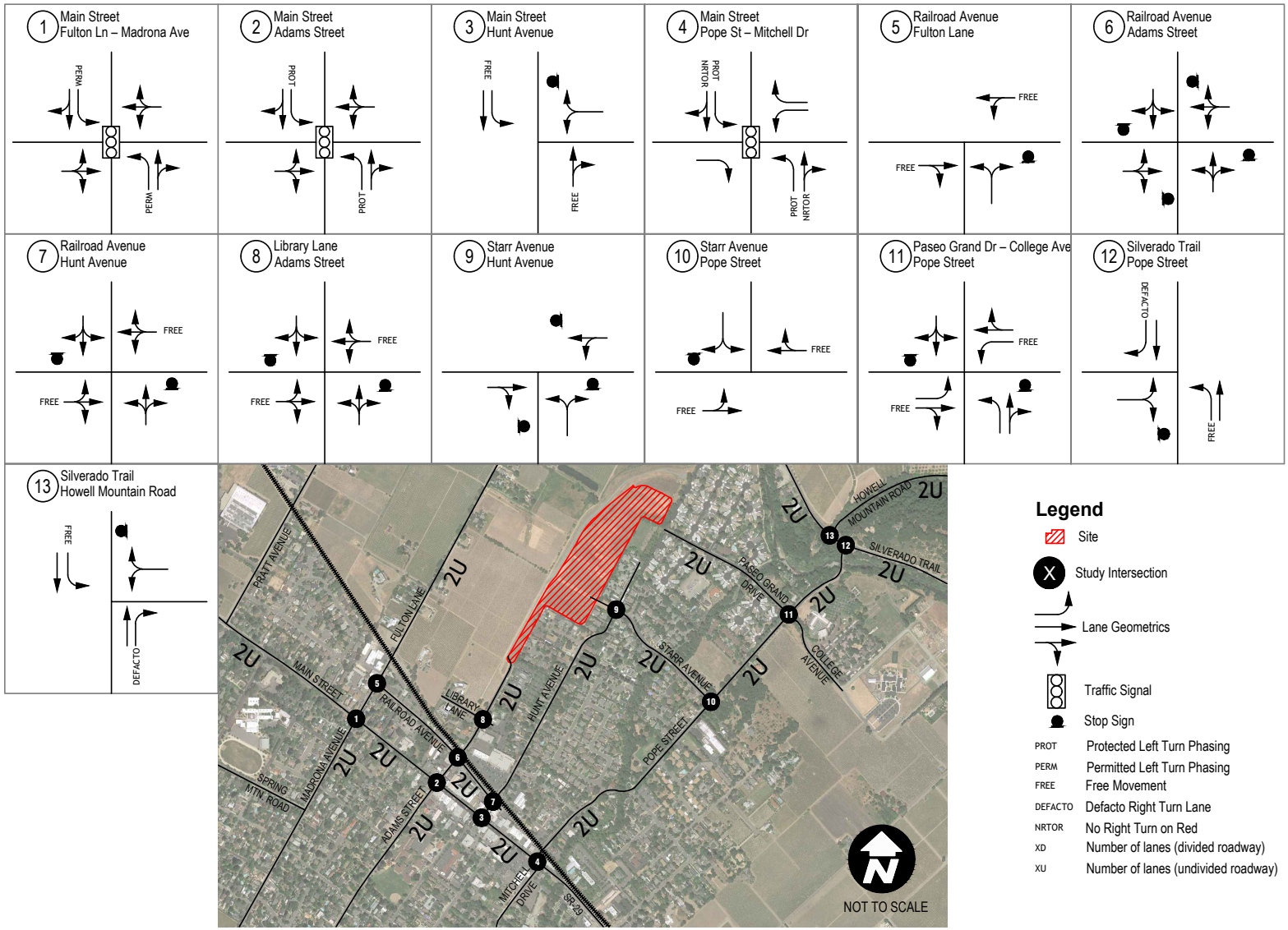
The Pope Street Bridge is a narrow two-lane historic bridge that spans the Napa River and connects the City with Silverado Trail, a regional roadway that provides north-south access through Napa County. Silverado Trail also serves as an alternative route to Main Street (SR-29). The Pope Street Bridge is largely unimproved, and is constructed of stone, creating narrow lanes and reduced speed for motorists. This also creates a situation where bicyclists share the road with vehicles, creating potential areas of conflict. Operationally, the Pope Street Bridge allows for one lane of westbound traffic, creating conflicts between vehicles turning onto Pope Street versus vehicles turning onto Silverado Trail. Collisions between these conflict points were analyzed in depth in the following sections. Additionally, emergency access can be impeded due to congestion along the bridge, creating difficulty for services to be provided to areas along Silverado Trail.

2.6 Traffic Volumes

Existing peak hour turning movement counts at the study intersections were conducted in April 2018, during the week (and Saturday) of the Napa Arts in April Art Festival and celebration in Lyman Park. Per review of Caltrans data from the previous seven years, the month of April was identified as the peak month for traffic volumes in the St. Helena downtown area based on traffic volumes on Main Street (SR-29), north and south of Adam Street.[1] This data is presented in Appendix B. Therefore, these volumes represent a high traffic period during the year and present a conservative existing baseline scenario.

Traffic volumes were balanced between intersections. Raw intersection turning movement counts are provided in Appendix B. Existing weekday AM and PM peak hour traffic volumes, and Saturday peak hour volumes, are summarized in Figures 4 and 5, respectively. These volumes were used to evaluate existing weekday and Saturday traffic conditions.

[1] The second busiest time in the area is during the fall harvest "crush" period in the month of October.



Source: Google Maps, 05/2017

Existing Traffic Controls and Geometrics

Hunter Subdivision - St. Helena

FIGURE 3

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2.7 Intersection Operations

An intersection LOS analysis was prepared for the existing weekday and Saturday conditions using the HCM methodology discussed in Section 1. Detailed LOS worksheets and signal warrants are included in Appendix C. Tables 3 and 4 show the results of the weekday and Saturday, respectively, existing conditions LOS analysis.

Table 3
Existing Weekday Peak Hour Intersection LOS

Intersection	Control	AM Peak		PM Peak	
		Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]
1. Main Street/Fulton Lane – Madrona Avenue	signalized	13.0	B	11.2	B
2. Main Street/Adams Street	signalized	22.9	C	20.8	C
3. Main Street/Hunt Avenue	unsignalized	16.9	C	18.3	C
4. Main Street/Pope Street – Mitchell Drive	signalized	**148.7**	**F**	**110.1**	**F**
5. Railroad Avenue/Fulton Lane	unsignalized	10.1	B	10.4	B
6. Railroad Avenue/Adams Street	unsignalized	10.0	A	11.2	B
7. Railroad Avenue/Hunt Avenue	unsignalized	14.4	B	14.0	B
8. Library Lane/Adams Street	unsignalized	10.6	B	12.4	B
9. Starr Avenue/Hunt Avenue	unsignalized	7.6	A	7.4	A
10. Starr Avenue/Pope Street	unsignalized	15.4	C	14.1	B
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	**27.1**	**D**	15.5	C
12. Silverado Trail/Pope Street	unsignalized	18.0	C	**27.3**	**D**
13. Silverado Trail/Howell Mountain Road	unsignalized	14.5	B	17.7	C

Notes:
1 Average seconds per vehicle
2 Level of Service (LOS)
BOLD value indicates unsatisfactory LOS

As shown in Table 3, a majority of the study area intersections are currently operating at satisfactory LOS under existing weekday conditions except for:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F in AM and PM peak hours.
- 11. Paseo Grand Drive – College Avenue/Pope Street: LOS D in AM peak hour.
- 12. Silverado Trail/Pope Street: LOS D in PM peak hour.

Table 4
Existing Saturday Peak Hour Intersection LOS

Intersection	Control	Saturday PM Peak	
		Delay[1]	*LOS*[2]
1. Main Street/Fulton Lane – Madrona Avenue	signalized	22.3	C
2. Main Street/Adams Street	signalized	37.5	D

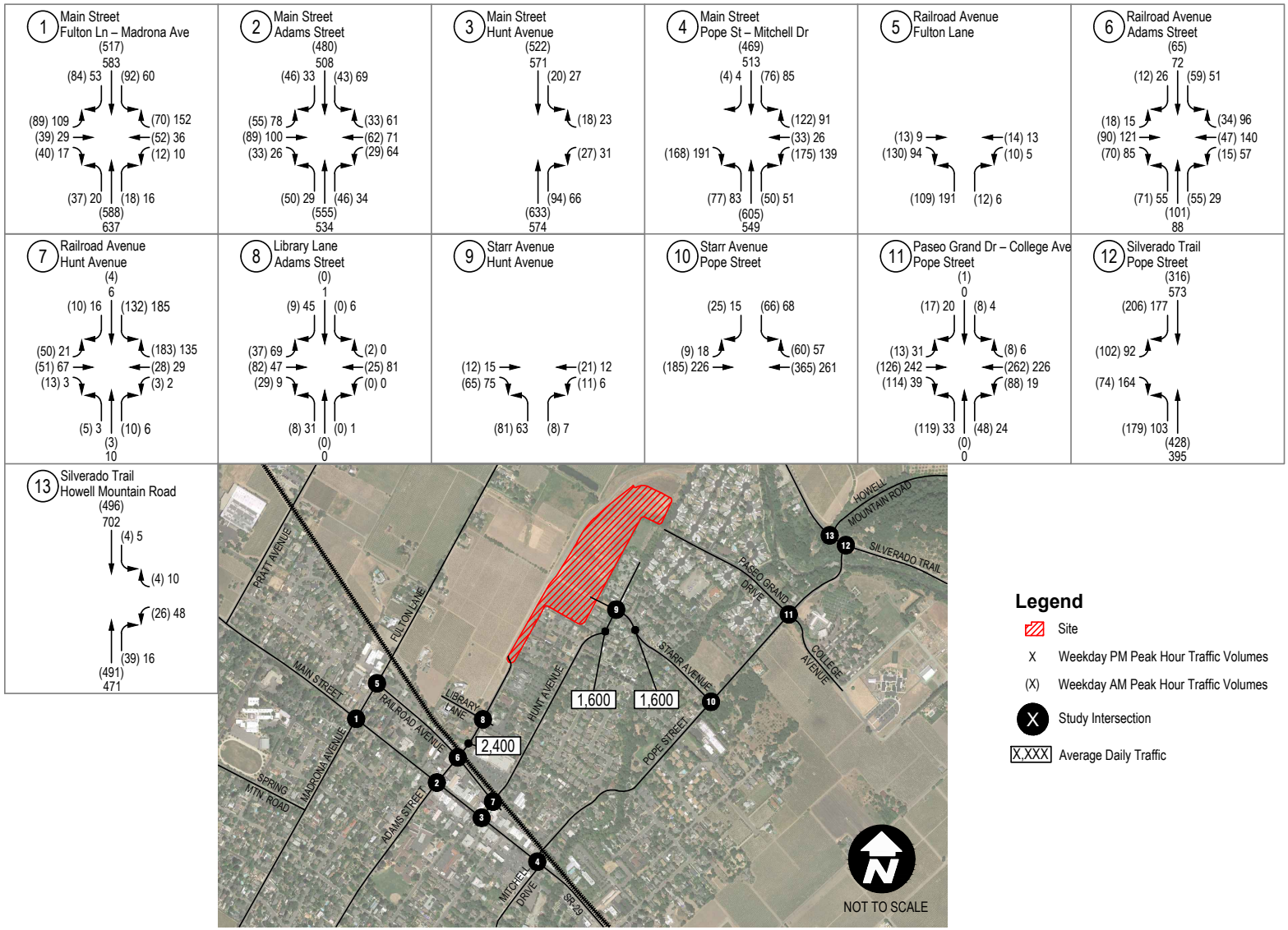
Table 4
Existing Saturday Peak Hour Intersection LOS

Intersection	Control	Saturday PM Peak	
		Delay[1]	*LOS*[2]
3. Main Street/Hunt Avenue	unsignalized	22.6	C
4. Main Street/Pope Street – Mitchell Drive	signalized	**129.2**	**F**
5. Railroad Avenue/Fulton Lane	unsignalized	9.6	A
6. Railroad Avenue/Adams Street	unsignalized	8.7	A
7. Railroad Avenue/Hunt Avenue	unsignalized	11.1	B
8. Library Lane/Adams Street	unsignalized	9.9	A
9. Starr Avenue/Hunt Avenue	unsignalized	7.2	A
10. Starr Avenue/Pope Street	unsignalized	11.7	B
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	13.4	B
12. Silverado Trail/Pope Street	unsignalized	20.2	C
13. Silverado Trail/Howell Mountain Road	unsignalized	15.2	C

Notes:
1 Average seconds per vehicle
2 Level of Service (LOS)
BOLD value indicates unsatisfactory LOS

As shown in Table 4, a majority of the study area intersections are currently operating at satisfactory LOS under existing Saturday conditions except for:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F.



Source: Google Maps, 05/2017

Existing Weekday Traffic Volumes

Hunter Subdivision - St. Helena

FIGURE **4**

DUDEK

Apr 15, 2019 - 2:21pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_04.15.19.dwg Layout: fig4-ex vols

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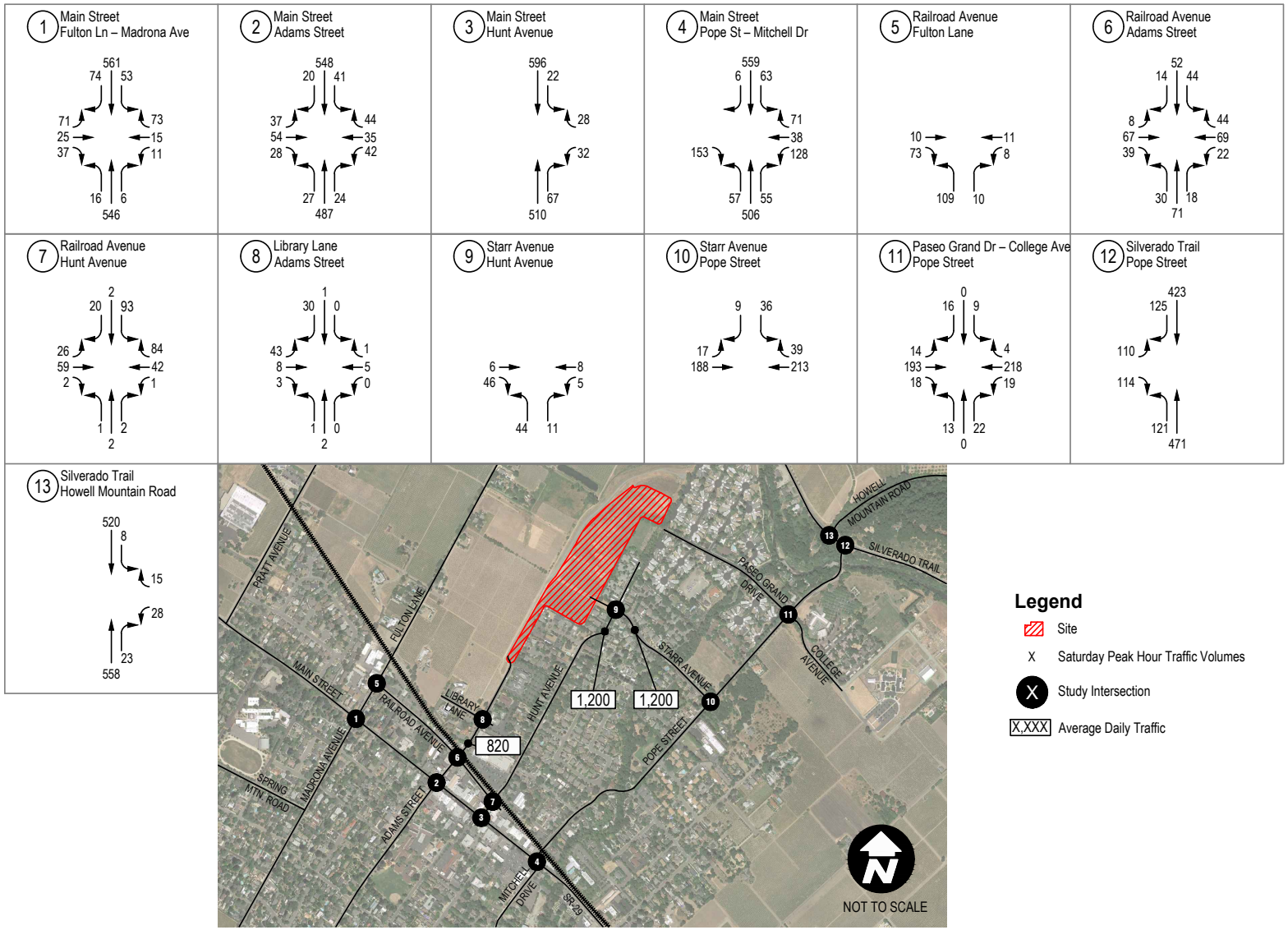

Source: Google Maps, 05/2017

Existing Saturday Traffic Volumes

Hunter Subdivision - St. Helena

FIGURE **5**

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3 PROJECT TRAFFIC

This section documents project-generated changes on the surrounding transportation system and at the study intersections.

3.1 Trip Generation

Trip generation estimates for the project were calculated based upon the trip rates from the Institute of Transportation Engineers' *Trip Generation, 10th Edition* (ITE 2017). Average trip generation rates represent weighted averages from studies conducted throughout the United States and Canada since 1980 that surveyed the identified use.[2] For example, "single-family detached housing," which has the highest trip generation rate per dwelling unit of all residential uses, specifically identifies all detached homes on individual lots, with a typical site being a suburban subdivision.

In order to reflect the correct intensity of land use and project traffic, the single-family detached housing rate was also used for the income-restricted housing, while the multifamily housing rate was used for the ADU rate. The calculation of project trip generation estimates for the weekday and Saturday is shown in Tables 5 and 6, respectively.

As shown in Table 5, during a weekday the project would generate 798 daily trips, 62 AM peak hour trips (16 inbound and 46 outbound), and 82 PM peak hour trips (52 inbound and 30 outbound).

Table 5
Weekday Project Trip Generation

Trip Generation Rates[1]								
			AM Peak Hour			*PM Peak Hour*		
Land Use	*Daily Trip Rate*	*Unit*	*% In*	*% Out*	*Total*	*% In*	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.44	DU	0.19	0.56	0.74	0.62	0.37	0.99
Multifamily Housing (Low-Rise) (ITE Code 220)	7.32	DU	0.11	0.35	0.46	0.35	0.21	0.56

Trip Generation									
				AM Peak Hour			*PM Peak Hour*		
Land Use	*Total No. of Units*	*Unit*	*Daily*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Single-Family Detached Housing	51	DU	481	10	28	38	32	19	51
Accessory (Granny) Units	11	DU	81	1	4	5	4	2	6
Affordable Housing[2]	25	DU	236	5	14	19	16	9	25
Total Trip Generation			**798**	**16**	**46**	**62**	**52**	**30**	**82**

Notes:
1 Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

2 Single-Family and multifamily land uses are based on surveys and weighted averages. Rates are not based on a specified number of bedrooms or vehicles per household.

[2] Reflects use of Single-Family land use since this rate is more conservative (higher trip generation) as compared to multifamily housing.

As shown in Table 6, during a Saturday the project would generate 815 daily trips, and 80 peak hour trips (40 inbound and 40 outbound).

Table 6
Saturday Project Trip Generation

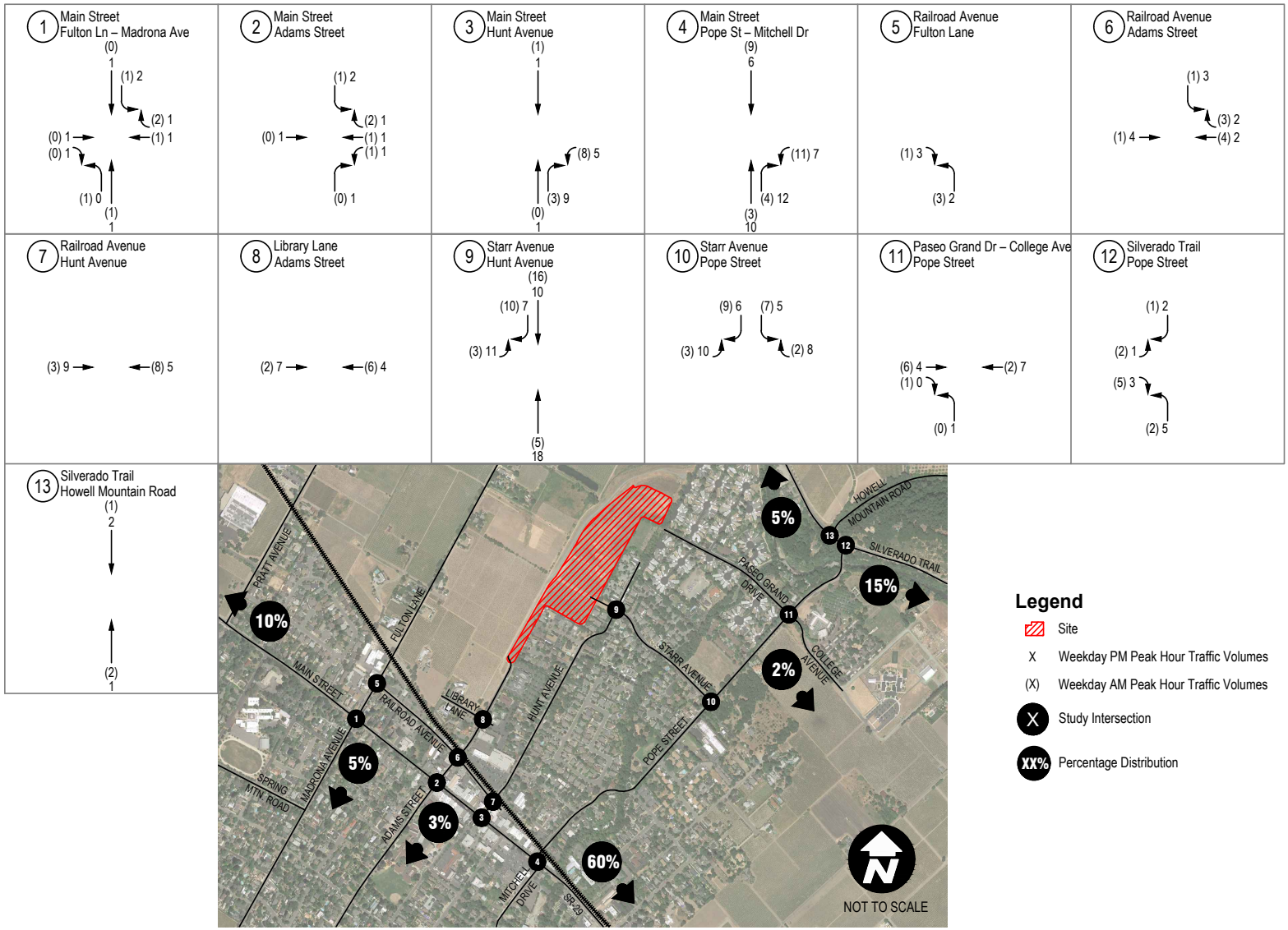
Trip Generation Rates[1]					
			Peak Hour		
Land Use	*Saturday Trip Rate*	*Unit*	*% In*	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.54	DU	0.47	0.47	0.93
Multifamily Housing (Low-Rise) (ITE Code 220)	8.14	DU	0.35	0.35	0.70

Trip Generation						
				Peak Hour		
Land Use	*Total No. of Units*	*Unit*	*Daily*	*In*	*Out*	*Total*
Single-Family Detached Housing	51	DU	487	24	24	48
Accessory (Granny) Units	11	DU	90	4	4	8
Affordable Housing[2]	25	DU	239	12	12	24
Total Trip Generation			**815**	**40**	**40**	**80**

Notes:
[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.
[2] Reflects use of Single-Family land use since this rate is more conservative (higher trip generation) as compared to multifamily housing.

3.2 Trip Distribution and Assignment

Project trips were distributed to the study area intersections using the existing travel patterns and logical commute routes for project-related traffic. Project trips were assigned to the study area intersections by applying the project trip generation estimates to the trip distribution percentages at each study area intersection. Single-family and ADU trips were distributed and assigned together, as shown on Figure 6, while the multifamily housing trips were distributed and assigned separately, as show on Figure 7. The total project trip assignment is shown in Figure 8. The project trip distribution and assignment for Saturday includes all uses combined and is shown on Figure 9.



Source: Google Maps, 05/2017

Project Trip Distribution & Assignment - Single-Family & Accessory Dwelling Units

FIGURE 6

Hunter Subdivision - St. Helena

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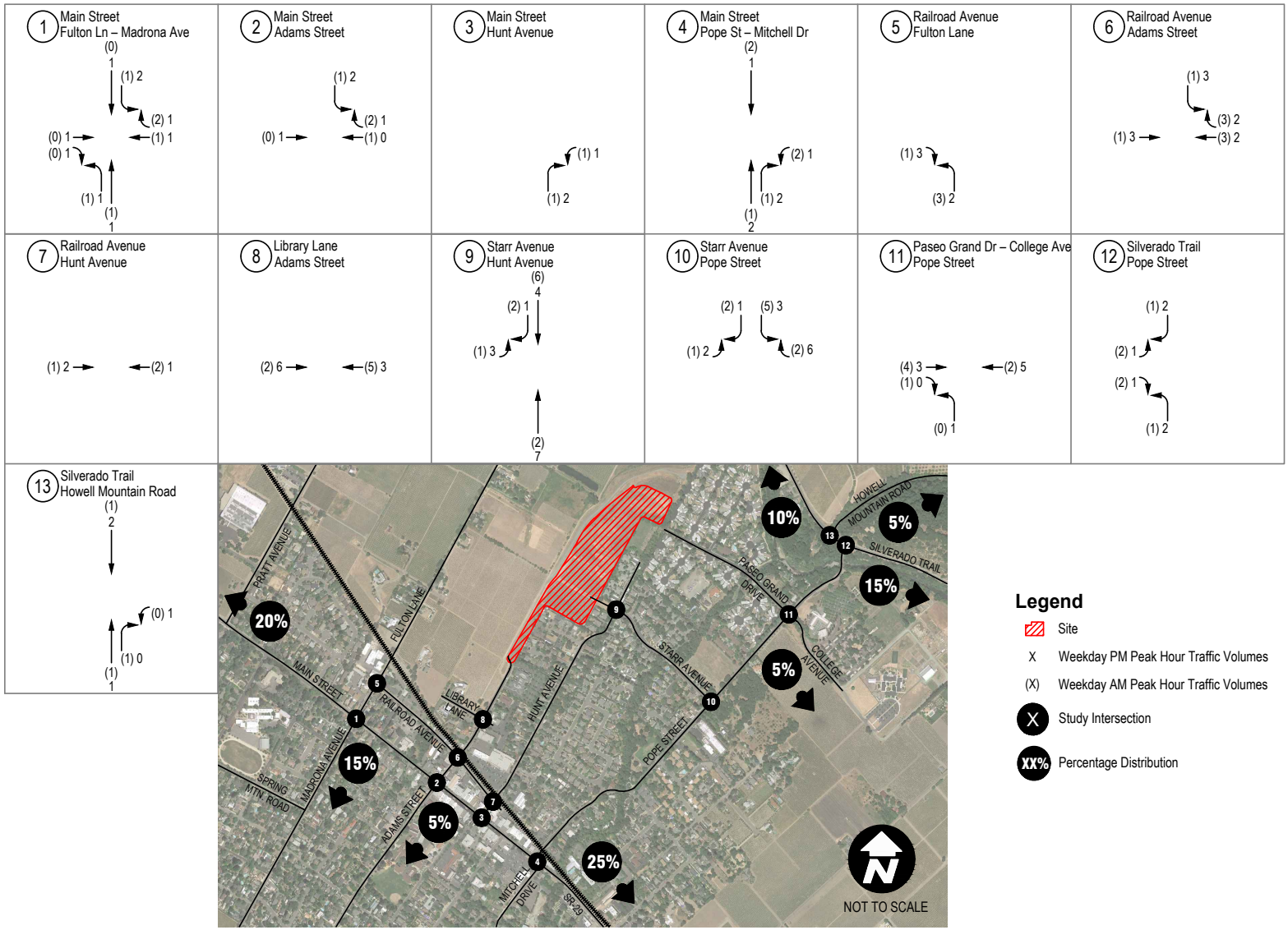

Source: Google Maps, 05/2017

Project Trip Distribution & Assignment - Multi-Family Housing

FIGURE 7

Hunter Subdivision - St. Helena

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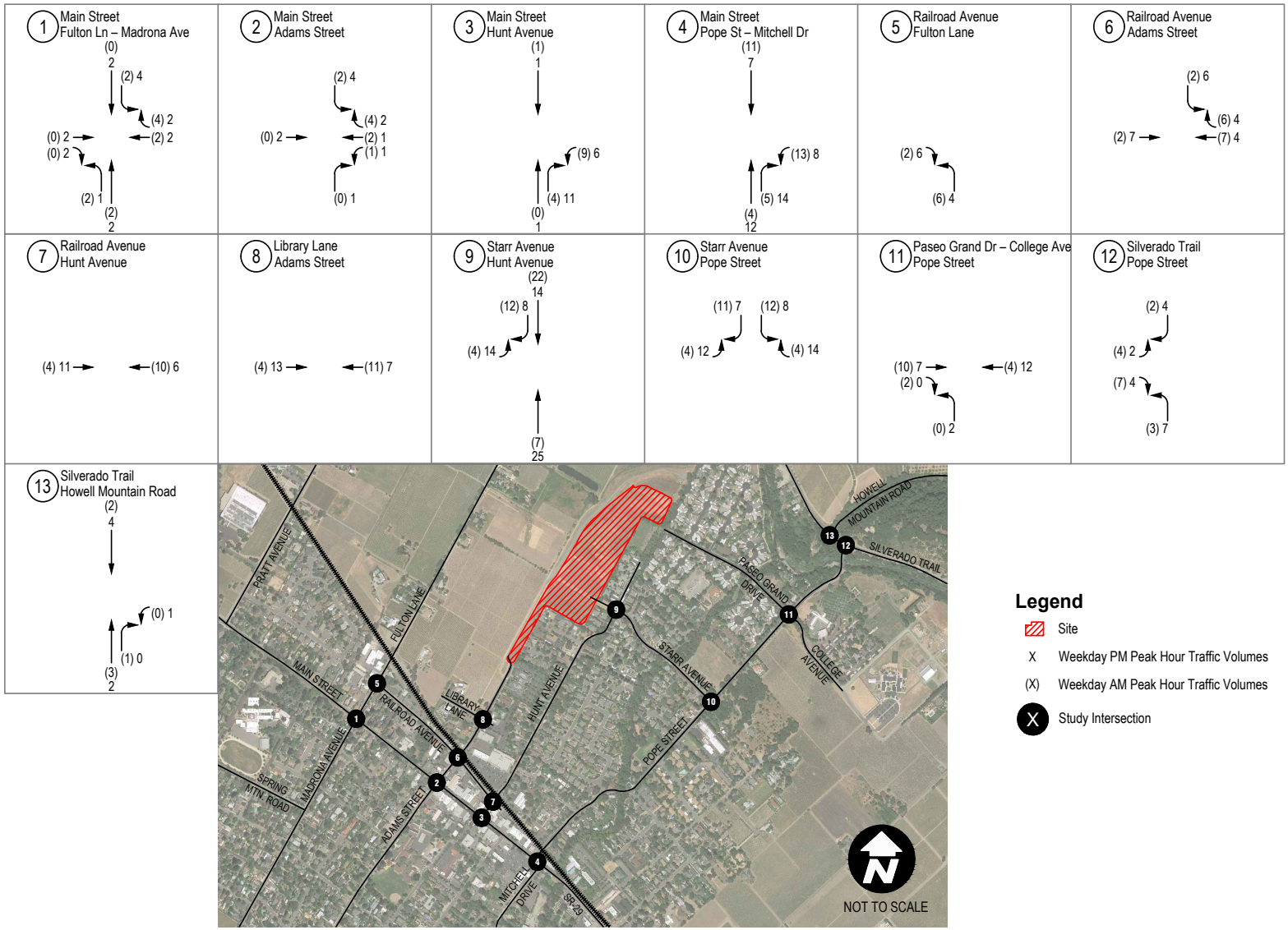

Source: Google Maps, 05/2017

Project Trip Assignment - Total (All Uses)

Hunter Subdivision - St. Helena

FIGURE **8**

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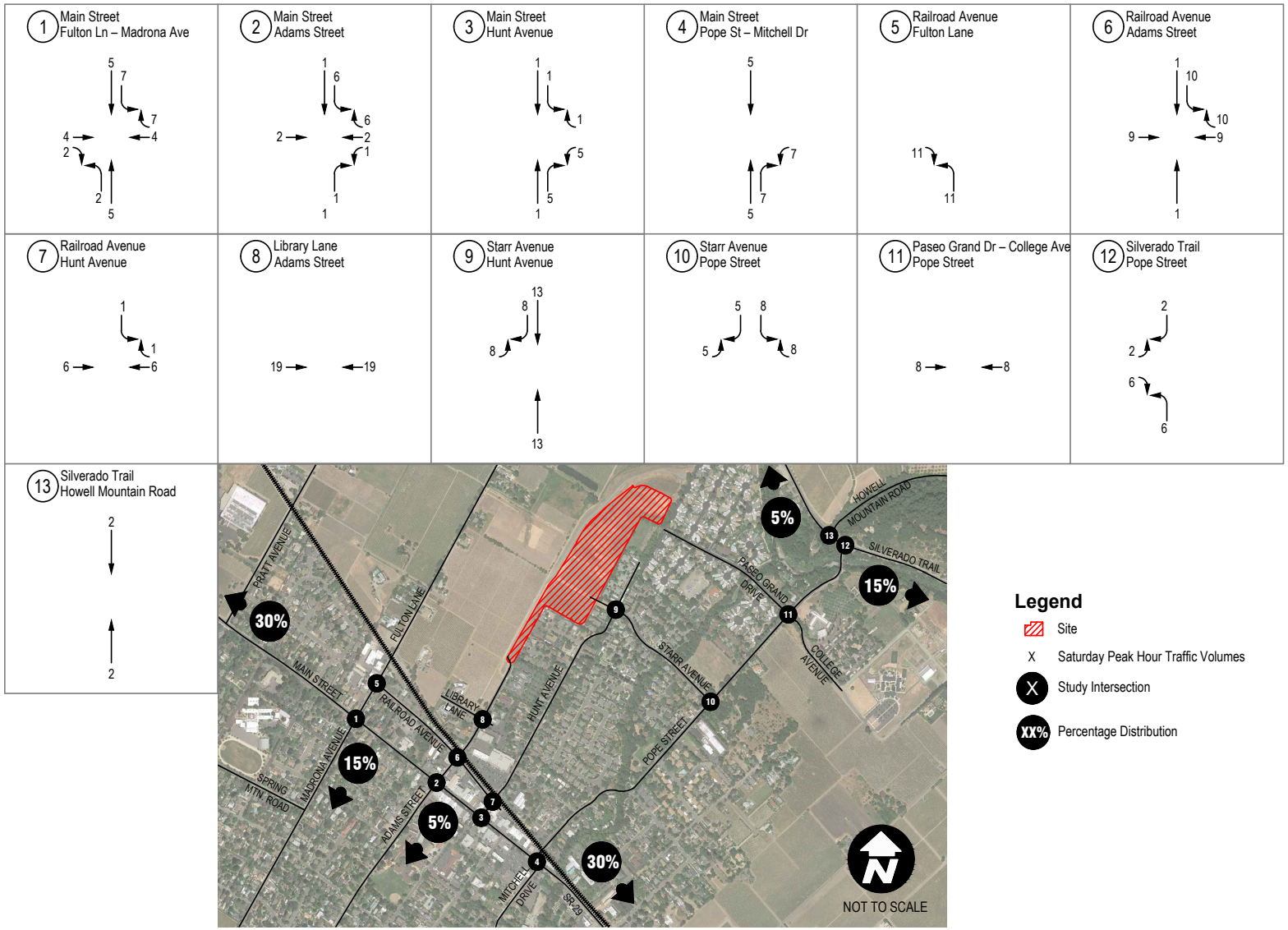

Source: Google Maps, 05/2017

Project Trip Distribution & Assignment - Saturday (All Uses)

FIGURE 9

Hunter Subdivision - St. Helena

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4 EXISTING PLUS PROJECT

4.1 Traffic Volumes

The project trip assignments shown in Figure 8 were added to the existing weekday traffic volumes shown in Figure 4 to derive the Existing plus Project weekday AM and PM peak hour traffic volumes. Figure 10 illustrates the Existing plus Project weekday AM and PM peak hour traffic volumes that were used to evaluate Existing plus Project weekday traffic conditions.

The project trip assignments shown in Figure 9 were added to the Existing Saturday traffic volumes shown in Figure 5 to derive the Existing plus Project Saturday peak hour traffic volumes. Figure 11 illustrates the Existing plus Project Saturday peak hour traffic volumes that were used to evaluate Existing plus Project Saturday traffic conditions.

4.2 Intersection Operations

An intersection operations analysis was conducted for the study area to evaluate the Existing plus Project weekday AM and PM peak hour, and Saturday peak hour conditions. Intersection operations were calculated using the LOS methodology described in Section 1. The following presents the results of the project analysis.

Tables 7 and 8 show the results of the Existing plus Project weekday and Saturday LOS analysis, respectively, and provides a comparison to the Existing (without project) conditions for the weekday peak hours using the HCM methodology described previously at all intersections. Detailed LOS worksheets and signal warrants are included in Appendix C.

As shown in Table 7, based on the appropriate impact criteria, all of the study area intersections would continue to operate at a satisfactory LOS, except for the following intersections:

- 4. Main Street/Pope Street – Mitchell Drive: Continues to operate with unsatisfactory LOS at LOS F during both the AM and PM peak hours, however the increase in delay is less than 5.0 seconds in the AM peak hour (4.8 seconds), while the increase in delay is greater than 5.0 seconds in the PM peak hour (11.4 seconds). This constitutes a deficiency with the City's LOS impact criteria (discussed in Section 1.5.3 above) for the PM peak hour.

- 11. Paseo Grand Drive – College Avenue/Pope Street: Continues to operate with unsatisfactory LOS at LOS D in AM peak hour. This intersection is unsignalized and does not satisfy a peak hour signal warrants (traffic signal), and the increase in delay is less than 5.0 seconds (1.1 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.

Table 7
Existing plus Project Weekday Peak Hour Intersection Level of Service

Intersection	Control	Existing				Existing Plus Project				Delay Change		Impact?	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	Delay[1]	LOS[2]	AM	PM	AM	PM
1. Main Street/Fulton Lane – Madrona Avenue	signalized	13.0	B	11.2	B	13.2	B	11.4	B	0.2	0.2	no	no
2. Main Street/Adams Street	signalized	22.9	C	20.8	C	23.0	C	21.2	C	0.1	0.4	no	no
3. Main Street/Hunt Avenue	unsignalized	16.9	C	18.3	C	17.6	C	18.9	C	0.7	0.6	no	no
4. Main Street/Pope Street – Mitchell Drive	signalized	**148.7**	**F**	**110.1**	**F**	**153.5**	**F**	**121.5**	**F**	4.8	**11.4**	no	**yes**
5. Railroad Avenue/Fulton Lane	unsignalized	10.1	B	10.4	B	10.2	B	10.5	B	0.1	0.1	no	no
6. Railroad Avenue/Adams Street	unsignalized	10.0	A	11.2	B	10.2	B	11.4	B	0.2	0.2	no	no
7. Railroad Avenue/Hunt Avenue	unsignalized	14.4	B	14.0	B	14.8	B	14.5	B	0.4	0.5	no	no
8. Library Lane/Adams Street	unsignalized	10.6	B	12.4	B	10.8	B	12.8	B	0.2	0.4	no	no
9. Starr Avenue/Hunt Avenue	unsignalized	7.6	A	7.4	A	7.7	A	7.6	A	0.1	0.2	no	no
10. Starr Avenue/Pope Street	unsignalized	15.4	C	14.1	B	16.2	C	14.8	B	0.8	0.7	no	no
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	**27.1**	**D**	15.5	C	**28.2**	**D**	15.9	C	1.1	0.4	no	no
12. Silverado Trail/Pope Street	unsignalized	18.0	C	27.3	D	18.5	C	28.6	D	0.5	1.3	no	no
13. Silverado Trail/Howell Mountain Road	unsignalized	14.5	B	17.7	C	14.6	B	17.9	C	0.1	0.2	no	no

Notes:
[1] Average seconds per vehicle
[2] Level of Service (LOS)
BOLD value indicates unsatisfactory LOS

Table 8
Existing plus Project Saturday Peak Hour Intersection Level of Service

Intersection	Control	Existing		Existing plus Project		Delay Change	Impact?
		Saturday PM Peak		*Saturday PM Peak*			
		Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]	*AM*	*AM*
1. Main Street/Fulton Lane – Madrona Avenue	signalized	22.3	C	22.6	C	0.3	no
2. Main Street/Adams Street	signalized	37.5	D	37.6	D	0.1	no
3. Main Street/Hunt Avenue	unsignalized	22.6	C	23.4	C	0.8	no
4. Main Street/Pope Street – Mitchell Drive	signalized	**129.2**	**F**	**132.9**	**F**	3.7	no
5. Railroad Avenue/Fulton Lane	unsignalized	9.6	A	9.8	A	0.2	no
6. Railroad Avenue/Adams Street	unsignalized	8.7	A	8.9	A	0.2	no
7. Railroad Avenue/Hunt Avenue	unsignalized	11.1	B	11.3	B	0.2	no
8. Library Lane/Adams Street	unsignalized	9.9	A	10.2	B	0.3	no
9. Starr Avenue/Hunt Avenue	unsignalized	7.2	A	7.3	A	0.1	no
10. Starr Avenue/Pope Street	unsignalized	11.7	B	11.9	B	0.2	no
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	13.4	B	13.7	B	0.3	no
12. Silverado Trail/Pope Street	unsignalized	20.2	C	21.0	C	0.8	no
13. Silverado Trail/Howell Mountain Road	unsignalized	15.2	C	15.2	C	0.1	no

Notes:
[1] Average seconds per vehicle
[2] Level of Service (LOS)
BOLD value indicates unsatisfactory LOS

- 12. Silverado Trail/Pope Street: Continues to operate with unsatisfactory LOS at LOS D in the PM peak hour. This intersection is unsignalized and satisfies the peak hour signal warrant (traffic signal) for the PM peak hour, however the increase in delay is less than 5.0 seconds (1.3 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.

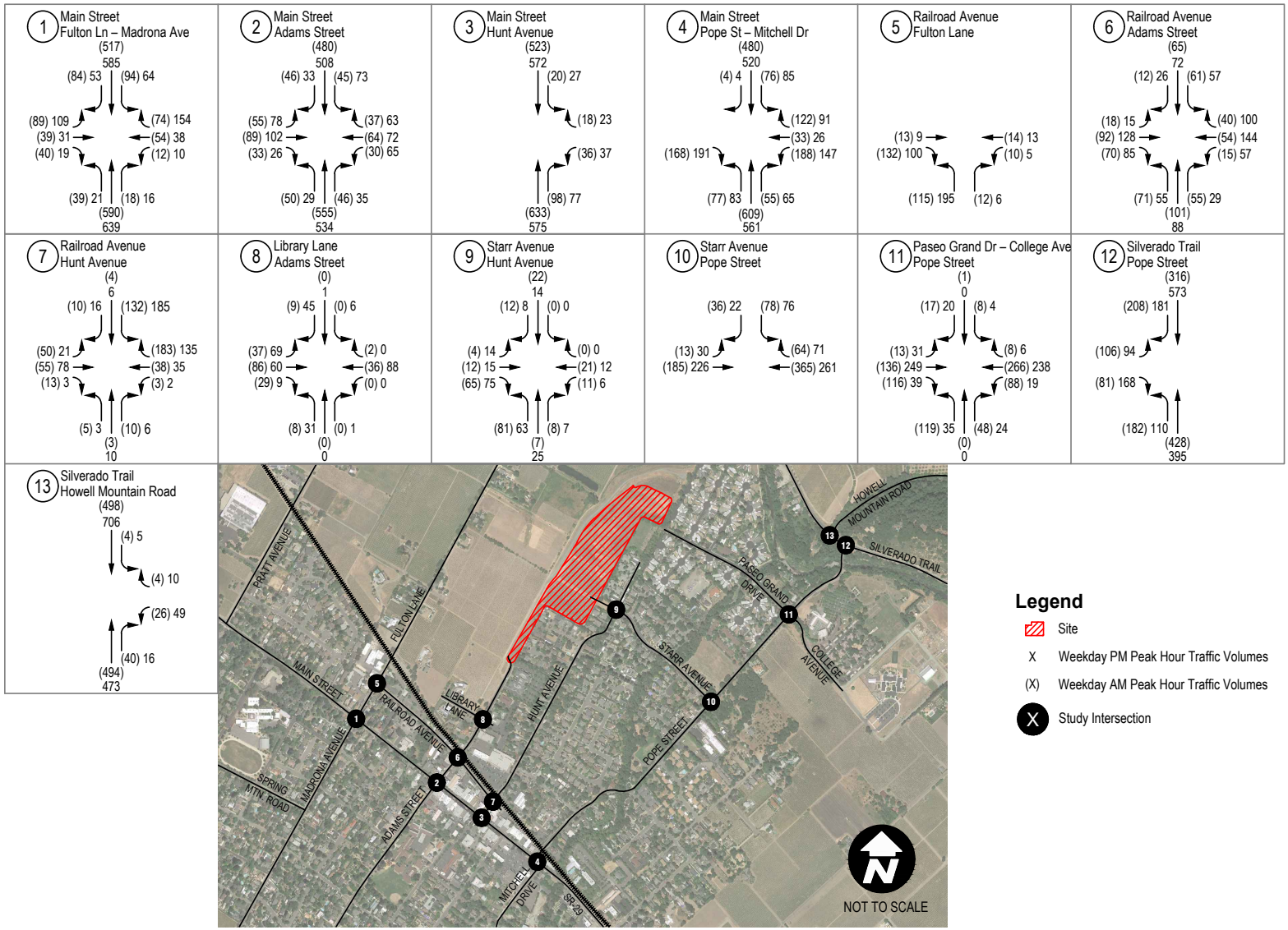
As shown in Table 8, based on the appropriate impact criteria, most of the study area intersections would continue to operate at a satisfactory LOS (LOS D or better for intersections along Main Street – SR-29, and LOS C or better for all other intersections) during the Saturday peak hour, except for the following intersections:

- 4. Main Street/Pope Street – Mitchell Drive: Continues to operate with unsatisfactory LOS at LOS F, however, the increase in delay is less than 5.0 seconds (3.7 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.

Based on the LOS results of the Existing plus Project weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would be inconsistent with the City's LOS policies, and would require an improvement:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F during the weekday PM peak hour.

An improvement for this intersection is provided in Section 6 below.



Source: Google Maps, 05/2017

Existing plus Project Weekday Peak Hour Traffic Volumes

FIGURE 10

Hunter Subdivision - St. Helena

DUDEK

Mar 11, 2021 - 2:55pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_04.15.19.dwg Layout: fig10-exwp vols

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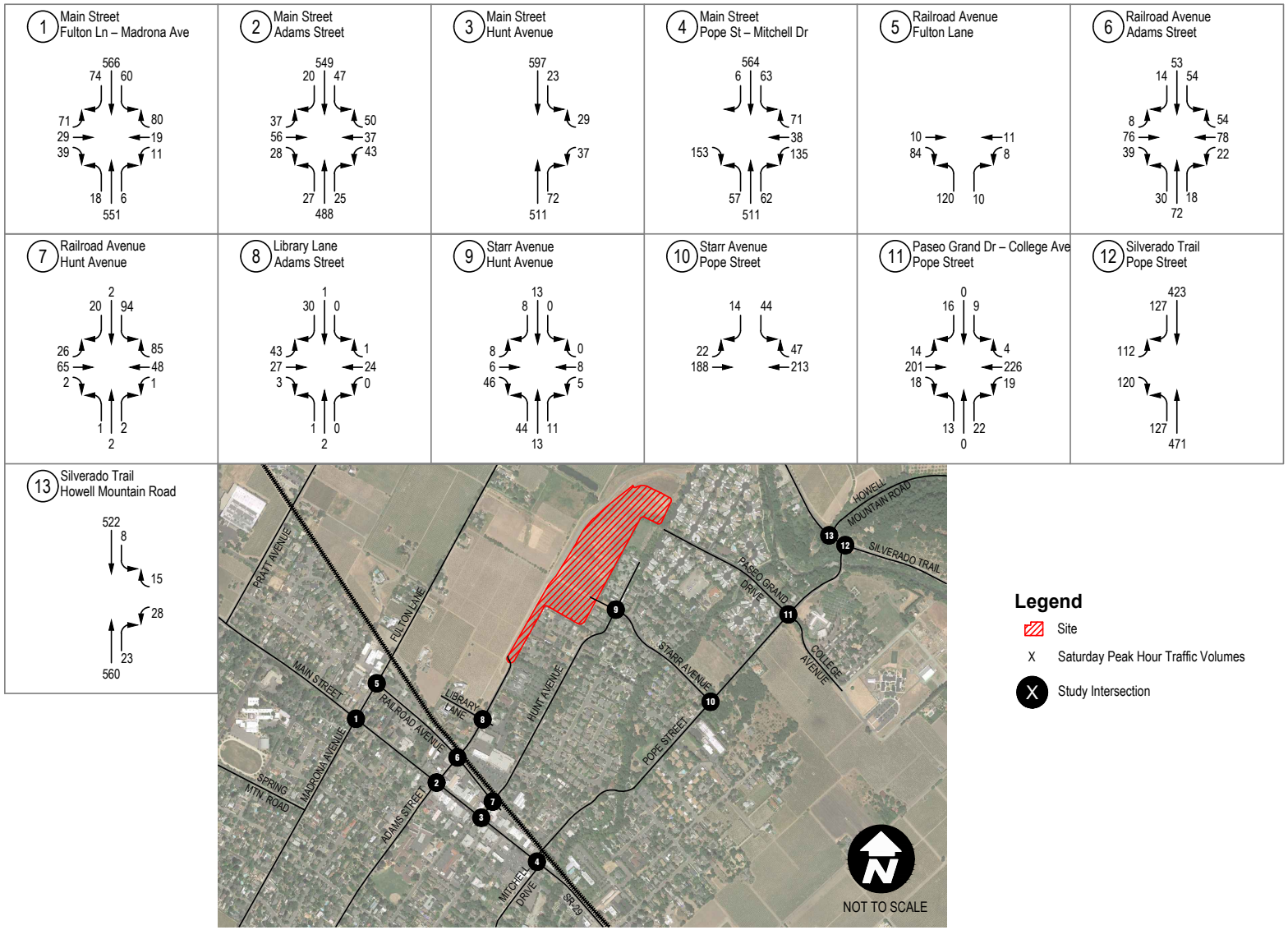

Source: Google Maps, 05/2017

Existing plus Project Saturday Peak Hour Traffic Volumes

Hunter Subdivision - St. Helena

FIGURE 11

DUDEK

Mar 11, 2021 - 3:02pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_04.15.19.dwg Layout: fig11-exwp Svols

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5 BUILDOUT (2040) CONDITIONS

This section describes impacts under Buildout (2040) conditions within the study area for intersection operations, and analyzes impacts based on the threshold criteria.

5.1 Planned Pedestrian and Bicycle Facility Improvements

The pedestrian infrastructure within the study area would remain largely unaffected by the proposed project. As Starr Avenue is extended northward and Adams Street extended eastward, additional sidewalks connecting the proposed project to the surrounding area would provide pedestrian access to the surrounding residential community. Additionally, the NVTA has plans for the Vine Trail, a network of bicycle and pedestrian paths that will connect all the Napa County communities, with construction in the St. Helena area anticipated to begin as early as 2021. The Vine Trail, as tentatively proposed, would proceed through sections of the proposed project by way of Adams Street and Starr Avenue.

5.2 Transit System

The NVTA has published a report, *Vision 2040 Moving Napa Forward Transportation Plan*, which outlines policies to improve system safety of all users, serve the transportation needs of all users regardless of age, income or ability, and to improve overall reliability of the transit system. As the shift from one-car trips to multi-modal and active transportation uses increases, the plan would require collaboration with the City and other jurisdictions to modify service as needed to serve the community. The plan would also promote the Vine Trail as an active transportation use, and along with the proposed General Plan's "Complete Streets" approach, improve overall connectivity, ease of access, and safety for all members of the community.

The Wine Train is not expected to increase frequency, but could potentially add stops within the City, and additional commuter or freight train traffic is not expected to occur through 2040.

5.3 Traffic Volumes

Buildout (2040) traffic volumes are based on the forecast volumes from the St. Helena General Plan Update 2040 Draft EIR. The proposed project was included in the 2040 circulation analysis, and traffic volumes generated by the project's ADUs were added to the Buildout (2040) conditions. Furthermore, the General Plan Update analysis did not include any of the following roadway extensions described within the Draft EIR:

- Connection 1: Starr Avenue extension north to Adams Street;

- Three options for connection 2, extension to Mills Lane: Starr Avenue (connection 2A), College Avenue (connection 2B), or Allison Avenue (connection 2C);
- Connection 3: Oak Avenue from Charter Oak Avenue to Grayson Avenue and limited access from Mitchell Drive to Charter Oak;
- Connection 4: Adams Street extension from its current eastern terminus to Starr Avenue;
- Two options for connection 5, extension to Silverado Trail: Adams Street (connection 5A) or Mills Lane (connection 5B).

These connections would require further study and City Council approval.

Within the Draft EIR, 2040 traffic volumes were forecast using existing (2018) count data and the four-step Napa-Solano Travel Demand Model. It should be noted that the 2018 count data used in that Draft EIR is the same as the 2018 count data used in this TIS. The Base Year version of the model was calibrated and validated to year 2018 traffic volume counts based on validation targets documented in the *Caltrans 2017 Regional Transportation Plan Guidelines Update*. The calibration and validation procedure is a typical process in traffic volume forecasting whereby the model is fine-tuned to replicate observed travel behavior in the study area prior to developing forecasts. After the calibration procedure, the Base Year model met all validation targets for both the weekday AM and PM peak hour model scenarios. Saturday midday traffic patterns and volumes mimic the weekday PM peak hour scenario, so travel demand model growth data from the PM peak hour model was used to develop the Saturday midday traffic volume forecasts.

Buildout (2040) weekday AM and PM peak hour traffic volumes are summarized in Figure 12, and were used to evaluate Buildout (2040) weekday traffic conditions. Buildout (2040) Saturday PM peak hour traffic volumes are summarized in Figure 13 and were used to evaluate Buildout (2040) Saturday traffic conditions.

5.4 Intersection Operations

An intersection LOS analysis was prepared for the weekday and Saturday Buildout (2040) conditions using the HCM methodology discussed in Section 1. Detailed LOS worksheets and signal warrants are included in Appendix C. Tables 9 and 10 show the results of the weekday and Saturday Buildout (2040) conditions LOS analysis, respectively.

As shown in Table 9, most of the study area intersections are forecast to operate with satisfactory LOS (LOS D or better for intersections along Main Street – SR-29, and LOS C or better for all other intersections) under weekday Buildout (2040) conditions except for:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F in AM and PM peak hours. The proposed project would contribute traffic to this LOS deficiency.
- 11. Paseo Grand Drive – College Avenue/Pope Street: LOS E in AM peak hour. This intersection would remain unsignalized in the Buildout condition, and would not satisfy the peak hour signal warrant in the AM peak hour. Therefore, this would be consistent with the City's LOS policies.
- 12. Silverado Trail/Pope Street: LOS E in AM peak hour, and LOS F in the PM peak hour. This intersection would remain unsignalized in the Buildout condition. However, the AM and PM peak hour traffic volumes would satisfy the peak hour signal warrant. The proposed project would contribute traffic to this LOS deficiency.

Table 9
Buildout (2040) Weekday Peak Hour Intersection LOS

Intersection	Control	AM Peak		PM Peak	
		Delay[1]	*LOS*[2]	*Delay*[1]	*LOS*[2]
1. Main Street/Fulton Lane – Madrona Avenue	signalized	22.3	C	14.6	B
2. Main Street/Adams Street	signalized	29.8	C	24.4	C
3. Main Street/Hunt Avenue	unsignalized	19.0	C	22.3	C
4. Main Street/Pope Street – Mitchell Drive	signalized	**164.0**	**F**	**132.4**	**F**
5. Railroad Avenue/Fulton Lane	unsignalized	10.6	B	11.5	B
6. Railroad Avenue/Adams Street	unsignalized	11.0	B	12.0	B
7. Railroad Avenue/Hunt Avenue	unsignalized	16.7	C	16.8	C
8. Library Lane/Adams Street	unsignalized	10.9	B	12.6	B
9. Starr Avenue/Hunt Avenue	unsignalized	8.1	A	8.0	A
10. Starr Avenue/Pope Street	unsignalized	19.1	C	18.4	C
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	**45.6**	**E**	19.3	C
12. Silverado Trail/Pope Street	unsignalized	**48.1**	**E**	**108.8**	**F**
13. Silverado Trail/Howell Mountain Road	unsignalized	16.6	C	21.9	C

Notes:
[1] Average seconds per vehicle
[2] Level of Service (LOS)
BOLD value indicates unsatisfactory LOS
Source: Dudek 2019.

Table 10
Buildout (2040) Saturday Peak Hour Intersection LOS

Intersection	Control	Saturday PM Peak	
		Delay[1]	*LOS*[2]
1. Main Street/Fulton Lane – Madrona Avenue	signalized	23.6	C
2. Main Street/Adams Street	signalized	39.9	D
3. Main Street/Hunt Avenue	unsignalized	25.3	D

Table 10
Buildout (2040) Saturday Peak Hour Intersection LOS

Intersection	Control	Saturday PM Peak	
		Delay[1]	*LOS*[2]
4. Main Street/Pope Street – Mitchell Drive	signalized	**146.8**	**F**
5. Railroad Avenue/Fulton Lane	unsignalized	10.4	B
6. Railroad Avenue/Adams Street	unsignalized	8.9	A
7. Railroad Avenue/Hunt Avenue	unsignalized	12.3	B
8. Library Lane/Adams Street	unsignalized	8.5	A
9. Starr Avenue/Hunt Avenue	unsignalized	7.5	A
10. Starr Avenue/Pope Street	unsignalized	13.4	B
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	16.1	C
12. Silverado Trail/Pope Street	unsignalized	**82.1**	**F**
13. Silverado Trail/Howell Mountain Road	unsignalized	19.8	C

Notes:
1 Average seconds per vehicle
2 Level of Service (LOS)
BOLD value indicates unsatisfactory LOS
Source: Dudek 2019.

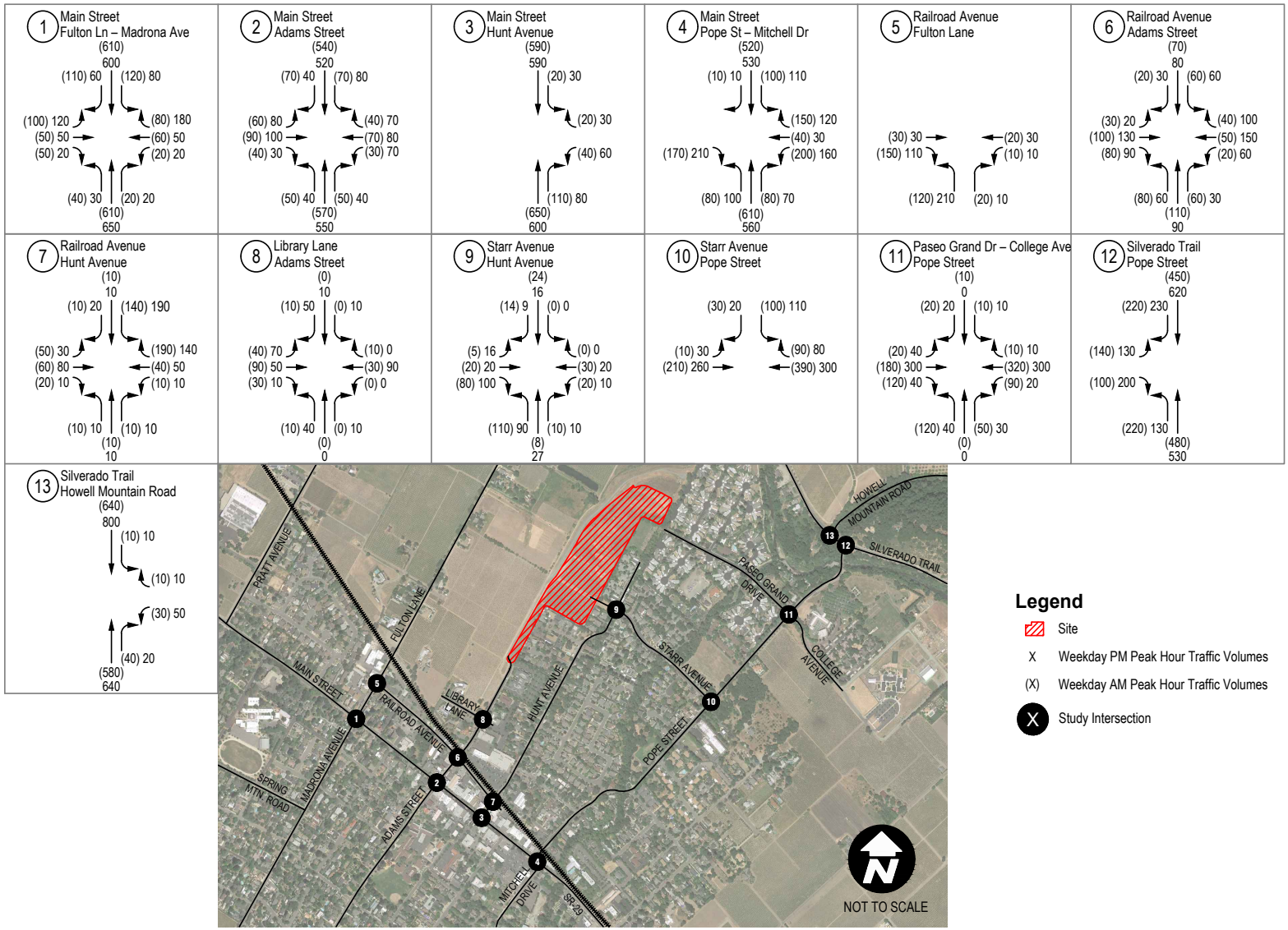
As shown in Table 10, most of the study area intersections are forecast to operate with satisfactory LOS (LOS D or better for intersections along Main Street – SR-29, and LOS C or better for all other intersections) per the City's LOS standards under Saturday Buildout (2040) conditions except for:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F in the weekday and Saturday peak hours. The proposed project would contribute traffic to this LOS deficiency.
- 12. Silverado Trail/Pope Street: LOS F. This intersection would remain unsignalized in the Buildout condition. However, its Saturday peak hour volume would satisfy the peak hour signal warrant. The proposed project would contribute traffic to this LOS deficiency.

Based on the LOS results of the Buildout (2040) weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would create an LOS deficiency at the following intersections, and would require improvements:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F during the weekday and Saturday peak hours.
- 12. Silverado Trail/Pope Street: LOS E during the weekday AM peak hour, LOS F during the weekday PM peak hour and Saturday peak hours. The weekday and Saturday peak hours volumes satisfy peak hour signal warrants.

Improvements for these LOS inconsistencies are provided in Section 6 below.



Source: Google Maps, 05/2017

Buildout (2040) Weekday Peak Hour Traffic Volumes

Hunter Subdivision - St. Helena

FIGURE 12

DUDEK

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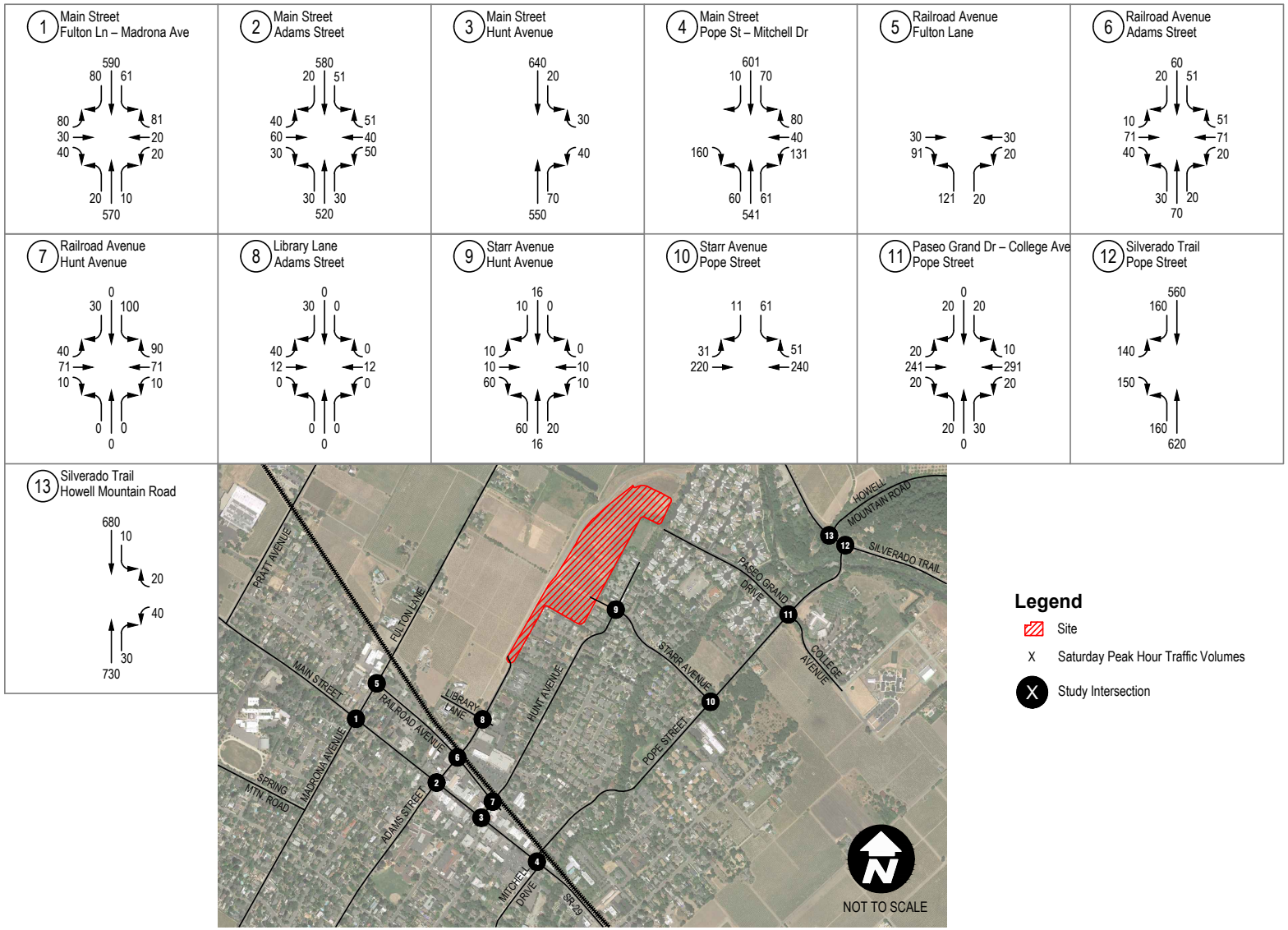

Source: Google Maps, 05/2017

Buildout (2040) Saturday Peak Hour Traffic Volumes

Hunter Subdivision - St. Helena

FIGURE 13

DUDEK

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5 SPECIAL ISSUES

This section provides analyses of specific transportation/circulation issues pertaining to the proposed project as directed by the City in the project's Scoping Agreement. This includes an analysis of the project's access and circulation, and a vehicular queueing analysis for the critical storage turn lanes for the study area intersections, including primary driveway and secondary access points to the site. In addition, a qualitative collision analysis was also completed to identify safety concerns for motorists, pedestrians, and bicyclists.

5.1 Project Access and Circulation

As mentioned previously, the proposed project would extend Starr Avenue northward into the project site, and intersect with Adams Street, which the project would also extend eastward from its current terminus. As Starr Avenue is extended approximately northward, it would narrow from approximately a 75-foot right-of-way (ROW) to a 60-foot ROW with 4-foot-side sidewalks and a 6-foot-wide planter strip on both sides of the street, consistent with the City's street standards. This extension, along with Adams Street, would be designed to accommodate emergency service vehicles and maintain accessibility for pedestrians and bicyclists according to City design standards.

Additionally, internal public residential streets within the project site would be created to accommodate neighborhood circulation and provide on-street parking on both sides of the Starr Avenue and Adams Street extensions (where permitted). These roadways would be designed to be consistent with all applicable City design criteria and conform to the City's Municipal Code (§16.32.060) to ensure that emergency service vehicles can adequately circulate within the project site.

Per review of the site plan, and field observations of existing on-street conditions around the site on Adams Street and Starr Avenue, there are no visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the site.

5.2 Queueing

Vehicular queues on all study intersections were calculated for the 95th percentile (design) queues for the weekday AM and PM, and Saturday peak hours using the Synchro/SimTraffic software. The queues were calculated to determine whether left- or right turning traffic at intersections would spill over into through lanes and potentially impede vehicles causing intersection delays, which may contribute to unsatisfactory LOS results measured intersections. The 95th percentile queues were determined for the Existing, Existing plus Project, and Buildout (2040) conditions.

5.2.1 Existing Condition

Table 11 presents the calculated queues for major movements, including left turns, right turns, and through lanes at the study intersections for the existing condition.

Table 11
Existing AM, PM, and Saturday Peak Hour Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Existing			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
1. Main Street/Fulton Lane – Madrona Avenue	EBLTR[3]	300	167	184	134	no	no	no
	WBLTR[3]	330	121	161	92	no	no	no
	NBL[3]	420	86	81	59	no	no	no
	SBL	110	106	88	84	no	no	no
2. Main Street/Adams Street	EBLTR[3]	290	150	181	126	no	no	no
	WBLTR[3]	250	122	194	140	no	no	no
	NBL	180	145	136	126	no	no	no
	SBL[3]	420	125	150	113	no	no	no
3. Main Street/Hunt Avenue	WBLR[3]	150	72	69	98	no	no	no
	SBL	110	39	44	56	no	no	no
4. Main Street/Pope Street – Mitchell Drive	EBR[3]	300	211	244	188	no	no	no
	WBR	160	**173**	137	124	**YES**	no	no
	NBL	155	**181**	**167**	133	**YES**	**YES**	no
	SBL[3]	330	150	162	145	no	no	no
5. Railroad Avenue/Fulton Lane	WBTL[3]	250	13	11	13	no	no	no
	NBLR[3]	1050	55	60	55	no	no	no
6. Railroad Avenue/Adams Street	EBLTR[3]	250	77	95	65	no	no	no
	WBLTR[3]	350	59	95	70	no	no	no
	NBLTR[3]	500	71	74	56	no	no	no
	SBLTR[3]	1,050	66	72	60	no	no	no
7. Railroad Avenue/Hunt Avenue	EBLTR[3]	160	41	27	24	no	no	no
	WBLTR[3]	300	14	28	8	no	no	no
	NBLTR[3]	300	35	33	18	no	no	no
	SBLTR[3]	500	55	68	50	no	no	no
8. Library Lane/Adams Street	EBLTR[3]	300	12	26	7	no	no	no
	WBLTR[4]	575	0	10	0	no	no	no
	NBLTR[4]	250	33	48	18	no	no	no
	SBLTR[4]	440	31	51	46	no	no	no
9. Starr Avenue/Hunt Avenue	EBTR[3]	420	59	57	52	no	no	no
	WBLT[4]	450	51	37	37	no	no	no
	NBLR[3]	75	57	54	50	no	no	no
	SBLTR[5]	0	0	0	0	no	no	no

Table 11
Existing AM, PM, and Saturday Peak Hour Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Existing			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
10. Starr Avenue/Pope Street	EBTL[3]	700	28	33	35	no	no	no
	WBTR[3]	1100	5	0	0	no	no	no
	SBLR[3]	335	71	63	59	no	no	no
11. Paseo Grand Dr – College Ave/Pope Street	EBL	85	20	29	20	no	no	no
	EBTR[3]	1100	9	0	14	no	no	no
	WBL	90	47	17	20	no	no	no
	NBL	110	69	41	29	no	no	no
	SBLTR[3]	300	40	37	39	no	no	no
12. Silverado Trail/Pope Street	EBLR[3]	900	191	255	262	no	no	no
	NBL	100	84	66	66	no	no	no
	SBR[3]	225	26	19	16	no	no	no
13. Silverado Trail/Howell Mountain Road	WBLR[3]	850	47	61	59	no	no	no
	NBR	50	17	0	15	no	no	no
	SBL	100	7	13	18	no	no	no

Notes:
1 Based on 95th percentile (design) queue length in SimTraffic 10.
2 Measured in feet.
3 Length measured to nearest intersection.
4 Length measured to roadway terminus.
5 Does not exist.
BOLD Queue exceeds storage length.
Source: Dudek 2019.

Based on Table 11, most of the study intersections do not exceed storage length for the highest calculated 95th percentile queues in the weekday and Saturday peak hours of the existing condition except for:

- 4. Main Street/Pope Street – Mitchell Drive: Westbound right turn lane (WBR) in the AM peak hour (exceeded by 13 feet); and, the northbound left turn lane (NBL) in the AM and PM peak hours (exceeded by 26 feet and 12 feet, respectively). These storage lane exceedances would be approximately one car length or less (assuming length of standard vehicle is 22 feet, including front and rear space).

5.2.2 Existing plus Project

Table 12 presents the calculated 95th percentile (design) queues at the study area intersections for the Existing plus Project condition.

Table 12
Existing plus Project AM, PM and Saturday Peak Hour
Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Existing plus Project			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
1. Main Street/Fulton Lane – Madrona Avenue	EBLTR[3]	300	171	189	122	no	no	no
	WBLTR[3]	330	138	153	89	no	no	no
	NBL[3]	420	99	85	66	no	no	no
	SBL	110	110	85	74	no	no	no
2. Main Street/Adams Street	EBLTR[3]	290	161	186	118	no	no	no
	WBLTR[3]	250	125	196	139	no	no	no
	NBL	180	154	115	123	no	no	no
	SBL[3]	420	130	132	140	no	no	no
3. Main Street/Hunt Avenue	WBLR[3]	150	86	77	93	no	no	no
	SBL	110	44	43	53	no	no	no
4. Main Street/Pope Street – Mitchell Drive	EBR[3]	300	199	208	193	no	no	no
	WBR	160	**177**	141	128	**yes**	no	no
	NBL	155	**173**	**162**	135	**yes**	**yes**	no
	SBL[3]	330	148	155	148	no	no	no
5. Railroad Avenue/Fulton Lane	WBTL[3]	250	12	6	6	no	no	no
	NBLR[3]	1050	54	66	54	no	no	no
6. Railroad Avenue/Adams Street	EBLTR[3]	250	86	108	69	no	no	no
	WBLTR[3]	350	66	105	66	no	no	no
	NBLTR[3]	500	69	66	57	no	no	no
	SBLTR[3]	1,050	65	72	61	no	no	no
7. Railroad Avenue/Hunt Avenue	EBLTR[3]	160	42	24	29	no	no	no
	WBLTR[3]	300	24	10	9	no	no	no
	NBLTR[3]	300	34	36	19	no	no	no
	SBLTR[3]	500	67	60	50	no	no	no
8. Library Lane/Adams Street	EBLTR[3]	300	12	28	9	no	no	no
	WBLTR[4]	575	0	0	0	no	no	no
	NBLTR[4]	250	28	52	19	no	no	no
	SBLTR[4]	440	31	50	50	no	no	no
9. Starr Avenue/Hunt Avenue	EBTR[3]	420	51	50	47	no	no	no
	WBLT[4]	450	53	42	33	no	no	no
	NBLR[3]	75	52	53	54	no	no	no
	SBLTR[5]	0	50	37	38	no	no	no
10. Starr Avenue/Pope Street	EBTL[3]	700	33	46	36	no	no	no
	WBTR[3]	1100	9	5	0	no	no	no
	SBLR[3]	335	79	68	55	no	no	no

Table 12
Existing plus Project AM, PM and Saturday Peak Hour
Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Existing plus Project			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
11. Paseo Grand Dr – College Ave/Pope Street	EBL	85	17	26	15	no	no	no
	EBTR[3]	1100	7	3	8	no	no	no
	WBL	90	50	22	24	no	no	no
	NBL	110	69	43	25	no	no	no
	SBLTR[3]	300	41	37	39	no	no	no
12. Silverado Trail/Pope Street	EBLR[3]	900	177	405	227	no	no	no
	NBL	100	75	68	68	no	no	no
	SBR[3]	225	28	21	15	no	no	no
13. Silverado Trail/Howell Mountain Road	WBLR[3]	850	52	66	56	no	no	no
	NBR	50	9	3	7	no	no	no
	SBL	100	11	12	22	no	no	no

Notes:
1 Based on 95th percentile (design) queue length in SimTraffic 10.
2 Measured in feet.
3 Length measured to nearest intersection.
4 Length measured to roadway terminus.
5 Does not exist.
BOLD Queue exceeds storage length.
Source: Dudek 2019.

Based on Table 12, similar to the existing condition, most of the study intersections do not exceed storage length for the highest calculated 95th percentile queues in the weekday and Saturday peak hours of the Existing plus Project condition except for:

- 4. Main Street/Pope Street – Mitchell Drive: WBR in the AM peak hour (exceeded by 17 feet), NBL in the AM and PM peak hour (exceeded by 18 feet and 7 feet respectively). These storage lane exceedances would be approximately one car length or less (assuming length of standard vehicle is 22 feet, including front and rear space).

While the queues calculated in the Existing plus Project condition were slightly less (less than one car length) than the existing condition, due to calculation variations and optimized signal timing, the calculated Existing plus Project queues generally show that addition of project traffic to Main Street/Pope Street would not create a measurable increase of vehicular queues at the intersection.

5.2.3 Buildout (2040) Condition

Table 13 presents the calculated queues for major movements, including left turns, right turns, and through lanes at the study area intersections for the Buildout (2040) scenario.

Table 13
Buildout (2040) AM, PM and Saturday Peak Hour Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Buildout (2040)			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
1. Main Street/Fulton Lane – Madrona Avenue	EBLTR[3]	300	204	200	154	no	no	no
	WBLTR[3]	330	147	197	106	no	no	no
	NBL[3]	420	102	83	68	no	no	no
	SBL	110	**138**	107	87	**yes**	no	no
2. Main Street/Adams Street	EBLTR[3]	290	168	189	139	no	no	no
	WBLTR[3]	250	150	217	145	no	no	no
	NBL	180	154	138	127	no	no	no
	SBL[3]	420	146	166	129	no	no	no
3. Main Street/Hunt Avenue	WBLR[3]	150	84	125	**154**	no	no	**yes**
	SBL	110	42	45	56	no	no	no
4. Main Street/Pope Street – Mitchell Drive	EBR[3]	300	234	233	188	no	no	no
	WBR	160	**184**	153	144	**yes**	no	no
	NBL	155	**191**	**189**	**156**	**yes**	**yes**	**yes**
	SBL[3]	330	183	174	152	no	no	no
5. Railroad Avenue/Fulton Lane	WBTL[3]	250	15	13	30	no	no	no
	NBLR[3]	1050	58	71	60	no	no	no
6. Railroad Avenue/Adams Street	EBLTR[3]	250	106	115	66	no	no	no
	WBLTR[3]	350	61	106	67	no	no	no
	NBLTR[3]	500	80	73	56	no	no	no
	SBLTR[3]	1,050	73	79	62	no	no	no
7. Railroad Avenue/Hunt Avenue	EBLTR[3]	160	47	29	39	no	no	no
	WBLTR[3]	300	15	24	60	no	no	no
	NBLTR[3]	300	41	42	0	no	no	no
	SBLTR[3]	500	60	64	66	no	no	no
8. Library Lane/Adams Street	EBLTR[3]	300	10	23	4	no	no	no
	WBLTR[4]	575	0	3	0	no	no	no
	NBLTR[4]	250	31	49	0	no	no	no
	SBLTR[4]	440	29	50	46	no	no	no
9. Starr Avenue/Hunt Avenue	EBTR[3]	420	59	63	58	no	no	no
	WBLT[4]	450	54	44	39	no	no	no
	NBLR[3]	75	64	62	56	no	no	no
	SBLTR[5]	100	49	45	45	no	no	no
10. Starr Avenue/Pope Street	EBTL[3]	700	36	418	73	no	no	no
	WBTR[3]	1100	0	8	0	no	no	no
	SBLR[3]	335	86	314	81	no	no	no
11. Paseo Grand Dr – College Ave/Pope Street	EBL	85	36	**94**	**90**	no	**yes**	**yes**
	EBTR[3]	1100	139	**1139**	821	no	**yes**	no
	WBL	90	53	24	20	no	no	no
	NBL	110	86	68	59	no	no	no

Table 13
Buildout (2040) AM, PM and Saturday Peak Hour Calculated 95th Percentile Queues[1]

Intersection	Movement	Pocket Length[2]	Buildout (2040)			Exceeds Turn Pocket Length?		
			AM	*PM*	*Sat*	*AM*	*PM*	*Sat*
	SBLTR[3]	300	54	105	151	no	no	no
12. Silverado Trail/Pope Street	EBLR[3]	900	**926**	**1104**	**1165**	**yes**	**yes**	**yes**
	NBL	100	95	72	87	no	no	no
	SBR[3]	225	26	24	25	no	no	no
13. Silverado Trail/Howell Mountain Road	WBLR[3]	850	56	72	73	no	no	no
	NBR	50	7	0	0	no	no	no
	SBL	100	20	20	26	no	no	no

Notes:
1 Based on 95th percentile (design) queue length in SimTraffic 10.
2 Measured in feet.
3 Length measured to nearest intersection.
4 Length measured to roadway terminus.
5 Does not exist.
BOLD Queue exceeds storage length.
Source: Dudek 2019.

Based on Table 13, during the Buildout (2040) condition, the following study area intersections would have 95th percentile queues that would exceed their storage lanes:

- 1. Main Street/Fulton Lane – Madrona Avenue: SBL in the AM peak hour (exceeded by 28 feet). These storage lane exceedances would be approximately 1.5 car lengths or less.
- 3. Main Street/Hunt Avenue: WBLR in the Saturday peak hour (exceeded by 4 feet). This exceedance would be approximately one car length or less.
- 4. Main Street/Pope Street – Mitchell Drive: WBR in the AM peak hour (exceeded by 24 feet); and, NBL in the AM (exceeded by 36 feet), PM peak hour (exceeded by 34 feet), and in the Saturday peak hour (exceeded by 1 foot). These storage lane exceedances would be approximately 1.5 car lengths or less.
- 11. Paseo Grand Drive – College Avenue/Pope Street: EBL in the PM peak hour (exceeded by 9 feet) and the Saturday peak hour (exceeded by 5 feet); and, EBTR in the PM peak hour (exceeded by 39 feet). The exceedance on the EBL lane would be less than one car length, while the exceedance on the EBTR lane would be approximately six car lengths.
- 12. Silverado Trail/Pope Street: EBLR in the AM peak hour (exceeded by 26 feet), PM peak hour (exceeded by 204 feet); and, the Saturday peak hour (exceeded by 265 feet). These exceedances would be approximately twelve car lengths or less.

5.3 Collision Analysis

A qualitative collision analysis was performed to disclose the collision history in the study area. Five years of collision data, from 2014 to 2018, was obtained from the California Highway Patrol's (CHP) *Statewide Integrated Traffic Records System* (SWITRS). It is important to note that it may take up to six months for a collision to appear within the database, therefore data for 2018 may be incomplete.

The SWITRS database is a public system that processes and collects data from CHP and other police agencies. The database was queried to select for all collisions occurring within the jurisdiction of the St. Helena Police Department (SHPD) and then narrowed down to the study area intersections that contained collisions resulting in pedestrian or bicyclist injury, as well as collisions occurring at intersections. Most "rear-end" type of collisions were not considered in this analysis since these types of collisions are considered to be by fault of the driver and not because of the intersection or roadway layout, or lack of signalization. SWITRS files are included in Appendix D.

Table 14
Collision Summary (2014-2018)

Nearest Study Intersection	# of Total Collisions	Total # of Injured[1]	Total # of Pedestrians Injured	Total # of Bicyclists Injured	Primary Cause
1. Main Street/Fulton Lane – Madrona Avenue	9	4	1	0	Ran light; improper turn
2. Main Street/Adams Street	4	3	3	0	Left turn/pedestrian crossing conflict
3. Main Street/Hunt Avenue	2	0	0	0	Left turn/pedestrian crossing conflict; improper turn
4. Main Street/Pope Street – Mitchell Drive	5	2	1	0	Unsafe speed
11. Paseo Grand Drive – College Avenue/Pope Street	1	0	0	0	Improper turn
12. Silverado Trail/Pope Street	15	12	0	0	Left turn and right-of-way conflicts
13. Silverado Trail/Howell Mountain Road	4	3	0	0	Improper turn

Note: Consists of all injured parties (motorists, pedestrians, and bicyclists).
Source: SWITRS Database Query conducted March 27, 2019.

As the table shows, the total number of people injured within the 40 reported collisions is 24 people, 5 of which were pedestrians, and zero bicyclists. The intersection of Silverado Trail/Pope Street had the highest number of total collisions recorded. These collisions may be attributed to

the narrowing of Pope Street at both approaches to the narrow Pope Street Bridge, creating slower moving traffic heading towards a higher speed roadway (Silverado Trail).

5.4 Vehicle-Miles of Travel (VMT)

As stated previously, SB 743 required OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. VMT has been adopted as the most appropriate measure of transportation impacts under CEQA.

Table 3.13-6 in the General Plan Update Draft EIR shows an increase in overall VMT within the City, however this does not take into account mode shifts (motorists shifting to bicycle or transit uses). Finally, the analysis concludes that with policies framed in the draft 2040 General Plan Update, VMT would be reduced on a per-capita basis and impacts would be less than significant.

A separate VMT analysis has been prepared, and its methodology, analysis results, findings, and mitigation measures (if any) are provided in the EIR.

5.5 Parking

The City's Municipal Code provides regulations for minimum on-site parking requirements for residential land uses (§17.124.030 (A)).

Specifically, the parking regulations mandate that for two or more bedroom dwelling units "one covered space for each dwelling unit plus one space for each dwelling unit which need not be covered" is to be provided. The income-restricted housing would consist of 25 garaged spaces along with 37 guest spaces. Parking demand for the single-family and accessory dwelling units would be accommodated by a garage and driveway attached to the residence. As the project has not submitted detailed site plan and floor plan designs, future plans should follow the City's parking requirements and be designed to sufficiently accommodate all elements of the project.

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6 RECOMMENDED IMPROVEMENTS

The following section provides improvements for project LOS deficiencies identified in the traffic analyses above.

6.1 Existing plus Project

Based on the LOS results of the Existing plus Project weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would create an LOS deficiency at the following intersection, and would require an improvement:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F during the weekday PM peak hour.

With the implementation of Improvement-1, the project's delay increase would be reduced to less than 5.0 seconds (delay would decrease below the existing baseline delay in the PM peak hour). Therefore, the project's impact to Main Street/Pope Street – Mitchell Drive would be consistent with the City's LOS policies:

Improvement-1 Prior to issuance of a Certificate of Occupancy, the project applicant shall coordinate with the City and Caltrans to implement the following improvement to the intersection of Main Street/Pope Street – Mitchell Drive:

- Westbound right turn phase to allow for overlapping turns. This will allow for permitted right turns occurring during a red light and also a protected right-turn phase occurring turning a non-conflicting movement, such as the southbound left-turn protected phase.

6.2 Buildout (2040)

Based on the LOS results of the Buildout (2040) weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would contribute to LOS inconsistencies at the following intersections, and would require improvements:

- 4. Main Street/Pope Street – Mitchell Drive: LOS F during the weekday and Saturday peak hours.
- 12. Silverado Trail/Pope Street: LOS E during the weekday AM peak hour, and LOS F during the weekday PM peak hour and Saturday peak hours, and weekday and Saturday peak hour volumes satisfy peak hour signal warrants.

The following improvements would make the project consistent with the City's LOS policies per the City's impact criteria. However, since the City cannot guarantee implementation of these

improvements due to the uncertainty of construction feasibility as it would require coordination with Caltrans and Napa County. Additionally, although the City levies traffic impact fees, as explained in Section 3.32.100 of the Municipal Code, it is not clear whether intersection improvements are included. The City's Development Impact Fee Study Report does not identify necessary improvements that would directly alleviate project related LOS impacts listed below as part of the traffic mitigation impact fee program.

The City may require the applicant to pay a fee to fully, or partially, implement a transportation improvement; however, there is no specific mechanism to allocate fees directly to the impacted locations. Therefore, there are no feasible improvements to reduce the project's impact to the Main Street/Pope Street and Silverado Trail/Pope Street intersections to be consistent with the City's LOS policies.

Improvement-2 Prior to issuance of a Certificate of Occupancy, the City may require the project applicant to pay fees towards the implementation of the following improvement to the intersection of Main Street/Pope Street – Mitchell Drive:

- Construction of one or more of the various roadway connections recommended in the St. Helena General Plan Update EIR (discussed in detail in Section 3.13 – Transportation and Traffic). These connections would improve overall LOS in the Buildout (2040) scenario:
  - Connection 2A: College Avenue extension to Mills Lane (may require realignment of Mills Lane to meet Main Street/Grayson Avenue intersection).
  - Connection 3: Oak Avenue extension from Mitchell Drive to Grayson Avenue.
  - Connection 2B, Connection 2C, Connection 5B, or a combination of Connections 1, 4 and 5A may provide congestion relief to Main Street/Pope Street-Mitchell Drive, but these improvements have additional considerations related to neighborhood traffic volumes and costs related to crossings of the Napa River.

Improvement-3 Prior to issuance of a Certificate of Occupancy, the City may require the project applicant to pay fees towards the implementation of the following improvement to the intersection of Silverado Trail/Pope Street:

- Installation of a traffic signal at the intersection, as well as, at the adjacent, closely-spaced intersection Silverado Trail/Howell Mountain Road. This intersection is recommended for signalization according to

the analysis in the St. Helena General Plan Update EIR. With a traffic signal in-place, this intersection would operate with satisfactory LOS.

7 FINDINGS AND RECOMMENDATIONS

Based on the results of the analysis in this TIS, the following summarizes the traffic deficiencies of the proposed project. General findings include:

- For a typical weekday the project would generate 798 daily trips, 62 AM peak hour trips (186 inbound and 46 outbound), and 82 PM peak hour trips (52 inbound and 30 outbound).
- For a typical Saturday the project would generate 815 daily trips, and 80 peak hour trips (40 inbound and 40 outbound).
- Under the Existing plus Project weekday scenario, all of the study area intersections would continue to operate at an acceptable LOS and not result in an LOS deficiency with the addition of the project except for:
    - 4. Main Street/Pope Street – Mitchell Drive: Continues to operate with unsatisfactory LOS at LOS F during the AM and PM peak hours, however the increase in delay is greater than 5.0 seconds only in the PM peak hour (4.8 seconds and 11.4 seconds, respectively).
        - Improvement required includes a westbound overlapping right-turn phase. This would ensure consistency with the City's LOS policies.
- Under the Existing plus Project Saturday scenario, all of the study area intersections would continue to operate an acceptable LOS with the addition of the project. Therefore, the proposed project would be consistent with the City's LOS policies, and no improvements are required.
- Under the Buildout (2040) weekday and Saturday scenarios, all of the study area intersections would continue to operate at an acceptable LOS and not result in an LOS deficiency except for:
    - 4. Main Street/Pope Street – Mitchell Drive: LOS F during the weekday and Saturday peak hours.
        - Construction of one or more of the various roadway connections recommended in the St. Helena General Plan Update EIR (discussed in detail in Section 3.13 – Transportation and Traffic).
        - However, since the City cannot guarantee implementation of this improvement due to the uncertainty of construction feasibility as it would require coordination with Caltrans and Napa County. Additionally, although the City levies traffic impact fees, as explained in Section 3.32.100 of the Municipal Code, it is not clear whether intersection improvements are included. The applicant will pay its

required traffic fees; however, there is not a specific mechanism to allocate traffic impact fees directly to the impacted locations. Therefore, the project would be inconsistent with the City's LOS policies at the Main Street/Pope Street intersection.

- 12. Silverado Trail/Pope Street: LOS E during the weekday AM peak hour, and LOS F during the weekday PM peak hour and Saturday peak hours, and weekday and Saturday peak hour volumes satisfy peak hour signal warrants.
  - Installation of a traffic signal at the intersection, as well as, at the adjacent, closely-spaced intersection Silverado Trail/Howell Mountain Road. This intersection is recommended for signalization according to the analysis in the St. Helena General Plan Update EIR. With a traffic signal in-place, this intersection would operate with satisfactory LOS.
  - However, since the City cannot guarantee implementation of this measure due to the uncertainty of construction feasibility as it would require coordination with Napa County; and, since the City does not have a fair-share or developer fee program to collect fees, the project would be inconsistent with the City's LOS policies at the Silverado Trail/Pope Street intersection.

- Project site access, parking, circulation, and emergency vehicle ingress/egress shows that there are no project-related inconsistencies.

APPENDIX A

Scoping Agreement

CITY OF ST HELENA

TRAFFIC IMPACT STUDY SCOPING AGREEMENT

A Traffic Impact Study (TIS) is an integral tool in the development review process. A TIS provides a clear understanding of how a project may affect the local and regional transportation networks. In essence, a TIS details a projects contribution to the roadway system traffic loads, establishes if a nexus exists to require a particular project to contribute to transportation improvements, and last, provides a lens through which to determine a project's compatibility with the applicable transportation plan.

A Traffic Impact Study (TIS) shall be required as determined necessary by the Public Works Director, if one or more of the following scenarios exist:

1. high project trip generation:
    a. Generates over 100 peak hour trips
    b. Generates 50 to 100 peak hour trips – and, affected facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
    c. Generates 1 to 49 peak hour trips; the following are examples that may require a full TIS or some lesser analysis
        1. Affected facilities are experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
        2. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
        3. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).
2. high volume or high speed on road where project access is taken
3. collision history
4. sight distance concerns
5. proximity to impacted facilities

*If a traffic study has been previously prepared for a project, a new or updated study may be required by if the traffic study is more than two years old and/or the proposed project has changed such that the PM peak hour trip generation is expected to increase by more than 10%. Any information used from a previously completed traffic impact study must be formally referenced in the text of the report. Similarly, any traffic data, analyses, results, conclusions and/or recommendation used from other traffic studies must be appropriately references. Copies of data and information informing the referenced study shall be included as an appendix in the traffic impact study.

SCOPING

To determine whether a traffic impact study is necessary and if so, to establish concurrence between the applicant and the City of St. Helena and to detail key assumptions, the following scoping agreement shall be completed by the applicant for review and approval by the Public Works Director prior to proceeding. Key information to be addressed includes:

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- Approximation of trip generation, distribution and assignment
- Identification of potentially affected transportation facilities
- Identification of pipeline projects to be assumed under baseline and cumulative scenarios
- Proposed assumptions, deviations from standard ITE methodology, or proposed changes to the Citywide circulation systems not assumed under the General Plan.

PROJECT OVERVIEW

Project number: _____

Project Name: Hunter Subdivision

Project Location: Intersection of Adams Street and Starr Avenue; northern terminus of Starr Avenue, see Figure 1.

Project Contact: Dennis Pascua, Dudek, dpascua@dudek.com, 760-479-4256
Mladen Popovic, Dudek, mpopovic@dudek.com, 510-601-2503

Project Description: The proposed project would include the development of 51 single-family residences, an additional 25 attached residential units, and 11 accessory dwelling (granny-flat) units for a total of 87 dwelling units. The project is located on a 16.9-acre site along Adams Street in the northeast section of the City. The site is currently located without access to roadways; however, Adams Street and Starr Avenue will be extended to provide vehicular access to the site. Figure 2 shows the project site plan.

Property Description: *(Land Use/Acreage/Zoning/ Context)*

The project is approximately 16.9-acre site located at the northern terminus of Starr Avenue. Assessor's Parcel Number is 009-030-057. The land uses that surround the project site are currently characterized as a mixture of office and residential development, open space, and vineyards. Uses immediately south of the project site are primarily residential, both single- and multi-family, including the Vineyard Valley Mobile Home Park. Office uses are located immediately adjacent to the site's most western edge at the terminus of Adams Street.

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1993 General Plan Land Use is Medium Density Residential (MDR), permitting densities between 5.1 to 16.0 dwelling units per acre. Zoning designation is Medium Density Residential (MR). The current density of the proposed project is 5.1 dwelling units per acre. Therefore, the project is consistent with current City General Plan and zoning standards and requirements.

A. Trip Generation

Average Daily Trips (ADT): 798

Peak Hours of Generator (list hours):

a.m. 7:00 AM – 9:00 AM

p.m. 4:00 PM – 6:00 PM

Saturday (2:00 PM – 4:00 PM)

	IN	OUT	TOTAL
AM Trips	15	46	61
PM Trips	51	30	81

Source: ITE Trip Generation, 10th Edition, 2017

Internal Trip Allowance (% Trip Discount): N/A

Pass-By Trip Allowance (% Trip Discount): N/A

(Attach additional sheet for multi-use sites)

SEE ATTACHED TABLE 1 & TABLE 2 FOR DETAILED BREAKDOWN

B. Trip Distribution ((Attach exhibit with details)

N% PLEASE SEE ATTACHED FIGURES 3 - 6 FOR DETAILED BREAKDOWN

S%_____

E%_____

W%_____

C. Background Traffic

Project Completion Year: 2020

Ambient Annual Growth Rate: Based on Napa Valley Transportation Authority (NVTA) 2035 Model

TRAFFIC IMPACT STUDY SCOPING AGREEMENT
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List provided by Planning Department

Pipeline projects:

To be completed by Public Works (and concurrence from Planning?)

1. Crocker Starr Winery, 2. Redmon Winery, 3. Davies Winery
4. CIA Campus Master Plan, 5. Komes (Winery + office space)
6. St Helena Estates and Winery (residential + winery), 7. OK Tire (tire shop)
8. Herdell Painting (industrial + office space), 9. Salvestrin Winery Expansion
10. Fulton Office Buildings, 11. Montessori School (new school buildings)
12. Farmstead Hotel, 13. Vineland Station Hotel

D. Scenarios

1. Existing Conditions 2018
2. Existing plus Project
3. Cumulative (2020 - Project Opening Year) Baseline
4. Cumulative 2020 plus Project
5. Buildout 2035 (NVTA Model) Baseline
6. Buildout 2035 plus Project

E. Study Intersections

1. Main Street/Fulton Lane	7. Railroad Avenue/Hunt Avenue
2. Main Street/Adams Street	8.Library Lane/Adams Street
3. Main Street/Hunt Avenue	9. Starr Avenue/Hunt Avenue
4. Main Street/Pope Street-Mitchell Drive	10. Starr Avenue/Pope Street
5.Railroad Avenue/Fulton Lane	11. Paseo Grand Drive-College Avenue/Pope Street
6. Railroad Avenue/Adams Street	12. Silverado Trail/Pope Street-Howell Mountain Road
	13. Silverado Trail/Howell Mountain Road

F. Study Roadway Segments

1. Adams Street, Library Lane to Railroad Avenue	
2. Hunt Avenue, south of Starr Avenue	
3. Starr Avenue, east of Hunt Avenue	

G. Other Jurisdictional Impacts

Intersections 1, 2, 3, 4 fall under Caltrans jurisdiction	
Intersection 13 falls under Napa County jurisdiction	

H. Site Plan (attach)

I. Special Issues

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1. 95th Percentile Queues: Analysis for the 95th percentile queueing for major intersections will be conducted in order to evaluate storage length concerns that residents may have with the project, especially in regards to left-turn lane queues at Main Street. This analysis will be conducted using SimTraffic (version 10) software. Vehicular queuing will also be assessed at the railroad crossings at Adams Street, Hunt Avenue, and Pope Street. Dudek will assess the forecast vehicular queues at these crossings based on the frequency and use of the Napa Valley Wine Train.

2. On-Site Circulation and Access: Since the project site will extend two streets to serve vehicles to/from the site (Starr Avenue and Adams Street), site access and circulation will be evaluated, in addition to emergency vehicle access. Parking within the project site will be evaluated in accordance with parking standards within the St. Helena Municipal Code.

3. Non-Motorized Vehicle Access: A detailed pedestrian, bicycle, and transit accessibility analysis will be conducted to evaluate the proposed project and its ability to provide safe and reliable alternative modes of transportation. A vehicle collision analysis will also be evaluated for major intersections, utilizing California Highway Patrol data (SWTRS) from the past five years.

4. Pope Street Bridge: The Pope Street Bridge, a narrow historical bridge, that connects St. Helena to the Silverado Trail, will be analyzed for potential intersection improvements to alleviate significant vehicular queuing on the bridge. Such improvements may include traffic signalization and/or a roundabout (connecting with Howell Mountain Road).

This letter acknowledges the City of St Helena Engineering Division requirements for the traffic impact analysis of the following project.

Recommended by:

Consultant Rep _____ Date April 24, 2018

Approved by:

City of St Helena
Director of Public Works _____ Date April 26, 2018

TRAFFIC IMPACT STUDY REQUIRED COMPONENTS[1]

1. EXECUTIVE SUMMARY. The Executive Summary shall include a general description of the project scope, existing conditions, potential impacts of the project, traffic operations and conclusions, mitigation measures, and recommendations. This summary shall be complete in itself and not dependent on supplementary data included by reference. Not to exceed 1 page in length.

2. INTRODUCTION. The introduction serves as a background summary to detail the purpose of the project, location, study area boundaries, study scope, intersections and roadways to be analyzed, as well as, study scenarios. Any pertinent transportation and land development information prepared within the last five years or considered to be current by the Public Works Directors should be reviewed and summarized in the Traffic Impact Study.

3. PROJECT CHARACTERISTICS

A. PROJECT DESCRIPTION. A detailed description of the proposed project, including all information used (square footage, rooms, employees, parking spaces, transportation demand measures, operational characteristics, project phasing, etc) to determine traffic-generating characteristics.

B. EXISTING CONDITIONS. A qualitative description of roads, intersections, driveways, parking facilities, and pedestrian and bicycle facilities in the vicinity of the project. The determination of roads and intersections to be included in the TIS shall be made in consultation with the Public Works Director and shall the generally follow the ITE Transportation and Land Development guidelines. This section shall also include an evaluation of existing Level of Service for all study roads and intersections. The discussion of traffic volumes shall distinguish between passenger vehicles (e.g. cars, pick-ups, SUVS), heavy vehicles (semi-trucks, buses, delivery vans) motorcycles, bicyclists, and pedestrians.

Keep in mind that Location information is often best presented graphically in figures which should include a vicinity map showing the project site and study area boundaries in relation to the surrounding system. Additionally, roadways that provide access to the project site and are included in the study area should be identified.

C. TRIP GENERATION. Include trip generation estimates for the project based on industry standard trip generation values or other methods approved by the Public Works Director, such as local trip generation rates and vehicle-miles of travel (VMT). Typically, these values will be derived from the current edition of Trip Generation, published by the Institute of Transportation Engineers (ITE). Adjustments to these values may be appropriate assuming the applicant proposes acceptable specific and permanent measures that will reduce the traffic generation potential of the project. The engineer must submit the proper documentation to sufficiently support any proposed reduction.

Trip generation shall be represented for the following periods;

I. Average Daily Traffic (ADT)
II. Weekday a.m. peak (peak hour of adjacent street, not peak of generator)
III. Weekday p.m. peak (adjacent street, if required by Public Works)
IV. Weekend peak hour traffic, if required by Public Works

[1] These guidelines are periodically updated to reflect changes in City policies, the regulatory environment, and the state of the transportation impact analysis practice.

- *If and when required, all traffic counts shall be conducted between 4:00 p.m. to 6:00 p.m. on a Tuesday, Wednesday or Thursday during the normal public school period (i.e. September to May) unless requested otherwise*

D. TRIP DISTRIBUTION. Description of the projected directional distribution of traffic and provide exhibit. The estimates of percentage distribution of trips for the proposed project to destinations outside the study area must be clearly stated in the TIS. Trip Distribution origins and destinations with roadways and/or compass points must be clearly stated in the text of the report and shown on a figure. Recent studies and existing data regarding traffic patterns may be used to support these assumptions, where available. A map showing the percentage or number of project trips on each street must be provided as part of the traffic study graphics. It is highly recommended that the method used to distribute trips is acceptable by the City Traffic Engineer prior to conducting any analysis.

TRIP ASSIGNMENT. Provide a trip assignment analysis that shows pre- and post- project analysis.

3. IMPACT ANALYSIS

The City of St. Helena has adopted the following level of Service Standards to be applied to roads and intersections

A significant impact would occur if one of more of the following scenarios exist:

- Operations at a signalized intersection along State Route 29 to deteriorate from LOS D under conditions without the project to LOS E or F, or operations at other signalized intersections to deteriorate from LOS C under conditions without the project to LOS D, E or F.

- The LOS to deteriorate to LOS F for signalized intersections that operate at LOS E under conditions without the project.

- The average intersection delay to increase by more than five seconds for signalized intersections that operate at LOS F under conditions without the project.

- The LOS to deteriorate to LOS D, E or F for unsignalized intersections operating at LOS C or better under conditions without the project, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation. For unsignalized intersections on State Route 29 operating at LOS D or better under conditions without the project, the impact would be significant if the project would cause the LOS to deteriorate to LOS E or F, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation.

- Average delay to increase by five or more seconds for unsignalized intersections operating at unacceptable levels (LOS D, E or F; or LOS E or F on State Route 29) under conditions without the project, and the traffic volumes would satisfy the Caltrans peak hour volume warrant criterion for traffic signal installation.

- Operations on street segments to deteriorate from LOS D under conditions without the project to LOS E or F. For street segments that operate at LOS E under conditions without the project, the impact would be significant if the project would cause the LOS to deteriorate to LOS F.

- •An increase of more than five percent for average daily traffic for street segments that operate at LOS F.

In addition, please also analyze the project's traffic impacts as they relate to the most up to date version of Napa County's guidelines and policies:

- The County shall seek to maintain an arterial Level of Service D or better on all county roadways, except where maintaining this desired level of service would require the installation of more travel lanes than shown on the Circulation Map.

- The County shall seek to maintain a Level of Service D or better at all signalized intersections, except where the level of service already exceeds this standard (i.e., Level of Service E or F) and where increased intersection capacity is not feasible without substantial additional right-of-way.

- No single level of service standard is appropriate for un-signalized intersections, which shall be evaluated on a case-by-case basis to determine if signal warrants are met.

Methodology employed to determine LOS shall follow that outlined in the latest edition of the Highway Capacity Manual, published by the Transportation Research Board, and any related computer software based on its analysis methods.

A. SCENARIOS

The LOS of all affected intersections shall be analyzed under the following scenarios

a. Existing ; Existing + project
b. Baseline; Baseline + project
c. Cumulative; Cumulative + project

The list of pipeline projects for use in developing Baseline (approved; but not completed projects) shall be obtained from the Public Works Department.

Cumulative conditions shall be determined by use of traffic forecasts from approved Napa Valley Transportation Authority (NVTA) models, where available. Information on current model availability, and data files for those models, may be obtained from NVTA. In limited situations where appropriate to the scale of the proposed development, a 20-year growth factor determined from historic traffic volume trends, or a buildout "trafficshed" approach, may be used with approval from Public Works.

The required traffic scenarios shall be represented in the format below and shall be followed by a narrative detailing the content represented in the table and highlighting impacts expected to occur under the respective scenario.

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CITY OF ST HELENA

TABLE __
INTERSECTION LEVELS OF SERVICE: SCENARIO AND SCENARIO + PROJECT

		Scenario				Scenario + project			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Control Type[a]	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. intersection									
2. intersection									
3. intersection									
4. intersection									

B. SITE ACCESS/ SITE DISTANCE

a. Sight distance and intersection corner distance relative to new and existing project driveways.
b. Considerations for truck and other large vehicle operations.
c. Considerations for freight loading zones, if applicable.
d. Considerations for passenger loading zones, if applicable.

C. ON SITE CIRCULATION

a. Includes a discussion of on-site circulation complete with descriptions of the proposed access points, turn prohibitions, number of lanes proposed, on-site transit stop locations, driveway throat depth, parking supply/demand/parking aisle circulation, on-site pedestrian circulation, bicycle parking, on/off-site delivery truck circulation, railroad at-grade crossings and any other applicable circulation issues.

D. CONSTRUCTION PERIOD IMPACTS

a. Includes a discussion of any unusual circumstances anticipate during construction. Proposed transportation facility closures, construction signage, safety features, and detours shall be included. At no time will any street capacity be reduced or closed without written permission from the Engineering Division.

E. QUEUING

a. Evaluate the maximum length of queue at intersections in the immediate vicinity of the proposed project, including proposed project driveways (if applicable), during the peak hour generator, and provide opinion on whether the development will significantly affect operations at other closely spaced public road intersections. If so, recommend appropriate mitigation measures.

F. SAFETY ANALYSIS

a. A safety analysis that evaluates the collision history in the immediate vicinity of the proposed project, and provide an opinion on whether the development will significantly affect existing safety conditions. If so, recommend appropriate mitigation measures.

TRAFFIC IMPACT STUDY SCOPING AGREEMENT
CITY OF ST HELENA

G. ALTERNATIVE MODES OF TRANSPORTATION

a. Pedestrian
b. Bicycle
c. Public transit

**The report shall identify any quantifiable benefit which can be attributed to improvements to these modes, as part of the Impact Analysis. Recommend appropriate mitigation measures as needed.*

H. WARRANTS. Engineers shall conduct traffic warrant analysis when intersection analysis indicates that installation of a traffic control signal may be justified based on operational, safety or other requirements, as deemed by the City. In addition, on State highways, consideration for roundabout (yield control) must also be included if it may be a viable and practical solution. ____

I. IDENTIFICATION OF SIGNIFICANT IMPACTS. This section shall detail whether any of the significance criteria adopted by the City of St. Helena or County of Napa are met

J. SIGNIFICANT IMPACT MITIGATION. The study shall conclude by identifying appropriate measures to reduce potential impacts to less than significant levels.

K. APPENDICES

As appropriate, all transportation analysis should including the following appendices:

1. Complete sets of all required traffic, bicycle and pedestrian counts and estimated volumes, including traffic volumes with applied growth factors, etc.
2. Complete sets of all Level of Service calculations, including summary and rationales for the variables used in the calculations.
3. Complete sets of all analysis assumptions, including trip generation rates, trip distribution, trip assignment, and other analysis assumptions that were completed as part of the study.
4. Other appendices, as needed.

Table 1
Trip Generation Summary (Weekday)

Trip Generation Rates[1]								
Land Use	*Daily Trip Rate*	*Unit*	*AM Peak Hour*			*PM Peak Hour*		
			% In	*% Out*	*Total*	*% In*	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.44	DU	0.19	0.56	0.74	0.62	0.37	0.99
Multifamily Housing (Low-Rise) (ITE Code 220)	7.32	DU	0.11	0.35	0.46	0.35	0.21	0.56

Trip Generation									
Land Use	*Total No. of Units*	*Unit*	*Daily*	*AM Peak Hour*			*PM Peak Hour*		
				In	*Out*	*Total*	*In*	*Out*	*Total*
Single-Family Detached Housing	51	DU	481	9	28	38	32	19	50
Accessory (Granny) Units	11	DU	81	1	4	5	4	2	6
Low-Income Work Force Housing[2]	25	DU	236	5	14	19	16	9	25
Total Trip Generation			798	15	46	61	51	30	81

Notes: DU = Dwelling Unit

[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

[2] Reflects use of Single-Family land use since this rate is more conservative (higher trip generation) as compared to multifamily housing

Table 2
Trip Generation Summary (Saturday)

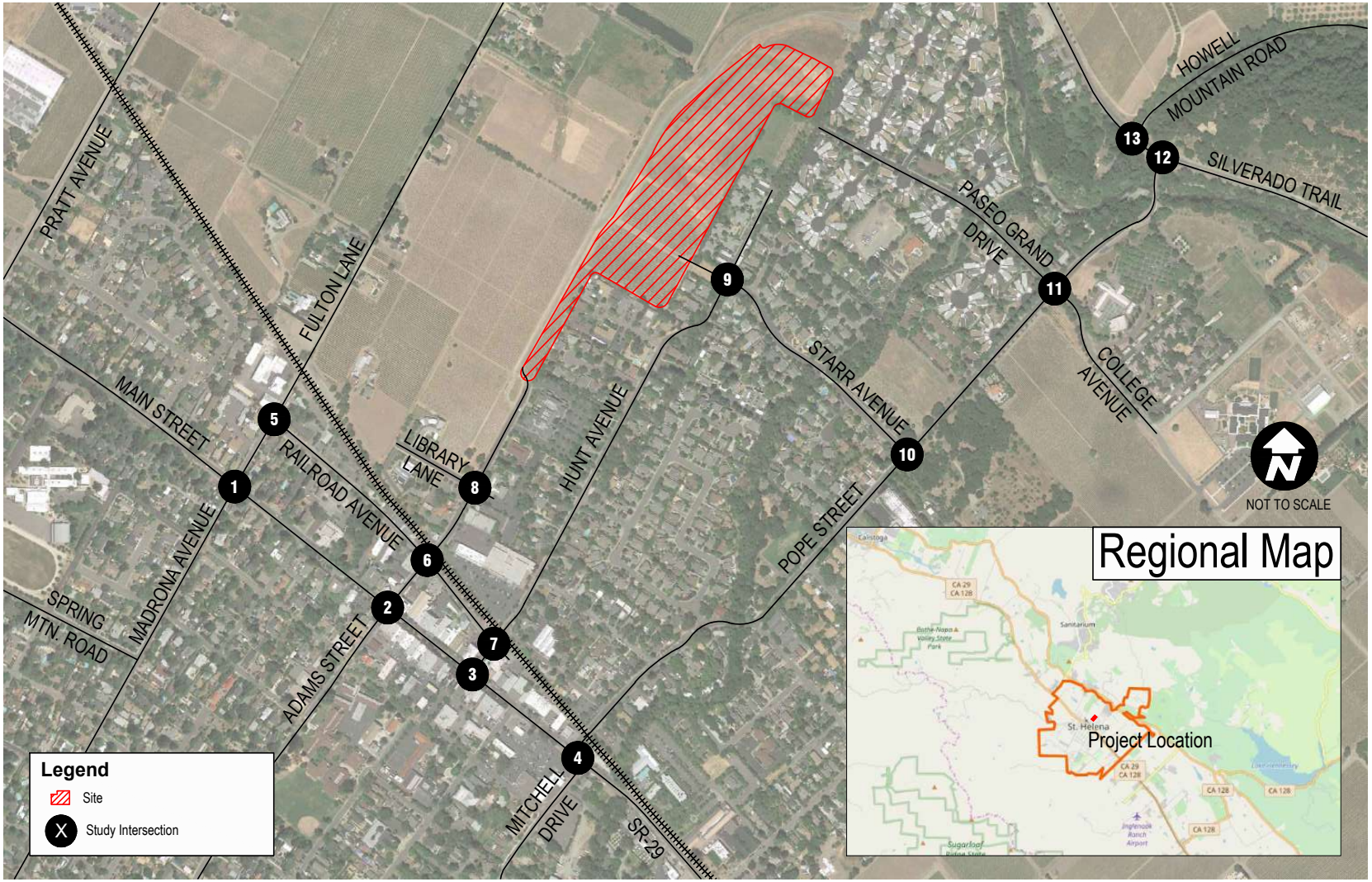
Trip Generation Rates[1]					
Land Use	*Saturday Trip Rate*	*Unit*	*PM Peak Hour*		
			% In	*% Out*	*Total*
Single-Family Detached Housing (ITE Code 210)	9.54	DU	0.47	0.47	0.93
Multifamily Housing (Low-Rise) (ITE Code 220)	8.14	DU	0.35	0.35	0.70

Trip Generation						
Land Use	*Total No. of Units*	*Unit*	*Daily*	*PM Peak Hour*		
				In	*Out*	*Total*
Single-Family Detached Housing	51	DU	487	24	24	47
Accessory (Granny) Units	11	DU	90	4	4	8
Low-Income Work Force Housing[2]	25	DU	239	12	12	23
Total Trip Generation			815	39	39	78

Notes: DU = Dwelling Unit

[1] Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017.

[2] Reflects use of Single-Family land use since this rate is more conservative (higher trip generation) as compared to multifamily housing



Source: Google Maps,05/2017; Open Street Map, 01/2018

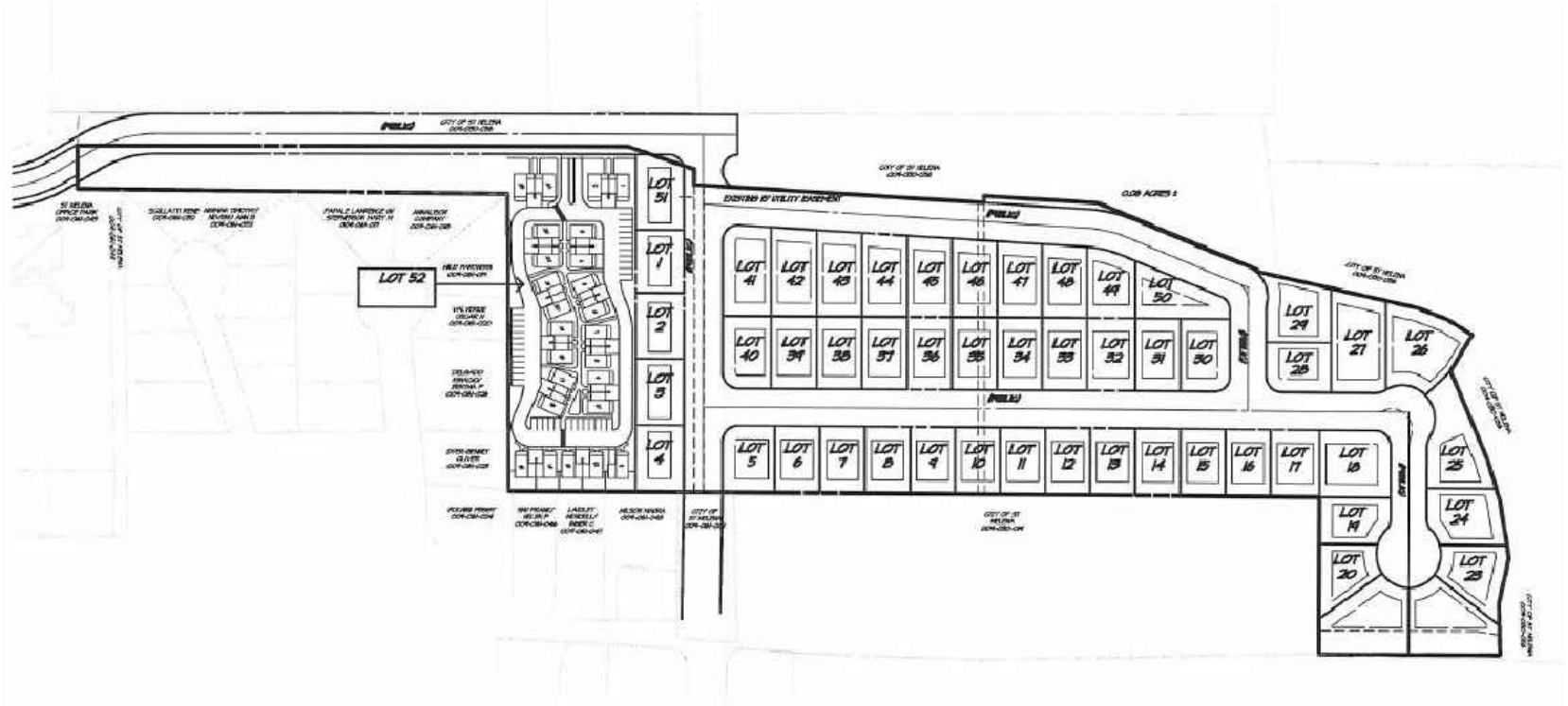
Project Site Location and Study Area

FIGURE 1

Hunter Subdivision - St. Helena

DUDEK

Feb 20, 2018 - 4:28pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig1-site location and study area



NOT TO SCALE

Source: RSA+, 02/2017

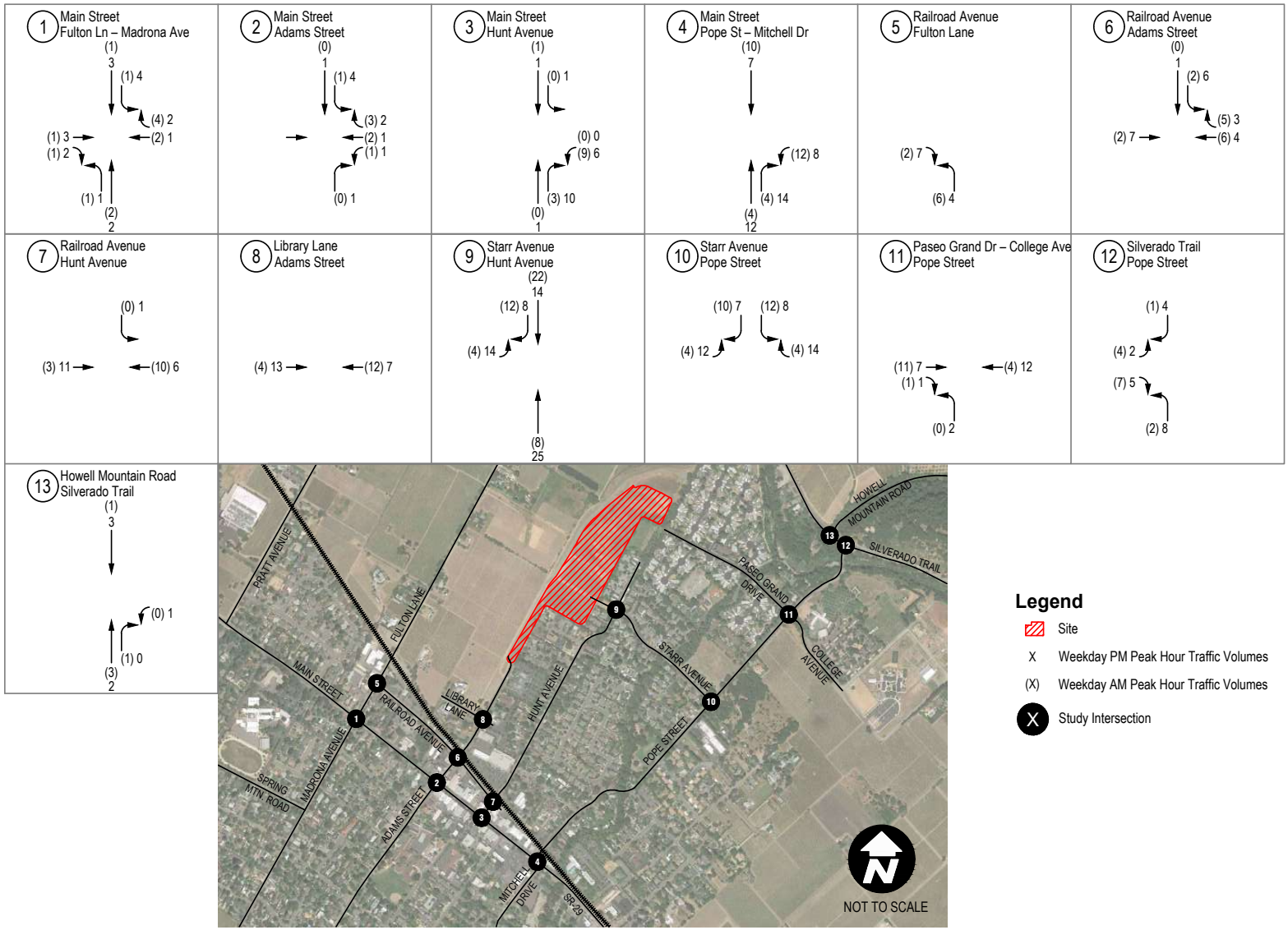
Project Site Plan

Hunter Subdivision - St. Helena

FIGURE 2

DUDEK

Feb 20, 2018 - 4:28pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig2-SitePlan



Source: Google Maps, 05/2017

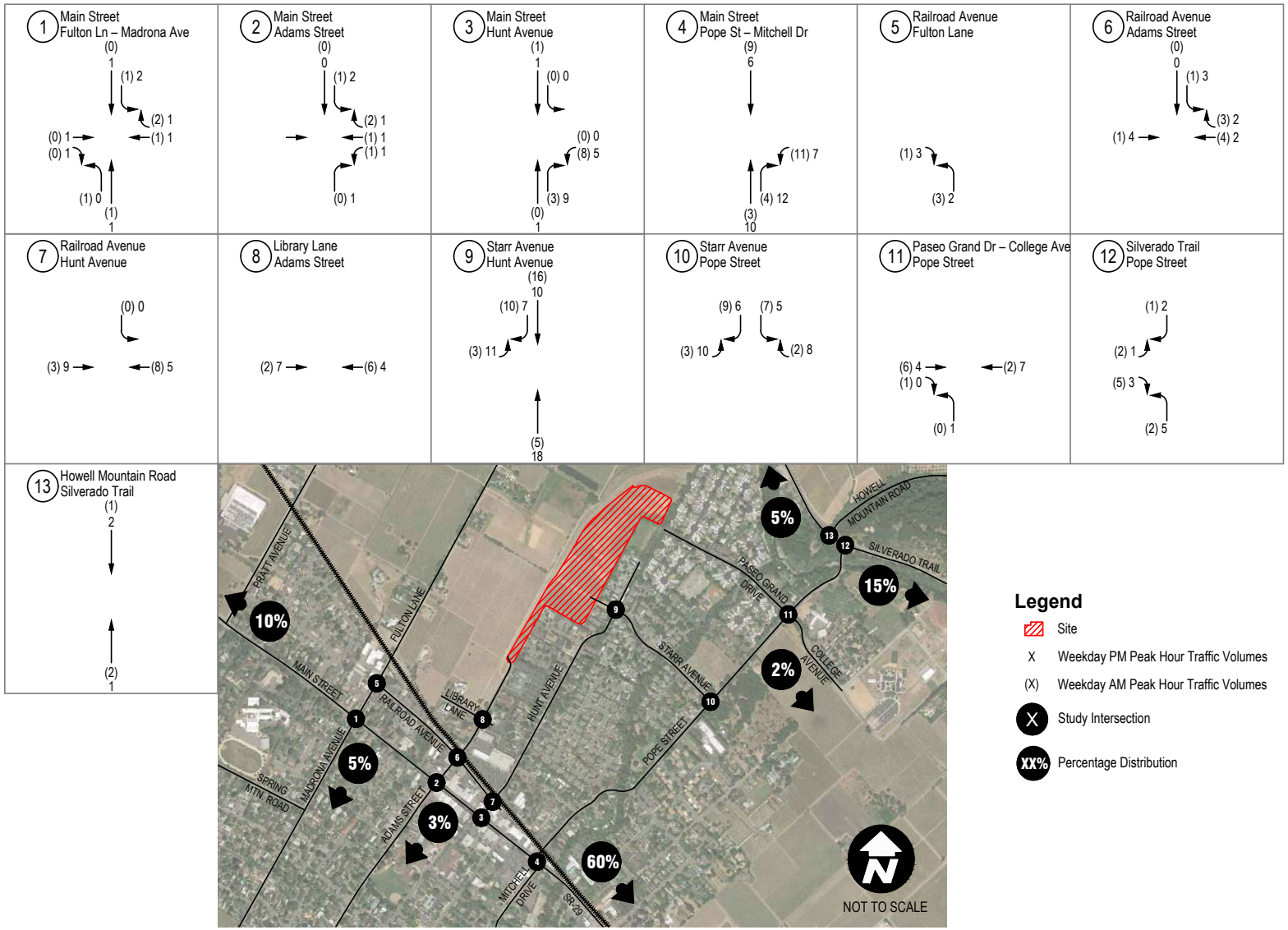
Project Trip Assignment - Total (All Uses)

Hunter Subdivision - St. Helena

FIGURE 3

DUDEK

Feb 20, 2018 - 4:29pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig3-ProjTripAs



Source: Google Maps, 05/2017

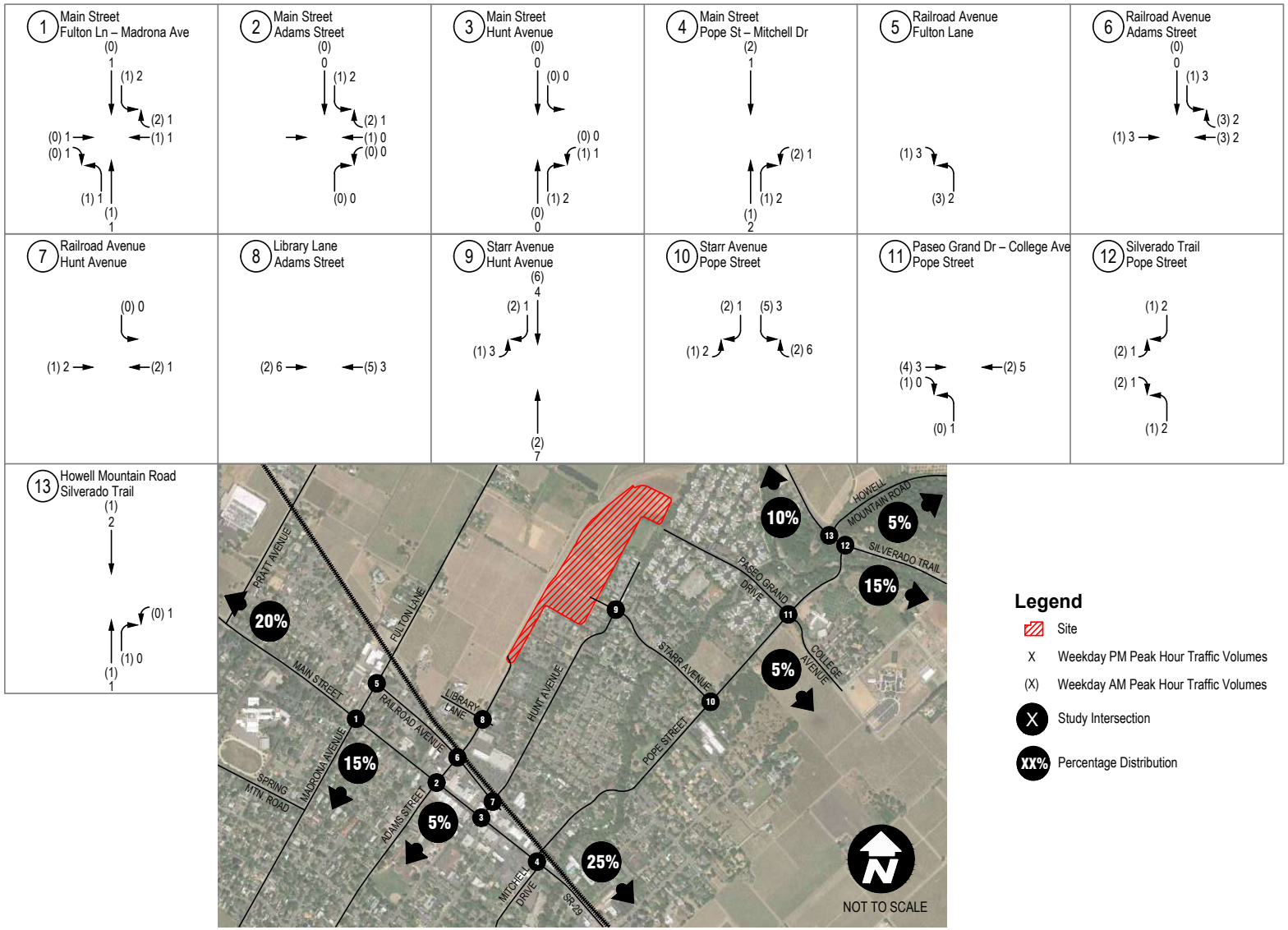
Project Trip Distribution & Assignment - Single-Family & Accessory Dwelling Units

FIGURE 4

Hunter Subdivision - St. Helena

DUDEK

Feb 20, 2018 - 4:31pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig4-SfAcsTrip



Source: Google Maps, 05/2017

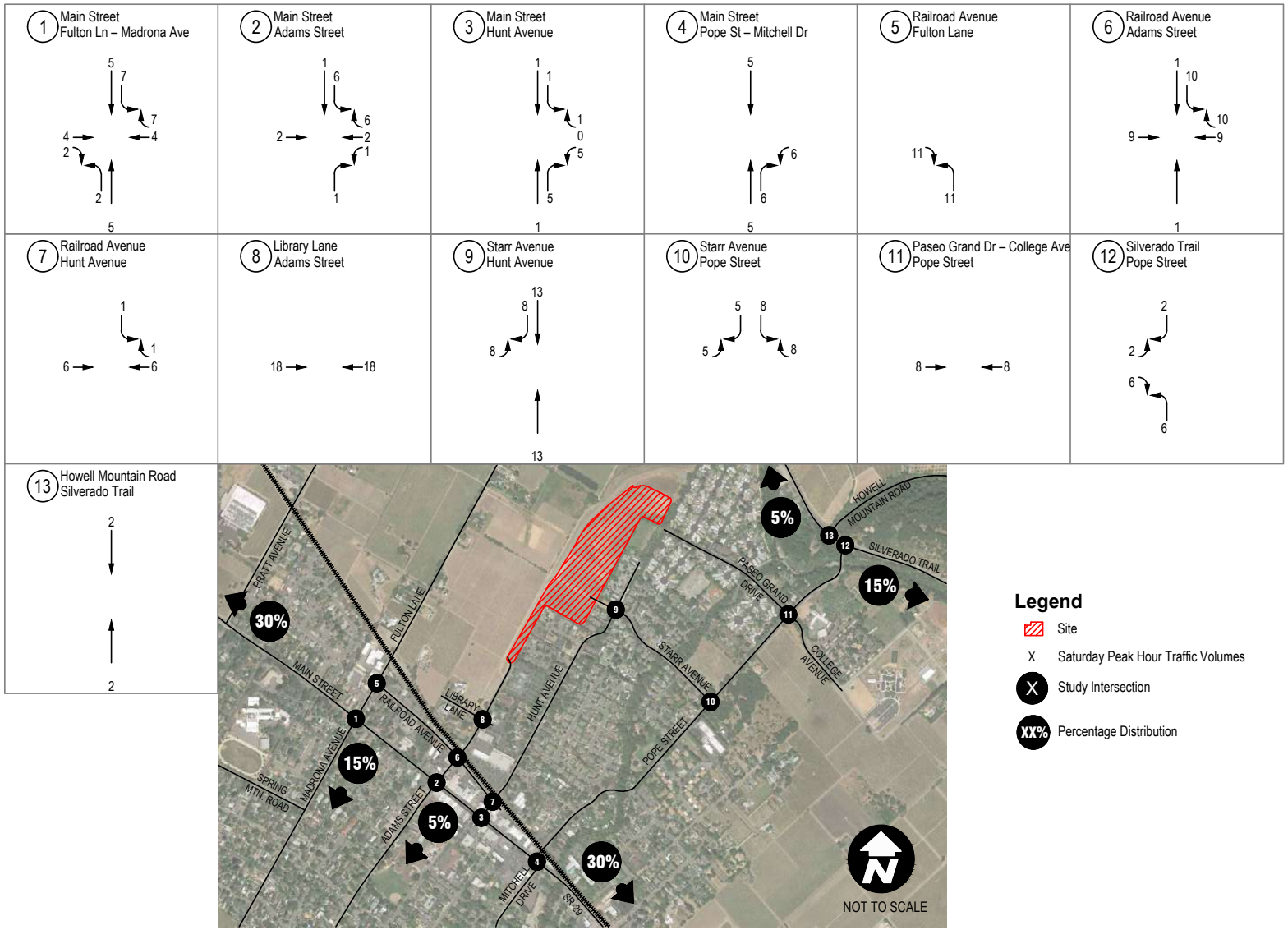
Project Trip Distribution & Assignment - Multi-Family Housing

FIGURE 5

Hunter Subdivision - St. Helena

DUDEK

Feb 20, 2018 - 5:01pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig5-MFTrips



Source: Google Maps, 05/2017

Project Trip Distribution & Assignment - Saturday (All Uses)

FIGURE 6

Hunter Subdivision - St. Helena

DUDEK

Feb 20, 2018 - 4:37pm mpopovic P:\300.Environmental\10839 Hunter Subdivision\DUDEK WORK PRODUCTS\DOCUMENTS\Traffic\Graphics\Autocad Files\Base_HunterSubdivision_02.20.18.dwg Layout: fig6-SaturdayTrip

APPENDIX B

Traffic Data

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Total

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	98	1	0	6	93	7	0	8	0	3	0	2	0	3	0	224
7:15 AM	4	91	2	0	8	125	6	0	9	4	2	0	2	1	7	0	261
7:30 AM	7	112	2	0	10	118	12	0	14	0	3	0	2	2	10	0	292
7:45 AM	8	100	1	0	15	140	23	0	18	7	6	0	3	7	16	0	344
8:00 AM	9	113	2	0	19	145	35	0	26	12	10	0	2	23	15	0	411
8:15 AM	10	127	3	0	28	132	21	0	26	19	12	0	2	19	15	0	414
8:30 AM	7	92	5	0	14	115	9	0	25	2	8	0	5	4	21	0	307
8:45 AM	11	107	8	0	31	114	19	0	12	6	10	0	3	6	19	0	346
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	840	24	0	131	982	132	0	138	50	54	0	21	62	106	0	2599
APPROACH %'s :	6.39%	91.01%	2.60%	0.00%	10.52%	78.88%	10.60%	0.00%	57.02%	20.66%	22.31%	0.00%	11.11%	32.80%	56.08%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	37	439	18	0	92	506	84	0	89	39	40	0	12	52	70	0	1478
PEAK HR FACTOR :	0.841	0.864	0.563	0.000	0.742	0.872	0.600	0.000	0.856	0.513	0.833	0.000	0.600	0.565	0.833	0.000	0.893
	0.882				0.857				0.737				0.838				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	141	2	0	18	101	9	0	30	5	7	0	2	8	37	0	365
4:15 PM	4	136	8	0	22	121	12	0	24	5	4	0	4	9	40	0	389
4:30 PM	6	140	4	0	13	136	13	0	31	8	5	0	3	9	28	0	396
4:45 PM	5	144	4	0	11	118	14	0	27	3	4	0	1	8	43	0	382
5:00 PM	5	146	0	0	14	124	14	0	27	13	4	0	2	10	41	0	400
5:15 PM	5	150	2	0	8	129	14	0	23	7	5	0	2	7	36	0	388
5:30 PM	2	144	1	0	9	124	12	0	21	4	7	0	2	7	32	0	365
5:45 PM	6	111	2	0	11	104	9	0	23	5	3	0	1	1	22	0	298
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	38	1112	23	0	106	957	97	0	206	50	39	0	17	59	279	0	2983
APPROACH %'s :	3.24%	94.80%	1.96%	0.00%	9.14%	82.50%	8.36%	0.00%	69.83%	16.95%	13.22%	0.00%	4.79%	16.62%	78.59%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	20	566	16	0	60	499	53	0	109	29	17	0	10	36	152	0	1567
PEAK HR FACTOR :	0.833	0.969	0.500	0.000	0.682	0.917	0.946	0.000	0.879	0.558	0.850	0.000	0.625	0.900	0.884	0.000	0.979
	0.984				0.944				0.881				0.934				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Passenger Vehicles

NS/EW Streets: Main St | Main St | Fulton Ln | Fulton Ln

AM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	97	1	0	6	91	7	0	8	0	3	0	2	0	3	0	221
7:15 AM	4	86	2	0	8	122	6	0	9	3	2	0	2	1	7	0	252
7:30 AM	7	109	2	0	10	117	12	0	14	0	3	0	2	2	10	0	288
7:45 AM	8	97	1	0	15	135	23	0	18	7	6	0	3	7	16	0	336
8:00 AM	9	110	2	0	19	138	35	0	26	12	10	0	2	23	15	0	401
8:15 AM	10	121	3	0	28	131	21	0	25	19	12	0	2	19	15	0	406
8:30 AM	7	90	5	0	14	111	9	0	24	2	8	0	5	4	21	0	300
8:45 AM	11	103	8	0	31	111	19	0	12	6	10	0	3	6	19	0	339
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	813	24	0	131	956	132	0	136	49	54	0	21	62	106	0	2543
APPROACH %'s :	6.58%	90.74%	2.68%	0.00%	10.75%	78.42%	10.83%	0.00%	56.90%	20.50%	22.59%	0.00%	11.11%	32.80%	56.08%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	37	424	18	0	92	491	84	0	87	39	40	0	12	52	70	0	1446
PEAK HR FACTOR :	0.84	0.876	0.563	0.000	0.742	0.889	0.600	0.000	0.837	0.513	0.833	0.000	0.600	0.565	0.833	0.000	0.890
	0.894				0.868				0.741				0.838				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	5	141	2	0	18	98	9	0	30	5	7	0	2	8	37	0	362
4:15 PM	4	136	8	0	22	120	12	0	24	5	4	0	4	9	40	0	388
4:30 PM	6	138	4	0	13	133	13	0	31	8	5	0	3	9	28	0	391
4:45 PM	5	143	4	0	11	118	14	0	27	3	4	0	1	8	43	0	381
5:00 PM	5	146	0	0	14	122	14	0	27	13	4	0	2	10	41	0	398
5:15 PM	5	149	2	0	8	129	14	0	23	7	5	0	2	7	36	0	387
5:30 PM	2	142	1	0	9	122	12	0	21	4	7	0	2	7	32	0	361
5:45 PM	6	109	2	0	11	103	9	0	23	5	3	0	1	1	22	0	295
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	38	1104	23	0	106	945	97	0	206	50	39	0	17	59	279	0	2963
APPROACH %'s :	3.26%	94.76%	1.97%	0.00%	9.23%	82.32%	8.45%	0.00%	69.83%	16.95%	13.22%	0.00%	4.79%	16.62%	78.59%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	20	563	16	0	60	493	53	0	109	29	17	0	10	36	152	0	1558
PEAK HR FACTOR :	0.83	0.964	0.500	0.000	0.682	0.927	0.946	0.000	0.879	0.558	0.850	0.000	0.625	0.900	0.884	0.000	0.979
	0.985				0.953				0.881				0.934				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Heavy Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6
8:15 AM	0	6	0	0	0	1	0	0	1	0	0	0	0	0	0	0	8
8:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	19	0	0	0	16	0	0	1	0	0	0	0	0	0	0	36
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	10	0	0	0	9	0	0	1	0	0	0	0	0	0	0	20
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.000	0.450	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
		0.417				0.450				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	0	16
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	8
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
		0.500				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Medium Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	4
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	4
8:45 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	0	0	0	10	0	0	1	1	0	0	0	0	0	0	20
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	5	0	0	0	6	0	0	1	0	0	0	0	0	0	0	12
PEAK HR FACTOR :	0.000	0.625	0.000	0.000	0.000	0.750	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.625				0.750				0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Light Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	0	11
7:15 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	6	0	0	0	3	0	0	0	0	1	0	0	0	0	0	10
7:45 AM	1	3	0	0	0	6	0	0	2	0	0	0	0	0	0	0	12
8:00 AM	0	3	0	0	0	5	0	0	0	0	0	0	0	0	1	0	9
8:15 AM	2	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	5
8:30 AM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7
8:45 AM	0	5	1	0	0	2	0	0	0	0	0	0	0	0	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	31	1	0	0	26	0	0	3	0	1	0	0	0	1	0	66
APPROACH %'s :	8.57%	88.57%	2.86%	0.00%	0.00%	100.00%	0.00%	0.00%	75.00%	0.00%	25.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	12	1	0	0	12	0	0	1	0	0	0	0	0	1	0	29
PEAK HR FACTOR :	0.250	0.600	0.250	0.000	0.000	0.600	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.806
	0.625				0.600				0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	5	0	0	0	1	0	0	1	1	0	0	0	0	0	0	8
4:15 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	0	0	1	3	0	0	1	0	0	0	0	0	0	0	5
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4
5:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	16	0	0	1	12	0	0	2	1	0	0	0	1	0	0	33
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	7.69%	92.31%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	8	0	0	1	7	0	0	1	0	0	0	0	1	0	0	18
PEAK HR FACTOR :	0.00	0.667	0.000	0.000	0.250	0.583	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.900
	0.667				0.500				0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 4/17/2018

Bikes

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.500
									0.250				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%									
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
					0.250												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Project ID: 18-08162-001
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Fulton Ln		Fulton Ln		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	0	1	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	0	2	0	1	3
7:45 AM	0	0	1	4	0	0	1	0	6
8:00 AM	0	0	4	0	0	0	0	1	5
8:15 AM	0	2	0	0	0	0	0	1	3
8:30 AM	0	0	2	1	2	0	0	0	5
8:45 AM	0	0	2	0	2	0	0	3	7
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	3	10	6	4	2	1	6	32
APPROACH %'s :	0.00%	100.00%	62.50%	37.50%	66.67%	33.33%	14.29%	85.71%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	2	8	1	4	0	0	5	20
PEAK HR FACTOR :		0.250	0.500	0.250	0.500			0.417	0.714
	0.250		0.563		0.500		0.417		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	0	0	1	0	0	0	2
4:15 PM	0	0	1	0	1	0	0	1	3
4:30 PM	0	1	1	0	1	0	0	0	3
4:45 PM	0	0	0	3	0	0	1	0	4
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	1	0	0	3
5:30 PM	0	0	0	0	0	0	1	2	3
5:45 PM	0	0	0	1	0	1	1	1	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	2	2	4	5	2	3	4	22
APPROACH %'s :	0.00%	100.00%	33.33%	66.67%	71.43%	28.57%	42.86%	57.14%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	1	2	3	2	0	1	1	10
PEAK HR FACTOR :		0.250	0.500	0.250	0.500		0.250	0.250	0.625
	0.250		0.417		0.500		0.500		

Prepared by National Data & Surveying Services

Main St & Fulton Ln

Peak Hour Turning Movement Count

ID: 18-08162-001
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

Main St

SOUTHBOUND

AM	84	506	92	0	598	AM
NOON	0	0	0	0	0	NOON
PM	53	499	60	0	827	PM

EASTBOUND (Fulton Ln)

AM	NOON	PM	
173	0	109	⇦
0	0	0	0
89	0	109	0
39	0	29	1
40	0	17	0
AM	NOON	PM	

WESTBOUND (Fulton Ln)

PM	NOON	AM	
152	0	70	0
36	0	52	1
10	0	12	0
0	0	0	0
105	0	149	⇨
PM	NOON	AM	

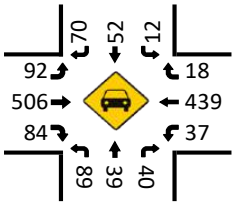
NORTHBOUND

PM	526	0	20	566	16	PM
NOON	0	0	0	0	0	NOON
AM	558	0	37	439	18	AM

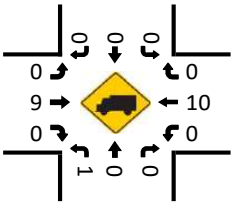
Main St

CONTROL			
Signalized			
TEV	1478 AM	0 NOON	1567 PM
PHF	0.89		0.98

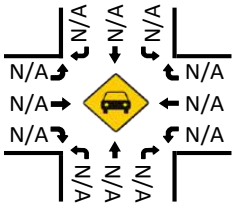
Total Vehicles (AM)



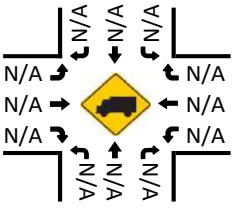
HT (AM)



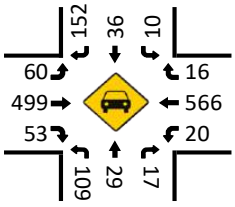
Total Vehicles (Noon)



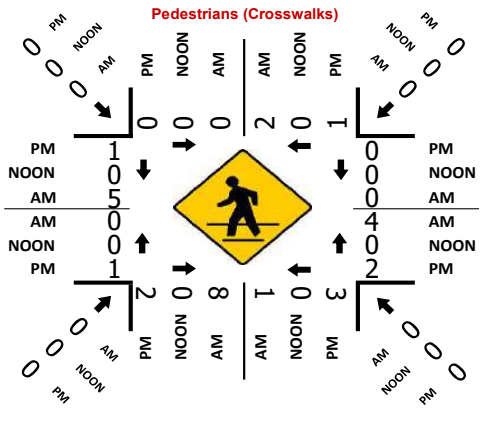
HT (NOON)



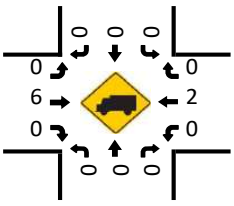
Total Vehicles (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Total

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	7	88	5	0	4	83	5	0	5	3	7	0	5	2	6	0	220
7:15 AM	9	97	9	0	7	111	4	0	1	4	8	0	4	5	4	0	263
7:30 AM	7	101	7	0	4	97	4	0	7	9	5	0	12	6	9	0	268
7:45 AM	17	112	9	0	10	138	14	0	7	10	6	0	4	10	9	0	346
8:00 AM	8	102	5	0	11	110	9	0	22	19	8	0	4	22	4	0	324
8:15 AM	9	115	11	0	7	128	14	0	15	33	8	0	8	17	8	0	373
8:30 AM	8	94	13	0	15	104	9	0	11	27	11	0	13	13	12	0	330
8:45 AM	11	104	12	0	9	106	11	0	10	23	6	0	14	6	7	0	319
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	813	71	0	67	877	70	0	78	128	59	0	64	81	59	0	2443
APPROACH %'s :	7.92%	84.69%	7.40%	0.00%	6.61%	86.49%	6.90%	0.00%	29.43%	48.30%	22.26%	0.00%	31.37%	39.71%	28.92%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	42	423	38	0	43	480	46	0	55	89	33	0	29	62	33	0	1373
PEAK HR FACTOR :	0.618	0.920	0.731	0.000	0.717	0.870	0.821	0.000	0.625	0.674	0.750	0.000	0.558	0.705	0.688	0.000	0.920
	0.911				0.878				0.790				0.816				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	110	9	0	10	113	12	0	27	30	7	0	12	12	21	0	365
4:15 PM	6	102	10	0	20	103	9	0	19	31	5	0	19	26	25	0	375
4:30 PM	5	114	9	0	19	123	10	0	18	31	7	0	13	17	20	0	386
4:45 PM	9	107	9	0	18	111	6	0	25	31	6	0	12	20	12	0	366
5:00 PM	8	122	8	0	17	112	7	0	20	17	6	0	22	14	13	0	366
5:15 PM	7	128	8	0	15	113	10	0	15	21	7	0	17	20	16	0	377
5:30 PM	8	115	7	0	16	120	11	0	21	22	6	0	16	14	15	0	371
5:45 PM	8	90	5	0	11	85	5	0	17	17	4	0	12	7	11	0	272
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	53	888	65	0	126	880	70	0	162	200	48	0	123	130	133	0	2878
APPROACH %'s :	5.27%	88.27%	6.46%	0.00%	11.71%	81.78%	6.51%	0.00%	39.51%	48.78%	11.71%	0.00%	31.87%	33.68%	34.46%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	29	471	34	0	69	459	33	0	78	100	26	0	64	71	61	0	1495
PEAK HR FACTOR :	0.806	0.920	0.944	0.000	0.908	0.933	0.825	0.000	0.780	0.806	0.929	0.000	0.727	0.888	0.763	0.000	0.968
	0.934				0.923				0.823				0.925				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	1 NR	1 NU	1 SL	1 ST	1 SR	1 SU	1 EL	1 ET	1 ER	1 EU	1 WL	1 WT	1 WR	1 WU	TOTAL
7:00 AM	7	88	5	0	4	81	5	0	5	3	7	0	5	2	5	0	217
7:15 AM	9	91	9	0	7	108	4	0	1	4	8	0	4	5	4	0	254
7:30 AM	7	98	7	0	4	96	4	0	7	8	5	0	12	6	8	0	262
7:45 AM	17	109	9	0	10	133	14	0	7	10	6	0	4	10	9	0	338
8:00 AM	8	99	5	0	11	103	9	0	22	19	8	0	4	22	4	0	314
8:15 AM	9	110	11	0	7	127	14	0	15	33	8	0	8	17	8	0	367
8:30 AM	8	91	13	0	15	99	9	0	11	27	11	0	13	13	12	0	322
8:45 AM	11	101	12	0	9	102	11	0	10	23	6	0	14	6	7	0	312
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	787	71	0	67	849	70	0	78	127	59	0	64	81	57	0	2386
APPROACH %'s :	8.14%	84.26%	7.60%	0.00%	6.80%	86.11%	7.10%	0.00%	29.55%	48.11%	22.35%	0.00%	31.68%	40.10%	28.22%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	42	409	38	0	43	462	46	0	55	89	33	0	29	62	33	0	1341
PEAK HR FACTOR :	0.62	0.930	0.731	0.000	0.717	0.868	0.821	0.000	0.625	0.674	0.750	0.000	0.558	0.705	0.688	0.000	0.913
	0.906				0.877				0.790				0.816				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	1 NR	1 NU	1 SL	1 ST	1 SR	1 SU	1 EL	1 ET	1 ER	1 EU	1 WL	1 WT	1 WR	1 WU	TOTAL
4:00 PM	2	110	9	0	10	111	12	0	27	30	7	0	12	12	21	0	363
4:15 PM	6	102	10	0	20	101	9	0	19	31	5	0	19	26	25	0	373
4:30 PM	5	112	9	0	19	120	10	0	18	31	7	0	13	17	20	0	381
4:45 PM	9	106	9	0	18	111	6	0	25	31	6	0	12	20	12	0	365
5:00 PM	8	122	8	0	17	110	7	0	20	17	6	0	22	14	13	0	364
5:15 PM	7	127	8	0	15	113	10	0	15	21	7	0	17	20	16	0	376
5:30 PM	8	113	7	0	16	118	11	0	21	22	6	0	16	14	15	0	367
5:45 PM	8	88	5	0	11	84	5	0	17	17	4	0	12	7	11	0	269
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	53	880	65	0	126	868	70	0	162	200	48	0	123	130	133	0	2858
APPROACH %'s :	5.31%	88.18%	6.51%	0.00%	11.84%	81.58%	6.58%	0.00%	39.51%	48.78%	11.71%	0.00%	31.87%	33.68%	34.46%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	29	467	34	0	69	454	33	0	78	100	26	0	64	71	61	0	1486
PEAK HR FACTOR :	0.81	0.919	0.944	0.000	0.908	0.946	0.825	0.000	0.780	0.806	0.929	0.000	0.727	0.888	0.763	0.000	0.975
	0.933				0.933				0.823				0.925				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Heavy Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	3
7:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4
7:45 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6
8:30 AM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	18	0	0	0	17	0	0	0	1	0	0	0	0	1	0	37
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	22
PEAK HR FACTOR :	0.000	0.550	0.000	0.000	0.000	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.786
	0.550				0.550												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	0	0	0	9	0	0	0	0	0	0	0	0	0	0	16
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.750				0.417												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Medium Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
7:45 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	0	0	0	11	0	0	0	0	0	0	0	0	1	0	20
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	0	10
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
		0.750				0.583											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
		0.250															

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Light Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	7	0	0	0	1	0	0	0	0	0	0	0	0	1	0	9
7:15 AM	1	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
7:30 AM	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7
7:45 AM	1	5	0	0	0	7	1	0	1	0	1	0	0	0	0	0	16
8:00 AM	0	1	0	0	0	4	0	0	1	0	0	0	0	0	0	0	6
8:15 AM	0	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
8:30 AM	3	2	0	0	0	4	1	0	1	0	0	0	1	1	0	0	13
8:45 AM	0	5	0	0	0	2	1	0	1	0	0	0	0	0	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	29	0	0	0	25	3	0	4	1	1	0	1	1	1	0	71
APPROACH %'s :	14.71%	85.29%	0.00%	0.00%	0.00%	89.29%	10.71%	0.00%	66.67%	16.67%	16.67%	0.00%	33.33%	33.33%	33.33%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	4	11	0	0	0	16	2	0	3	1	1	0	1	1	0	0	40
PEAK HR FACTOR :	0.333	0.550	0.000	0.000	0.000	0.571	0.500	0.000	0.750	0.250	0.250	0.000	0.250	0.250	0.000	0.000	0.625
	0.625				0.563				0.625				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6
4:15 PM	0	1	0	0	0	2	0	0	1	0	0	0	0	0	1	0	5
4:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	4
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	4
5:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	14	0	0	0	12	0	0	1	0	0	0	1	0	2	0	30
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	0.00%	66.67%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	6	0	0	0	6	0	0	0	0	0	0	1	0	1	0	14
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.875
	0.750				0.500				0.000				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 4/17/2018

Bikes

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	3
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	50.00%	0.00%	50.00%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	2	0	0	0	1	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.375
									0.500				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Project ID: 18-08162-002
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Adams St		Adams St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	1	0	0	3	0	0	5
7:15 AM	0	0	1	2	0	0	0	0	3
7:30 AM	0	0	1	0	0	0	0	1	2
7:45 AM	0	0	2	2	0	0	0	1	5
8:00 AM	0	0	3	1	0	0	2	1	7
8:15 AM	0	0	4	4	0	0	3	2	13
8:30 AM	0	0	7	3	2	0	1	1	14
8:45 AM	3	0	2	3	4	7	2	1	22
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	1	21	15	6	10	8	7	71
APPROACH %'s :	75.00%	25.00%	58.33%	41.67%	37.50%	62.50%	53.33%	46.67%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	16	10	2	0	6	5	39
PEAK HR FACTOR :			0.571	0.625	0.250		0.500	0.625	0.696
			0.650		0.250		0.550		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	3	7	0	2	7	11	6	1	37
4:15 PM	9	5	8	2	13	4	5	5	51
4:30 PM	6	3	3	6	4	13	2	0	37
4:45 PM	0	1	4	6	9	0	4	4	28
5:00 PM	1	1	8	4	8	5	4	3	34
5:15 PM	2	2	4	6	6	7	1	3	31
5:30 PM	0	0	3	5	4	4	1	1	18
5:45 PM	4	4	1	3	6	6	2	0	26
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	25	23	31	34	57	50	25	17	262
APPROACH %'s :	52.08%	47.92%	47.69%	52.31%	53.27%	46.73%	59.52%	40.48%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	9	7	19	22	27	25	11	10	130
PEAK HR FACTOR :	0.375	0.583	0.594	0.917	0.750	0.481	0.688	0.625	0.878
	0.444		0.854		0.765		0.656		

Prepared by National Data & Surveying Services

Main St & Adams St

Peak Hour Turning Movement Count

ID: 18-08162-002
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	
AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS	
AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1373	0	1495
PHF	0.92		0.97

Main St — SOUTHBOUND

	Left	Thru	Right	Peds	Total	
AM	46	480	43	0	511	AM
NOON	0	0	0	0	0	NOON
PM	33	459	69	0	610	PM

Adams St — EASTBOUND

	Left	Thru	Right	Peds	
AM	150	0	133	0	
NOON	0	0	0	1	
PM	133	0	150	1	
AM	0	0	0	0	
NOON	55	0	78	0	
PM	89	0	100	1	
AM	33	0	26	0	
NOON	0	0	0	0	
PM	549	0	29	471	34	PM
NOON	0	0	0	0	0	NOON
AM	542	0	42	423	38	AM

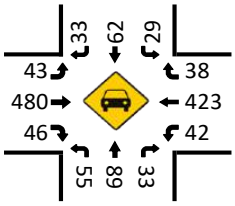
Adams St — WESTBOUND

	Left	Thru	Right	Peds	
PM	61	0	33	0	
NOON	71	0	62	1	
AM	64	0	29	0	
PM	0	0	0	0	
NOON	203	0	170	0	
AM	69	459	33	0	
NOON	0	0	0	0	
PM	78	100	26	0	

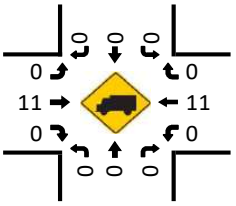
Main St — NORTHBOUND

	Left	Thru	Right	Peds	Total	
PM	43	480	46	0	569	PM
NOON	38	423	42	0	503	NOON
AM	33	62	29	0	124	AM

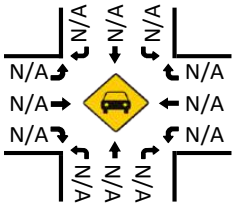
Total Vehicles (AM)



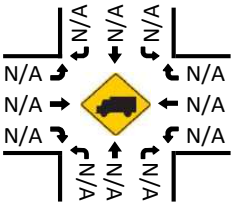
HT (AM)



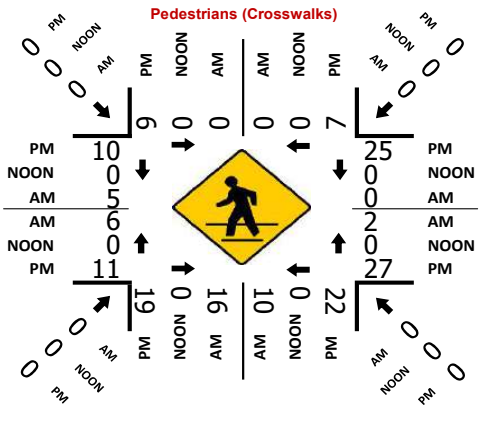
Total Vehicles (Noon)



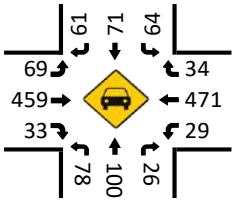
HT (NOON)



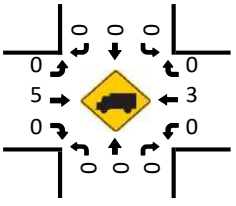
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Total

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	95	15	0	3	90	0	0	0	0	0	0	2	0	6	0	211
7:15 AM	0	114	13	0	6	121	0	0	0	0	0	0	5	0	5	0	264
7:30 AM	0	115	19	0	7	112	0	0	0	0	0	0	2	0	8	0	263
7:45 AM	0	126	23	0	3	132	0	0	0	0	0	0	7	0	7	0	298
8:00 AM	0	118	25	0	8	112	0	0	0	0	0	0	7	0	4	0	274
8:15 AM	0	130	16	0	6	133	0	0	0	0	0	0	6	0	4	0	295
8:30 AM	0	123	26	0	3	117	0	0	0	0	0	0	7	0	3	0	279
8:45 AM	0	123	19	0	8	119	0	0	0	0	0	0	8	0	1	0	278
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	944	156	0	44	936	0	0	0	0	0	0	44	0	38	0	2162
APPROACH %'s :	0.00%	85.82%	14.18%	0.00%	4.49%	95.51%	0.00%	0.00%					53.66%	0.00%	46.34%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	497	90	0	20	494	0	0	0	0	0	0	27	0	18	0	1146
PEAK HR FACTOR :	0.000	0.956	0.865	0.000	0.625	0.929	0.000	0.000	0.000	0.000	0.000	0.000	0.964	0.000	0.643	0.000	0.961
		0.985				0.924								0.804			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	114	26	0	8	122	0	0	0	0	0	0	9	0	2	0	281
4:15 PM	0	114	14	0	5	124	0	0	0	0	0	0	2	0	4	0	263
4:30 PM	0	128	16	0	5	134	0	0	0	0	0	0	10	0	7	0	300
4:45 PM	0	118	17	0	8	117	0	0	0	0	0	0	8	0	6	0	274
5:00 PM	0	136	19	0	4	143	0	0	0	0	0	0	5	0	6	0	313
5:15 PM	0	141	14	1	10	128	0	0	0	0	0	0	8	0	4	0	306
5:30 PM	0	109	13	0	8	131	0	0	0	0	0	0	7	0	5	0	273
5:45 PM	0	103	20	0	4	101	0	0	0	0	0	0	8	0	3	0	239
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	963	139	1	52	1000	0	0	0	0	0	0	57	0	37	0	2249
APPROACH %'s :	0.00%	87.31%	12.60%	0.09%	4.94%	95.06%	0.00%	0.00%					60.64%	0.00%	39.36%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	523	66	1	27	522	0	0	0	0	0	0	31	0	23	0	1193
PEAK HR FACTOR :	0.000	0.927	0.868	0.250	0.675	0.913	0.000	0.000	0.000	0.000	0.000	0.000	0.775	0.000	0.821	0.000	0.953
		0.946				0.934								0.794			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	94	15	0	3	88	0	0	0	0	0	0	2	0	6	0	208
7:15 AM	0	107	13	0	6	118	0	0	0	0	0	0	5	0	5	0	254
7:30 AM	0	112	18	0	7	110	0	0	0	0	0	0	2	0	8	0	257
7:45 AM	0	124	23	0	3	128	0	0	0	0	0	0	7	0	7	0	292
8:00 AM	0	115	25	0	7	105	0	0	0	0	0	0	7	0	4	0	263
8:15 AM	0	124	16	0	6	132	0	0	0	0	0	0	6	0	4	0	288
8:30 AM	0	121	26	0	3	112	0	0	0	0	0	0	7	0	3	0	272
8:45 AM	0	120	19	0	8	115	0	0	0	0	0	0	5	0	1	0	268
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	917	155	0	43	908	0	0	0	0	0	0	41	0	38	0	2102
APPROACH %'s :	0.00%	85.54%	14.46%	0.00%	4.52%	95.48%	0.00%	0.00%					51.90%	0.00%	48.10%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	484	90	0	19	477	0	0	0	0	0	0	27	0	18	0	1115
PEAK HR FACTOR :	0.00	0.976	0.865	0.000	0.679	0.903	0.000	0.000	0.000	0.000	0.000	0.000	0.964	0.000	0.643	0.000	0.955
		0.976				0.899								0.804			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	114	26	0	8	120	0	0	0	0	0	0	9	0	2	0	279
4:15 PM	0	114	14	0	5	122	0	0	0	0	0	0	2	0	4	0	261
4:30 PM	0	126	15	0	5	131	0	0	0	0	0	0	10	0	7	0	294
4:45 PM	0	117	17	0	8	117	0	0	0	0	0	0	8	0	6	0	273
5:00 PM	0	136	19	0	4	141	0	0	0	0	0	0	5	0	6	0	311
5:15 PM	0	140	14	1	10	128	0	0	0	0	0	0	8	0	4	0	305
5:30 PM	0	107	13	0	8	129	0	0	0	0	0	0	7	0	5	0	269
5:45 PM	0	101	20	0	4	100	0	0	0	0	0	0	8	0	3	0	236
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	955	138	1	52	988	0	0	0	0	0	0	57	0	37	0	2228
APPROACH %'s :	0.00%	87.29%	12.61%	0.09%	5.00%	95.00%	0.00%	0.00%					60.64%	0.00%	39.36%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	519	65	1	27	517	0	0	0	0	0	0	31	0	23	0	1183
PEAK HR FACTOR :	0.00	0.927	0.855	0.250	0.675	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.775	0.000	0.821	0.000	0.951
		0.944				0.938								0.794			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Heavy Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
7:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	2	0	0	1	4	0	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
8:30 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	3	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	18	1	0	1	16	0	0	0	0	0	0	3	0	0	0	39
APPROACH %'s :	0.00%	94.74%	5.26%	0.00%	5.88%	94.12%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	10	0	0	1	9	0	0	0	0	0	0	0	0	0	0	20
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.250	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.714
	0.417				0.500												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	1	0	0	9	0	0	0	0	0	0	0	0	0	0	17
APPROACH %'s :	0.00%	87.50%	12.50%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	1	0	0	5	0	0	0	0	0	0	0	0	0	0	9
PEAK HR FACTOR :	0.00	0.750	0.250	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.450
	0.500				0.417												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Medium Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	21
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	0	11
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.688
	0.750				0.667												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Light Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	6	1	0	0	1	0	0	0	0	0	0	1	0	0	0	9
7:15 AM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7
7:30 AM	0	4	1	0	0	5	0	0	0	0	0	0	0	0	0	0	10
7:45 AM	0	4	0	0	0	8	0	0	0	0	0	0	0	0	1	0	13
8:00 AM	0	3	1	0	0	3	0	0	0	0	0	0	1	0	0	0	8
8:15 AM	0	2	1	0	0	1	0	0	0	0	0	0	1	0	0	0	5
8:30 AM	0	1	1	0	0	4	0	0	0	0	0	0	2	0	1	0	9
8:45 AM	0	8	1	0	0	1	0	0	0	0	0	0	0	0	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	31	6	0	0	27	0	0	0	0	0	0	5	0	2	0	71
APPROACH %'s :	0.00%	83.78%	16.22%	0.00%	0.00%	100.00%	0.00%	0.00%					71.43%	0.00%	28.57%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	10	3	0	0	16	0	0	0	0	0	0	4	0	2	0	35
PEAK HR FACTOR :	0.000	0.625	0.750	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.673
		0.813				0.500								0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	3	1	0	0	1	0	0	0	0	0	0	2	0	0	0	7
4:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:30 PM	0	3	0	0	0	2	0	0	0	0	0	0	1	0	0	0	6
4:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	3	1	0	0	2	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	15	2	0	0	12	0	0	0	0	0	0	3	0	0	0	32
APPROACH %'s :	0.00%	88.24%	11.76%	0.00%	0.00%	100.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	9	1	0	0	7	0	0	0	0	0	0	1	0	0	0	18
PEAK HR FACTOR :	0.00	0.750	0.250	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750
		0.625				0.583								0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 4/17/2018

Bikes

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250
													0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	2	0	1	2	0	0	0	0	0	0	0	0	1	0	7
APPROACH %'s :	0.00%	33.33%	66.67%	0.00%	33.33%	66.67%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
			0.250			0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Project ID: 18-08162-003
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Hunt Ave		Hunt Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	0	0	0	0	1	1	3
7:15 AM	0	0	0	0	0	0	1	0	1
7:30 AM	2	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	2	2	6	10
8:00 AM	1	0	0	0	0	3	1	2	7
8:15 AM	1	0	0	0	0	0	0	1	2
8:30 AM	0	0	0	0	0	0	3	1	4
8:45 AM	2	11	0	1	0	0	0	3	17
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	12	0	1	0	5	8	14	46
APPROACH %'s :	33.33%	66.67%	0.00%	100.00%	0.00%	100.00%	36.36%	63.64%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	2	0	0	0	0	5	6	10	23
PEAK HR FACTOR :	0.500					0.417	0.500	0.417	0.575
	0.500				0.417		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	11	14	0	1	3	2	7	4	42
4:15 PM	12	8	0	0	7	2	7	3	39
4:30 PM	10	8	0	1	2	1	7	0	29
4:45 PM	9	7	0	0	1	0	12	5	34
5:00 PM	7	4	0	0	5	0	3	5	24
5:15 PM	5	4	0	0	2	1	5	0	17
5:30 PM	4	10	0	0	0	3	1	3	21
5:45 PM	7	9	0	0	0	3	12	1	32
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	65	64	0	2	20	12	54	21	238
APPROACH %'s :	50.39%	49.61%	0.00%	100.00%	62.50%	37.50%	72.00%	28.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	31	23	0	1	10	2	27	10	104
PEAK HR FACTOR :	0.775	0.719		0.250	0.500	0.500	0.563	0.500	0.765
	0.750		0.250		0.600		0.544		

Prepared by National Data & Surveying Services

Main St & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-003
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	
AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS	
AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Main St

SOUTHBOUND

AM	0	494	20	0	515	AM
NOON	0	0	0	0	0	NOON
PM	0	522	27	0	546	PM

Hunt Ave

EASTBOUND

AM	NOON	PM	
0	0	0	⇦
0	0	0	↰ 0
0	0	0	→ 0
0	0	0	↱ 0
0	0	0	↓
AM	NOON	PM	

WESTBOUND

PM	NOON	AM	
23	0	18	0 ↱
0	0	0	1 ←
31	0	27	0 ↰
0	0	0	0 ↰
93	0	110	⇨
PM	NOON	AM	

Hunt Ave

	0	1	1	0		
	0	0	1	0		

CONTROL

1-Way Stop (WB)

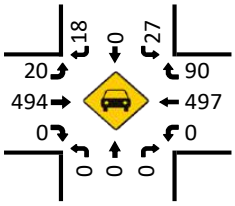
TEV	1146 AM	0 NOON	1193 PM
PHF	0.96		0.95

PM	554	1	0	523	66	PM
NOON	0	0	0	0	0	NOON
AM	521	0	0	497	90	AM

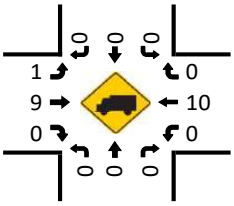
NORTHBOUND

Main St

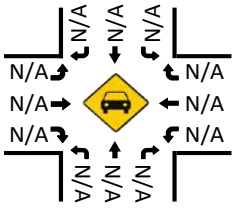
Total Vehicles (AM)



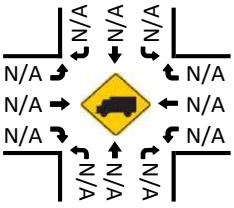
HT (AM)



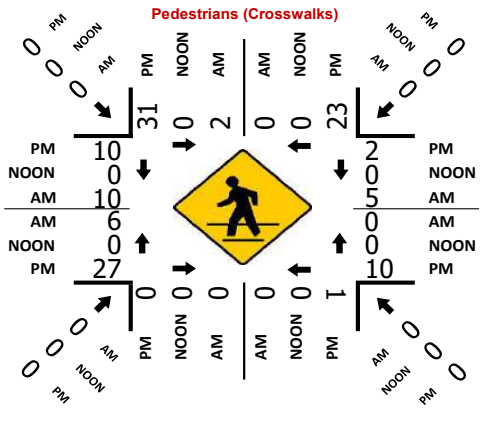
Total Vehicles (Noon)



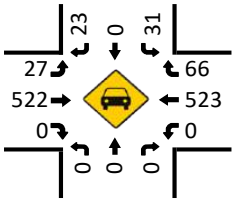
HT (NOON)



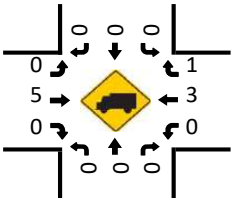
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Total

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	103	9	0	6	87	0	0	0	0	13	0	20	3	10	0	255
7:15 AM	13	120	7	0	7	98	1	0	0	0	25	0	26	3	14	0	314
7:30 AM	25	145	9	0	10	103	2	0	0	0	19	0	39	6	12	0	370
7:45 AM	25	139	9	0	7	119	2	0	0	0	33	0	53	6	21	0	414
8:00 AM	20	129	10	0	23	105	1	0	0	0	54	0	60	11	46	0	459
8:15 AM	15	137	8	0	25	135	0	0	0	0	43	0	30	9	34	0	436
8:30 AM	17	140	23	0	21	100	1	0	0	0	38	0	32	7	21	0	400
8:45 AM	17	143	10	0	21	99	2	0	0	0	32	0	42	6	17	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	136	1056	85	0	120	846	9	0	0	0	257	0	302	51	175	0	3037
APPROACH %'s :	10.65%	82.69%	6.66%	0.00%	12.31%	86.77%	0.92%	0.00%	0.00%	0.00%	100.00%	0.00%	57.20%	9.66%	33.14%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	77	545	50	0	76	459	4	0	0	0	168	0	175	33	122	0	1709
PEAK HR FACTOR :	0.770	0.973	0.543	0.000	0.760	0.850	0.500	0.000	0.000	0.000	0.778	0.000	0.729	0.750	0.663	0.000	0.931
	0.933				0.842				0.778				0.705				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	11	135	13	0	22	118	1	0	0	0	43	0	40	0	28	0	411
4:15 PM	23	126	13	0	25	116	0	0	0	0	42	0	41	10	34	0	430
4:30 PM	21	138	10	0	25	133	0	0	0	0	57	0	39	10	21	0	454
4:45 PM	18	126	13	0	21	109	0	0	0	0	36	0	33	8	23	0	387
5:00 PM	19	143	14	0	14	133	0	0	0	0	44	0	33	7	22	0	429
5:15 PM	25	142	14	0	25	138	4	0	0	0	54	0	34	1	25	0	462
5:30 PM	24	125	13	0	25	131	4	0	0	0	38	0	51	6	21	0	438
5:45 PM	28	112	18	0	16	91	0	0	0	0	33	0	23	10	26	0	357
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	169	1047	108	0	173	969	9	0	0	0	347	0	294	52	200	0	3368
APPROACH %'s :	12.76%	79.08%	8.16%	0.00%	15.03%	84.19%	0.78%	0.00%	0.00%	0.00%	100.00%	0.00%	53.85%	9.52%	36.63%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	83	549	51	0	85	513	4	0	0	0	191	0	139	26	91	0	1732
PEAK HR FACTOR :	0.830	0.960	0.911	0.000	0.850	0.929	0.250	0.000	0.000	0.000	0.838	0.000	0.891	0.650	0.910	0.000	0.937
	0.943				0.901				0.838				0.914				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Passenger Vehicles

NS/EW Streets: Main St | Main St | Pope-St_Mitchell Dr | Pope-St_Mitchell Dr

AM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	102	9	0	6	85	0	0	0	0	12	0	20	3	10	0	251
7:15 AM	13	113	7	0	7	96	1	0	0	0	25	0	26	3	14	0	305
7:30 AM	24	142	9	0	10	100	2	0	0	0	19	0	39	6	11	0	362
7:45 AM	24	137	9	0	7	115	1	0	0	0	33	0	52	6	21	0	405
8:00 AM	20	126	10	0	22	102	0	0	0	0	54	0	60	11	46	0	451
8:15 AM	15	131	8	0	25	133	0	0	0	0	43	0	30	9	34	0	428
8:30 AM	17	138	23	0	21	95	1	0	0	0	38	0	32	7	21	0	393
8:45 AM	17	139	10	0	21	93	1	0	0	0	32	0	42	6	16	0	377
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	134	1028	85	0	119	819	6	0	0	0	256	0	301	51	173	0	2972
APPROACH %'s :	10.75%	82.44%	6.82%	0.00%	12.61%	86.76%	0.64%	0.00%	0.00%	0.00%	100.00%	0.00%	57.33%	9.71%	32.95%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	76	532	50	0	75	445	2	0	0	0	168	0	174	33	122	0	1677
PEAK HR FACTOR :	0.79	0.964	0.543	0.000	0.750	0.836	0.500	0.000	0.000	0.000	0.778	0.000	0.725	0.750	0.663	0.000	0.930
	0.924				0.826				0.778				0.703				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	11	135	13	0	22	116	1	0	0	0	43	0	40	0	28	0	409
4:15 PM	23	126	13	0	25	115	0	0	0	0	42	0	41	10	34	0	429
4:30 PM	21	135	10	0	25	129	0	0	0	0	57	0	39	10	21	0	447
4:45 PM	18	125	13	0	21	109	0	0	0	0	36	0	33	8	23	0	386
5:00 PM	19	143	14	0	14	131	0	0	0	0	44	0	33	7	22	0	427
5:15 PM	25	141	14	0	25	138	4	0	0	0	54	0	34	1	25	0	461
5:30 PM	24	123	13	0	25	129	4	0	0	0	38	0	51	6	21	0	434
5:45 PM	28	110	18	0	16	90	0	0	0	0	33	0	23	10	26	0	354
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	169	1038	108	0	173	957	9	0	0	0	347	0	294	52	200	0	3347
APPROACH %'s :	12.85%	78.94%	8.21%	0.00%	15.19%	84.02%	0.79%	0.00%	0.00%	0.00%	100.00%	0.00%	53.85%	9.52%	36.63%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	83	544	51	0	85	507	4	0	0	0	191	0	139	26	91	0	1721
PEAK HR FACTOR :	0.83	0.951	0.911	0.000	0.850	0.918	0.250	0.000	0.000	0.000	0.838	0.000	0.891	0.650	0.910	0.000	0.933
	0.942				0.892				0.838				0.914				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Heavy Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	4
7:15 AM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7
8:30 AM	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
8:45 AM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	20	0	0	0	19	0	0	0	0	1	0	0	0	0	0	40
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	20
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.714
	0.417				0.625												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	8	0	0	0	9	0	0	0	0	0	0	0	0	0	0	17
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	10
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
	0.500				0.375												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Medium Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
7:30 AM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
7:45 AM	1	1	0	0	0	2	1	0	0	0	0	0	1	0	0	0	6
8:00 AM	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	1	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	8	0	0	1	8	3	0	0	0	0	0	1	0	2	0	25
APPROACH %'s :	20.00%	80.00%	0.00%	0.00%	8.33%	66.67%	25.00%	0.00%					33.33%	0.00%	66.67%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	1	3	0	0	1	4	2	0	0	0	0	0	1	0	0	0	12
PEAK HR FACTOR :	0.250	0.750	0.000	0.000	0.250	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500
	0.500				0.583								0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Light Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7
7:15 AM	0	1	0	0	0	4	0	0	0	0	1	0	0	0	0	0	6
7:30 AM	0	8	1	0	0	5	0	0	0	0	1	0	1	0	0	0	16
7:45 AM	0	4	0	0	0	7	0	0	0	0	2	0	0	1	0	0	14
8:00 AM	0	3	1	0	0	5	0	0	0	0	2	0	0	0	0	0	11
8:15 AM	1	5	0	0	1	2	0	0	0	0	2	0	2	0	0	0	13
8:30 AM	1	2	0	0	0	5	0	0	0	0	2	0	0	0	0	0	10
8:45 AM	2	9	0	0	0	5	0	0	0	0	1	0	2	0	0	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	38	2	0	1	33	0	0	0	0	12	0	5	1	0	0	96
APPROACH %'s :	9.09%	86.36%	4.55%	0.00%	2.94%	97.06%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	83.33%	16.67%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	2	14	1	0	1	19	0	0	0	0	8	0	2	1	0	0	48
PEAK HR FACTOR :	0.500	0.700	0.250	0.000	0.250	0.679	0.000	0.000	0.000	0.000	1.000	0.000	0.250	0.250	0.000	0.000	0.857
	0.708				0.714				1.000				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	5	0	0	0	1	0	0	0	0	1	0	2	0	0	0	9
4:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	1	0	0	0	3	0	0	0	0	0	0	1	0	1	0	6
4:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
5:15 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1	0	6
5:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	4
5:45 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	15	0	0	1	13	0	0	0	0	2	0	4	0	3	0	38
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	7.14%	92.86%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	57.14%	0.00%	42.86%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	7	0	0	0	7	0	0	0	0	1	0	1	0	2	0	18
PEAK HR FACTOR :	0.00	0.583	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.500	0.000	0.750
	0.583				0.583				0.250				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 4/17/2018

Bikes

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	1	1	0	0	0	0	0	0	2	0	2	0	7
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	50.00%	50.00%	0.00%	0.00%					50.00%	0.00%	50.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	1	0	1	0	0	0	0	0	0	0	1	0	2	0	5
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.417
	0.250				0.250								0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	2	2	0	0	0	3	0	0	0	2	1	0	12
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	2	1	0	0	0	0	0	0	0	0	1	0	5
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.625
	0.250				0.750								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Project ID: 18-09162-004
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Pope-St_Mitchell Dr		Pope-St_Mitchell Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	1	2	1	0	0	2	4	10
7:15 AM	1	0	0	0	0	0	2	4	7
7:30 AM	0	0	0	0	0	0	1	0	1
7:45 AM	1	0	3	5	0	0	2	1	12
8:00 AM	0	0	2	1	0	0	1	1	5
8:15 AM	1	0	0	1	0	0	2	1	5
8:30 AM	1	0	2	6	0	0	1	2	12
8:45 AM	2	1	3	5	1	0	1	3	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	2	12	19	1	0	12	16	68
APPROACH %'s :	75.00%	25.00%	38.71%	61.29%	100.00%	0.00%	42.86%	57.14%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	3	0	7	13	0	0	6	5	34
PEAK HR FACTOR :	0.750		0.583	0.542			0.750	0.625	0.708
	0.750		0.625				0.917		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	1	1	0	0	0	0	3	2	7
4:15 PM	3	1	0	0	0	0	3	1	8
4:30 PM	2	3	0	0	0	0	1	4	10
4:45 PM	4	2	0	2	0	0	4	3	15
5:00 PM	0	0	0	0	0	0	3	3	6
5:15 PM	1	0	0	1	0	0	5	5	12
5:30 PM	3	0	0	0	0	0	7	3	13
5:45 PM	0	0	1	1	0	0	1	3	6
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	14	7	1	4	0	0	27	24	77
APPROACH %'s :	66.67%	33.33%	20.00%	80.00%			52.94%	47.06%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	7	5	0	3	0	0	13	15	43
PEAK HR FACTOR :	0.438	0.417		0.375			0.650	0.750	0.717
	0.500		0.375				0.700		

Prepared by National Data & Surveying Services

Main St & Pope-St_Mitchell Dr

Peak Hour Turning Movement Count

ID: 18-08162-004
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Main St — SOUTHBOUND

AM	4	459	76	0	667	AM
NOON	0	0	0	0	0	NOON
PM	4	513	85	0	640	PM

Pope-St_Mitchell Dr — EASTBOUND

AM	NOON	PM	
114	0	113	
0	0	0	0
0	0	0	0
0	0	0	1
168	0	191	0
AM	NOON	PM	

Pope-St_Mitchell Dr — WESTBOUND

PM	NOON	AM	
91	0	122	1
26	0	33	0
139	0	175	1
0	0	0	0
136	0	126	
PM	NOON	AM	

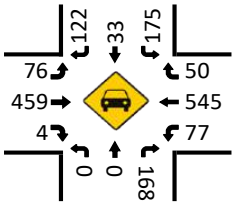
Main St — NORTHBOUND

PM	843	0	83	549	51	PM
NOON	0	0	0	0	0	NOON
AM	802	0	77	545	50	AM

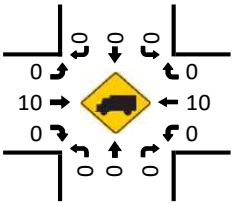
CONTROL			
Signalized			
TEV	1709 AM	0 NOON	1732 PM
PHF	0.93		0.94

	0	1	1	0
	0	0	1	0

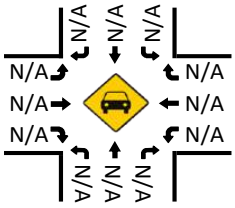
Total Vehicles (AM)



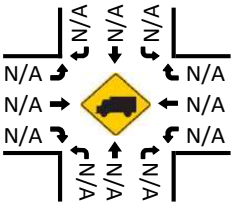
HT (AM)



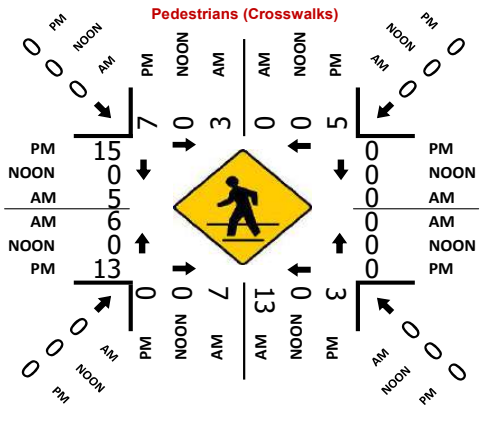
Total Vehicles (Noon)



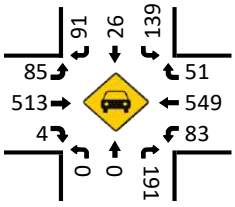
HT (NOON)



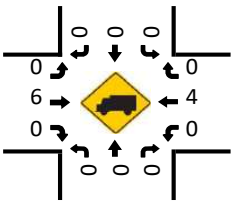
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Control: 1-Way Stop (NB)

Project ID: 18-08162-005
Date: 4/17/2018

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	1	4	0	0	0	0	0	0	2	5	0	1	5	0	0	20
7:15 AM	7	0	0	0	0	0	0	0	0	4	8	0	2	2	0	0	23
7:30 AM	14	1	0	0	0	2	0	0	0	2	10	0	3	0	0	0	32
7:45 AM	22	0	0	0	0	0	0	0	0	3	20	0	0	3	0	0	48
8:00 AM	33	0	2	0	0	0	0	0	0	4	27	0	1	4	0	0	71
8:15 AM	30	0	1	0	0	0	0	0	0	0	50	0	3	3	0	0	87
8:30 AM	22	0	6	0	0	0	0	0	0	4	13	0	1	3	0	0	49
8:45 AM	24	0	3	0	0	0	1	0	0	5	40	0	5	4	0	0	82
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	154	2	16	0	0	2	1	0	0	24	173	0	16	24	0	0	412
APPROACH %'s :	89.53%	1.16%	9.30%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	12.18%	87.82%	0.00%	40.00%	60.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	109	0	12	0	0	0	1	0	0	13	130	0	10	14	0	0	289
PEAK HR FACTOR :	0.826	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.650	0.650	0.000	0.500	0.875	0.000	0.000	0.830
	0.864				0.250				0.715				0.667				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	42	0	1	0	0	0	0	0	0	2	22	0	3	4	0	0	74
4:15 PM	53	0	2	0	0	0	0	0	0	6	31	0	0	5	0	0	97
4:30 PM	39	0	0	0	0	0	0	0	0	2	22	0	3	2	0	0	68
4:45 PM	47	0	1	0	0	0	0	0	2	1	15	0	1	2	0	0	69
5:00 PM	52	0	3	0	0	0	1	0	0	0	26	0	1	4	0	0	87
5:15 PM	46	0	2	0	0	0	0	0	0	0	19	0	1	1	0	0	69
5:30 PM	43	0	1	0	0	0	0	0	0	5	11	0	4	3	0	0	67
5:45 PM	17	0	3	0	0	0	0	0	0	1	15	0	1	1	0	0	38
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	339	0	13	0	0	0	1	0	2	17	161	0	14	22	0	0	569
APPROACH %'s :	96.31%	0.00%	3.69%	0.00%	0.00%	0.00%	100.00%	0.00%	1.11%	9.44%	89.44%	0.00%	38.89%	61.11%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	191	0	6	0	0	0	1	0	2	9	94	0	5	13	0	0	321
PEAK HR FACTOR :	0.901	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.250	0.375	0.758	0.000	0.417	0.650	0.000	0.000	0.827
	0.895				0.250				0.709				0.900				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Control: 1-Way Stop (NB)

Project ID: 18-08162-005
Date: 4/17/2018

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Fulton Ln				Fulton Ln				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
										0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
										0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Project ID: 18-08162-005
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Fulton Ln		Fulton Ln		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	1	0	1	0	0	0	2
8:45 AM	0	0	1	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	0	1	1	0	1	5
APPROACH %'s :			100.00%	0.00%	50.00%	50.00%	0.00%	100.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	2	0	1	0	0	1	4
PEAK HR FACTOR :			0.500		0.250			0.250	0.500
			0.500		0.250		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	2	1	0	1	0	6
APPROACH %'s :			50.00%	50.00%	100.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	0	0	1	1	1	0	0	0	3
PEAK HR FACTOR :			0.250	0.250	0.250				0.750
			0.500		0.250				

Prepared by National Data & Surveying Services

Railroad Ave & Fulton Ln

Peak Hour Turning Movement Count

ID: 18-08162-005
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

Railroad Ave

SOUTHBOUND

AM	1	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	1	0	0	0	2	PM

EASTBOUND (Fulton Ln)

AM	NOON	PM	
124	0	205	⇦
0	0	0	↶ 0
0	0	2	↱ 0
13	0	9	→ 1
130	0	94	↴ 0
AM	NOON	PM	

WESTBOUND (Fulton Ln)

PM	NOON	AM	
0	0	0	0 ↰
13	0	14	1 ←
5	0	10	0 ↙
0	0	0	0 ↙
15	0	25	⇨
PM	NOON	AM	

	0	0	0	0

CONTROL

1-Way Stop (NB)

TEV	289 AM	0 NOON	321 PM
PHF	0.83		0.83

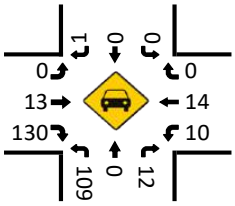
	0	0	1	0

NORTHBOUND

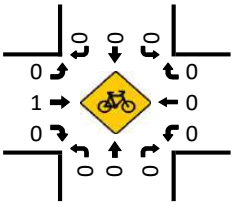
PM	99	0	191	0	6	PM
NOON	0	0	0	0	0	NOON
AM	140	0	109	0	12	AM

Railroad Ave

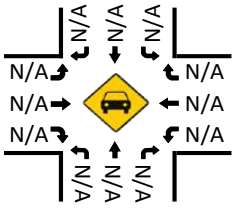
Total Vehicles (AM)



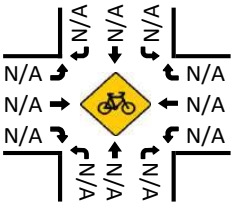
Bikes (AM)



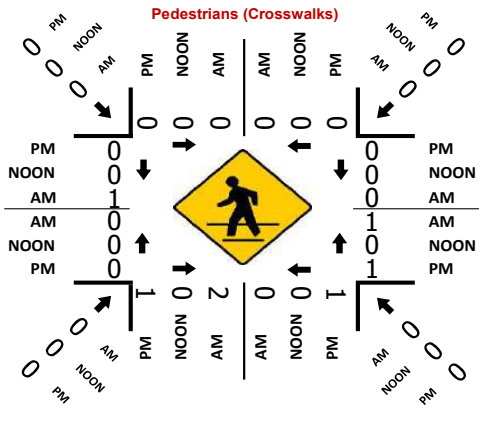
Total Vehicles (NOON)



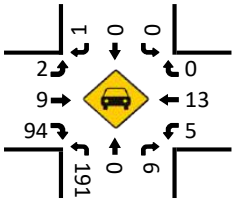
Bikes (NOON)



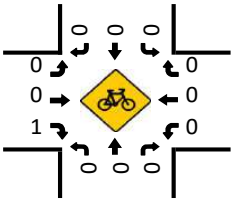
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Control: 4-Way Stop

Project ID: 18-08162-006
Date: 4/17/2018

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	5	6	7	0	5	2	3	0	1	6	1	0	0	5	2	0	43
7:15 AM	4	4	8	0	3	6	1	0	1	15	4	0	1	5	3	0	55
7:30 AM	5	12	12	0	9	3	4	0	1	14	6	0	1	13	5	0	85
7:45 AM	15	14	14	0	11	6	3	0	1	21	14	0	3	9	9	0	120
8:00 AM	14	37	14	0	12	17	2	0	4	10	14	0	6	9	8	0	147
8:15 AM	28	25	15	0	19	26	4	0	6	21	23	0	3	8	8	0	186
8:30 AM	19	20	14	0	5	8	3	0	7	30	21	0	1	15	10	0	153
8:45 AM	10	19	12	0	23	14	3	0	1	29	12	0	5	15	8	0	151
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	100	137	96	0	87	82	23	0	22	146	95	0	20	79	53	0	940
APPROACH %'s :	30.03%	41.14%	28.83%	0.00%	45.31%	42.71%	11.98%	0.00%	8.37%	55.51%	36.12%	0.00%	13.16%	51.97%	34.87%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	71	101	55	0	59	65	12	0	18	90	70	0	15	47	34	0	637
PEAK HR FACTOR :	0.634	0.682	0.917	0.000	0.641	0.625	0.750	0.000	0.643	0.750	0.761	0.000	0.625	0.783	0.850	0.000	0.856
	0.835				0.694				0.767				0.857				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	16	15	7	0	15	15	5	0	7	30	13	0	4	35	23	0	185
4:15 PM	17	21	4	0	20	18	9	0	5	28	25	0	8	37	27	0	219
4:30 PM	18	18	9	0	12	17	7	0	1	34	26	0	17	35	23	0	217
4:45 PM	12	25	11	0	8	8	2	0	4	34	20	0	13	29	25	0	191
5:00 PM	8	24	5	0	11	29	8	0	5	25	14	0	19	39	21	0	208
5:15 PM	9	21	1	0	5	15	2	0	2	29	10	0	8	29	28	0	159
5:30 PM	8	18	4	0	6	13	1	0	1	29	15	0	12	28	25	0	160
5:45 PM	9	3	4	0	11	4	6	0	2	16	11	0	3	19	18	0	106
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	97	145	45	0	88	119	40	0	27	225	134	0	84	251	190	0	1445
APPROACH %'s :	33.80%	50.52%	15.68%	0.00%	35.63%	48.18%	16.19%	0.00%	6.99%	58.29%	34.72%	0.00%	16.00%	47.81%	36.19%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	55	88	29	0	51	72	26	0	15	121	85	0	57	140	96	0	835
PEAK HR FACTOR :	0.764	0.880	0.659	0.000	0.638	0.621	0.722	0.000	0.750	0.890	0.817	0.000	0.750	0.897	0.889	0.000	0.953
	0.896				0.776				0.906				0.927				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Control: 4-Way Stop

Project ID: 18-08162-006
Date: 4/17/2018

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
APPROACH %'s :													0.00%	0.00%	100.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.500
					0.250				0.500				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Project ID: 18-09162-006
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Adams St		Adams St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	2	0	0	0	0	2
7:15 AM	0	0	0	1	0	1	0	0	2
7:30 AM	1	0	0	0	0	1	1	0	3
7:45 AM	0	1	2	1	0	0	0	0	4
8:00 AM	2	0	1	1	0	0	0	0	4
8:15 AM	0	0	3	0	1	1	0	2	7
8:30 AM	2	0	1	3	0	0	0	0	6
8:45 AM	1	1	1	0	0	2	0	1	6
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	2	8	8	1	5	1	3	34
APPROACH %'s :	75.00%	25.00%	50.00%	50.00%	16.67%	83.33%	25.00%	75.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	5	1	6	4	1	3	0	3	23
PEAK HR FACTOR :	0.625	0.250	0.500	0.333	0.250	0.375		0.375	0.821
	0.750		0.625		0.500		0.375		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	3	3	0	0	3	0	10
4:15 PM	6	2	1	1	2	3	0	5	20
4:30 PM	1	3	2	3	0	1	0	0	10
4:45 PM	1	0	2	5	0	0	0	0	8
5:00 PM	4	2	1	1	0	1	1	1	11
5:15 PM	1	1	1	1	0	0	1	0	5
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	1	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	13	9	10	16	2	6	5	7	68
APPROACH %'s :	59.09%	40.91%	38.46%	61.54%	25.00%	75.00%	41.67%	58.33%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	12	7	6	10	2	5	1	6	49
PEAK HR FACTOR :	0.500	0.583	0.750	0.500	0.250	0.417	0.250	0.300	0.613
	0.594		0.571		0.350		0.350		

Prepared by National Data & Surveying Services

Railroad Ave & Adams St

Peak Hour Turning Movement Count

ID: 18-08162-006
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS		COUNT PERIODS
08:00 AM - 09:00 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
04:15 PM - 05:15 PM	PM	04:00 PM - 06:00 PM

Railroad Ave — SOUTHBOUND

AM	12	65	59	0	153	AM
NOON	0	0	0	0	0	NOON
PM	26	72	51	0	199	PM
	0	1	0	0		

Adams St — EASTBOUND

AM	NOON	PM	
130	0	221	⇦
0	0	0	0
18	0	15	0
90	0	121	1
70	0	85	0
AM	NOON	PM	

CONTROL

4-Way Stop

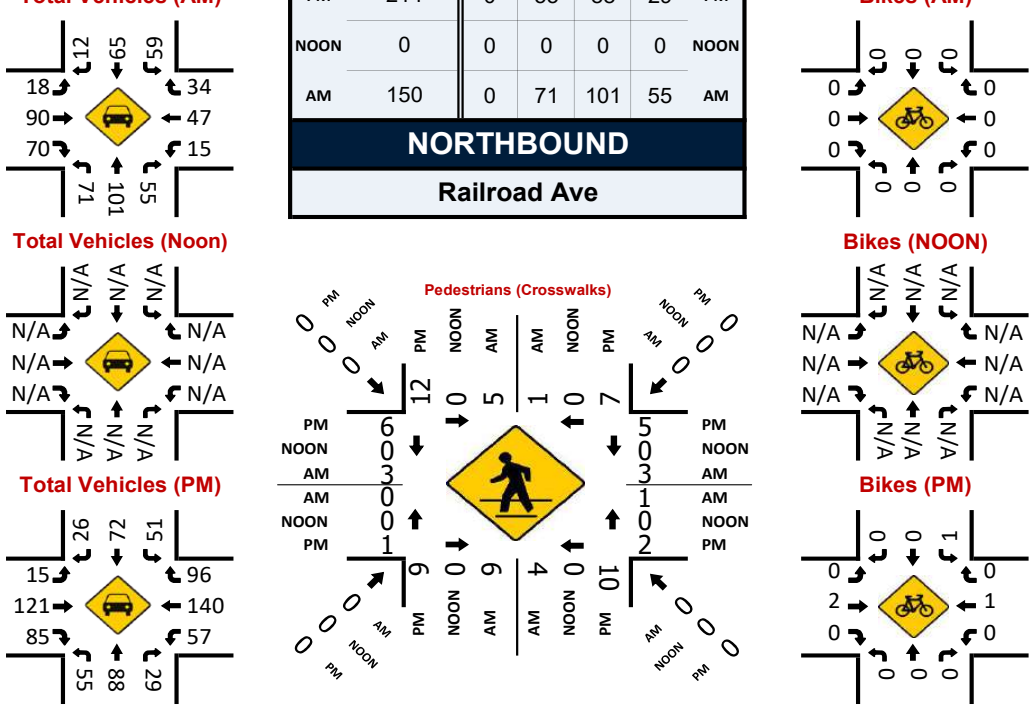
	AM	NOON	PM
TEV	637	0	835
PHF	0.86		0.95

Adams St — WESTBOUND

	PM	NOON	AM
0	96	0	34
1	140	0	47
0	57	0	15
0	0	0	0
⇨	201	0	204
	PM	NOON	AM

		0	0	1	0	
PM	214	0	55	88	29	PM
NOON	0	0	0	0	0	NOON
AM	150	0	71	101	55	AM

NORTHBOUND — Railroad Ave



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-007
Date: 4/17/2018

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	2	1	0	0	8	8	1	0	1	8	12	0	41
7:15 AM	1	0	1	0	10	0	0	0	8	7	4	0	0	9	10	0	50
7:30 AM	0	0	1	0	8	2	0	0	11	9	2	0	1	10	15	0	59
7:45 AM	1	0	0	0	18	1	0	0	9	16	2	0	0	13	38	0	98
8:00 AM	1	0	3	0	29	1	1	0	11	17	4	0	0	11	49	0	127
8:15 AM	3	1	1	0	49	1	1	0	12	12	3	0	1	4	61	0	149
8:30 AM	1	2	1	0	24	1	4	0	15	12	5	0	1	6	41	0	113
8:45 AM	0	0	5	0	30	1	4	0	12	10	1	0	1	7	32	0	103
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	3	12	0	170	8	10	0	86	91	22	0	5	68	258	0	740
APPROACH %'s :	31.82%	13.64%	54.55%	0.00%	90.43%	4.26%	5.32%	0.00%	43.22%	45.73%	11.06%	0.00%	1.51%	20.54%	77.95%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	5	3	10	0	132	4	10	0	50	51	13	0	3	28	183	0	492
PEAK HR FACTOR :	0.417	0.375	0.500	0.000	0.673	1.000	0.625	0.000	0.833	0.750	0.650	0.000	0.750	0.636	0.750	0.000	0.826
	0.900				0.716				0.891				0.811				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	3	2	0	26	4	4	0	9	23	1	0	0	7	28	0	108
4:15 PM	0	4	0	0	40	4	0	0	5	17	0	0	0	6	34	0	110
4:30 PM	1	4	2	0	56	2	7	0	7	12	2	0	0	9	36	0	138
4:45 PM	2	0	3	0	34	0	6	0	6	21	0	0	1	5	35	0	113
5:00 PM	0	2	1	0	55	0	3	0	3	17	1	0	1	9	30	0	122
5:15 PM	0	1	1	0	34	0	4	0	2	25	1	0	0	6	25	0	99
5:30 PM	2	2	3	0	43	0	2	0	3	13	0	0	3	12	26	0	109
5:45 PM	1	1	4	0	21	0	3	0	5	21	2	0	2	8	8	0	76
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	17	16	0	309	10	29	0	40	149	7	0	7	62	222	0	875
APPROACH %'s :	17.50%	42.50%	40.00%	0.00%	88.79%	2.87%	8.33%	0.00%	20.41%	76.02%	3.57%	0.00%	2.41%	21.31%	76.29%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	3	10	6	0	185	6	16	0	21	67	3	0	2	29	135	0	483
PEAK HR FACTOR :	0.375	0.625	0.500	0.000	0.826	0.375	0.571	0.000	0.750	0.798	0.375	0.000	0.500	0.806	0.938	0.000	0.875
	0.679				0.796				0.843				0.922				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-007
Date: 4/17/2018

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	3	0	0	0	1	0	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
										0.500							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Project ID: 18-08162-007
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Hunt Ave		Hunt Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	1	0	0	0	0	0	0	2
7:15 AM	1	0	0	0	0	0	0	0	1
7:30 AM	0	2	0	0	0	0	0	0	2
7:45 AM	0	5	0	1	0	0	0	0	6
8:00 AM	0	5	0	5	1	0	0	0	11
8:15 AM	0	2	1	2	1	0	0	0	6
8:30 AM	3	1	0	0	0	0	0	0	4
8:45 AM	4	0	0	7	0	2	0	0	13
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	9	16	1	15	2	2	0	0	45
APPROACH %'s :	36.00%	64.00%	6.25%	93.75%	50.00%	50.00%			
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	7	8	1	14	2	2	0	0	34
PEAK HR FACTOR :	0.438	0.400	0.250	0.500	0.500	0.250			0.654
	0.750		0.536		0.500				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	8	3	3	4	1	0	0	0	19
4:15 PM	4	6	0	0	1	1	0	1	13
4:30 PM	3	4	0	0	0	1	5	1	14
4:45 PM	6	0	0	0	0	0	0	0	6
5:00 PM	3	5	1	0	2	0	0	0	11
5:15 PM	3	7	0	0	1	0	1	1	13
5:30 PM	8	2	1	0	0	0	0	0	11
5:45 PM	6	0	3	0	0	0	0	1	10
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	41	27	8	4	5	2	6	4	97
APPROACH %'s :	60.29%	39.71%	66.67%	33.33%	71.43%	28.57%	60.00%	40.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	16	15	1	0	3	2	5	2	44
PEAK HR FACTOR :	0.667	0.625	0.250		0.375	0.500	0.250	0.500	0.786
	0.775		0.250		0.625		0.292		

Prepared by National Data & Surveying Services

Railroad Ave & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-007
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

CONTROL: 1-Way Stop (SB)

	AM	NOON	PM
TEV	492	0	483
PHF	0.83	NOON	0.88

Railroad Ave — SOUTHBOUND

	Left	Thru	Right	U-Turn		
AM	10	4	132	0	236	AM
NOON	0	0	0	0	0	NOON
PM	16	6	185	0	166	PM

Hunt Ave — EASTBOUND

	Left	Thru	Right	U-Turn		
AM	43	0	48		0	AM
NOON	0	0	0	0	0	NOON
PM	50	0	21	0	0	PM
AM	51	0	67	1	0	AM
NOON	13	0	3	0	0	NOON
PM					0	PM

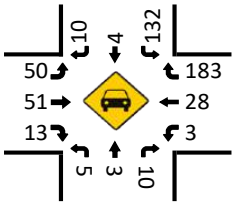
Hunt Ave — WESTBOUND

	Left	Thru	Right	U-Turn		
PM	135	0	183	0	0	PM
NOON	29	0	28	1	0	NOON
AM	2	0	3	0	0	AM
PM	0	0	0	0	258	PM
NOON					0	NOON
AM					193	AM

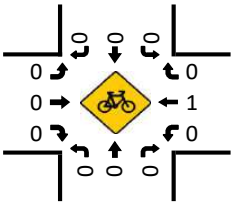
Railroad Ave — NORTHBOUND

	Left	Thru	Right	U-Turn		
PM	11	0	3	10	6	PM
NOON	0	0	0	0	0	NOON
AM	20	0	5	3	10	AM

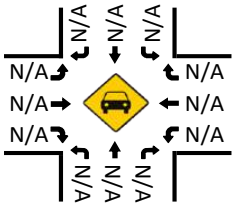
Total Vehicles (AM)



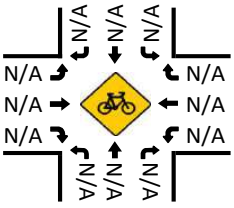
Bikes (AM)



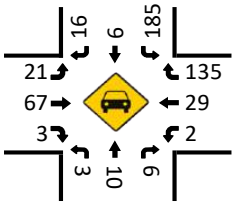
Total Vehicles (Noon)



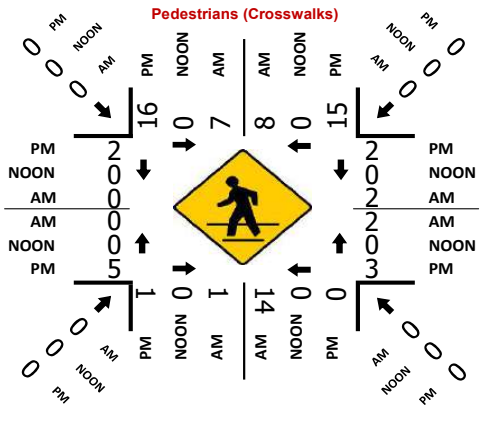
Bikes (NOON)



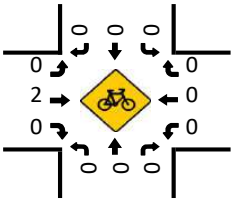
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-008
Date: 4/17/2018

Total

NS/EW Streets:	Library Ln				Library Ln				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	5	2	0	0	1	0	0	9
7:15 AM	2	0	0	0	0	0	0	0	6	9	4	0	0	4	0	0	25
7:30 AM	4	0	0	0	0	0	0	0	7	13	3	2	0	1	0	0	30
7:45 AM	2	0	0	0	0	0	3	0	9	34	4	1	0	8	0	0	61
8:00 AM	1	0	0	0	0	0	1	0	5	17	3	0	0	7	1	0	35
8:15 AM	2	0	0	0	0	0	1	0	7	24	8	0	0	4	0	0	46
8:30 AM	2	0	0	0	0	0	3	0	6	20	9	2	0	6	0	0	48
8:45 AM	3	0	0	0	0	0	4	0	17	21	9	0	0	8	1	0	63
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	0	0	0	0	0	12	0	58	143	42	5	0	39	2	0	317
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	23.39%	57.66%	16.94%	2.02%	0.00%	95.12%	4.88%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	8	0	0	0	0	0	9	0	35	82	29	2	0	25	2	0	192
PEAK HR FACTOR :	0.667	0.000	0.000	0.000	0.000	0.000	0.563	0.000	0.515	0.854	0.806	0.250	0.000	0.781	0.500	0.000	0.762
	0.667				0.563				0.787				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	0	0	0	0	0	14	0	13	10	4	8	0	9	0	0	64
4:15 PM	7	0	0	0	0	0	6	0	10	12	5	3	0	11	0	0	54
4:30 PM	3	0	0	0	1	0	8	1	12	11	2	2	0	24	0	0	64
4:45 PM	5	0	1	0	2	0	13	0	25	9	1	4	0	23	0	0	83
5:00 PM	16	0	0	0	2	1	18	0	11	15	1	2	0	23	0	0	89
5:15 PM	3	0	0	0	0	0	7	0	7	3	2	0	0	25	0	0	47
5:30 PM	5	0	0	0	0	0	18	0	9	3	1	0	0	12	0	0	48
5:45 PM	2	0	0	0	0	0	7	0	9	1	2	1	0	6	0	0	28
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	47	0	1	0	5	1	91	1	96	64	18	20	0	133	0	0	477
APPROACH %'s :	97.92%	0.00%	2.08%	0.00%	5.10%	1.02%	92.86%	1.02%	48.48%	32.32%	9.09%	10.10%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	31	0	1	0	5	1	45	1	58	47	9	11	0	81	0	0	290
PEAK HR FACTOR :	0.484	0.000	0.250	0.000	0.625	0.250	0.625	0.250	0.580	0.783	0.450	0.688	0.000	0.844	0.000	0.000	0.815
	0.500				0.619				0.801				0.844				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-008
Date: 4/17/2018

Bikes

NS/EW Streets:	Library Ln				Library Ln				Adams St				Adams St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	1	0	1	2	1	0	0	0	0	0	6
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	25.00%	50.00%	25.00%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.500
										0.500							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Project ID: 18-08162-008
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Library Ln		Library Ln		Adams St		Adams St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	2	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	0	0	1	0	3
7:45 AM	0	0	0	1	0	0	1	0	2
8:00 AM	0	0	0	1	0	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	2	0	1	0	0	0	4
8:45 AM	1	3	0	0	1	0	0	0	5
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	4	2	6	2	0	2	1	18
APPROACH %'s :	20.00%	80.00%	25.00%	75.00%	100.00%	0.00%	66.67%	33.33%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	1	4	2	1	2	0	0	1	11
PEAK HR FACTOR :	0.250	0.333	0.250	0.250	0.500			0.250	0.550
	0.313		0.375		0.500		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	1	4	1	3	0	0	0	9
4:15 PM	1	0	1	2	0	3	0	0	7
4:30 PM	0	0	1	2	0	1	1	1	6
4:45 PM	0	0	1	0	0	0	0	0	1
5:00 PM	1	2	0	1	1	1	1	1	8
5:15 PM	0	0	1	3	0	0	0	0	4
5:30 PM	1	0	1	1	0	1	0	0	4
5:45 PM	0	0	1	0	1	1	0	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	3	10	10	5	7	2	2	42
APPROACH %'s :	50.00%	50.00%	50.00%	50.00%	41.67%	58.33%	50.00%	50.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	2	2	3	5	1	5	2	2	22
PEAK HR FACTOR :	0.500	0.250	0.750	0.625	0.250	0.417	0.500	0.500	0.688
	0.333		0.667		0.500		0.500		

Prepared by National Data & Surveying Services

Library Ln & Adams St

Peak Hour Turning Movement Count

ID: 18-08162-008
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

Library Ln

SOUTHBOUND

AM	9	0	0	0	37	AM
NOON	0	0	0	0	0	NOON
PM	45	1	5	1	59	PM

EASTBOUND (Adams St)

AM	NOON	PM		
44	0	168	⇦	
2	0	11	↱	0
35	0	58	↱	0
82	0	47	→	1
29	0	9	↳	0
AM	NOON	PM		

WESTBOUND (Adams St)

PM	NOON	AM		
0	0	2	↰	0
81	0	25	←	1
0	0	0	↰	0
0	0	0	↰	0
53	0	82	⇨	
PM	NOON	AM		

NORTHBOUND

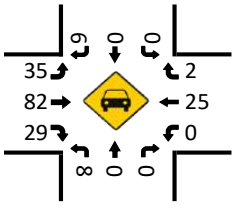
PM	10	0	31	0	1	PM
NOON	0	0	0	0	0	NOON
AM	29	0	8	0	0	AM

Library Ln

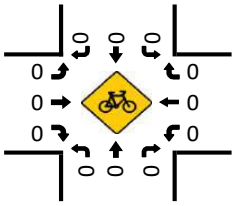
⇩	↰	↰	↑	↱
0	0	1	0	

CONTROL			
1-Way Stop (SB)			
TEV	192 AM	0 NOON	290 PM
PHF	0.76		0.81

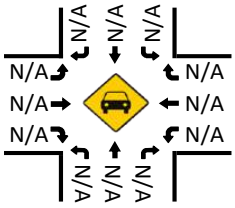
Total Vehicles (AM)



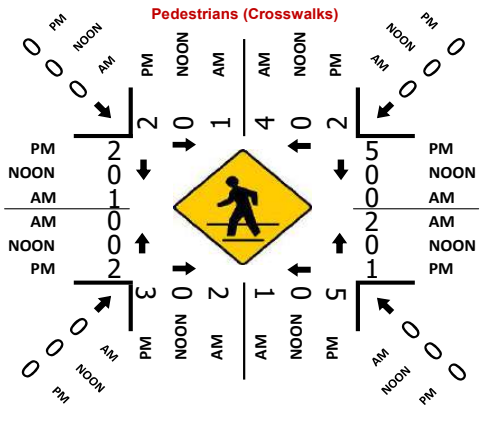
Bikes (AM)



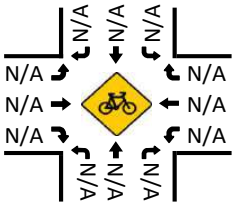
Total Vehicles (NOON)



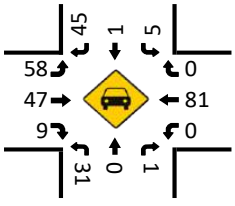
Pedestrians (Crosswalks)



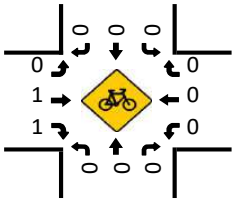
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave
City: St Helena
Control: 3-Way Stop (NB/EB/WB)

Project ID: 18-08162-009
Date: 4/17/2018

Total

NS/EW Streets:	Starr Ave				Starr Ave				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	0	2	0	0	0	0	0	0	0	2	0	1	2	0	0	11
7:15 AM	2	0	0	0	0	0	0	0	0	1	9	0	0	3	0	0	15
7:30 AM	12	0	1	0	0	0	0	0	0	1	7	1	1	3	0	0	26
7:45 AM	14	0	1	0	0	0	0	0	0	0	14	0	1	6	0	0	36
8:00 AM	20	0	4	1	0	0	0	0	0	3	14	0	3	10	0	0	55
8:15 AM	20	0	1	0	0	0	0	0	0	5	23	0	3	6	0	0	58
8:30 AM	18	0	2	0	0	0	0	0	0	4	15	0	3	2	0	0	44
8:45 AM	21	0	1	1	0	0	0	0	0	0	13	0	2	3	0	0	41
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	111	0	12	2	0	0	0	0	0	14	97	1	14	35	0	0	286
APPROACH %'s :	88.80%	0.00%	9.60%	1.60%					0.00%	12.50%	86.61%	0.89%	28.57%	71.43%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	79	0	8	2	0	0	0	0	0	12	65	0	11	21	0	0	198
PEAK HR FACTOR :	0.940	0.000	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.600	0.707	0.000	0.917	0.525	0.000	0.000	0.853
	0.890								0.688				0.615				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	16	0	2	0	0	0	0	0	0	3	22	0	1	1	0	0	45
4:15 PM	16	0	3	1	0	0	0	0	0	3	17	0	2	6	0	0	48
4:30 PM	17	0	0	0	0	0	0	0	0	4	19	0	2	2	0	0	44
4:45 PM	12	0	2	0	0	0	0	0	0	5	16	0	2	3	0	0	40
5:00 PM	13	0	3	0	0	0	0	0	0	4	20	0	1	3	0	0	44
5:15 PM	21	0	2	0	0	0	0	0	0	2	20	1	1	4	0	0	51
5:30 PM	7	0	1	0	0	0	0	0	0	2	28	0	1	4	0	0	43
5:45 PM	4	0	3	0	0	0	0	0	0	5	10	0	3	3	0	0	28
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	106	0	16	1	0	0	0	0	0	28	152	1	13	26	0	0	343
APPROACH %'s :	86.18%	0.00%	13.01%	0.81%					0.00%	15.47%	83.98%	0.55%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	63	0	7	0	0	0	0	0	0	15	75	1	6	12	0	0	179
PEAK HR FACTOR :	0.750	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.938	0.250	0.750	0.750	0.000	0.000	0.877
	0.761								0.948				0.900				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave
City: St Helena
Control: 3-Way Stop (NB/EB/WB)

Project ID: 18-08162-009
Date: 4/17/2018

Bikes

NS/EW Streets:	Starr Ave				Starr Ave				Hunt Ave				Hunt Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	6
APPROACH %'s :	66.67%	0.00%	33.33%	0.00%					0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	4
PEAK HR FACTOR :	0.50	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
	0.375								0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave **Project ID:** 18-08162-009
City: St Helena **Date:** 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Starr Ave		Starr Ave		Hunt Ave		Hunt Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	2	0	0	2
8:00 AM	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	2	2	0	0	4
8:45 AM	0	0	1	0	0	1	0	1	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	1	0	2	9	0	1	13
APPROACH %'s :			100.00%	0.00%	18.18%	81.82%	0.00%	100.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	1	0	2	5	0	1	9
PEAK HR FACTOR :			0.250		0.250	0.625		0.250	0.563
			0.250		0.438		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	1	2	1	1	5
5:30 PM	0	0	2	0	1	2	0	1	6
5:45 PM	0	0	0	0	3	0	0	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	0	7	4	1	2	16
APPROACH %'s :			100.00%	0.00%	63.64%	36.36%	33.33%	66.67%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	3	2	1	1	7
PEAK HR FACTOR :					0.750	0.250	0.250	0.250	0.350
					0.417		0.250		

Prepared by National Data & Surveying Services

Starr Ave & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-009
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

Starr Ave — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

Hunt Ave — EASTBOUND

AM	NOON	PM	
100	0	76	⇦
0	0	1	↱ 0
0	0	0	↱ 0
12	0	15	→ 1
65	0	75	↴ 0
AM	NOON	PM	

CONTROL
3-Way Stop (NB/EB/WB)

TEV	198 AM	0 NOON	179 PM
PHF	0.85		0.88

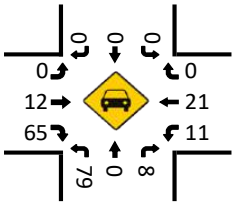
WESTBOUND — Hunt Ave

PM	NOON	AM	
0	0	0	0 ↰
12	0	21	1 ←
6	0	11	0 ↰
0	0	0	0 ↰
22	0	20	⇨
PM	NOON	AM	

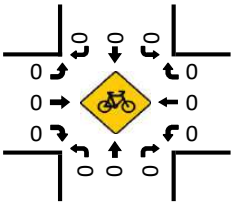
Starr Ave — NORTHBOUND

PM	81	0	63	0	7	PM
NOON	0	0	0	0	0	NOON
AM	78	2	79	0	8	AM

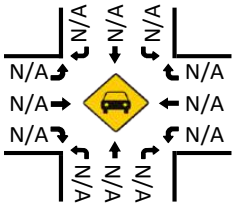
Total Vehicles (AM)



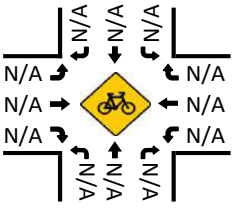
Bikes (AM)



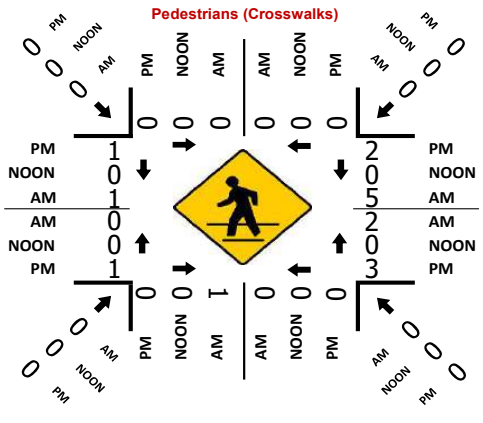
Total Vehicles (Noon)



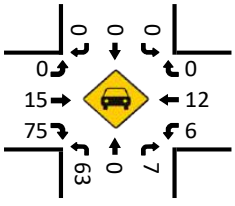
Bikes (NOON)



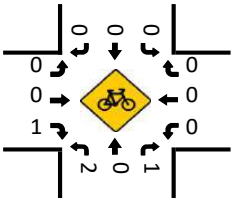
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-010
Date: 4/17/2018

Total

NS/EW Streets:	Starr Ave				Starr Ave				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	2	0	2	0	1	20	0	0	0	28	3	0	56
7:15 AM	0	0	0	0	9	0	0	0	1	21	0	0	0	46	3	0	80
7:30 AM	0	0	0	0	7	0	5	0	2	24	0	0	0	51	6	0	95
7:45 AM	0	0	0	0	15	0	7	0	1	33	0	0	0	101	13	0	170
8:00 AM	0	0	0	0	13	0	9	0	4	49	0	0	0	110	15	0	200
8:15 AM	0	0	0	0	20	0	6	0	1	62	0	0	0	85	16	0	190
8:30 AM	0	0	0	0	18	0	3	0	3	41	0	0	0	69	16	0	150
8:45 AM	0	0	0	0	11	0	1	0	4	34	0	0	0	72	20	0	142
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	95	0	33	0	17	284	0	0	0	562	92	0	1083
APPROACH %'s :					74.22%	0.00%	25.78%	0.00%	5.65%	94.35%	0.00%	0.00%	0.00%	85.93%	14.07%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	66	0	25	0	9	185	0	0	0	365	60	0	710
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.825	0.000	0.694	0.000	0.563	0.746	0.000	0.000	0.000	0.830	0.938	0.000	0.888
					0.875				0.770				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	22	0	3	0	6	65	0	0	0	65	15	0	176
4:15 PM	0	0	0	0	14	0	4	0	4	48	0	0	0	65	14	0	149
4:30 PM	0	0	0	0	17	0	3	0	5	59	0	0	0	77	15	0	176
4:45 PM	0	0	0	0	15	0	5	0	3	54	0	0	0	54	13	0	144
5:00 PM	0	0	0	0	17	0	4	0	3	63	0	0	0	42	10	0	139
5:15 PM	0	0	0	0	16	0	2	0	8	53	0	0	0	56	18	0	153
5:30 PM	0	0	0	0	23	0	5	0	3	55	0	0	0	55	3	0	144
5:45 PM	0	0	0	0	12	0	2	0	7	30	0	0	0	52	6	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	136	0	28	0	39	427	0	0	0	466	94	0	1190
APPROACH %'s :					82.93%	0.00%	17.07%	0.00%	8.37%	91.63%	0.00%	0.00%	0.00%	83.21%	16.79%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	68	0	15	0	18	226	0	0	0	261	57	0	645
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.773	0.000	0.750	0.000	0.750	0.869	0.000	0.000	0.000	0.847	0.950	0.000	0.916
					0.830				0.859				0.864				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-010
Date: 4/17/2018

Bikes

NS/EW Streets:	Starr Ave				Starr Ave				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	5	0	0	0	1	1	0	7
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.250	0.000	0.000	0.313
										0.333				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	0	2	0	0	0	4	2	0	10
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.500
						0.250				0.250					0.250		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Project ID: 18-08162-010
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Starr Ave		Starr Ave		Pope St		Pope St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	1	1	0	0	0	0	0	0	2
8:00 AM	1	1	0	0	0	0	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	3	0	0	0	0	1	1	7
APPROACH %'s :	40.00%	60.00%					50.00%	50.00%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	2	2	0	0	0	0	0	1	5
PEAK HR FACTOR :	0.500	0.500						0.250	0.417
	0.500						0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	1	1	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	0	0	0	1	1
5:30 PM	2	1	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	1	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	2	0	0	0	0	1	2	8
APPROACH %'s :	60.00%	40.00%					33.33%	66.67%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Starr Ave & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-010
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Starr Ave — SOUTHBOUND

AM	25	0	66	0	69	AM
NOON	0	0	0	0	0	NOON
PM	15	0	68	0	75	PM

EASTBOUND — Pope St

AM	NOON	PM	
390	0	276	⇦
0	0	0	↶ 0
9	0	18	↱ 0
185	0	226	→ 1
0	0	0	↴ 0

WESTBOUND — Pope St

PM	NOON	AM	
57	0	60	0 ↰
261	0	365	1 ←
0	0	0	0 ↰
0	0	0	0 ↰
294	0	251	⇨

CONTROL

1-Way Stop (SB)

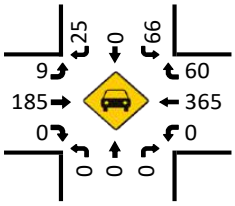
	AM	NOON	PM
TEV	710	0	645
PHF	0.89		0.92

0	1	0	0	↓ ↰ ← ↑ ↱
0	0	0	0	↑ ↰ ← ↓ ↱

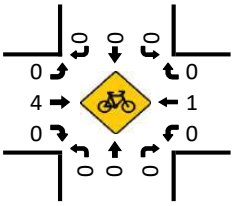
NORTHBOUND — Starr Ave

PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

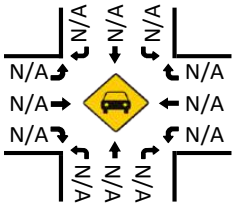
Total Vehicles (AM)



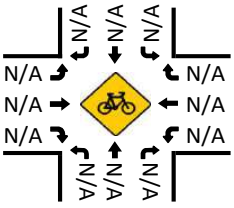
Bikes (AM)



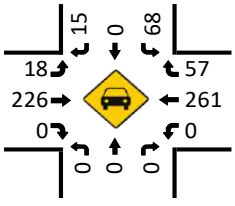
Total Vehicles (Noon)



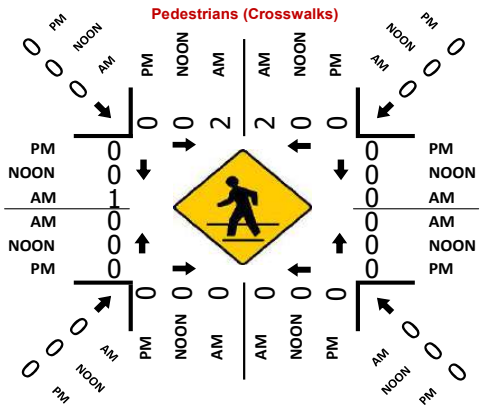
Bikes (NOON)



Total Vehicles (PM)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
2
2
0
0
PM
NOON
AM
0
0
1
AM
NOON
PM
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Control: 2-Way Stop (NB/SB)

Project ID: 18-08162-011
Date: 4/17/2018

Total

NS/EW Streets:	Paseo Grand Dr/College Ave				Paseo Grand Dr/College Ave				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	0	6	0	2	0	3	0	1	20	1	0	1	34	1	0	73
7:15 AM	3	1	1	1	2	0	1	0	0	23	4	1	4	42	2	0	85
7:30 AM	5	0	5	1	0	0	3	0	2	21	4	0	3	58	2	0	104
7:45 AM	8	0	2	0	0	0	8	0	5	25	11	0	11	78	3	0	151
8:00 AM	44	0	9	0	0	0	5	0	4	21	30	0	26	80	5	0	224
8:15 AM	24	0	15	0	2	1	4	0	3	41	47	0	34	56	2	0	229
8:30 AM	31	0	17	0	2	0	4	0	3	35	23	0	19	61	0	0	195
8:45 AM	20	0	7	0	4	0	4	0	3	29	14	0	9	65	1	0	156
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	139	1	62	2	12	1	32	0	21	215	134	1	107	474	16	0	1217
APPROACH %'s :	68.14%	0.49%	30.39%	0.98%	26.67%	2.22%	71.11%	0.00%	5.66%	57.95%	36.12%	0.27%	17.92%	79.40%	2.68%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	119	0	48	0	8	1	17	0	13	126	114	0	88	262	8	0	804
PEAK HR FACTOR :	0.676	0.000	0.706	0.000	0.500	0.250	0.850	0.000	0.813	0.768	0.606	0.000	0.647	0.819	0.400	0.000	0.878
	0.788				0.813				0.695				0.806				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	11	1	8	0	3	0	6	0	7	58	13	1	8	54	1	0	171
4:15 PM	6	0	8	0	2	0	7	1	7	44	11	0	8	44	3	0	141
4:30 PM	11	0	10	1	0	0	5	0	6	55	9	0	9	58	2	0	166
4:45 PM	5	0	6	0	1	0	7	0	9	59	10	0	3	52	2	0	154
5:00 PM	8	0	5	0	3	0	4	0	8	68	6	0	3	54	0	0	159
5:15 PM	8	0	3	0	0	0	4	0	8	60	14	0	4	62	2	0	165
5:30 PM	10	0	9	0	0	0	4	0	4	45	7	0	2	53	2	0	136
5:45 PM	9	0	8	0	1	0	6	0	10	47	7	0	2	47	0	0	137
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	68	1	57	1	10	0	43	1	59	436	77	1	39	424	12	0	1229
APPROACH %'s :	53.54%	0.79%	44.88%	0.79%	18.52%	0.00%	79.63%	1.85%	10.30%	76.09%	13.44%	0.17%	8.21%	89.26%	2.53%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	32	0	24	1	4	0	20	0	31	242	39	0	19	226	6	0	644
PEAK HR FACTOR :	0.727	0.000	0.600	0.250	0.333	0.000	0.714	0.000	0.861	0.890	0.696	0.000	0.528	0.911	0.750	0.000	0.970
	0.648				0.750				0.951				0.909				

out

National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Control: 2-Way Stop (NB/SB)

Project ID: 18-08162-011
Date: 4/17/2018

Bikes

NS/EW Streets:	Paseo Grand Dr/College Ave				Paseo Grand Dr/College Ave				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	0	3	0	0	2	0	0	6
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.375
					0.250				0.500								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	0	0	0	0	0	0	0	2	1	0	1	4	0	0	11
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	66.67%	33.33%	0.00%	20.00%	80.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	0	5
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.313
									0.250				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Project ID: 18-08162-011
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Paseo Grand Dr/College Ave		Paseo Grand Dr/College Ave		Pope St		Pope St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Paseo Grand Dr/College Ave & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-011
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS		COUNT PERIODS
08:00 AM - 09:00 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
04:30 PM - 05:30 PM	PM	04:00 PM - 06:00 PM

Paseo Grand Dr/College Ave — SOUTHBOUND

AM	17	1	8	0	21	AM
NOON	0	0	0	0	0	NOON
PM	20	0	4	0	37	PM
	0	1	0	0		

Pope St — EASTBOUND

AM	NOON	PM	
398	0	278	⇦
0	0	0	0
13	0	31	1
126	0	242	1
114	0	39	0
AM	NOON	PM	

CONTROL

2-Way Stop (NB/SB)

	AM	NOON	PM
TEV	804	0	644
PHF	0.88		0.97

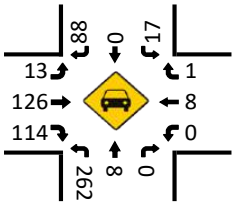
Pope St — WESTBOUND

	PM	NOON	AM
0	6	0	8
1	226	0	262
1	19	0	88
0	0	0	0
⇨	270	0	182
	PM	NOON	AM

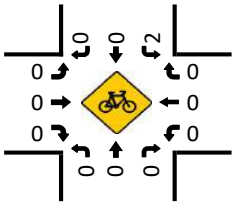
		0	0	1	0	
PM	59	1	32	0	24	PM
NOON	0	0	0	0	0	NOON
AM	203	0	119	0	48	AM

NORTHBOUND — Paseo Grand Dr/College Ave

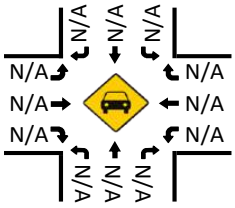
Total Vehicles (AM)



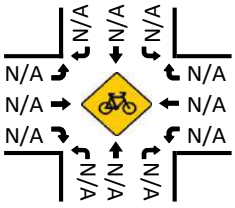
Bikes (AM)



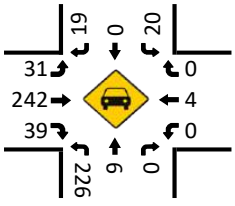
Total Vehicles (Noon)



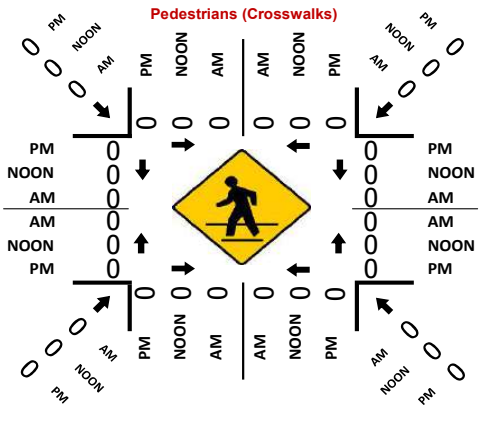
Bikes (NOON)



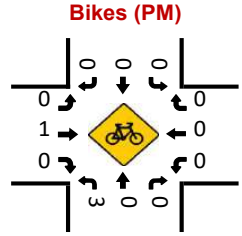
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Control: 1-Way Stop (EB)

Project ID: 18-08162-012
Date: 4/17/2018

Total

NS/EW Streets:	Silverado Trail				Silverado Trail				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	12	75	0	0	0	59	17	0	13	0	9	0	0	0	0	0	185
7:15 AM	20	90	0	0	0	80	25	0	11	0	10	0	0	0	0	0	236
7:30 AM	15	106	0	0	0	87	39	0	18	0	12	0	0	0	0	0	277
7:45 AM	51	116	0	0	0	78	61	0	17	0	4	1	0	0	0	0	328
8:00 AM	40	109	0	0	0	67	67	0	21	0	22	0	0	0	0	0	326
8:15 AM	47	111	0	0	0	81	45	0	32	0	24	0	0	0	0	0	340
8:30 AM	40	108	0	1	0	69	33	0	31	0	24	0	0	0	0	0	306
8:45 AM	29	110	0	0	0	87	43	0	20	0	17	0	0	0	0	0	306
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	254	825	0	1	0	608	330	0	163	0	122	1	0	0	0	0	2304
APPROACH %'s :	23.52%	76.39%	0.00%	0.09%	0.00%	64.82%	35.18%	0.00%	56.99%	0.00%	42.66%	0.35%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	178	444	0	1	0	295	206	0	101	0	74	1	0	0	0	0	1300
PEAK HR FACTOR :	0.873	0.957	0.000	0.250	0.000	0.910	0.769	0.000	0.789	0.000	0.771	0.250	0.000	0.000	0.000	0.000	0.956
	0.933				0.901				0.786								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	32	104	0	0	0	137	39	0	25	0	52	0	0	0	0	0	389
4:15 PM	19	81	0	0	0	140	51	0	19	0	29	0	0	0	0	0	339
4:30 PM	32	114	0	0	0	151	50	0	23	0	40	0	0	0	0	0	410
4:45 PM	20	96	0	0	0	145	37	0	25	0	43	0	0	0	0	0	366
5:00 PM	16	76	0	0	0	141	20	0	33	0	47	0	0	0	0	0	333
5:15 PM	23	80	0	0	0	151	48	0	20	0	47	0	0	0	0	0	369
5:30 PM	20	88	0	0	0	94	25	0	20	0	45	0	0	0	0	0	292
5:45 PM	18	60	0	0	0	85	29	0	16	0	19	0	0	0	0	0	227
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	180	699	0	0	0	1044	299	0	181	0	322	0	0	0	0	0	2725
APPROACH %'s :	20.48%	79.52%	0.00%	0.00%	0.00%	77.74%	22.26%	0.00%	35.98%	0.00%	64.02%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	103	395	0	0	0	573	177	0	92	0	164	0	0	0	0	0	1504
PEAK HR FACTOR :	0.805	0.866	0.000	0.000	0.000	0.949	0.868	0.000	0.920	0.000	0.788	0.000	0.000	0.000	0.000	0.000	0.917
	0.853				0.933				0.831								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Control: 1-Way Stop (EB)

Project ID: 18-08162-012
Date: 4/17/2018

Bikes

NS/EW Streets:	Silverado Trail				Silverado Trail				Pope St				Pope St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%													
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	3	0	2	0	0	0	0	0	0	0	7
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
					0.250				0.500								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Project ID: 18-08162-012
Date: 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Silverado Trail		Silverado Trail		Pope St		Pope St		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Silverado Trail & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-012
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS		COUNT PERIODS	
07:45 AM - 08:45 AM	AM	07:00 AM - 09:00 AM	AM
NONE	NOON	NONE	NOON
04:00 PM - 05:00 PM	PM	04:00 PM - 06:00 PM	PM

Silverado Trail — SOUTHBOUND

AM	206	295	0	0	545	AM
NOON	0	0	0	0	0	NOON
PM	177	573	0	0	487	PM
	0	1	0	0		

Pope St — EASTBOUND

AM	NOON	PM	
385	0	280	⇦
1	0	0	0
101	0	92	0
0	0	0	1
74	0	164	0
AM	NOON	PM	

CONTROL

1-Way Stop (EB)

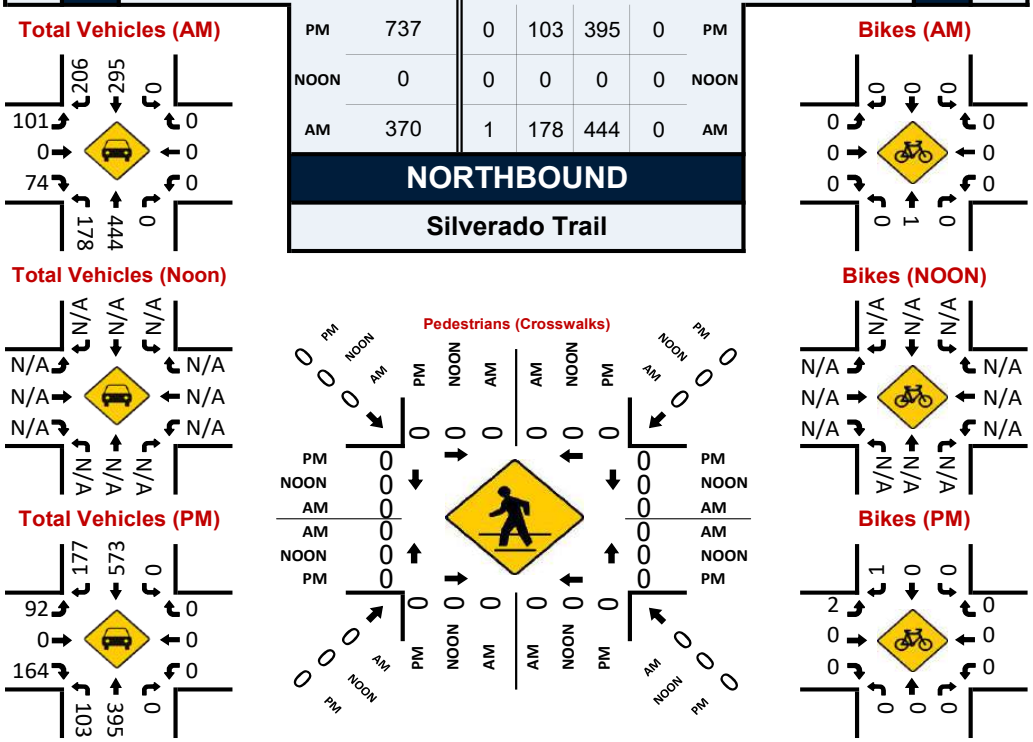
	AM	NOON	PM
TEV	1300	0	1504
PHF	0.96		0.92

Pope St — WESTBOUND

	PM	NOON	AM
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
⇨	0	0	0
	PM	NOON	AM

		0	1	1	0	
PM	737	0	103	395	0	PM
NOON	0	0	0	0	0	NOON
AM	370	1	178	444	0	AM

NORTHBOUND — Silverado Trail



National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-013
Date: 4/17/2018

Total

NS/EW Streets:	Silverado Trail				Silverado Trail				Howell Mountain Rd				Howell Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	81	8	0	4	74	0	0	0	0	0	0	3	0	0	0	170
7:15 AM	0	95	5	0	2	99	0	0	0	0	0	0	7	0	0	0	208
7:30 AM	0	117	8	1	0	119	0	0	0	0	0	0	4	0	1	0	250
7:45 AM	0	123	8	0	2	132	0	0	0	0	0	0	7	0	1	0	273
8:00 AM	0	115	14	0	0	126	0	0	0	0	0	0	9	0	2	0	266
8:15 AM	0	136	9	0	2	119	0	0	0	0	0	0	6	0	0	0	272
8:30 AM	0	116	24	0	3	97	0	0	0	0	0	0	5	0	0	0	245
8:45 AM	0	111	17	0	1	123	0	0	0	0	0	0	7	0	2	0	261
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	894	93	1	14	889	0	0	0	0	0	0	48	0	6	0	1945
APPROACH %'s :	0.00%	90.49%	9.41%	0.10%	1.55%	98.45%	0.00%	0.00%					88.89%	0.00%	11.11%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	491	39	1	4	496	0	0	0	0	0	0	26	0	4	0	1061
PEAK HR FACTOR :	0.000	0.903	0.696	0.250	0.500	0.939	0.000	0.000	0.000	0.000	0.000	0.000	0.722	0.000	0.500	0.000	0.972
		0.916				0.933								0.682			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	127	3	0	1	158	0	2	0	0	0	0	18	0	4	0	313
4:15 PM	0	95	2	1	0	184	0	0	0	0	0	0	5	0	5	0	292
4:30 PM	0	132	7	0	1	185	0	0	0	0	0	0	13	0	0	0	338
4:45 PM	0	117	4	0	1	174	0	0	0	0	0	0	12	0	1	0	309
5:00 PM	0	104	4	0	4	152	0	0	0	0	0	0	9	0	1	0	274
5:15 PM	0	96	4	0	0	187	0	0	0	0	0	0	12	0	2	0	301
5:30 PM	0	105	5	0	1	116	0	0	0	0	0	0	3	0	1	0	231
5:45 PM	0	72	3	0	7	105	0	0	0	0	0	0	7	0	4	0	198
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	848	32	1	15	1261	0	2	0	0	0	0	79	0	18	0	2256
APPROACH %'s :	0.00%	96.25%	3.63%	0.11%	1.17%	98.67%	0.00%	0.16%					81.44%	0.00%	18.56%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	471	16	1	3	701	0	2	0	0	0	0	48	0	10	0	1252
PEAK HR FACTOR :	0.000	0.892	0.571	0.250	0.750	0.947	0.000	0.250	0.000	0.000	0.000	0.000	0.667	0.000	0.500	0.000	0.926
		0.878				0.949								0.659			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-013
Date: 4/17/2018

Bikes

NS/EW Streets:	Silverado Trail				Silverado Trail				Howell Mountain Rd				Howell Mountain Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%													
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	2	0	1	3	0	0	0	0	0	0	0	0	0	0	7
APPROACH %'s :	0.00%	33.33%	66.67%	0.00%	25.00%	75.00%	0.00%	0.00%									
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.500	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
			0.500				0.250										

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd **Project ID:** 18-08162-013
City: St Helena **Date:** 4/17/2018

Pedestrians (Crosswalks)

NS/EW Streets:	Silverado Trail		Silverado Trail		Howell Mountain Rd		Howell Mountain Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Silverado Trail & Howell Mountain Rd

Peak Hour Turning Movement Count

ID: 18-08162-013
City: St Helena

Day: Tuesday
Date: 04/17/2018

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	04:00 PM - 06:00 PM

Silverado Trail — SOUTHBOUND

AM	0	496	4	0	495	AM
NOON	0	0	0	0	0	NOON
PM	0	701	3	2	483	PM

Howell Mountain Rd — EASTBOUND

AM	NOON	PM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Howell Mountain Rd — WESTBOUND

PM	NOON	AM
10	0	4
0	0	0
48	0	26
0	0	0
19	0	43

CONTROL

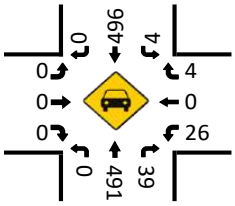
1-Way Stop (WB)

	AM	NOON	PM
TEV	1061	0	1252
PHF	0.97	NOON	0.93

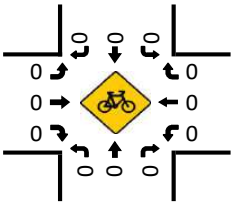
Silverado Trail — NORTHBOUND

PM	750	1	0	471	16	PM
NOON	0	0	0	0	0	NOON
AM	523	1	0	491	39	AM

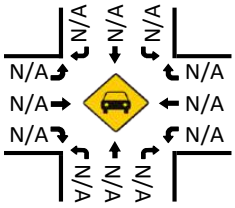
Total Vehicles (AM)



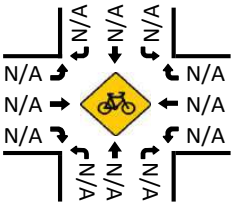
Bikes (AM)



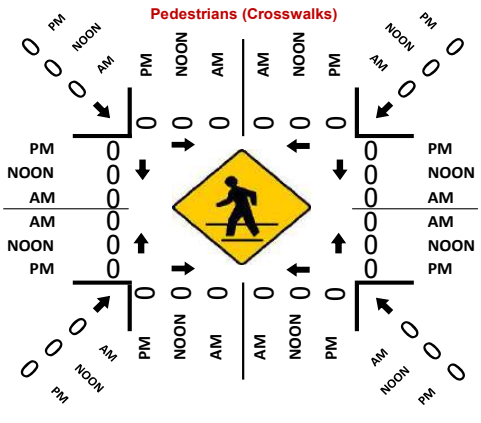
Total Vehicles (Noon)



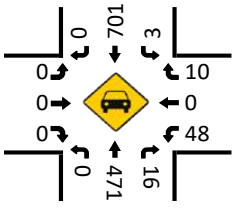
Bikes (NOON)



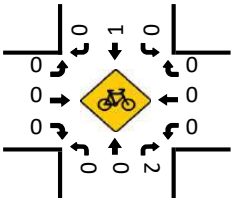
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Total

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	4	143	3	0	13	122	17	0	21	11	10	0	3	6	22	0	375
2:15 PM	6	135	3	0	11	120	11	0	20	3	7	0	0	2	29	0	347
2:30 PM	2	112	3	0	11	123	21	0	17	4	4	0	3	2	22	0	324
2:45 PM	3	142	2	0	17	123	8	0	17	2	13	0	6	4	23	0	360
3:00 PM	2	139	2	0	7	141	19	0	19	7	8	0	3	4	21	0	372
3:15 PM	3	125	2	0	19	149	24	0	19	4	7	0	3	6	17	0	378
3:30 PM	6	129	0	0	9	131	20	0	13	6	15	0	2	2	19	0	352
3:45 PM	5	133	2	0	18	140	11	0	20	8	7	0	3	3	16	0	366
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	1058	17	0	105	1049	131	0	146	45	71	0	23	29	169	0	2874
APPROACH %'s :	2.80%	95.66%	1.54%	0.00%	8.17%	81.63%	10.19%	0.00%	55.73%	17.18%	27.10%	0.00%	10.41%	13.12%	76.47%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	16	526	6	0	53	561	74	0	71	25	37	0	11	15	73	0	1468
PEAK HR FACTOR :	0.667	0.946	0.750	0.000	0.697	0.941	0.771	0.000	0.888	0.781	0.617	0.000	0.917	0.625	0.869	0.000	0.971
	0.958				0.896				0.950				0.884				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	4	141	3	0	13	121	17	0	21	11	10	0	3	6	22	0	372
2:15 PM	6	135	3	0	11	118	11	0	20	3	7	0	0	2	29	0	345
2:30 PM	2	112	3	0	11	121	21	0	17	4	4	0	3	2	22	0	322
2:45 PM	3	140	2	0	17	123	8	0	17	2	13	0	6	4	23	0	358
3:00 PM	2	139	2	0	7	139	19	0	19	7	8	0	3	4	21	0	370
3:15 PM	3	125	2	0	19	149	24	0	19	4	7	0	3	6	17	0	378
3:30 PM	6	129	0	0	9	131	20	0	13	6	15	0	2	2	19	0	352
3:45 PM	5	130	2	0	18	139	11	0	20	8	7	0	3	3	16	0	362
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	1051	17	0	105	1041	131	0	146	45	71	0	23	29	169	0	2859
APPROACH %'s :	2.82%	95.63%	1.55%	0.00%	8.22%	81.52%	10.26%	0.00%	55.73%	17.18%	27.10%	0.00%	10.41%	13.12%	76.47%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	16	523	6	0	53	558	74	0	71	25	37	0	11	15	73	0	1462
PEAK HR FACTOR :	0.67	0.941	0.750	0.000	0.697	0.936	0.771	0.000	0.888	0.781	0.617	0.000	0.917	0.625	0.869	0.000	0.967
		0.953				0.892				0.950				0.884			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Heavy Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333
		0.250				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Medium Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
		0.250				0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Light Trucks

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
2:15 PM	0	2	0	0	0	3	1	0	0	0	0	0	0	0	1	0	7
2:30 PM	0	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	5
2:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
3:15 PM	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3
3:45 PM	0	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	13	0	0	2	16	2	0	0	0	0	0	1	0	1	0	35
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	10.00%	80.00%	10.00%	0.00%					50.00%	0.00%	50.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	4	0	0	1	10	1	0	0	0	0	0	1	0	0	0	17
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.250	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.708
		0.500				0.600								0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Control: Signalized

Project ID: 18-08162-001
Date: 2018-04-14

Bikes

NS/EW Streets:	Main St				Main St				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	4	1	0	0	0	0	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%					
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.750
		0.250				0.250				0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Fulton Ln
City: St Helena
Project ID: 18-08162-001
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Fulton Ln		Fulton Ln		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	3	0	3	0	0	1	0	0	7
2:15 PM	0	0	1	0	0	1	0	0	2
2:30 PM	0	0	0	0	1	0	0	1	2
2:45 PM	0	0	0	2	0	3	9	0	14
3:00 PM	0	0	0	3	2	0	2	0	7
3:15 PM	0	0	0	0	0	0	0	2	2
3:30 PM	0	0	0	1	0	0	1	3	5
3:45 PM	0	2	0	0	0	3	0	7	12
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	2	4	6	3	8	12	13	51
APPROACH %'s :	60.00%	40.00%	40.00%	60.00%	27.27%	72.73%	48.00%	52.00%	
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	0	2	0	4	2	3	3	12	26
PEAK HR FACTOR :		0.250		0.333	0.250	0.250	0.375	0.429	0.542
	0.250		0.333		0.417		0.536		

Prepared by National Data & Surveying Services

Main St & Fulton Ln

Peak Hour Turning Movement Count

ID: 18-08162-001
City: St Helena

Day: Saturday
Date: 04/14/2018

PEAK HOURS	COUNT PERIODS
NONE	NONE
NONE	NONE
03:00 PM - 04:00 PM	02:00 PM - 04:00 PM

Main St

SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	74	561	53	0	670	PM
	0	1	1	0		

EASTBOUND (Fulton Ln)

AM	NOON	PM	
0	0	105	
0	0	0	0
0	0	71	0
0	0	25	1
0	0	37	0
AM	NOON	PM	

WESTBOUND (Fulton Ln)

PM	NOON	AM	
73	0	0	0
15	0	0	1
11	0	0	0
0	0	0	0
84	0	0	
PM	NOON	AM	

CONTROL

Signalized

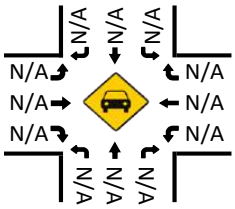
TEV	0 AM	0 NOON	1468 PM
PHF			0.97

PM	609	0	16	526	6	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
	0	1	1	0		

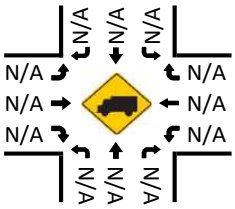
NORTHBOUND

Main St

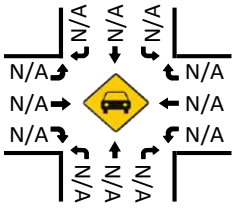
Total Vehicles (AM)



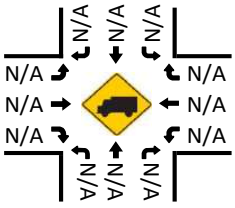
HT (AM)



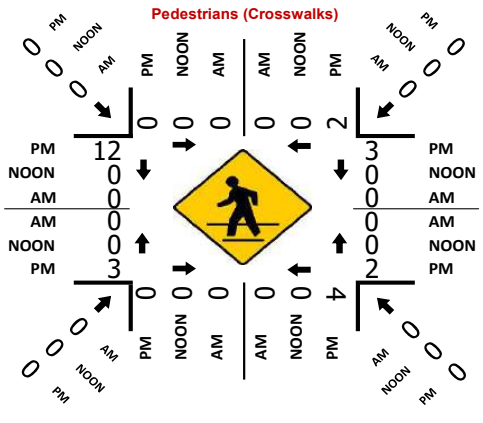
Total Vehicles (Noon)



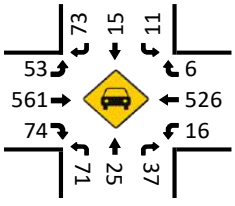
HT (NOON)



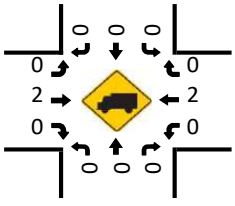
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Total

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	4	119	8	0	6	119	14	0	19	22	5	0	10	10	15	0	351
2:15 PM	10	119	7	0	5	117	3	0	15	16	9	0	4	5	12	0	322
2:30 PM	6	114	4	0	10	124	5	0	8	11	8	0	12	10	7	0	319
2:45 PM	7	118	4	0	11	119	4	0	10	10	12	0	5	10	12	0	322
3:00 PM	7	126	5	0	6	141	3	0	10	12	5	0	12	5	14	0	346
3:15 PM	7	116	7	0	14	130	7	0	8	9	8	0	10	9	11	0	336
3:30 PM	4	117	9	0	12	133	3	0	8	11	6	0	12	9	7	0	331
3:45 PM	9	119	3	0	9	113	7	0	11	22	9	0	8	12	12	0	334
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	54	948	47	0	73	996	46	0	89	113	62	0	73	70	90	0	2661
APPROACH %'s :	5.15%	90.37%	4.48%	0.00%	6.55%	89.33%	4.13%	0.00%	33.71%	42.80%	23.48%	0.00%	31.33%	30.04%	38.63%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	27	478	24	0	41	517	20	0	37	54	28	0	42	35	44	0	1347
PEAK HR FACTOR :	0.750	0.948	0.667	0.000	0.732	0.917	0.714	0.000	0.841	0.614	0.778	0.000	0.875	0.729	0.786	0.000	0.973
		0.958				0.957				0.708				0.945			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	1 NR	1 NU	1 SL	1 ST	1 SR	1 SU	1 EL	1 ET	1 ER	1 EU	1 WL	1 WT	1 WR	1 WU	TOTAL
2:00 PM	4	117	8	0	6	118	14	0	19	22	5	0	10	10	15	0	348
2:15 PM	10	119	7	0	5	116	3	0	15	16	9	0	4	5	12	0	321
2:30 PM	6	114	4	0	10	121	5	0	8	11	8	0	12	10	7	0	316
2:45 PM	7	116	4	0	11	119	4	0	10	10	12	0	5	10	12	0	320
3:00 PM	7	126	5	0	6	140	3	0	10	12	5	0	12	5	14	0	345
3:15 PM	7	116	7	0	14	129	7	0	8	9	8	0	10	9	11	0	335
3:30 PM	4	117	9	0	12	133	3	0	8	11	6	0	12	9	7	0	331
3:45 PM	9	116	3	0	9	112	7	0	11	22	9	0	8	12	12	0	330
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	54	941	47	0	73	988	46	0	89	113	62	0	73	70	90	0	2646
APPROACH %'s :	5.18%	90.31%	4.51%	0.00%	6.59%	89.25%	4.16%	0.00%	33.71%	42.80%	23.48%	0.00%	31.33%	30.04%	38.63%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	27	475	24	0	41	514	20	0	37	54	28	0	42	35	44	0	1341
PEAK HR FACTOR :	0.75	0.942	0.667	0.000	0.732	0.918	0.714	0.000	0.841	0.614	0.778	0.000	0.875	0.729	0.786	0.000	0.972
		0.953				0.958				0.708				0.945			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Heavy Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	10
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333
		0.250				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Medium Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
		0.250				0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Light Trucks

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	3	0	0	0	2	0	0	0	1	0	0	1	0	0	0	7
2:15 PM	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	6
2:30 PM	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4
2:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	1	0	0	0	5	0	0	0	0	0	0	1	0	1	0	8
3:30 PM	0	2	0	0	1	3	0	0	0	0	1	0	0	0	0	0	7
3:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	14	1	0	1	15	1	0	1	1	1	0	2	0	1	0	38
APPROACH %'s :	0.00%	93.33%	6.67%	0.00%	5.88%	88.24%	5.88%	0.00%	33.33%	33.33%	33.33%	0.00%	66.67%	0.00%	33.33%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	6	0	0	1	9	0	0	0	0	1	0	1	0	1	0	19
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.250	0.450	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.594
		0.500				0.500				0.250				0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Control: Signalized

Project ID: 18-08162-002
Date: 2018-04-14

Bikes

NS/EW Streets:	Main St				Main St				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
3:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	1	0	2	0	0	3	0	0	0	1	0	0	8
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	33.33%	0.00%	66.67%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	2	0	0	3	0	0	0	1	0	0	7
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.875
	0.250				0.500				0.375				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Adams St
City: St Helena
Project ID: 18-08162-002
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Adams St		Adams St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	6	4	45	24	13	17	18	5	132
2:15 PM	12	8	24	24	12	13	10	16	119
2:30 PM	8	8	11	43	12	21	14	6	123
2:45 PM	4	3	27	21	22	9	17	23	126
3:00 PM	3	4	25	20	7	20	6	18	103
3:15 PM	3	3	17	22	2	7	6	10	70
3:30 PM	2	1	17	28	2	8	8	10	76
3:45 PM	6	10	18	29	8	13	15	14	113
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	44	41	184	211	78	108	94	102	862
APPROACH %'s :	51.76%	48.24%	46.58%	53.42%	41.94%	58.06%	47.96%	52.04%	
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	14	18	77	99	19	48	35	52	362
PEAK HR FACTOR :	0.583	0.450	0.770	0.853	0.594	0.600	0.583	0.722	0.801
	0.500		0.936		0.620		0.750		

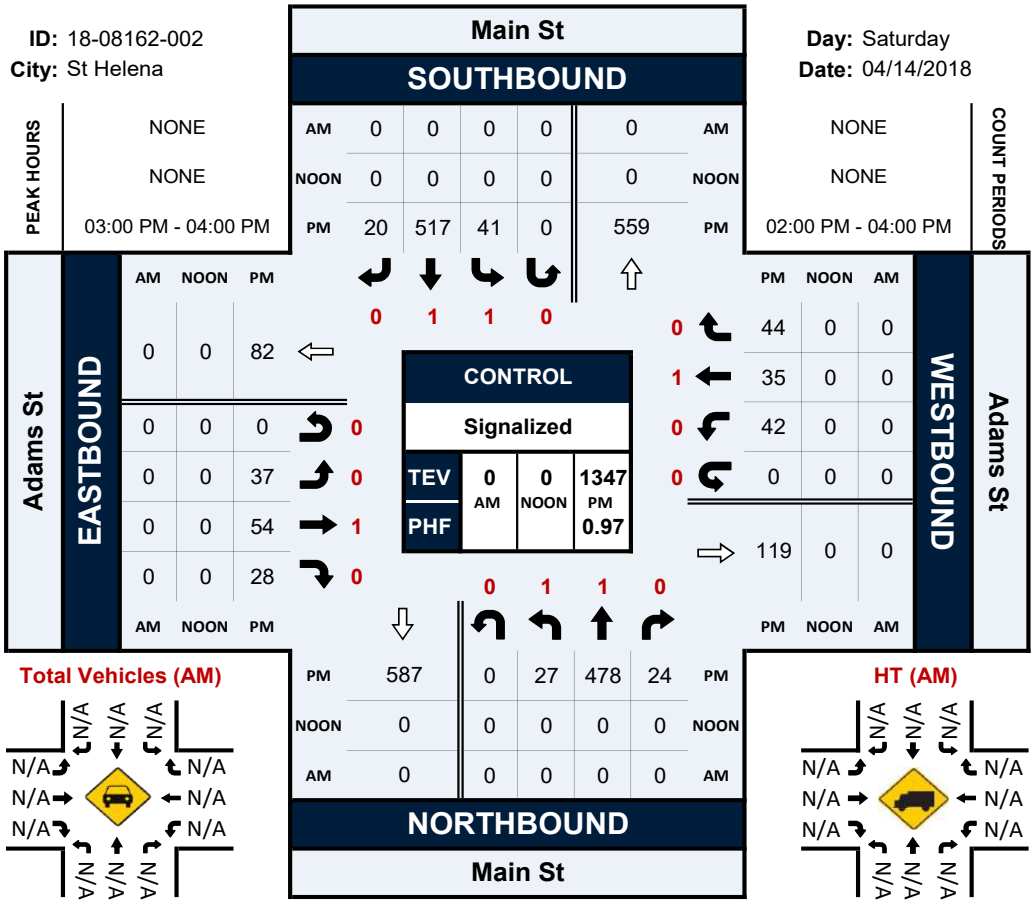
Prepared by National Data & Surveying Services

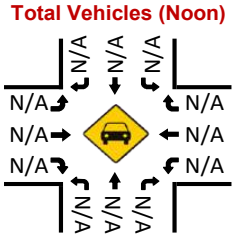
Main St & Adams St

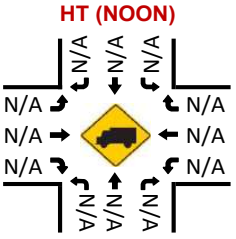
Peak Hour Turning Movement Count

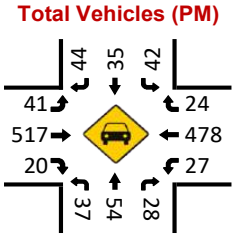
ID: 18-08162-002
City: St Helena

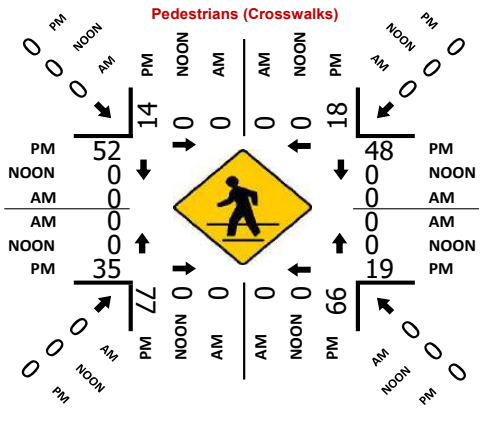
Day: Saturday
Date: 04/14/2018

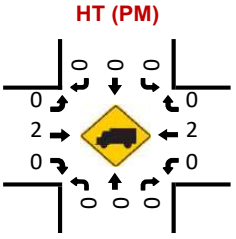












National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Total

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	128	13	0	1	127	0	0	0	0	0	0	9	0	9	0	287
2:15 PM	0	119	18	0	3	133	0	0	0	0	0	0	10	0	9	0	292
2:30 PM	0	117	18	0	6	131	0	0	0	0	0	0	11	0	12	0	295
2:45 PM	0	127	12	0	7	137	0	0	0	0	0	0	8	0	5	0	296
3:00 PM	0	118	19	0	7	149	0	0	0	0	0	0	9	0	12	0	314
3:15 PM	0	122	17	0	3	139	0	0	0	0	0	0	7	0	7	0	295
3:30 PM	0	121	19	0	5	141	0	0	0	0	0	0	8	0	4	0	298
3:45 PM	0	125	13	0	6	131	0	0	0	0	0	0	11	0	8	0	294
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	977	129	0	38	1088	0	0	0	0	0	0	73	0	66	0	2371
APPROACH %'s :	0.00%	88.34%	11.66%	0.00%	3.37%	96.63%	0.00%	0.00%					52.52%	0.00%	47.48%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	488	67	0	22	566	0	0	0	0	0	0	32	0	28	0	1203
PEAK HR FACTOR :	0.000	0.961	0.882	0.000	0.786	0.950	0.000	0.000	0.000	0.000	0.000	0.000	0.889	0.000	0.583	0.000	0.958
		0.991				0.942								0.714			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	126	13	0	1	126	0	0	0	0	0	0	9	0	9	0	284
2:15 PM	0	119	18	0	3	132	0	0	0	0	0	0	10	0	9	0	291
2:30 PM	0	116	18	0	6	128	0	0	0	0	0	0	11	0	12	0	291
2:45 PM	0	126	12	0	7	137	0	0	0	0	0	0	8	0	5	0	295
3:00 PM	0	118	19	0	7	148	0	0	0	0	0	0	9	0	12	0	313
3:15 PM	0	122	17	0	3	138	0	0	0	0	0	0	7	0	7	0	294
3:30 PM	0	121	19	0	5	141	0	0	0	0	0	0	7	0	4	0	297
3:45 PM	0	123	13	0	6	130	0	0	0	0	0	0	11	0	7	0	290
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	971	129	0	38	1080	0	0	0	0	0	0	72	0	65	0	2355
APPROACH %'s :	0.00%	88.27%	11.73%	0.00%	3.40%	96.60%	0.00%	0.00%					52.55%	0.00%	47.45%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	487	67	0	22	564	0	0	0	0	0	0	31	0	28	0	1199
PEAK HR FACTOR :	0.00	0.966	0.882	0.000	0.786	0.953	0.000	0.000	0.000	0.000	0.000	0.000	0.861	0.000	0.583	0.000	0.958
		0.989				0.945								0.702			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Heavy Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	5	0	0	0	0	0	0	1	0	0	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750
	0.250				0.250								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Medium Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	3	0	0	0	0	0	0	0	0	1	0	5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
						0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Light Trucks

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6
2:15 PM	0	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	6
2:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	7
3:30 PM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	15	0	0	1	17	0	0	0	0	0	0	0	0	1	0	34
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	5.56%	94.44%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	15
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.458	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.536
		0.500				0.458											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-003
Date: 2018-04-14

Bikes

NS/EW Streets:	Main St				Main St				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	1	0	2	0	0	0	0	0	0	0	0	5	0	0	10
APPROACH %'s :	0.00%	66.67%	33.33%	0.00%	100.00%	0.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.00	0.250	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
		0.250				0.250											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Hunt Ave
City: St Helena
Project ID: 18-08162-003
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Hunt Ave		Hunt Ave		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	13	11	8	4	23	12	0	0	71
2:15 PM	3	1	9	8	21	35	0	0	77
2:30 PM	15	18	10	9	30	28	0	0	110
2:45 PM	14	9	2	5	15	22	0	0	67
3:00 PM	13	8	0	4	12	15	0	0	52
3:15 PM	2	7	13	3	29	20	0	0	74
3:30 PM	11	7	6	6	37	19	0	0	86
3:45 PM	19	6	0	7	39	25	0	0	96
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	90	67	48	46	206	176	0	0	633
APPROACH %'s :	57.32%	42.68%	51.06%	48.94%	53.93%	46.07%			
PEAK HR :	02:45 PM - 03:45 PM								TOTAL
PEAK HR VOL :	40	31	21	18	93	76	0	0	279
PEAK HR FACTOR :	0.714	0.861	0.404	0.750	0.628	0.864			0.811
	0.772		0.609		0.754				

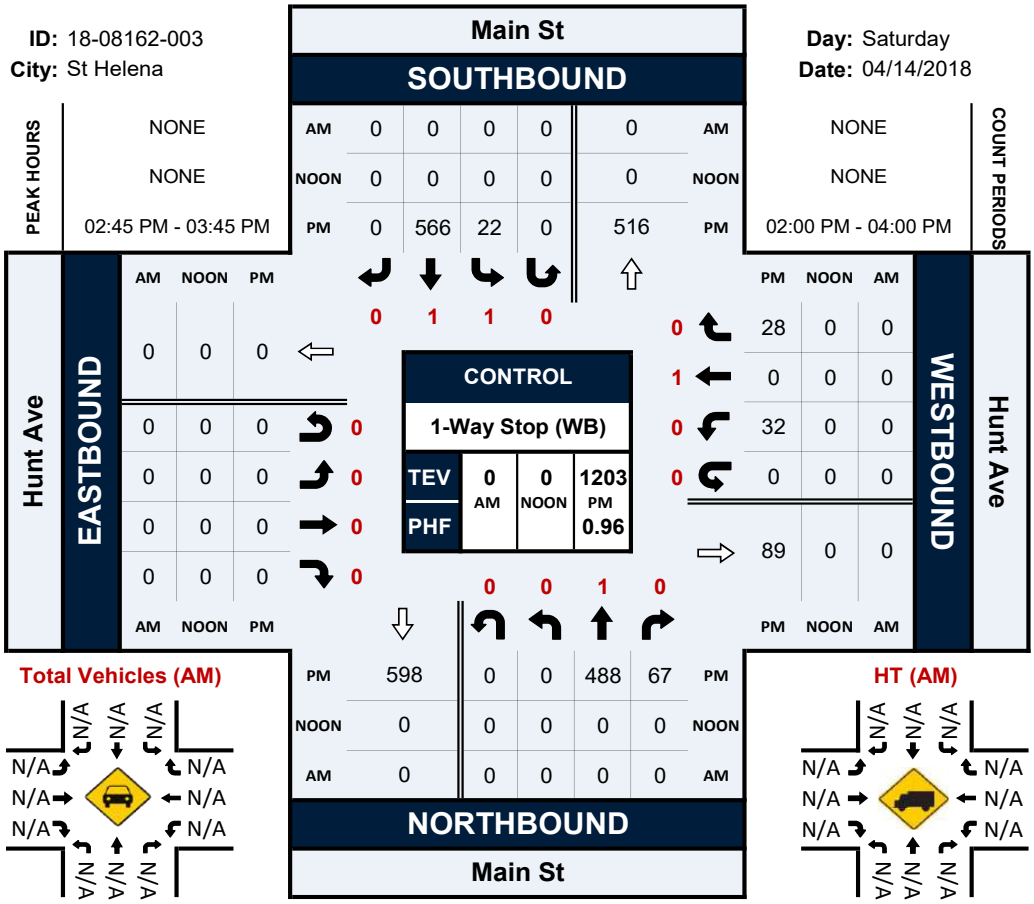
Prepared by National Data & Surveying Services

Main St & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-003
City: St Helena

Day: Saturday
Date: 04/14/2018



National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Total

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	16	129	16	0	8	116	2	0	0	0	35	0	35	5	17	0	379
2:15 PM	20	127	14	0	14	133	1	0	0	0	32	0	32	5	19	0	397
2:30 PM	13	125	17	0	18	129	4	0	0	0	35	0	30	15	23	0	409
2:45 PM	12	134	12	0	18	142	1	0	0	0	30	0	29	11	19	0	408
3:00 PM	14	115	16	0	22	143	2	0	0	0	34	0	33	7	19	0	405
3:15 PM	14	125	18	0	14	127	2	0	0	0	45	0	33	6	17	0	401
3:30 PM	17	132	9	0	9	137	1	0	0	0	44	0	33	14	22	0	418
3:45 PM	20	125	9	0	16	134	0	0	0	0	35	0	25	3	19	0	386
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	126	1012	111	0	119	1061	13	0	0	0	290	0	250	66	155	0	3203
APPROACH %'s :	10.09%	81.02%	8.89%	0.00%	9.97%	88.94%	1.09%	0.00%	0.00%	0.00%	100.00%	0.00%	53.08%	14.01%	32.91%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	57	506	55	0	63	549	6	0	0	0	153	0	128	38	77	0	1632
PEAK HR FACTOR :	0.838	0.944	0.764	0.000	0.716	0.960	0.750	0.000	0.000	0.000	0.850	0.000	0.970	0.679	0.875	0.000	0.976
	0.978				0.925				0.850				0.880				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Passenger Vehicles

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	16	128	16	0	8	115	2	0	0	0	35	0	35	5	16	0	376
2:15 PM	20	127	14	0	14	132	1	0	0	0	32	0	32	5	19	0	396
2:30 PM	13	124	17	0	18	127	4	0	0	0	35	0	30	15	23	0	406
2:45 PM	12	133	12	0	18	141	1	0	0	0	30	0	29	11	19	0	406
3:00 PM	14	115	16	0	22	142	2	0	0	0	34	0	33	7	19	0	404
3:15 PM	14	125	18	0	14	126	2	0	0	0	45	0	33	6	17	0	400
3:30 PM	17	132	9	0	9	136	1	0	0	0	44	0	33	14	22	0	417
3:45 PM	20	123	9	0	16	133	0	0	0	0	35	0	24	3	19	0	382
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	126	1007	111	0	119	1052	13	0	0	0	290	0	249	66	154	0	3187
APPROACH %'s :	10.13%	80.95%	8.92%	0.00%	10.05%	88.85%	1.10%	0.00%	0.00%	0.00%	100.00%	0.00%	53.09%	14.07%	32.84%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	57	505	55	0	63	545	6	0	0	0	153	0	128	38	77	0	1627
PEAK HR FACTOR :	0.84	0.949	0.764	0.000	0.716	0.960	0.750	0.000	0.000	0.000	0.850	0.000	0.970	0.679	0.875	0.000	0.975
	0.976				0.925				0.850				0.880				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Heavy Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	0	11
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%									
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
		0.250				0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Medium Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	3	0	0	0	0	0	0	1	0	1	0	5
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%					50.00%	0.00%	50.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
						0.500											

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Light Trucks

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	2	0	0	0	4	0	0	0	0	1	0	0	0	0	0	7
2:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
2:30 PM	0	1	0	0	0	2	0	0	0	0	3	0	1	0	0	0	7
2:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
3:15 PM	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6
3:30 PM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	13	0	0	0	17	0	0	0	0	4	0	2	0	1	0	37
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	66.67%	0.00%	33.33%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	5	0	0	0	10	0	0	0	0	0	0	1	0	0	0	16
PEAK HR FACTOR :	0.00	0.625	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.667
		0.625				0.500								0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Control: Signalized

Project ID: 18-08162-004
Date: 2018-04-14

Bikes

NS/EW Streets:	Main St				Main St				Pope-St_Mitchell Dr				Pope-St_Mitchell Dr				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	0	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	2	0	4	0	0	0	0	0	0	0	0	0	7
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4
2:30 PM	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
2:45 PM	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	5
3:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	0	0	1	0	5
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
3:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	5	6	0	3	1	4	0	2	0	0	0	3	2	4	0	31
APPROACH %'s :	8.33%	41.67%	50.00%	0.00%	37.50%	12.50%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	22.22%	44.44%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	4	4	0	1	0	0	0	2	0	0	0	0	2	1	0	14
PEAK HR FACTOR :	0.00	0.500	0.333	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.700
		0.667				0.250				0.250				0.375			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Main St & Pope-St_Mitchell Dr
City: St Helena
Project ID: 18-08162-004
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Main St		Main St		Pope-St_Mitchell Dr		Pope-St_Mitchell Dr		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	4	2	0	0	1	4	6	4	21
2:15 PM	7	5	0	0	4	7	18	10	51
2:30 PM	15	12	0	0	2	5	15	3	52
2:45 PM	4	7	0	0	5	0	2	0	18
3:00 PM	12	8	0	0	10	6	4	7	47
3:15 PM	17	9	0	0	14	14	14	5	73
3:30 PM	9	22	0	0	18	5	5	0	59
3:45 PM	10	4	0	0	2	1	9	1	27
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	78	69	0	0	56	42	73	30	348
APPROACH %'s :	53.06%	46.94%			57.14%	42.86%	70.87%	29.13%	
PEAK HR :	02:45 PM - 03:45 PM								TOTAL
PEAK HR VOL :	42	46	0	0	47	25	25	12	197
PEAK HR FACTOR :	0.618	0.523			0.653	0.446	0.446	0.429	0.675
	0.710				0.643		0.487		

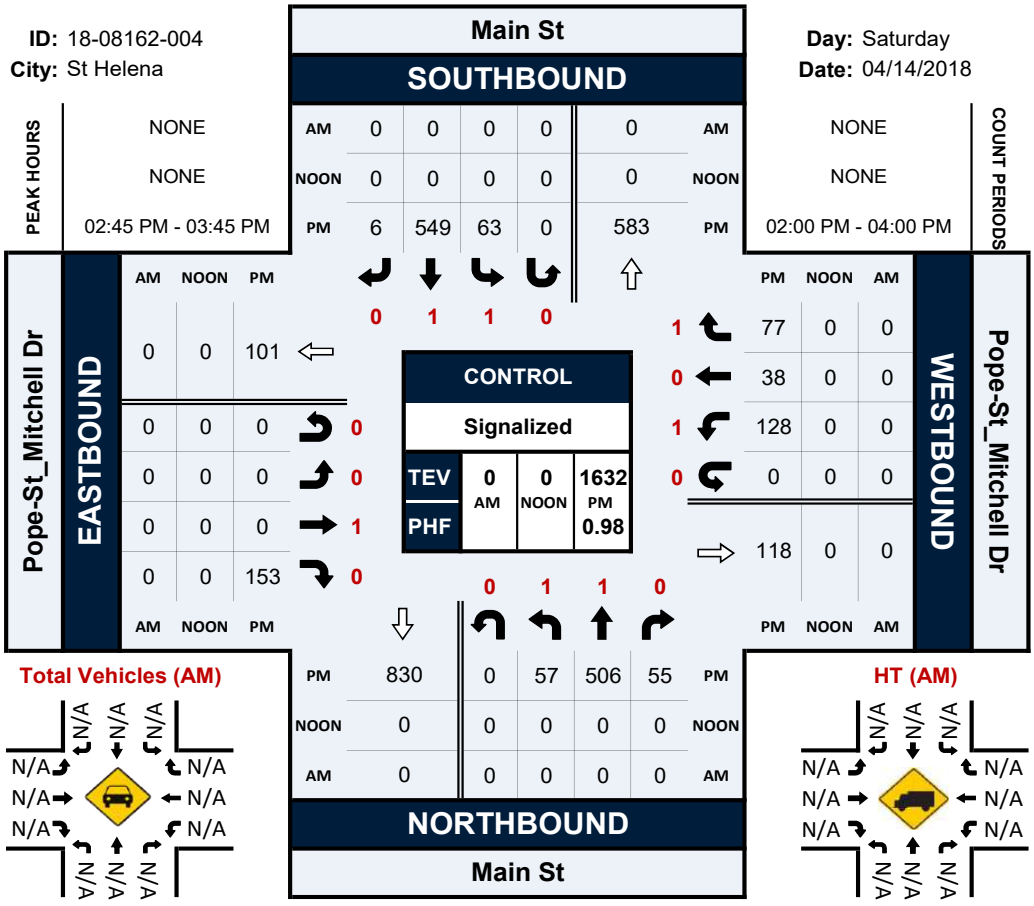
Prepared by National Data & Surveying Services

Main St & Pope-St_Mitchell Dr

Peak Hour Turning Movement Count

ID: 18-08162-004
City: St Helena

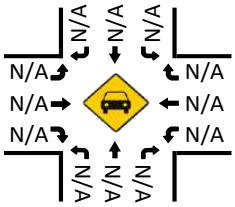
Day: Saturday
Date: 04/14/2018



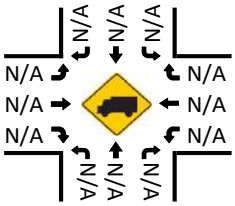
Total Vehicles (AM)

HT (AM)

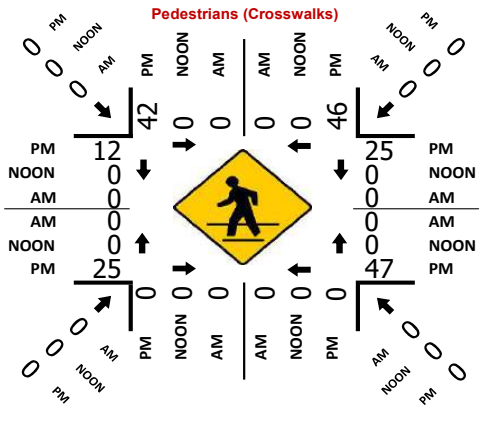
Total Vehicles (Noon)



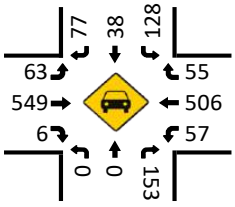
HT (NOON)



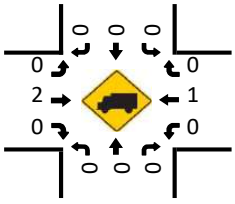
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Control: 1-Way Stop (NB)

Project ID: 18-08162-005
Date: 2018-04-14

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	26	0	2	0	0	0	0	0	0	3	24	0	1	1	0	0	57
2:15 PM	28	0	2	0	0	0	0	0	0	1	15	0	1	2	0	0	49
2:30 PM	24	0	4	0	0	0	0	0	0	3	16	0	5	3	0	0	55
2:45 PM	31	0	2	0	0	0	0	0	0	3	18	0	1	5	0	0	60
3:00 PM	23	0	2	0	0	0	0	0	0	3	15	0	2	3	0	0	48
3:15 PM	21	0	0	0	0	0	0	0	0	0	23	1	1	5	0	0	51
3:30 PM	22	0	0	0	0	0	0	0	0	0	15	0	0	2	0	0	39
3:45 PM	18	0	1	0	0	0	0	0	0	5	22	0	0	3	0	0	49
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	193	0	13	0	0	0	0	0	0	18	148	1	11	24	0	0	408
APPROACH %'s :	93.69%	0.00%	6.31%	0.00%					0.00%	10.78%	88.62%	0.60%	31.43%	68.57%	0.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	109	0	10	0	0	0	0	0	0	10	73	0	8	11	0	0	221
PEAK HR FACTOR :	0.879	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.760	0.000	0.400	0.550	0.000	0.000	0.921
	0.902								0.769				0.594				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Control: 1-Way Stop (NB)

Project ID: 18-08162-005
Date: 2018-04-14

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Fulton Ln				Fulton Ln				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	8
APPROACH %'s :	75.00%	0.00%	25.00%	0.00%					0.00%	0.00%	100.00%	0.00%					
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	3	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	8
PEAK HR FACTOR :	0.25	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
	0.250								0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Fulton Ln
City: St Helena
Project ID: 18-08162-005
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Fulton Ln		Fulton Ln		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	0	3	3
2:15 PM	0	0	0	0	0	0	3	0	3
2:30 PM	0	0	2	0	6	0	0	0	8
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	2	0	0	0	2
3:15 PM	0	0	0	0	0	0	1	0	1
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	1	0	1
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	2	0	8	0	5	3	18
APPROACH %'s :			100.00%	0.00%	100.00%	0.00%	62.50%	37.50%	
PEAK HR :	02:00 PM - 03:00 PM								TOTAL
PEAK HR VOL :	0	0	2	0	6	0	3	3	14
PEAK HR FACTOR :			0.250		0.250		0.250	0.250	0.438
			0.250		0.250		0.500		

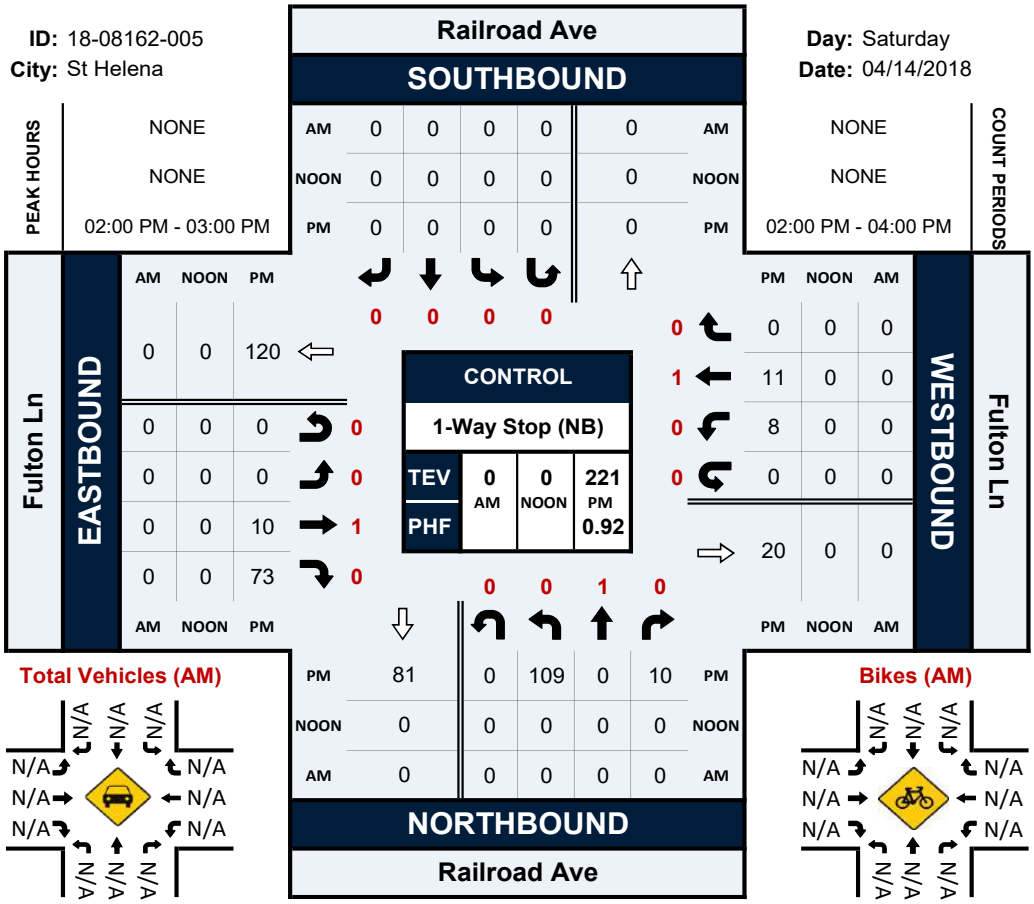
Prepared by National Data & Surveying Services

Railroad Ave & Fulton Ln

Peak Hour Turning Movement Count

ID: 18-08162-005
City: St Helena

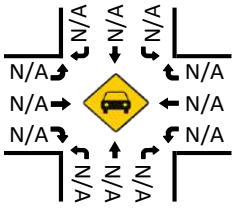
Day: Saturday
Date: 04/14/2018



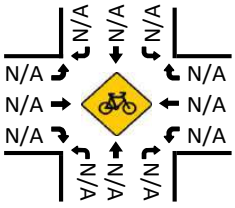
Total Vehicles (AM)

Bikes (AM)

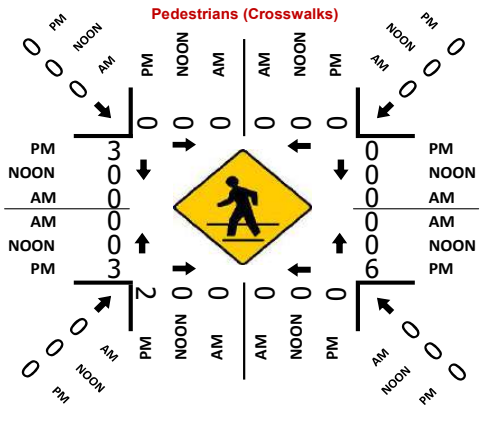
Total Vehicles (Noon)



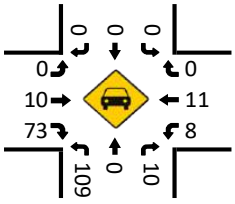
Bikes (NOON)



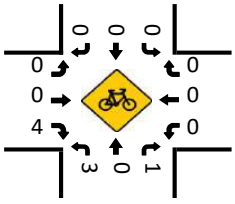
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Control: 4-Way Stop

Project ID: 18-08162-006
Date: 2018-04-14

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
2:00 PM	8	17	3	0	11	15	4	0	3	23	11	0	4	22	14	0	135
2:15 PM	7	17	3	1	10	15	3	0	0	17	9	0	5	13	12	0	112
2:30 PM	7	18	6	0	8	14	3	0	1	15	7	2	4	19	9	0	113
2:45 PM	7	19	6	0	15	8	4	0	2	12	12	0	9	15	9	0	118
3:00 PM	8	11	7	0	8	9	4	0	1	15	7	1	2	19	13	0	105
3:15 PM	11	15	3	0	9	16	3	0	1	11	17	0	2	12	8	0	108
3:30 PM	12	16	4	0	8	11	1	0	1	13	15	0	3	10	7	0	101
3:45 PM	10	7	6	0	11	12	2	0	4	13	12	0	4	14	9	0	104
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	70	120	38	1	80	100	24	0	13	119	90	3	33	124	81	0	896
APPROACH %'s :	30.57%	52.40%	16.59%	0.44%	39.22%	49.02%	11.76%	0.00%	5.78%	52.89%	40.00%	1.33%	13.87%	52.10%	34.03%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	29	71	18	1	44	52	14	0	6	67	39	2	22	69	44	0	478
PEAK HR FACTOR :	0.906	0.934	0.750	0.250	0.733	0.867	0.875	0.000	0.500	0.728	0.813	0.250	0.611	0.784	0.786	0.000	0.885
	0.930				0.917				0.770				0.844				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Control: 4-Way Stop

Project ID: 18-08162-006
Date: 2018-04-14

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	6
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4
3:00 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	5	1	0	4	0	0	0	0	3	0	0	0	2	2	0	18
APPROACH %'s :	14.29%	71.43%	14.29%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	0	4	1	0	4	0	0	0	0	1	0	0	0	0	2	0	12
PEAK HR FACTOR :	0.00	0.333	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.000	0.500
	0.417				0.250				0.250				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Adams St
City: St Helena
Project ID: 18-08162-006
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Adams St		Adams St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	1	2	0	0	0	2	0	5
2:15 PM	2	2	5	0	0	0	0	5	14
2:30 PM	0	1	0	3	0	0	3	1	8
2:45 PM	1	0	2	1	1	0	5	1	11
3:00 PM	3	0	7	3	0	0	0	0	13
3:15 PM	0	0	1	1	0	0	2	3	7
3:30 PM	2	0	9	2	0	0	1	0	14
3:45 PM	1	3	3	2	0	0	0	2	11
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	9	7	29	12	1	0	13	12	83
APPROACH %'s :	56.25%	43.75%	70.73%	29.27%	100.00%	0.00%	52.00%	48.00%	
PEAK HR :	02:00 PM - 03:00 PM								TOTAL
PEAK HR VOL :	3	4	9	4	1	0	10	7	38
PEAK HR FACTOR :	0.375	0.500	0.450	0.333	0.250		0.500	0.350	0.679
	0.438		0.650		0.250		0.708		

Prepared by National Data & Surveying Services

Railroad Ave & Adams St

Peak Hour Turning Movement Count

ID: 18-08162-006
City: St Helena

Day: Saturday
Date: 04/14/2018

PEAK HOURS

AM	NONE
NOON	NONE
PM	02:00 PM - 03:00 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	02:00 PM - 04:00 PM

Railroad Ave — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	14	52	44	0	121	PM

Adams St — EASTBOUND

AM	NOON	PM	
0	0	114	
0	0	2	0
0	0	6	0
0	0	67	1
0	0	39	0
AM	NOON	PM	

WESTBOUND — Adams St

PM	NOON	AM	
44	0	0	0
69	0	0	1
22	0	0	0
0	0	0	0
129	0	0	
PM	NOON	AM	

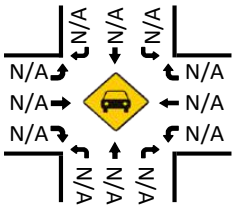
NORTHBOUND — Railroad Ave

PM	114	1	29	71	18	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

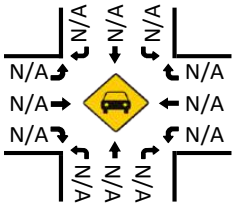
CONTROL: 4-Way Stop

	AM	NOON	PM
TEV	0	0	478
PHF			0.89

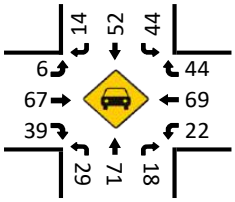
Total Vehicles (AM)



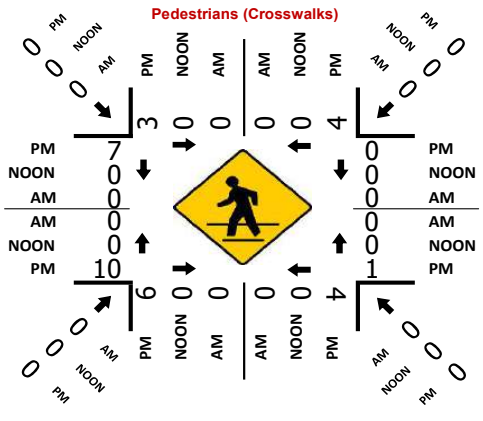
Total Vehicles (NOON)



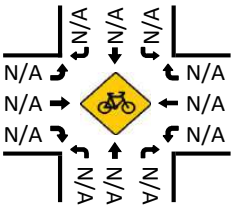
Total Vehicles (PM)



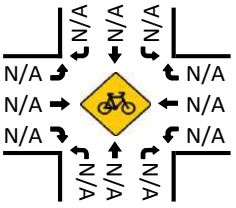
Pedestrians (Crosswalks)



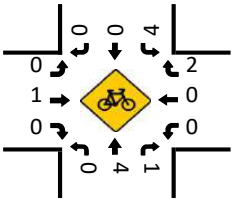
Bikes (AM)



Bikes (NOON)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-007
Date: 2018-04-14

Total

NS/EW Streets:	Railroad Ave				Railroad Ave				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	1	0	27	0	9	0	5	7	0	1	1	7	22	0	81
2:15 PM	2	0	1	0	24	0	8	0	10	9	1	1	0	8	15	0	79
2:30 PM	1	1	1	0	18	1	2	0	10	13	2	1	0	17	20	0	87
2:45 PM	0	1	1	0	22	1	6	0	6	10	1	0	1	8	22	0	79
3:00 PM	0	0	1	0	16	0	6	0	4	17	1	2	1	14	17	0	79
3:15 PM	1	1	1	0	29	1	3	1	7	12	0	1	0	8	21	0	86
3:30 PM	0	0	0	0	24	0	5	0	5	15	1	0	0	8	28	0	86
3:45 PM	0	1	0	0	23	1	6	0	7	15	0	0	0	12	18	0	83
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	5	6	0	183	4	45	1	54	98	6	6	3	82	163	0	660
APPROACH %'s :	26.67%	33.33%	40.00%	0.00%	78.54%	1.72%	19.31%	0.43%	32.93%	59.76%	3.66%	3.66%	1.21%	33.06%	65.73%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	1	2	2	0	92	2	20	1	23	59	2	3	1	42	84	0	334
PEAK HR FACTOR :	0.250	0.500	0.500	0.000	0.793	0.500	0.833	0.250	0.821	0.868	0.500	0.375	0.250	0.750	0.750	0.000	0.971
	0.417				0.846				0.906				0.882				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-007
Date: 2018-04-14

Bikes

NS/EW Streets:	Railroad Ave				Railroad Ave				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	6	2	0	9
2:45 PM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3
3:15 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	4	0	0	0	0	0	0	3	0	0	4	8	4	0	26
APPROACH %'s :	0.00%	42.86%	57.14%	0.00%					0.00%	100.00%	0.00%	0.00%	25.00%	50.00%	25.00%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	0	3	0	0	2	2	2	0	11
PEAK HR FACTOR :	0.00	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.250	0.250	0.250	0.000	0.917
		0.500								0.375				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Railroad Ave & Hunt Ave
City: St Helena
Project ID: 18-08162-007
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Railroad Ave		Railroad Ave		Hunt Ave		Hunt Ave		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	7	3	5	1	0	0	0	1	17
2:15 PM	5	5	6	6	0	0	4	0	26
2:30 PM	2	5	5	2	1	0	0	0	15
2:45 PM	7	4	2	3	1	0	4	0	21
3:00 PM	1	4	5	1	2	0	1	1	15
3:15 PM	2	3	3	0	0	0	0	0	8
3:30 PM	3	2	6	0	4	0	1	0	16
3:45 PM	2	10	2	1	1	0	2	0	18
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	29	36	34	14	9	0	12	2	136
APPROACH %'s :	44.62%	55.38%	70.83%	29.17%	100.00%	0.00%	85.71%	14.29%	
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	8	19	16	2	7	0	4	1	57
PEAK HR FACTOR :	0.667	0.475	0.667	0.500	0.438		0.500	0.250	0.792
	0.563		0.750		0.438		0.625		

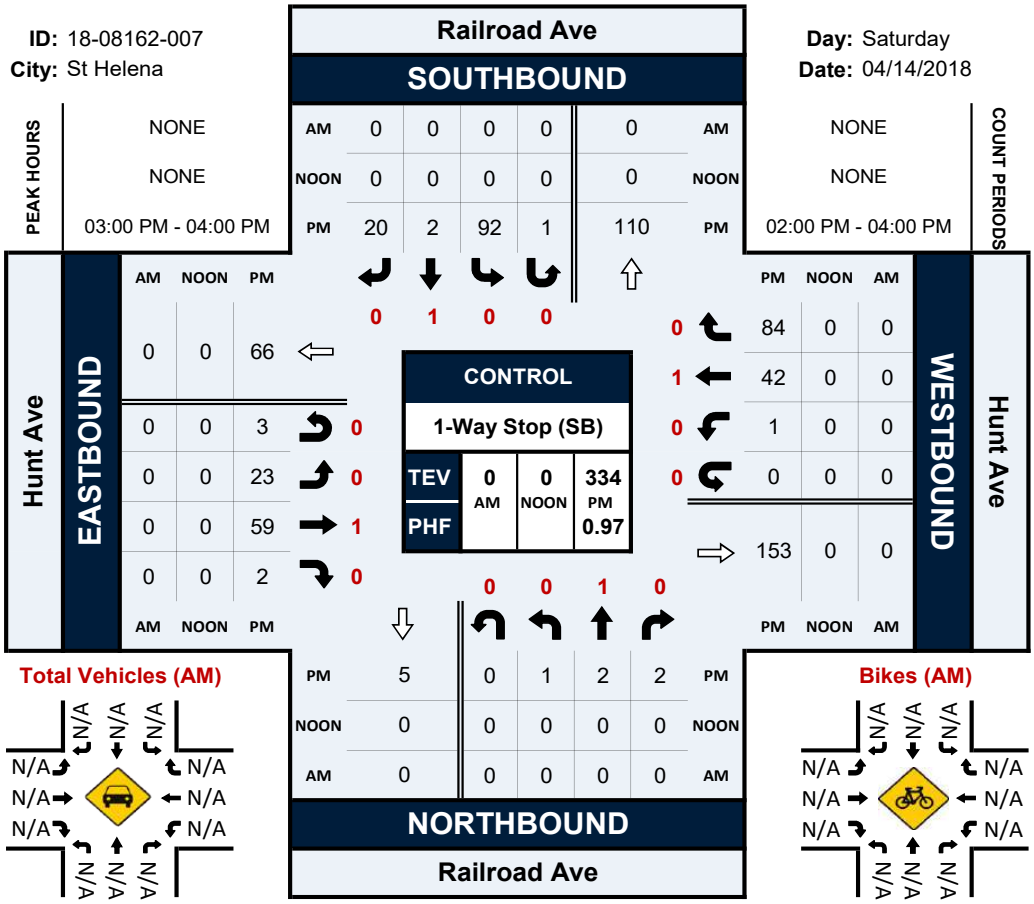
Prepared by National Data & Surveying Services

Railroad Ave & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-007
City: St Helena

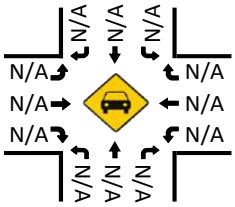
Day: Saturday
Date: 04/14/2018



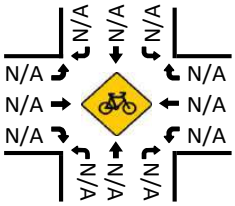
Total Vehicles (AM)

Bikes (AM)

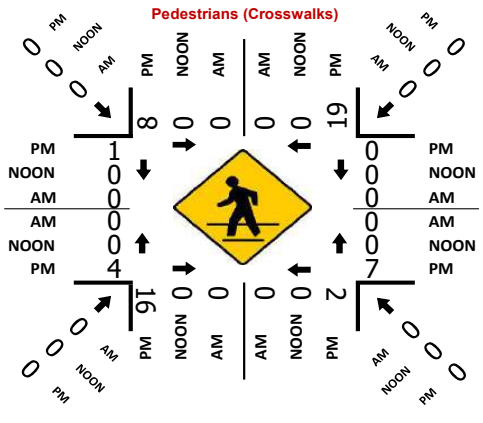
Total Vehicles (Noon)



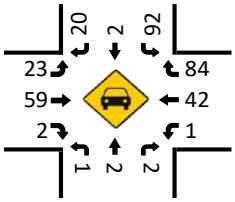
Bikes (NOON)



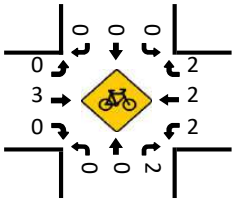
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-008
Date: 2018-04-14

Total

NS/EW Streets:	Library Ln				Library Ln				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	1	0	0	0	0	5	0	7	3	3	0	0	3	0	0	22
2:15 PM	0	0	0	0	0	1	6	0	9	1	0	3	0	1	0	0	21
2:30 PM	0	1	0	0	0	0	12	0	12	1	0	3	0	0	0	0	29
2:45 PM	1	0	0	0	0	0	7	0	6	3	0	3	0	1	1	0	22
3:00 PM	1	0	0	0	0	0	6	0	6	2	1	2	0	1	0	0	19
3:15 PM	0	0	0	0	0	0	8	0	7	2	0	2	0	1	0	0	20
3:30 PM	0	0	0	0	0	0	5	0	7	0	1	2	0	2	0	0	17
3:45 PM	1	0	0	0	0	0	5	0	3	2	0	4	0	2	0	0	17
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	2	0	0	0	1	54	0	57	14	5	19	0	11	1	0	167
APPROACH %'s :	60.00%	40.00%	0.00%	0.00%	0.00%	1.82%	98.18%	0.00%	60.00%	14.74%	5.26%	20.00%	0.00%	91.67%	8.33%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	1	2	0	0	0	1	30	0	34	8	3	9	0	5	1	0	94
PEAK HR FACTOR :	0.250	0.500	0.000	0.000	0.000	0.250	0.625	0.000	0.708	0.667	0.250	0.750	0.000	0.417	0.250	0.000	0.810
	0.750				0.646				0.844				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-008
Date: 2018-04-14

Bikes

NS/EW Streets:	Library Ln				Library Ln				Adams St				Adams St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	3	1	0	0	0	1	1	0	6
2:15 PM	0	0	0	0	4	0	0	0	1	1	0	0	0	0	0	0	6
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	5	0	0	0	4	5	0	0	0	1	1	0	16
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	44.44%	55.56%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	4	0	0	0	4	2	0	0	0	1	1	0	12
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.333	0.500	0.000	0.000	0.000	0.250	0.250	0.000	0.500
					0.250				0.375				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Library Ln & Adams St
City: St Helena
Project ID: 18-08162-008
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Library Ln		Library Ln		Adams St		Adams St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	1	0	0	0	1	0	1	0	3
2:15 PM	0	0	1	0	0	0	0	0	1
2:30 PM	0	0	0	2	0	0	2	0	4
2:45 PM	0	0	0	1	0	0	0	0	1
3:00 PM	0	0	0	2	1	1	0	0	4
3:15 PM	0	4	0	0	0	0	0	0	4
3:30 PM	2	0	0	0	0	0	0	0	2
3:45 PM	0	1	1	2	1	3	0	0	8
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	3	5	2	7	3	4	3	0	27
APPROACH %'s :	37.50%	62.50%	22.22%	77.78%	42.86%	57.14%	100.00%	0.00%	
PEAK HR :	02:00 PM - 03:00 PM								TOTAL
PEAK HR VOL :	1	0	1	3	1	0	3	0	9
PEAK HR FACTOR :	0.250		0.250	0.375	0.250		0.375		0.563
	0.250		0.500		0.250		0.375		

Prepared by National Data & Surveying Services

Library Ln & Adams St

Peak Hour Turning Movement Count

ID: 18-08162-008
City: St Helena

Day: Saturday
Date: 04/14/2018

PEAK HOURS

AM	NONE
NOON	NONE
PM	02:00 PM - 03:00 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	02:00 PM - 04:00 PM

Library Ln — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	30	1	0	0	37	PM

Adams St — EASTBOUND

AM	NOON	PM	
0	0	45	
0	0	9	0
0	0	34	0
0	0	8	1
0	0	3	0

CONTROL

1-Way Stop (SB)

	AM	NOON	PM
TEV	0	0	94
PHF			0.81

Adams St — WESTBOUND

PM	NOON	AM	
1	0	0	0
5	0	0	1
0	0	0	0
0	0	0	0
8	0	0	

Library Ln — NORTHBOUND

PM	4	0	1	2	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

Total Vehicles (AM)

Bikes (AM)

Total Vehicles (NOON)

Bikes (NOON)

Pedestrians (Crosswalks)

Total Vehicles (PM)

Bikes (PM)

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave
City: St Helena
Control: 3-Way Stop (NB/EB/WB)

Project ID: 18-08162-009
Date: 2018-04-14

Total

NS/EW Streets:	Starr Ave				Starr Ave				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	5	0	3	1	0	0	0	0	0	2	7	0	0	2	0	0	20
2:15 PM	5	0	1	0	0	0	0	0	0	2	19	0	1	0	0	0	28
2:30 PM	10	0	1	0	0	0	0	0	0	3	6	2	1	3	0	0	26
2:45 PM	12	0	2	0	0	0	0	0	0	1	12	0	3	2	0	0	32
3:00 PM	11	0	2	0	0	0	0	0	0	3	8	0	2	1	0	0	27
3:15 PM	10	0	3	0	0	0	0	0	0	0	16	1	0	5	0	0	35
3:30 PM	11	0	4	0	0	0	0	0	0	2	10	0	0	0	0	0	27
3:45 PM	9	0	1	0	0	0	0	0	0	3	13	0	1	1	0	0	28
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	73	0	17	1	0	0	0	0	0	16	91	3	8	14	0	0	223
APPROACH %'s :	80.22%	0.00%	18.68%	1.10%					0.00%	14.55%	82.73%	2.73%	36.36%	63.64%	0.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	44	0	11	0	0	0	0	0	0	6	46	1	5	8	0	0	121
PEAK HR FACTOR :	0.917	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.719	0.250	0.417	0.400	0.000	0.000	0.864
	0.917								0.779				0.650				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave
City: St Helena
Control: 3-Way Stop (NB/EB/WB)

Project ID: 18-08162-009
Date: 2018-04-14

Bikes

NS/EW Streets:	Starr Ave				Starr Ave				Hunt Ave				Hunt Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	0	0	5
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:15 PM	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4
3:30 PM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
3:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	0	0	0	0	0	0	0	0	9	0	0	1	0	0	15
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	7
PEAK HR FACTOR :	0.38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.438
	0.375								0.500								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Hunt Ave
City: St Helena
Project ID: 18-08162-009
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Starr Ave		Starr Ave		Hunt Ave		Hunt Ave		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	1	1
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	1	0	1
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	1	2
APPROACH %'s :							50.00%	50.00%	
PEAK HR :	02:45 PM - 03:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	1
PEAK HR FACTOR :							0.250		0.250
							0.250		

Prepared by National Data & Surveying Services

Starr Ave & Hunt Ave

Peak Hour Turning Movement Count

ID: 18-08162-009
City: St Helena

Day: Saturday
Date: 04/14/2018

PEAK HOURS

AM	NONE
NOON	NONE
PM	02:45 PM - 03:45 PM

COUNT PERIODS

AM	NONE
NOON	NONE
PM	02:00 PM - 04:00 PM

CONTROL: 3-Way Stop (NB/EB/WB)

	AM	NOON	PM
TEV	0	0	121
PHF			0.86

Starr Ave — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

Hunt Ave — EASTBOUND

AM	NOON	PM	
0	0	1	0
0	0	0	0
0	0	6	1
0	0	46	0
0	0	53	

WESTBOUND — Hunt Ave

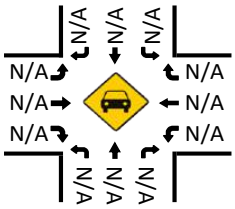
	PM	NOON	AM
0	0	0	0
1	8	0	0
0	5	0	0
0	0	0	0
	17	0	0

NORTHBOUND — Starr Ave

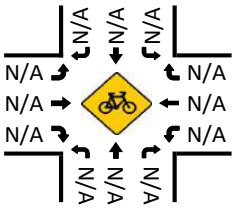
PM	51	0	44	0	11	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

0 0 0 0 — 0 0 1 0

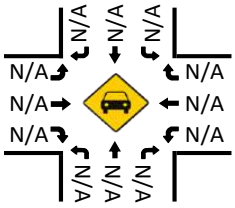
Total Vehicles (AM)



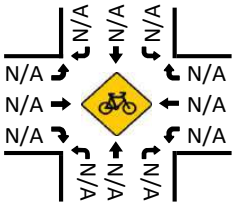
Bikes (AM)



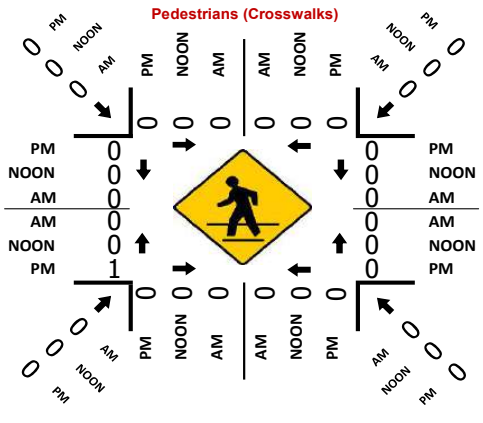
Total Vehicles (Noon)



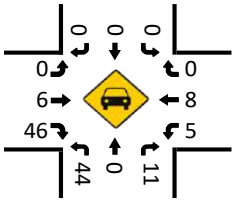
Bikes (NOON)



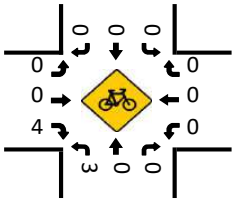
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-010
Date: 2018-04-14

Total

NS/EW Streets:	Starr Ave				Starr Ave				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	6	0	4	0	3	35	0	0	0	43	6	0	97
2:15 PM	0	0	0	0	16	0	0	0	2	45	0	0	0	45	2	0	110
2:30 PM	0	0	0	0	8	0	1	0	6	55	0	0	0	51	7	0	128
2:45 PM	0	0	0	0	9	0	6	0	3	45	0	0	0	45	12	0	120
3:00 PM	0	0	0	0	7	0	1	0	6	42	0	0	0	65	7	0	128
3:15 PM	0	0	0	0	12	0	1	0	2	46	0	0	0	52	13	0	126
3:30 PM	0	0	0	0	10	0	2	0	5	42	0	0	0	51	10	0	120
3:45 PM	0	0	0	0	8	0	2	0	2	28	0	0	0	44	7	0	91
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	76	0	17	0	29	338	0	0	0	396	64	0	920
APPROACH %'s :					81.72%	0.00%	18.28%	0.00%	7.90%	92.10%	0.00%	0.00%	0.00%	86.09%	13.91%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	36	0	9	0	17	188	0	0	0	213	39	0	502
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.000	0.375	0.000	0.708	0.855	0.000	0.000	0.000	0.819	0.750	0.000	0.980
					0.750				0.840				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Control: 1-Way Stop (SB)

Project ID: 18-08162-010
Date: 2018-04-14

Bikes

NS/EW Streets:	Starr Ave				Starr Ave				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5
2:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	4	0	0	16
3:15 PM	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	5
3:30 PM	0	0	0	0	0	0	0	0	4	0	0	0	0	3	1	0	8
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	4	0	4	17	0	0	0	15	1	0	43
APPROACH %'s :					33.33%	0.00%	66.67%	0.00%	19.05%	80.95%	0.00%	0.00%	0.00%	93.75%	6.25%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	4	0	0	15	0	0	0	5	0	0	25
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.313	0.000	0.000	0.000	0.313	0.000	0.000	0.391
					0.250				0.313				0.313				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Starr Ave & Pope St
City: St Helena
Project ID: 18-08162-010
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Starr Ave		Starr Ave		Pope St		Pope St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	0	1	1
2:15 PM	0	0	0	0	0	0	0	1	1
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0
3:30 PM	0	3	0	0	0	0	0	0	3
3:45 PM	2	0	0	0	0	0	1	0	3
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	3	0	0	0	0	1	2	8
APPROACH %'s :	40.00%	60.00%					33.33%	66.67%	
PEAK HR :	02:30 PM - 03:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

Starr Ave & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-010
City: St Helena

Day: Saturday
Date: 04/14/2018

PEAK HOURS		COUNT PERIODS
NONE	AM	NONE
NONE	NOON	NONE
02:30 PM - 03:30 PM	PM	02:00 PM - 04:00 PM

Starr Ave — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	9	0	36	0	56	PM

0 1 0 0

Pope St — EASTBOUND

AM	NOON	PM	
0	0	222	⇦
0	0	0	0
0	0	17	0
0	0	188	1
0	0	0	0

CONTROL

1-Way Stop (SB)

	AM	NOON	PM
TEV	0	0	502
PHF			0.98

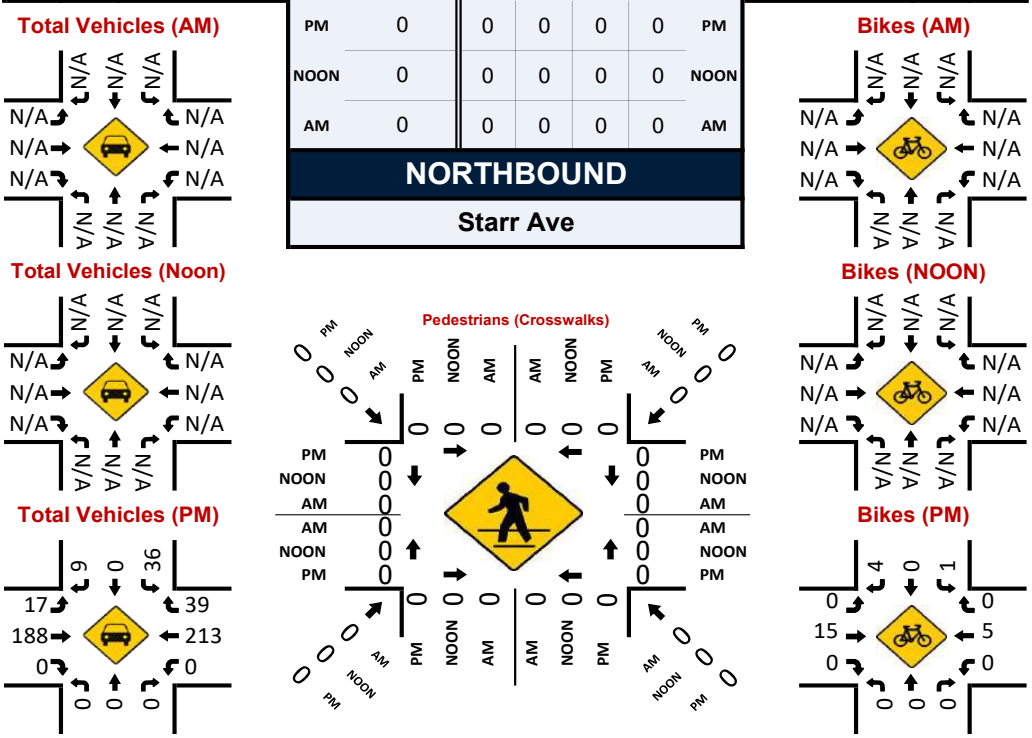
Pope St — WESTBOUND

	PM	NOON	AM
0	39	0	0
1	213	0	0
0	0	0	0
0	0	0	0
⇨	224	0	0

0 0 0 0

PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

NORTHBOUND — Starr Ave



National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Control: 2-Way Stop (NB/SB)

Project ID: 18-08162-011
Date: 2018-04-14

Total

NS/EW Streets:	Paseo Grand Dr/College Ave				Paseo Grand Dr/College Ave				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	TOTAL
2:00 PM	5	0	1	0	2	0	3	0	4	31	4	0	4	44	1	0	99
2:15 PM	5	0	5	0	0	0	4	0	6	44	5	0	8	39	2	0	118
2:30 PM	3	0	6	0	4	0	4	0	3	55	8	0	4	47	1	0	135
2:45 PM	4	0	4	0	0	0	6	0	2	44	5	0	5	47	1	0	118
3:00 PM	0	0	8	0	1	0	2	0	5	43	4	0	6	69	2	0	140
3:15 PM	6	0	4	0	4	0	4	0	4	51	1	0	4	55	0	0	133
3:30 PM	6	0	2	0	0	0	2	0	7	41	5	0	1	53	0	0	117
3:45 PM	2	0	5	0	4	1	2	0	6	30	3	0	4	50	2	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	0	35	0	15	1	27	0	37	339	35	0	36	404	9	0	969
APPROACH %'s :	46.97%	0.00%	53.03%	0.00%	34.88%	2.33%	62.79%	0.00%	9.00%	82.48%	8.52%	0.00%	8.02%	89.98%	2.00%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	13	0	22	0	9	0	16	0	14	193	18	0	19	218	4	0	526
PEAK HR FACTOR :	0.542	0.000	0.688	0.000	0.563	0.000	0.667	0.000	0.700	0.877	0.563	0.000	0.792	0.790	0.500	0.000	0.939
	0.875				0.781				0.852				0.782				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Control: 2-Way Stop (NB/SB)

Project ID: 18-08162-011
Date: 2018-04-14

Bikes

NS/EW Streets:	Paseo Grand Dr/College Ave				Paseo Grand Dr/College Ave				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	6
2:30 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
3:15 PM	0	1	0	0	0	0	0	0	0	8	1	0	0	0	0	0	10
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	4
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	1	0	1	16	2	0	0	15	0	0	36
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	5.26%	84.21%	10.53%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	1	14	1	0	0	5	0	0	22
PEAK HR FACTOR :	0.00	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.438	0.250	0.000	0.000	0.313	0.000	0.000	0.550
	0.250								0.444				0.313				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Paseo Grand Dr/College Ave & Pope St
City: St Helena
Project ID: 18-08162-011
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Paseo Grand Dr/College Ave		Paseo Grand Dr/College Ave		Pope St		Pope St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	1	0	1
2:15 PM	0	0	1	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	2	1	0	0	0	1	0	4
APPROACH %'s :	0.00%	100.00%	100.00%	0.00%			100.00%	0.00%	
PEAK HR :	02:30 PM - 03:30 PM								TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	2
PEAK HR FACTOR :		0.500							0.500
		0.500							

Prepared by National Data & Surveying Services

Paseo Grand Dr/College Ave & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-011
City: St Helena

Day: Saturday
Date: 04/14/2018

Paseo Grand Dr/College Ave

SOUTHBOUND

PEAK HOURS							COUNT PERIODS
	NONE					NONE	
	NONE					NONE	
	02:30 PM - 03:30 PM					02:00 PM - 04:00 PM	

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	16	0	9	0	18	PM
	0	1	0	0		

EASTBOUND

AM	NOON	PM	
0	0	247	⇦
0	0	0	0
0	0	14	1
0	0	193	1
0	0	18	0
AM	NOON	PM	

CONTROL
2-Way Stop (NB/SB)

TEV	0 AM	0 NOON	526 PM
PHF			0.94

WESTBOUND

PM	NOON	AM	
4	0	0	0
218	0	0	1
19	0	0	1
0	0	0	0
224	0	0	⇨
PM	NOON	AM	

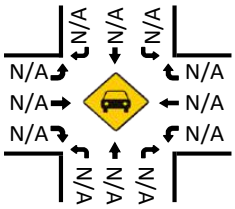
Pope St (EASTBOUND) / **Pope St** (WESTBOUND)

			0	0	1	0
PM	37	0	13	0	22	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

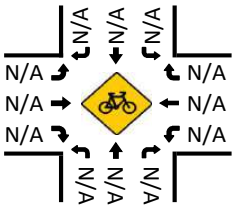
NORTHBOUND

Paseo Grand Dr/College Ave

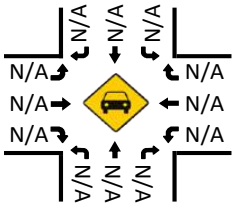
Total Vehicles (AM)



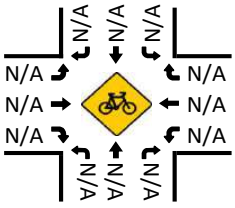
Bikes (AM)



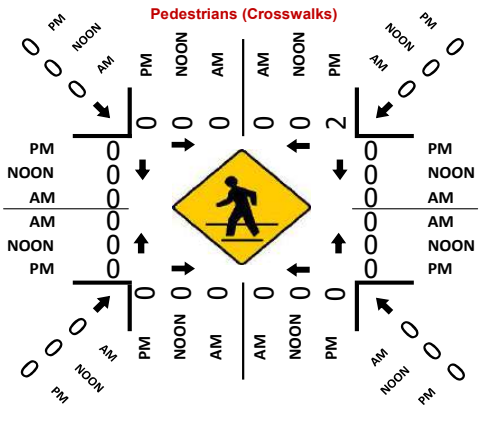
Total Vehicles (Noon)



Bikes (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
2
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Control: 1-Way Stop (EB)

Project ID: 18-08162-012
Date: 2018-04-14

Total

NS/EW Streets:	Silverado Trail				Silverado Trail				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	21	141	0	0	0	78	26	0	11	0	22	0	0	0	0	0	299
2:15 PM	27	137	0	0	0	93	24	0	21	0	25	0	0	0	0	0	327
2:30 PM	31	144	0	0	0	77	28	0	34	0	33	0	0	0	0	0	347
2:45 PM	26	118	0	0	0	103	29	0	23	0	28	0	0	0	0	0	327
3:00 PM	40	90	0	0	0	100	34	0	27	0	23	0	0	0	0	0	314
3:15 PM	24	119	0	0	0	97	34	0	26	0	30	0	0	0	0	0	330
3:30 PM	27	107	0	1	0	114	25	0	21	0	27	0	0	0	0	0	322
3:45 PM	26	120	0	0	0	116	27	0	20	0	19	0	0	0	0	0	328
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	222	976	0	1	0	778	227	0	183	0	207	0	0	0	0	0	2594
APPROACH %'s :	18.52%	81.40%	0.00%	0.08%	0.00%	77.41%	22.59%	0.00%	46.92%	0.00%	53.08%	0.00%					
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	121	471	0	0	0	377	125	0	110	0	114	0	0	0	0	0	1318
PEAK HR FACTOR :	0.756	0.818	0.000	0.000	0.000	0.915	0.919	0.000	0.809	0.000	0.864	0.000	0.000	0.000	0.000	0.000	0.950
	0.846				0.937				0.836								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Control: 1-Way Stop (EB)

Project ID: 18-08162-012
Date: 2018-04-14

Bikes

NS/EW Streets:	Silverado Trail				Silverado Trail				Pope St				Pope St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4
2:15 PM	3	15	0	0	0	2	2	0	0	0	0	0	0	0	0	0	22
2:30 PM	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	4
2:45 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
3:00 PM	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6
3:15 PM	0	3	0	0	0	0	0	0	7	0	3	0	0	0	0	0	13
3:30 PM	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	6
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	22	0	0	0	6	6	0	7	0	9	0	0	0	0	0	59
APPROACH %'s :	29.03%	70.97%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	43.75%	0.00%	56.25%	0.00%					
PEAK HR :	02:30 PM - 03:30 PM																TOTAL
PEAK HR VOL :	4	4	0	0	0	3	1	0	7	0	7	0	0	0	0	0	26
PEAK HR FACTOR :	0.25	0.333	0.000	0.000	0.000	0.375	0.250	0.000	0.250	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.500
	0.500				0.500				0.350								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Pope St
City: St Helena
Project ID: 18-08162-012
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Silverado Trail		Silverado Trail		Pope St		Pope St		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	1	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	1	0	0	0	0	1
APPROACH %'s :			0.00%	100.00%					
PEAK HR :	02:30 PM - 03:30 PM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :				0.250					0.250
			0.250						

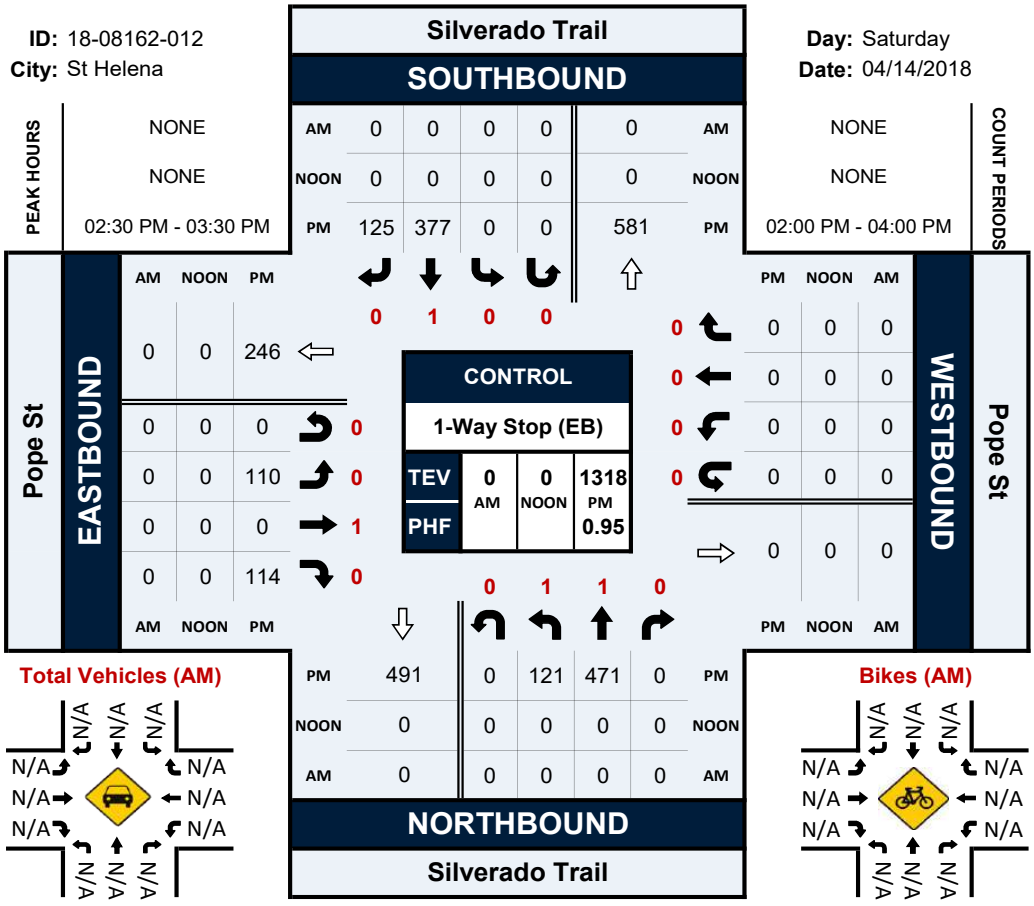
Prepared by National Data & Surveying Services

Silverado Trail & Pope St

Peak Hour Turning Movement Count

ID: 18-08162-012
City: St Helena

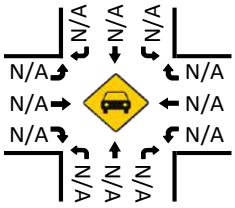
Day: Saturday
Date: 04/14/2018



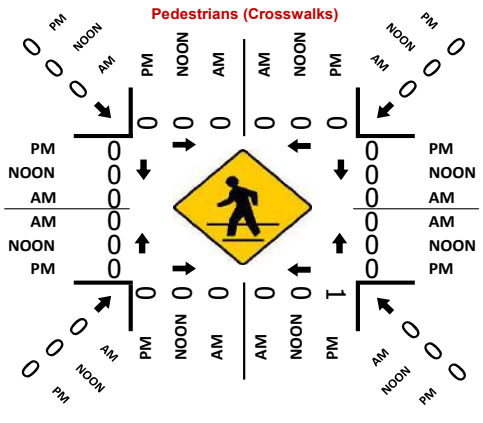
Total Vehicles (AM)

Bikes (AM)

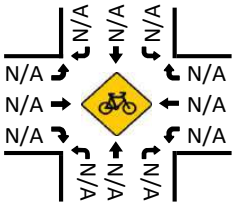
Total Vehicles (Noon)



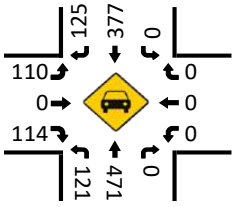
Pedestrians (Crosswalks)



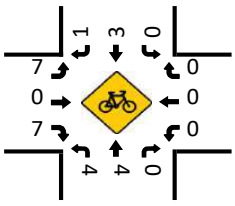
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-013
Date: 2018-04-14

Total

NS/EW Streets:	Silverado Trail				Silverado Trail				Howell Mountain Rd				Howell Mountain Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	148	7	0	1	104	0	0	0	0	0	0	5	0	1	0	266
2:15 PM	0	145	5	0	0	106	0	0	0	0	0	0	8	0	3	0	267
2:30 PM	0	168	13	1	2	92	0	0	0	0	0	0	6	0	5	0	287
2:45 PM	0	135	4	0	2	121	0	0	0	0	0	0	8	0	6	0	276
3:00 PM	0	114	6	0	2	134	0	0	0	0	0	0	4	0	1	0	261
3:15 PM	0	128	6	0	2	121	0	0	0	0	0	0	7	0	6	0	270
3:30 PM	0	125	9	0	2	129	0	0	0	0	0	0	13	0	6	0	284
3:45 PM	0	140	2	0	2	136	0	0	0	0	0	0	4	0	2	0	286
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1103	52	1	13	943	0	0	0	0	0	0	55	0	30	0	2197
APPROACH %'s :	0.00%	95.42%	4.50%	0.09%	1.36%	98.64%	0.00%	0.00%					64.71%	0.00%	35.29%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	507	23	0	8	520	0	0	0	0	0	0	28	0	15	0	1101
PEAK HR FACTOR :	0.000	0.905	0.639	0.000	1.000	0.956	0.000	0.000	0.000	0.000	0.000	0.000	0.538	0.000	0.625	0.000	0.962
		0.933				0.957								0.566			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd
City: St Helena
Control: 1-Way Stop (WB)

Project ID: 18-08162-013
Date: 2018-04-14

Bikes

NS/EW Streets:	Silverado Trail				Silverado Trail				Howell Mountain Rd				Howell Mountain Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	1	14	0	0	3	0	0	0	0	0	0	1	0	0	0	19
2:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	4
3:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	12	17	0	0	9	0	0	0	0	0	0	2	0	1	0	41
APPROACH %'s :	0.00%	41.38%	58.62%	0.00%	0.00%	100.00%	0.00%	0.00%					66.67%	0.00%	33.33%	0.00%	
PEAK HR :	03:00 PM - 04:00 PM																TOTAL
PEAK HR VOL :	0	9	2	0	0	3	0	0	0	0	0	0	1	0	1	0	16
PEAK HR FACTOR :	0.00	0.281	0.250	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.400
		0.275				0.750								0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Silverado Trail & Howell Mountain Rd
City: St Helena
Project ID: 18-08162-013
Date: 2018-04-14

Pedestrians (Crosswalks)

NS/EW Streets:	Silverado Trail		Silverado Trail		Howell Mountain Rd		Howell Mountain Rd		
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
2:00 PM	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	1
3:30 PM	0	1	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	2
APPROACH %'s :	0.00%	100.00%			0.00%	100.00%			
PEAK HR :	03:00 PM - 04:00 PM								TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :		0.250				0.250			0.500
		0.250				0.250			

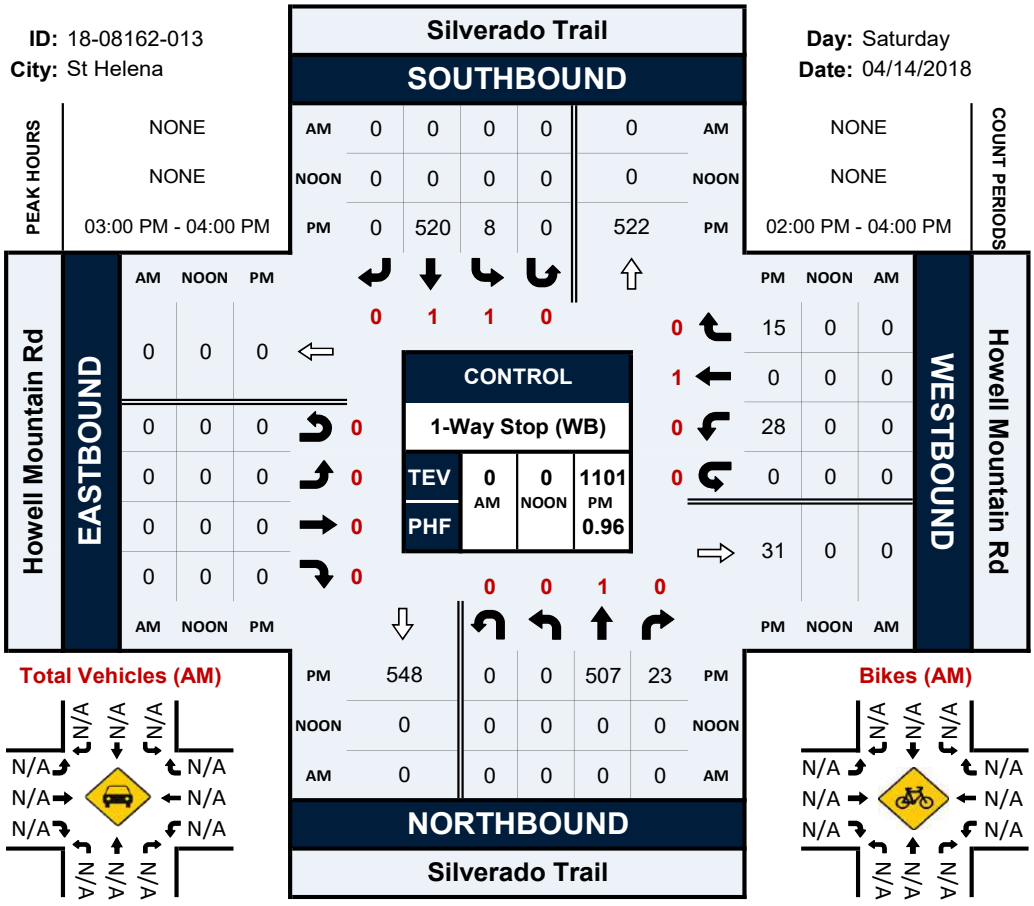
Prepared by National Data & Surveying Services

Silverado Trail & Howell Mountain Rd

Peak Hour Turning Movement Count

ID: 18-08162-013
City: St Helena

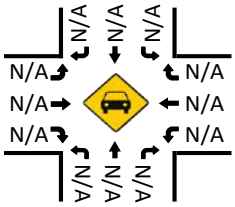
Day: Saturday
Date: 04/14/2018



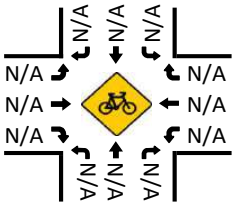
Total Vehicles (AM)

Bikes (AM)

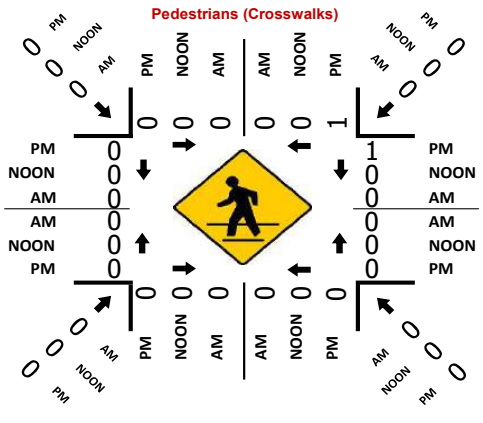
Total Vehicles (Noon)



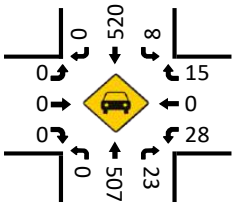
Bikes (NOON)



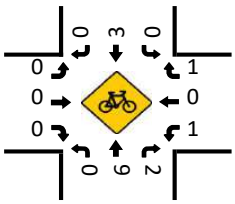
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



Prepared by NDS/ATD

VOLUME

Adams St Bet. Library Ln & Railroad Ave

Day: Saturday
Date: 4/14/2018

City: St Helena
Project #: CA18_8163_001

DAILY TOTALS	NB	SB	EB	WB	Total
	375	446	0	0	821

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0				0		12:00	4		7				11	
00:15	0		0				0		12:15	7		6				13	
00:30	1		0				1		12:30	8		6				14	
00:45	0	1	1	1			1	2	12:45	11	30	7	26			18	56
01:00	0		0				0		13:00	9		8				17	
01:15	0		0				0		13:15	8		7				15	
01:30	0		0				0		13:30	4		5				9	
01:45	0		0				0		13:45	13	34	9	29			22	63
02:00	1		0				1		14:00	15		10				25	
02:15	0		1				1		14:15	14		12				26	
02:30	0		0				0		14:30	16		19				35	
02:45	0	1	0	1			0	2	14:45	9	54	14	55			23	109
03:00	1		1				2		15:00	14		10				24	
03:15	1		1				2		15:15	9		12				21	
03:30	1		0				1		15:30	10		10				20	
03:45	0	3	1	3			1	6	15:45	9	42	14	46			23	88
04:00	0		1				1		16:00	12		9				21	
04:15	0		0				0		16:15	9		13				22	
04:30	0		0				0		16:30	8		17				25	
04:45	0		0	1			0	1	16:45	6	35	7	46			13	81
05:00	0		0				0		17:00	8		10				18	
05:15	0		0				0		17:15	10		13				23	
05:30	0		0				0		17:30	5		6				11	
05:45	0		0				0		17:45	4	27	10	39			14	66
06:00	1		1				2		18:00	6		9				15	
06:15	0		0				0		18:15	3		4				7	
06:30	2		2				4		18:30	3		2				5	
06:45	1	4	1	4			2	8	18:45	1	13	6	21			7	34
07:00	1		2				3		19:00	3		7				10	
07:15	1		2				3		19:15	4		5				9	
07:30	3		2				5		19:30	3		3				6	
07:45	3	8	3	9			6	17	19:45	3	13	4	19			7	32
08:00	2		4				6		20:00	4		7				11	
08:15	3		4				7		20:15	3		3				6	
08:30	1		3				4		20:30	1		3				4	
08:45	6	12	6	17			12	29	20:45	0	8	0	13			0	21
09:00	5		4				9		21:00	0		0				0	
09:15	9		9				18		21:15	2		6				8	
09:30	4		11				15		21:30	1		1				2	
09:45	4	22	3	27			7	49	21:45	1	4	1	8			2	12
10:00	3		5				8		22:00	0		0				0	
10:15	17		19				36		22:15	0		2				2	
10:30	10		9				19		22:30	1		1				2	
10:45	4	34	4	37			8	71	22:45	2	3	1	4			3	7
11:00	1		7				8		23:00	1		2				3	
11:15	9		8				17		23:15	0		1				1	
11:30	9		15				24		23:30	0		1				1	
11:45	6	25	6	36			12	61	23:45	1	2	0	4			1	6
TOTALS		110		136				246	TOTALS		265		310				575
SPLIT %		44.7%		55.3%				30.0%	SPLIT %		46.1%		53.9%				70.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	375	446	0	0	821

AM Peak Hour	09:45	10:15					10:00		PM Peak Hour	13:45	14:00					14:00		
AM Pk Volume	34	39					71		PM Pk Volume	58	55					109		
Pk Hr Factor	0.500	0.513					0.493		Pk Hr Factor	0.906	0.724					0.779		
7 - 9 Volume	20	26	0	0			46		4 - 6 Volume	62	85	0	0			147		
7 - 9 Peak Hour	08:00	08:00					08:00		4 - 6 Peak Hour	16:00	16:15					16:00		
7 - 9 Pk Volume	12	17	0	0			29		4 - 6 Pk Volume	35	47	0	0			81		
Pk Hr Factor	0.500	0.708	0.000	0.000			0.604		Pk Hr Factor	0.729	0.691	0.000	0.000			0.810		

Prepared by NDS/ATD

VOLUME

Adams St Bet. Library Ln & Railroad Ave

Day: Tuesday
Date: 4/17/2018

City: St Helena
Project #: CA18_8163_001

DAILY TOTALS	NB	SB	EB	WB	Total
	1,181	1,237	0	0	2,418

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0				0		12:00	20		37				57	
00:15	0		0				0		12:15	20		21				41	
00:30	0		0				0		12:30	16		28				44	
00:45	0		1	1			1	1	12:45	30	86	22	108			52	194
01:00	0		0				0		13:00	34		19				53	
01:15	0		0				0		13:15	25		23				48	
01:30	0		0				0		13:30	24		18				42	
01:45	0		0				0		13:45	18	101	29	89			47	190
02:00	0		0				0		14:00	24		21				45	
02:15	0		0				0		14:15	30		28				58	
02:30	0		0				0		14:30	19		16				35	
02:45	1	1	1	1			2	2	14:45	26	99	26	91			52	190
03:00	0		0				0		15:00	18		26				44	
03:15	0		0				0		15:15	20		36				56	
03:30	2		4				6		15:30	28		29				57	
03:45	1	3	1	5			2	8	15:45	32	98	35	126			67	224
04:00	0		0				0		16:00	34		36				70	
04:15	0		1				1		16:15	31		27				58	
04:30	0		0				0		16:30	28		33				61	
04:45	0		0	1			0	1	16:45	36	129	45	141			81	270
05:00	1		0				1		17:00	30		59				89	
05:15	2		2				4		17:15	13		43				56	
05:30	1		0				1		17:30	12		36				48	
05:45	0	4	2	4			2	8	17:45	11	66	16	154			27	220
06:00	1		1				2		18:00	13		32				45	
06:15	1		2				3		18:15	6		29				35	
06:30	3		1				4		18:30	4		16				20	
06:45	7	12	1	5			8	17	18:45	6	29	15	92			21	121
07:00	8		1				9		19:00	8		17				25	
07:15	16		4				20		19:15	3		7				10	
07:30	26		8				34		19:30	4		3				7	
07:45	48	98	11	24			59	122	19:45	7	22	8	35			15	57
08:00	26		11				37		20:00	3		6				9	
08:15	40		8				48		20:15	6		5				11	
08:30	36		16				52		20:30	1		5				6	
08:45	42	144	16	51			58	195	20:45	0	10	1	17			1	27
09:00	33		16				49		21:00	1		4				5	
09:15	15		14				29		21:15	1		5				6	
09:30	18		16				34		21:30	0		1				1	
09:45	21	87	25	71			46	158	21:45	1	3	4	14			5	17
10:00	26		22				48		22:00	0		1				1	
10:15	25		19				44		22:15	1		3				4	
10:30	21		16				37		22:30	0		1				1	
10:45	25	97	33	90			58	187	22:45	1	2	0	5			1	7
11:00	21		24				45		23:00	0		1				1	
11:15	26		32				58		23:15	1		1				2	
11:30	22		31				53		23:30	1		1				2	
11:45	19	88	22	109			41	197	23:45	0	2	0	3			0	5
TOTALS		534		362				896	TOTALS		647		875				1522
SPLIT %		59.6%		40.4%				37.1%	SPLIT %		42.5%		57.5%				62.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,181	1,237	0	0	2,418

AM Peak Hour	08:15	11:15				10:45	PM Peak Hour	16:00	16:45				16:15
AM Pk Volume	151	122				214	PM Pk Volume	129	183				289
Pk Hr Factor	0.899	0.824				0.922	Pk Hr Factor	0.896	0.775				0.812
7 - 9 Volume	242	75	0	0		317	4 - 6 Volume	195	295	0	0		490
7 - 9 Peak Hour	07:45	08:00				07:45	4 - 6 Peak Hour	16:00	16:45				16:15
7 - 9 Pk Volume	150	51	0	0		196	4 - 6 Pk Volume	129	183	0	0		289
Pk Hr Factor	0.781	0.797	0.000	0.000		0.831	Pk Hr Factor	0.896	0.775	0.000	0.000		0.812

Prepared by NDS/ATD

VOLUME

Hunt Ave S/O Starr Ave

Day: Saturday
Date: 4/21/2018

City: St Helena
Project #: CA18_8163_002

DAILY TOTALS	NB	SB	EB	WB	Total
	663	564	0	0	1,227

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	5		0						5	
00:30	1		1						2	
00:45	1	7	1	2					2	9
01:00	0		1						1	
01:15	2		1						3	
01:30	0		2						2	
01:45	1	3	1	5					2	8
02:00	0		1						1	
02:15	0		0						0	
02:30	1		0						1	
02:45	0	1	0	1					0	2
03:00	1		1						2	
03:15	0		0						0	
03:30	1		0						1	
03:45	0	2	1	2					1	4
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	1		0						1	
05:15	1		2						3	
05:30	2		1						3	
05:45	1	5	4	7					5	12
06:00	0		2						2	
06:15	1		4						5	
06:30	1		4						5	
06:45	5	7	8	18					13	25
07:00	5		2						7	
07:15	5		2						7	
07:30	3		5						8	
07:45	1	14	3	12					4	26
08:00	2		5						7	
08:15	3		4						7	
08:30	11		13						24	
08:45	9	25	8	30					17	55
09:00	9		9						18	
09:15	12		11						23	
09:30	8		6						14	
09:45	9	38	12	38					21	76
10:00	7		14						21	
10:15	9		8						17	
10:30	6		7						13	
10:45	13	35	10	39					23	74
11:00	12		8						20	
11:15	7		11						18	
11:30	10		13						23	
11:45	14	43	6	38					20	81
TOTALS		180		192						372
SPLIT %		48.4%		51.6%						30.3%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	18		15						33	
12:15	13		10						23	
12:30	12		18						30	
12:45	10	53	16	59					26	112
13:00	14		12						26	
13:15	14		14						28	
13:30	16		9						25	
13:45	14	58	12	47					26	105
14:00	8		12						20	
14:15	12		9						21	
14:30	17		10						27	
14:45	10	47	14	45					24	92
15:00	9		11						20	
15:15	17		15						32	
15:30	15		7						22	
15:45	14	55	8	41					22	96
16:00	19		9						28	
16:15	10		13						23	
16:30	17		7						24	
16:45	19	65	11	40					30	105
17:00	14		12						26	
17:15	20		8						28	
17:30	8		9						17	
17:45	14	56	6	35					20	91
18:00	13		6						19	
18:15	7		10						17	
18:30	7		3						10	
18:45	6	33	6	25					12	58
19:00	12		7						19	
19:15	7		2						9	
19:30	4		8						12	
19:45	6	29	6	23					12	52
20:00	10		4						14	
20:15	6		4						10	
20:30	9		6						15	
20:45	6	31	4	18					10	49
21:00	12		2						14	
21:15	5		2						7	
21:30	4		1						5	
21:45	7	28	6	11					13	39
22:00	4		6						10	
22:15	5		3						8	
22:30	3		3						6	
22:45	5	17	5	17					10	34
23:00	4		2						6	
23:15	3		2						5	
23:30	0		6						6	
23:45	4	11	1	11					5	22
TOTALS		483		372						855
SPLIT %		56.5%		43.5%						69.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	663	564	0	0	1,227

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	16:30	12:30			12:00
AM Pk Volume	57	49			106	PM Pk Volume	70	60			112
Pk Hr Factor	0.792	0.681			0.803	Pk Hr Factor	0.875	0.833			0.848
7 - 9 Volume	39	42	0	0	81	4 - 6 Volume	121	75	0	0	196
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:15			16:30
7 - 9 Pk Volume	25	30	0	0	55	4 - 6 Pk Volume	70	43	0	0	108
Pk Hr Factor	0.568	0.577	0.000	0.000	0.573	Pk Hr Factor	0.875	0.827	0.000	0.000	0.900

Prepared by NDS/ATD

VOLUME

Hunt Ave S/O Starr Ave

Day: Tuesday
Date: 4/17/2018

City: St Helena
Project #: CA18_8163_002

DAILY TOTALS	NB	SB	EB	WB	Total
	868	748	0	0	1,616

AM Period	NB		SB		EB		WB		TOTAL	
00:00	1		0						1	
00:15	1		1						2	
00:30	1		1						2	
00:45	0	3	0	2					0	5
01:00	1		0						1	
01:15	1		0						1	
01:30	0		0						0	
01:45	0	2	0						0	2
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	1	1	1	1					2	2
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	1	1	0						1	1
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		3						3	
05:15	1		1						2	
05:30	2		1						3	
05:45	1	4	5	10					6	14
06:00	1		2						3	
06:15	2		4						6	
06:30	2		4						6	
06:45	3	8	0	10					3	18
07:00	2		6						8	
07:15	9		5						14	
07:30	10		9						19	
07:45	11	32	24	44					35	76
08:00	16		28						44	
08:15	29		27						56	
08:30	18		18						36	
08:45	13	76	22	95					35	171
09:00	10		19						29	
09:15	7		8						15	
09:30	15		13						28	
09:45	14	46	15	55					29	101
10:00	10		23						33	
10:15	13		7						20	
10:30	9		10						19	
10:45	12	44	10	50					22	94
11:00	14		13						27	
11:15	7		7						14	
11:30	17		14						31	
11:45	13	51	13	47					26	98
TOTALS		268		314						582
SPLIT %		46.0%		54.0%						36.0%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	12		17						29	
12:15	15		15						30	
12:30	13		7						20	
12:45	17	57	8	47					25	104
13:00	14		11						25	
13:15	13		11						24	
13:30	14		13						27	
13:45	14	55	16	51					30	106
14:00	18		6						24	
14:15	15		18						33	
14:30	12		8						20	
14:45	15	60	13	45					28	105
15:00	30		21						51	
15:15	24		20						44	
15:30	23		19						42	
15:45	24	101	12	72					36	173
16:00	26		16						42	
16:15	22		23						45	
16:30	21		17						38	
16:45	20	89	16	72					36	161
17:00	23		16						39	
17:15	24		25						49	
17:30	28		13						41	
17:45	15	90	6	60					21	150
18:00	13		9						22	
18:15	17		11						28	
18:30	9		10						19	
18:45	8	47	5	35					13	82
19:00	13		4						17	
19:15	10		10						20	
19:30	14		4						18	
19:45	8	45	6	24					14	69
20:00	5		7						12	
20:15	8		5						13	
20:30	9		4						13	
20:45	4	26	1	17					5	43
21:00	5		2						7	
21:15	3		1						4	
21:30	4		2						6	
21:45	1	13	1	6					2	19
22:00	5		1						6	
22:15	1		1						2	
22:30	5		0						5	
22:45	2	13	0	2					2	15
23:00	2		2						4	
23:15	2		0						2	
23:30	0		0						0	
23:45	0	4	1	3					1	7
TOTALS		600		434						1034
SPLIT %		58.0%		42.0%						64.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	868	748	0	0	1,616

AM Peak Hour	08:00	07:45				07:45	PM Peak Hour	15:00	16:30				15:00
AM Pk Volume	76	97				171	PM Pk Volume	101	74				173
Pk Hr Factor	0.655	0.866				0.763	Pk Hr Factor	0.842	0.740				0.848
7 - 9 Volume	108	139	0	0		247	4 - 6 Volume	179	132	0	0		311
7 - 9 Peak Hour	08:00	07:45				07:45	4 - 6 Peak Hour	16:45	16:30				16:45
7 - 9 Pk Volume	76	97	0	0		171	4 - 6 Pk Volume	95	74	0	0		165
Pk Hr Factor	0.655	0.866	0.000	0.000		0.763	Pk Hr Factor	0.848	0.740	0.000	0.000		0.842

Prepared by NDS/ATD

VOLUME

Starr Ave E/O Hunt Ave

Day: Saturday
Date: 4/14/2018

City: St Helena
Project #: CA18_8163_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	665	537	1,202

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			2		4		6		12:00			14		14		28	
00:15			4		1		5		12:15			11		10		21	
00:30			4		2		6		12:30			13		8		21	
00:45			1	11	2	9	3	20	12:45			8	46	12	44	20	90
01:00			1		1		2		13:00			18		13		31	
01:15			0		0		0		13:15			11		7		18	
01:30			0		1		1		13:30			7		8		15	
01:45			1	2	0	2	1	4	13:45			14	50	9	37	23	87
02:00			0		0		0		14:00			9		10		19	
02:15			0		0		0		14:15			19		6		25	
02:30			0		0		0		14:30			8		12		20	
02:45			1	1	0		1	1	14:45			17	53	15	43	32	96
03:00			0		0		0		15:00			10		15		25	
03:15			1		0		1		15:15			14		14		28	
03:30			1		1		2		15:30			14		15		29	
03:45			0	2	1	2	1	4	15:45			15	53	10	54	25	107
04:00			1		0		1		16:00			11		12		23	
04:15			0		0		0		16:15			18		18		36	
04:30			1		0		1		16:30			15		12		27	
04:45			0	2	0		0	2	16:45			12	56	14	56	26	112
05:00			0		0		0		17:00			13		9		22	
05:15			1		0		1		17:15			8		9		17	
05:30			2		0		2		17:30			17		9		26	
05:45			2	5	2	2	4	7	17:45			11	49	10	37	21	86
06:00			0		2		2		18:00			13		7		20	
06:15			1		2		3		18:15			19		7		26	
06:30			4		2		6		18:30			8		6		14	
06:45			2	7	2	8	4	15	18:45			6	46	7	27	13	73
07:00			4		2		6		19:00			12		12		24	
07:15			7		5		12		19:15			5		9		14	
07:30			7		4		11		19:30			5		5		10	
07:45			2	20	2	13	4	33	19:45			9	31	7	33	16	64
08:00			6		4		10		20:00			5		7		12	
08:15			4		4		8		20:15			7		1		8	
08:30			11		3		14		20:30			3		1		4	
08:45			9	30	6	17	15	47	20:45			7	22	5	14	12	36
09:00			4		4		8		21:00			6		7		13	
09:15			3		9		12		21:15			7		0		7	
09:30			7		11		18		21:30			6		6		12	
09:45			11	25	5	29	16	54	21:45			9	28	3	16	12	44
10:00			10		9		19		22:00			3		1		4	
10:15			5		9		14		22:15			3		2		5	
10:30			13		8		21		22:30			4		4		8	
10:45			15	43	10	36	25	79	22:45			2	12	1	8	3	20
11:00			18		9		27		23:00			2		1		3	
11:15			12		13		25		23:15			3		1		4	
11:30			13		11		24		23:30			1		1		2	
11:45			20	63	13	46	33	109	23:45			2	8	1	4	3	12
TOTALS				211		164		375	TOTALS				454		373		827
SPLIT %				56.3%		43.7%		31.2%	SPLIT %				54.9%		45.1%		68.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	665	537	1,202

AM Peak Hour			11:00	11:15	11:15	PM Peak Hour			17:30	14:45	14:45
AM Pk Volume			63	51	110	PM Pk Volume			60	59	114
Pk Hr Factor			0.788	0.911	0.833	Pk Hr Factor			0.789	0.983	0.891
7 - 9 Volume	0	0	50	30	80	4 - 6 Volume	0	0	105	93	198
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	30	17	47	4 - 6 Pk Volume	0	0	58	56	112
Pk Hr Factor	0.000	0.000	0.682	0.708	0.783	Pk Hr Factor	0.000	0.000	0.806	0.778	0.778

Prepared by NDS/ATD

VOLUME

Starr Ave E/O Hunt Ave

Day: Tuesday
Date: 4/17/2018

City: St Helena
Project #: CA18_8163_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	879	721	1,600

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			2	0	2	12:00			9	16	25
00:15			1	2	3	12:15			14	13	27
00:30			0	0	0	12:30			12	7	19
00:45			0	3	0	2	0	5	12:45			18	53	6	42	24	95
01:00			1	0	1	13:00			14	11	25
01:15			1	0	1	13:15			15	11	26
01:30			0	0	0	13:30			17	13	30
01:45			0	2	0	0	2	13:45			12	58	12	47	24	105
02:00			0	0	0	14:00			18	7	25
02:15			0	0	0	14:15			16	14	30
02:30			0	0	0	14:30			15	8	23
02:45			3	3	0	3	3	14:45			15	64	10	39	25	103
03:00			0	0	0	15:00			28	20	48
03:15			0	0	0	15:15			25	19	44
03:30			0	0	0	15:30			23	20	43
03:45			1	1	0	1	1	15:45			23	99	10	69	33	168
04:00			0	0	0	16:00			27	19	46
04:15			0	0	0	16:15			23	18	41
04:30			0	0	0	16:30			20	15	35
04:45			0	0	0	16:45			20	90	14	66	34	156
05:00			0	0	0	17:00			19	16	35
05:15			2	1	3	17:15			24	23	47
05:30			2	1	3	17:30			31	10	41
05:45			4	8	1	3	5	11	17:45			15	89	7	56	22	145
06:00			1	2	3	18:00			12	9	21
06:15			4	1	5	18:15			19	9	28
06:30			3	2	5	18:30			7	9	16
06:45			4	12	0	5	4	17	18:45			9	47	7	34	16	81
07:00			3	5	8	19:00			13	6	19
07:15			8	3	11	19:15			6	10	16
07:30			9	4	13	19:30			16	4	20
07:45			12	32	17	29	29	61	19:45			6	41	8	28	14	69
08:00			20	21	41	20:00			7	9	16
08:15			27	23	50	20:15			7	4	11
08:30			18	18	36	20:30			6	5	11
08:45			17	82	27	89	44	171	20:45			4	24	2	20	6	44
09:00			9	21	30	21:00			5	4	9
09:15			7	8	15	21:15			2	3	5
09:30			17	16	33	21:30			2	0	2
09:45			15	48	19	64	34	112	21:45			1	10	0	7	1	17
10:00			10	24	34	22:00			2	1	3
10:15			12	10	22	22:15			1	1	2
10:30			13	11	24	22:30			5	2	7
10:45			12	47	12	57	24	104	22:45			0	8	0	4	0	12
11:00			15	15	30	23:00			1	2	3
11:15			8	11	19	23:15			0	0	0
11:30			20	15	35	23:30			1	0	1
11:45			13	56	17	58	30	114	23:45			0	2	0	2	0	4
TOTALS				294	307	601	TOTALS				585	414	999
SPLIT %				48.9%	51.1%	37.6%	SPLIT %				58.6%	41.4%	62.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	879	721	1,600

AM Peak Hour			08:00	08:00	08:00	PM Peak Hour			15:00	14:45	15:00
AM Pk Volume			82	89	171	PM Pk Volume			99	69	168
Pk Hr Factor			0.759	0.824	0.855	Pk Hr Factor			0.884	0.863	0.875
7 - 9 Volume	0	0	114	118	232	4 - 6 Volume	0	0	179	122	301
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:45	16:30	16:45
7 - 9 Pk Volume	0	0	82	89	171	4 - 6 Pk Volume	0	0	94	68	157
Pk Hr Factor	0.000	0.000	0.759	0.824	0.855	Pk Hr Factor	0.000	0.000	0.758	0.739	0.835

* Read Before Using Any Census/TSN Count Data *

Notes regarding this data:
These counts are Raw Data Only. All material is the direct product of field studies and machine processing. Mechanical errors may not have been corrected. This raw data is not to be considered the results of a professional Traffic Engineer's evaluation of validity or reliability. It is the user's responsibility to determine the accuracy and usability of the data prior to using or release to others.

Location Description Codes:
Traffic Volumes Data users must understand the codes used to describe count location in order to correctly identify the location of the count they are using.

Traffic Volumes Count Location
Description Definitions

Note: Description of a location is not the exact point where counted. The count location is specified by the "Leg" code.

Leg: Indicates the approximate location on a ramp or on a state highway relative to an I/C or I/S.

N - On-ramp count location.

F – Off-ramp count location

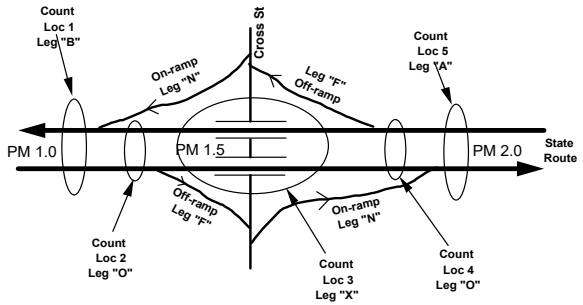
A - Ahead of you when facing the increasing postmile direction. Count location usually
* North or East of all ramps of either direction of that interchange or intersection. See Loc 5

B - Behind you when facing the increasing postmile direction. Count location usually
* South or West of all ramps of either direction of that interchange or intersection. See Loc 1

O - Count location that is inside of the interchange ramps either direction. See Loc 2 and Loc 4

X - Count location in the middle of the interchange. See Loc 3

***Note: Normally PM increase S to N and W to E. Some Routes such as Rte 580 and 780 don't.**



Traffic Volumes Counts

Dist	Cnty	Rte	Pre	PM	Leg	Dir	Description	Date	Day	24 hour Period Hourly Counts 0-1	1-2	2-3	3-4
4	SCL	101		0.028	O	N	SAN BENITO/SANTA CLARA COU	5/25/2000	WED	130 A	120 A	106 A	201 A
4	SCL	101		0.028	O	N	SAN BENITO/SANTA CLARA COU	5/24/2000	TUE	154 A	94 A	139 A	178 A
4	SCL	101		0.028	O	N	SAN BENITO/SANTA CLARA COU	5/23/2000	MON	195 A	120 A	132 C	200 C

Data type code:
"A" = Actual collected data
"C" = Calculated or Estimated values

Traffic Volumes Counts

Dist	Cnty	Rte	Prefi	PM	Leg	Dir	Description	Date	Day	24 hour Period Hourly Counts																								24hr total
										0-1		1-2		2-3		3-4		4-5		5-6		6-7		7-8		8-9		9-10		10-11		11-12		12-13		13-14		14-15		15-16		16-17		17-18		18-19		19-20		20-21		21-22		22-23		23-24	
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/01/2011	TUE																					399	A	437	A	408	A	429	A	460	A	494	A	462	A	283	A	193	A	144	A	88	A	48	A	26	A	3,871
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/02/2011	WED	21	A	10	A	8	A	14	A	52	A	134	A	298	A	468	A	462	A	331	A	371	A	387	A	431	A	424	A	383	A	462	A	524	A	459	A	320	A	202	A	122	A	114	A	56	A	30	A	6,083
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/03/2011	THU	24	A	21	A	8	A	23	A	42	A	121	A	279	A	456	A	465	A	382	A	386	A	441	A	439	A	428	A	443	A	477	A	487	A	512	A	331	A	178	A	150	A	185	A	76	A	43	A	6,397
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/04/2011	FRI	21	A	20	A	14	A	18	A	42	A	109	A	268	A	436	A	457	A	363	A	384	A	445	A	440	A	461	A	484	A	482	A	507	A	442	A	391	A	217	A	135	A	131	A	114	A	59	A	6,440
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/05/2011	SAT	33	A	22	A	22	A	19	A	18	A	50	A	120	A	190	A	245	A	378	A	356	A	410	A	457	A	495	A	500	A	543	A	517	A	543	A	362	A	251	A	220	A	159	A	138	A	83	A	6,131
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/06/2011	SUN	49	A	41	A	27	A	24	A	22	A	35	A	64	A	131	A	178	A	312	A	315	A	390	A	448	A	450	A	413	A	401	A	368	A	304	A	235	A	255	A	183	A	136	A	61	A	48	A	4,890
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/07/2011	MON	20	A	17	A	13	A	26	A	40	A	131	A	298	A	441	A	481	A	394	A	403	A	437	A	441	A	366	A	441	A	467	A	458	A	429	A	280	A	174	A	140	A	77	A	54	A	26	A	6,054
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/08/2011	TUE	20	A	13	A	9	A	24	A	43	A	136	A	300	A	431	A	482	A	387	A	356	A	420	A	408	A	441	A	466	A	456	A	512	A	508	A	266	A	154	A	136	A	112	A	48	A	39	A	6,167
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	02/09/2011	WED	24	A	14	A	12	A	19	A	49	A	117	A	319	A	424	A	476	A	362	A	361	A	387	C	431	C	424	C	383	C	462	C	524	C	459	C	320	C	202	C	122	C	114	C	56	C	30	C	6,091
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/03/2011	TUE																											443	A	472	A	476	A	483	A	489	A	335	A	252	A	173	A	141	A	68	A	41	A	3,373
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/04/2011	WED	16	A	15	A	11	A	22	A	51	A	184	A	310	A	499	A	491	A	426	A	401	A	428	A	457	A	486	A	469	A	472	A	488	A	503	A	350	A	243	A	201	A	126	A	81	A	44	A	6,774
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/05/2011	THU	32	A	12	A	18	A	30	A	49	A	187	A	319	A	472	A	473	A	454	A	441	A	462	A	455	A	486	A	478	A	457	A	517	A	513	A	306	A	232	A	206	A	147	A	110	A	57	A	6,913
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/06/2011	FRI	32	A	14	A	20	A	23	A	53	A	202	A	289	A	454	A	446	A	456	A	423	A	445	A	443	A	468	A	481	A	429	A	474	A	461	A	350	A	262	A	220	A	200	A	156	A	86	A	6,887
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/07/2011	SAT	53	A	37	A	16	A	18	A	35	A	114	A	122	A	192	A	305	A	391	A	410	A	419	A	515	A	491	A	499	A	479	A	474	A	510	A	441	A	325	A	227	A	229	A	162	A	96	A	6,560
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/08/2011	SUN	74	A	45	A	22	A	19	A	29	A	43	A	66	A	175	A	236	A	347	A	431	A	486	A	442	A	537	A	508	A	561	A	543	A	493	A	395	A	305	A	227	A	154	A	95	A	42	A	6,275
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/09/2011	MON	25	A	18	A	13	A	23	A	63	A	213	A	317	A	464	A	467	A	429	A	408	A	447	A	460	A	471	A	465	A	485	A	494	A	477	A	296	A	224	A	166	A	104	A	77	A	37	A	6,643
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/10/2011	TUE	27	A	9	A	15	A	24	A	54	A	191	A	308	A	472	A	512	A	465	A	399	A	475	A	470	A	440	A	462	A	497	A	466	A	459	A	334	A	242	A	187	A	162	A	76	A	30	A	6,776
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/11/2011	WED	26	A	16	A	16	A	27	A	44	A	238	A	307	A	456	A	511	A	407	A	419	A	494	A	481	A	473	A	455	A	494	A	522	A	464	A	360	A	251	A	168	A	148	A	103	A	43	A	6,923
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/12/2011	THU	21	A	17	A	13	A	30	A	54	A	230	A	291	A	483	A	479	A	468	A	429	A	463	A	482	A	483	A	496	A	494	A	514	A	477	A	377	A	250	A	184	A	155	A	127	A	82	A	7,099
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	05/13/2011	FRI	33	A	25	A	12	A	18	A	59	A	256	A	289	A	485	A	461	A	445	A	509	A	461	A	464	A																											3,517
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/05/2011	FRI																					609	A	705	A	724	A	640	A	734	A	634	A	619	A	587	A	423	A	305	A	346	A	344	A	293	A	6,963
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/06/2011	SAT	155	A	74	A	54	A	21	A	18	A	33	A	146	A	162	A	215	A	388	A	463	A	606	A	629	A	644	A	681	A	662	A	702	A	702	A	568	A	482	A	364	A	298	A	277	A	262	A	8,606
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/07/2011	SUN	167	A	87	A	47	A	29	A	13	A	17	A	37	A	77	A	120	A	271	A	381	A	396	A	560	A	651	A	661	A	693	A	562	A	480	A	471	A	385	A	333	A	299	A	216	A	164	A	7,117
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/08/2011	MON	88	A	44	A	29	A	7	A	18	A	45	A	236	A	379	A	414	A	478	A	505	A	526	A	626	A	568	A	610	A	643	A	697	A	785	A	641	A	453	A	330	A	274	A	202	A	156	A	8,754
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/09/2011	TUE	76	A	36	A	15	A	7	A	23	A	47	A	217	A	454	A	454	A	470	A	535	A	589	A	637	A	645	A	655	A	746	A	710	A	758	A	653	A	492	A	296	A	268	A	232	A	144	A	9,159
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/10/2011	WED	103	A	47	A	20	A	13	A	13	A	47	A	280	A	403	A	461	A	490	A	513	A	623	A	598	A	634	A	625	A	659	A	682	A	790	A	668	A	465	A	347	A	288	A	232	A	156	A	9,157
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/11/2011	THU	81	A	47	A	24	A	17	A	26	A	50	A	261	A	368	A	420	A	458	A	565	A	633	A	656	A	602	A	615	A	675	A	757	A	738	A	647	A	471	A	352	A	342	A	275	A	189	A	9,269
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/12/2011	FRI	84	A	50	A	31	A	17	A	21	A	53	A	214	A	361	A	455	A	420	A	510	A	660	A	640	A	647	A	669	A	729	A	782	A	824	A	772	A	540	A	410	A	359	A	321	A	256	A	9,825
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/13/2011	SAT	149	A	74	A	30	A	15	A	17	A	33	A	130	A	172	A	210	A	347	A	472	A	621	A	605	A	671	A	705	A	664	A	715	A	708	A	509	A	448	A	327	A	304	A	279	A	260	A	8,465
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/14/2011	SUN	155	A	101	A	53	A	25	A	16	A	25	A	46	A	74	A	122	A	228	A	342	A	445	A	505	A	573	A	610	A	643	A	654	A	593	A	436	A	368	A	305	A	281	A	228	A	190	A	7,018
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/15/2011	MON	102	A	43	A	24	A	10	A	13	A	41	A	234	A	345	A	446	A	425	A	467	A	606	A	665	A	608	A	648	A	672	A	736	A	688	A	657	A	468	A	303	A	261	A	221	A	142	A	8,825
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	08/16/2011	TUE	70	A	41	A	18	A	10	A	18	A	38	A	245	A	384	A	454	C	470	C	535	C	589	C	637	C	645	C	655	C	746	C	710	C	758	C	653	C	492	C	296	C	268	C	232	C	144	C	9,108
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/01/2011	TUE																					482	A	491	A	510	A	516	A	580	A	679	A	604	A	480	A	286	A	240	A	174	A	114	A	67	A	5,223
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/02/2011	WED	32	A	6	A	12	A	11	A	31	A	93	A	370	A	424	A	520	A	469	A	485	A	500	A	527	A	512	A	507	A	575	A	619	A	626	A	460	A	282	A	236	A	219	A	130	A	67	A	7,713
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/03/2011	THU	47	A	13	A	9	A	9	A	34	A	86	A	373	A	420	A	549	A	490	A	477	A	497	A	531	A	567	A	572	A	578	A	642	A	673	A	500	A	320	A	214	A	226	A	121	A	89	A	8,037
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/04/2011	FRI	40	A	22	A	17	A	18	A	29	A	93	A	368	A	404	A	520	A	536	A	532	A	547	A	598	A	602	A	587	A	625	A	665	A	642	A	484	A	341	A	325	A	252	A	174	A	120	A	8,541
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/05/2011	SAT	60	A	39	A	36	A	24	A	20	A	45	A	164	A	188	A	292	A	424	A	500	A	585	A	623	A	615	A	657	A	600	A	532	A	498	A	414	A	277	A	277	A	238	A	195	A	132	A	7,435
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/06/2011	SUN	61	A	38	A	26	A	19	A	21	A	26	A	82	A	120	A	200	A	314	A	346	A	468	A	519	A	489	A	540	A	404	A	332	A	351	A	235	A	257	A	200	A	151	A	115	A	59	A	5,373
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/07/2011	MON	23	A	15	A	11	A	10	A	33	A	84	A	377	A	425	A	531	A	431	A	453	A	469	A	514	A	550	A	513	A	594	A	611	A	598	A	418	A	283	A	220	A	154	A	105	A	42	A	7,464
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/08/2011	TUE	24	A	16	A	7	A	8	A	26	A	90	A	408	A	438	A	592	A	510	A	483	A	494	A	584	A	570	A	508	A	611	A	636	A	577	A	433	A	300	A	263	A	167	A	110	A	59	A	7,914
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	02/09/2011	WED	31	A	7	A	8	A	11	A	28	A	86	A	428	A	427	A	557	A	526	A	466	A																											2,575
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/03/2011	TUE																											536	A	579	A	624	A	687	A	620	A	467	A	313	A	277	A	256	A	122	A	60	A	4,541
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/04/2011	WED	44	A	13	A	11	A	17	A	39	A	238	A	367	A	479	A	571	A	599	A	561	A	553	A	552	A	564	A	583	A	627	A	642	A	620	A	455	A	389	A	360	A	286	A	168	A	83	A	8,821
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/05/2011	THU	38	A	22	A	16	A	25	A	40	A	225	A	385	A	424	A	621	A	536	A	598	A	558	A	616	A	578	A	621	A	627	A	689	A	605	A	465	A	378	A	334	A	252	A	167	A	87	A	8,907
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/06/2011	FRI	40	A	29	A	17	A	18	A	41	A	196	A	363	A	417	A	543	A	552	A	587	A	602	A	576	A	582	A	627	A	628	A	615	A	546	A	409	A	346	A	348	A	308	A	246	A	175	A	8,811
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/07/2011	SAT	80	A	48	A	24	A	18	A	42	A	208	A	239	A	280	A	412	A	540	A	599	A	626	A	623	A	620	A	651	A	631	A	550	A	538	A	448	A	337	A	319	A	211	A	215	A	165	A	8,424
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/08/2011	SUN	103	A	52	A	30	A	11	A	14	A	53	A	93	A	139	A	243	A	367	A	483	A	518	A	567	A	597	A	584	A	562	A	510	A	451	A	405	A	321	A	301	A	213	A	150	A	85	A	6,852
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/09/2011	MON	29	A	19	A	15	A	8	A	33	A	261	A	368	A	451	A	533	A	488	A	582	A	586	A	583	A	535	A	591	A	650	A	633	A	624	A	426	A	317	A	265	A	173	A	106	A	69	A	8,345
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/10/2011	TUE	35	A	12	A	10	A	11	A	40	A	257	A	341	A	448	A	560	A	540	A	665	A	540	A	515	A	577	A	547	A	599	A	667	A	661	A	461	A	356	A	279	A	280	A	142	A	72	A	8,615
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/11/2011	WED	38	A	14	A	7	A	24	A	50	A	269	A	378	A	472	A	541	A	522	A	556	A	591	A	585	A	587	A	595	A	613	A	634	A	656	A	455	A	351	A	283	A	242	A	144	A	76	A	8,683
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/12/2011	THU	51	A	16	A	10	A	17	A	56	A	258	A	375	A	428	A	583	A	586	A	546	A	605	A	577	A	610	A	591	A	643	A	678	A	678	A	454	A	381	A	291	A	267	A	184	A	92	A	8,977
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	05/13/2011	FRI	36	A	34	A	12	A	18	A	48	A	291	A	345	A	401	A	552	A	609	A	621	A	632	A	621	A																											4,220
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/05/2011	FRI																					601	A	698	A	713	A	632	A	725	A	627	A	607	A	579	A	412	A	298	A	321	A	329	A	233	A	6,775
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/06/2011	SAT	50	A	42	A	19	A	24	A	23	A	101	A	140	A	236	A	310	A	404	A	461	A	519	A	574	A	587	A	559	A	596	A	598	A	572	A	569	A	406	A	346	A	274	A	315	A	255	A	7,980
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/07/2011	SUN	110	A	49	A	26	A	16	A	29	A	44	A	111	A	181	A	286	A	446	A	473	A	571	A	555	A	610	A	617	A	579	A	568	A	621	A	521	A	362	A	282	A	217	A	135	A	64	A	7,473
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/08/2011	MON	40	A	30	A	16	A	26	A	65	A	227	A	319	A	527	A	505	A	530	A	546	A	506	A	536	A	524	A	587	A	539	A	599	A	560	A	434	A	275	A	217	A	142	A	87	A	72	A	7,909
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/09/2011	TUE	32	A	17	A	26	A	21	A	53	A	219	A	346	A	517	A	569	A	527	A	520	A	557	A	560	A	540	A	588	A	614	A	593	A	537	A	448	A	302	A	229	A	169	A	92	A	47	A	8,123
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/10/2011	WED	39	A	22	A	16	A	30	A	50	A	218	A	309	A	536	A	506	A	520	A	509	A	512	A	551	A	588	A	615	A	545	A	539	A	574	A	424	A	302	A	246	A	159	A	96	A	69	A	7,975
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/11/2011	THU	36	A	19	A	11	A	25	A	64	A	213	A	331	A	517	A	482	A	504	A	533	A	556	A	559	A	520	A	501	A	593	A	583	A	539	A	431	A	349	A	263	A	176	A	112	A	76	A	7,993
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/12/2011	FRI	37	A	21	A	22	A	25	A	48	A	203	A	332	A	502	A	594	A	543	A	559	A	568	A	551	A	536	A	524	A	584	A	497	A	574	A	485	A	353	A	294	A	189	A	163	A	117	A	8,321
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/13/2011	SAT	57	A	39	A	18	A	24	A	33	A	76	A	139	A	219	A	320	A	413	A	482	A	529	A	560	A	620	A	549	A	592	A	608	A	600	A	538	A	506	A	393	A	316	A	247	A	213	A	8,091
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/14/2011	SUN	91	A	40	A	20	A	27	A	21	A	37	A	87	A	214	A	239	A	393	A	461	A	541	A	568	A	599	A	609	A	623	A	649	A	613	A	513	A	363	A	264	A	220	A	125	A	99	A	7,416
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/15/2011	MON	32	A	21	A	10	A	18	A	65	A	203	A	340	A	481	A	525	A	525	A	538	A	547	A	540	A	566	A	593	A	578	A	596	A	548	A	443	A	274	A	202	A	138	A	83	A	48	A	7,914
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	08/16/2011	TUE	65	A	44	A	21	A	8	A	15	A	38	A	231	A	366	A	310	C	404	C	461	C	519	C	574	C	587	C	559	C	596	C	598	C	572	C	569	C	406	C	346	C	274	C	315	C	255	C	8,133
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	10/03/2013	THU																					593	A	602	A	578	A	600	A	606	A	578	A	588	A	461	A	325	A	300	A	240	A	170	A	89	A	6,262
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/04/2013	FRI	53	A	29	A	24	A	34	A	82	A	280	A	438	A	450	A	432	A	542	A	553	A	554	A	537	A	580	A	598	A	540	A	515	A	452	A	368	A	329	A	324	A	268	A	209	A	154	A	8,345
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/05/2013	SAT	61	A	32	A	31	A	30	A	58	A	183	A	292	A	315	A	413	A	570	A	597	A	556	A	593	A	620	A	580	A	599	A	580	A	472	A	350	A	300	A	286	A	287	A	275	A	152	A	8,232
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/06/2013	SUN	77	A	35	A	21	A	12	A	20	A	69	A	105	A	173	A	308	A	417	A	479	A	539	A	530	A	578	A	565	A	571	A	444	A	373	A	348	A	329	A	271	A	196	A	120	A	90	A	6,670
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/07/2013	MON	35	A	30	A	20	A	29	A	74	A	257	A	438	A	460	A	497	A	507	A	574	A	566	A	556	A	594	A	570	A	609	A	603	A	598	A	393	A	329	A	209	A	191	A	120	A	78	A	8,337
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/08/2013	TUE	36	A	19	A	13	A	31	A	84	A	249	A	476	A	478	A	467	A	531	A	573	A	526	A	572	A	568	A	607	A	551	A	598	A	587	A	504	A	327	A	243	A	182	A	111	A	68	A	8,401
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/09/2013	WED	32	A	30	A	22	A	37	A	91	A	251	A	469	A	461	A	496	A	546	A	511	A	510	A	542	A	577	A	583	A	581	A	614	A	635	A	477	A	351	A	258	A	181	A	134	A	79	A	8,468
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/10/2013	THU	40	A	24	A	27	A	44	A	93	A	269	A	475	A	465	A	470	A	527	A	557	A	563	A	542	A	527	A	553	A	608	A	602	A	558	A	464	A	379	A	285	A	225	A	148	A	117	A	8,562
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/01/2014	WED	116	A	91	A	54	A	24	A	17	A	21	A	50	A	79	A	122	A	156	A	316	A	419	A	439	A	520	A	587	A	527	A	387	A	289	A	260	A	241	A	197	A	183	A	126	A	74	A	5,295
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/02/2014	THU	23	A	23	A	12	A	14	A	33	A	93	A	317	A	471	A	432	A	521	A	491	A	566	A	641	A	656	A	652	A	619	A	585	A	621	A	400	A	326	A	256	A	186	A	184	A	64	A	8,186
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/03/2014	FRI	45	A	30	A	14	A	21	A	39	A	115	A	306	A	481	A	450	A	503	A	549	A	574	A	566	A	597	A	677	A	737	A	665	A	619	A	415	A	295	A	224	A	252	A	161	A	90	A	8,425
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/04/2014	SAT	58	A	51	A	16	A	23	A	27	A	73	A	129	A	186	A	290	A	457	A	494	A	584	A	570	A	496	A	523	A	495	A	418	A	370	A	286	A	215	A	248	A	154	A	167	A	95	A	6,425
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/05/2014	SUN	61	A	37	A	13	A	12	A	12	A	26	A	50	A	94	A	165	A	244	A	290	A	331	A	378	A	428	A	364	A	348	A	281	A	332	A	287	A	228	A	169	A	137	A	107	A	46	A	4,440
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/06/2014	MON	39	A	12	A	6	A	12	A	44	A	104	A	320	A	453	A	490	A	432	A	416	A	451	A	494	A	472	A	500	A	548	A	505	A	578	A	342	A	231	A	174	A	137	A	91	A	65	A	6,916
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	01/07/2014	TUE	27	A	14	A	12	A	7	A	61	A	90	A	360	A	483	A	561	A	496	A	396	A	454	A	469	A	474	A	469	A	549

Traffic Volumes Counts

Dist	Cnty	Rte	Prefi	PM	Leg	Dir	Description	Date	Day	24 hour Period Hourly Counts 0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24hr total
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/05/2014	SAT	63 A	44 A	16 A	16 A	14 A	60 A	221 A	211 A	347 A	508 A	555 A	564 A	645 A	555 A	606 A	614 A	582 A	537 A	424 A	308 A	264 A	229 A	194 A	153 A	7,730
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/06/2014	SUN	78 A	58 A	21 A	12 A	17 A	38 A	117 A	234 A	325 A	426 A	444 A	494 A	548 A	568 A	563 A	551 A	498 A	488 A	340 A	301 A	280 A	214 A	130 A	73 A	6,818
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/07/2014	MON	47 A	18 A	9 A	15 A	37 A	117 A	399 A	438 A	477 A	436 A	503 A	486 A	506 A	485 A	506 A	537 A	577 A	584 A	394 A	309 A	234 A	164 A	134 A	82 A	7,494
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/08/2014	TUE	38 A	11 A	6 A	15 A	59 A	124 A	382 A	438 A	535 A	773 A	814 A	837 A	784 A	851 A	739 A	811 A	851 A	861 A	610 A	407 A	416 A	306 A	168 A	105 A	10,941
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/09/2014	WED	49 A	18 A	22 A	27 A	86 A	185 A	584 A	640 A	712 A	770 A	738 A	788 A	830 A	845 A	772 A	908 A	914 A	814 A	654 A	448 A	439 A	271 A	202 A	99 A	11,815
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/10/2014	THU	78 A	29 A	13 A	35 A	96 A	180 A	570 A	669 A	791 A	779 A	837 A	791 A	785 A	809 A	790 A	926 A	882 A	837 A	620 A	424 A	361 A	311 A	221 A	119 A	11,953
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	04/11/2014	FRI	69 A	59 A	23 A	20 A	59 A	191 A	559 A	713 A	756 A	770 A	783 A	872 A	894 A	877 A	896 A	915 A	981 A	862 A	752 A	580 A	502 A	402 A	341 A	209 A	13,085
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/17/2014	THU												551 A	547 A	569 A	603 A	622 A	587 A	621 A	450 A	360 A	295 A	265 A	202 A	105 A	5,777
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/18/2014	FRI	42 A	27 A	20 A	28 A	73 A	292 A	378 A	403 A	493 A	552 A	545 A	549 A	551 A	563 A	582 A	625 A	596 A	589 A	502 A	387 A	344 A	327 A	359 A	198 A	9,025
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/19/2014	SAT	77 A	48 A	21 A	24 A	30 A	182 A	159 A	216 A	316 A	510 A	558 A	559 A	582 A	611 A	601 A	606 A	562 A	480 A	351 A	315 A	261 A	265 A	281 A	223 A	7,838
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/20/2014	SUN	98 A	46 A	25 A	19 A	23 A	37 A	90 A	161 A	207 A	359 A	430 A	490 A	505 A	569 A	584 A	568 A	507 A	457 A	330 A	281 A	270 A	201 A	149 A	96 A	6,502
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/21/2014	MON	58 A	28 A	10 A	10 A	66 A	274 A	393 A	455 A	492 A	518 A	505 A	559 A	547 A	538 A	598 A	587 A	580 A	631 A	406 A	347 A	277 A	215 A	132 A	102 A	8,328
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/22/2014	TUE	45 A	17 A	12 A	13 A	80 A	243 A	406 A	469 A	421 A	521 A	565 A	540 A	539 A	552 A	584 A	570 A	630 A	586 A	449 A	301 A	268 A	202 A	144 A	69 A	8,226
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/23/2014	WED	38 A	19 A	14 A	18 A	58 A	266 A	423 A	406 A	521 A	683 A	597 A	645 A	658 A	718 A	653 A	681 A	690 A	648 A	468 A	374 A	300 A	266 A	191 A	104 A	9,439
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/24/2014	THU	48 A	32 A	13 A	26 A	94 A	307 A	452 A	522 A	571 A	655 A	691 A	588 A	614 A	664 A	635 A	690 A	610 A	696 A	564 A	411 A	384 A	272 A	209 A	139 A	9,887
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/25/2014	FRI	52 A	22 A	27 A	19 A	75 A	282 A	432 A	454 A	531 A	647 A	589 A	607 A	644 A	660 A	685 A	651 A	691 A	659 A	606 A	463 A	345 A	339 A	301 A	177 A	9,958
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/26/2014	SAT	92 A	59 A	23 A	24 A	42 A	153 A	176 A	218 A	431 A	823 A	660 A	583 A	603 A	608 A	611 A	644 A	574 A	477 A	380 A	323 A	316 A	309 A	264 A	200 A	8,393
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/27/2014	SUN	102 A	54 A	28 A	17 A	13 A	44 A	89 A	140 A	241 A	396 A	471 A	601 A	600 A	572 A	623 A	578 A	516 A	469 A	376 A	312 A	316 A	394 A	466 A	148 A	7,566
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/28/2014	MON	49 A	29 A	22 A	17 A	89 A	284 A	524 A	582 A	751 A	1046 A	906 A	923 A	901 A	805 A	905 A	877 A	909 A	848 A	610 A	400 A	370 A	313 A	201 A	121 A	12,482
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/29/2014	TUE	47 A	21 A	12 A	33 A	111 A	326 A	441 A	543 A	617 A	846 A	706 A	778 A	906 A	933 A	945 A	868 A	938 A	791 A	665 A	486 A	384 A	289 A	196 A	116 A	11,998
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	07/30/2014	WED	50 A	31 A	21 A	20 A	85 A	380 A	491 A	573 A	711 A	757 A	710 A	645 C	658 C	718 C	653 C	681 C	690 C	648 C	468 C	374 C	300 C	266 C	191 C	104 C	10,225
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/01/2014	WED	122 A	133 A	58 A	43 A	34 A	27 A	43 A	81 A	151 A	215 A	340 A	539 A	531 A	646 A	754 A	687 A	729 A	554 A	365 A	235 A	158 A	115 A	62 A	47 A	6,669
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/02/2014	THU	14 A	19 A	14 A	22 A	45 A	123 A	309 A	544 A	599 A	696 A	791 A	840 A	962 A	1056 A	1007 A	1093 A	1177 A	890 A	431 A	266 A	161 A	129 A	115 A	68 A	11,371
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/03/2014	FRI	24 A	10 A	25 A	32 A	58 A	121 A	335 A	543 A	582 A	623 A	632 A	727 A	815 A	995 A	717 A	1101 A	1001 A	797 A	436 A	262 A	169 A	146 A	105 A	79 A	10,335
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/04/2014	SAT	35 A	27 A	11 A	17 A	30 A	38 A	109 A	182 A	308 A	350 A	480 A	562 A	706 A	708 A	750 A	913 A	926 A	740 A	456 A	238 A	207 A	144 A	116 A	81 A	8,134
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/05/2014	SUN	52 A	26 A	14 A	20 A	18 A	34 A	75 A	161 A	219 A	320 A	332 A	466 A	476 A	522 A	432 A	405 A	459 A	471 A	314 A	152 A	137 A	82 A	63 A	38 A	5,288
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/06/2014	MON	19 A	9 A	10 A	24 A	54 A	148 A	372 A	571 A	774 A	603 A	611 A	732 A	659 A	737 A	620 A	657 A	631 A	588 A	309 A	155 A	124 A	77 A	51 A	35 A	8,570
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/07/2014	TUE	12 A	16 A	9 A	37 A	49 A	150 A	356 A	607 A	712 A	515 A	447 A	735 A	610 A	586 A	593 A	735 A	650 A	579 A	312 A	177 A	129 A	97 A	58 A	36 A	8,207
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/08/2014	WED	17 A	23 A	17 A	22 A	48 A	125 A	351 A	605 A	615 A	560 A	480 A	558 A	576 A	664 A	618 A	734 A	604 A	501 A	335 A	191 A	160 A	114 A	70 A	34 A	8,022
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/09/2014	THU	14 A	20 A	20 A	22 A	51 A	129 A	317 A	522 A	590 A	475 A	530 A	639 A	608 A	546 A	631 A	694 A	653 A	544 A	321 A	188 A	128 A	111 A	87 A	40 A	7,880
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/10/2014	FRI	26 A	12 A	15 A	27 A	46 A	143 A	311 A	516 A	541 A	518 A	538 A	582 A	674 A	622 A	654 A	745 A	648 A	533 A	401 A	193 A	158 A	136 A	119 A	67 A	8,225
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/11/2014	SAT	29 A	24 A	12 A	15 A	34 A	51 A	109 A	181 A	238 A	314 A	536 A	552 A	741 A	596 A	612 A	497 A	561 A	593 A	366 A	208 A	148 A	130 A	102 A	85 A	6,734
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/12/2014	SUN	59 A	31 A	18 A	15 A	26 A	36 A	67 A	142 A	192 A	321 A	340 A	344 A	388 A	463 A	491 A	386 A	470 A	401 A	293 A	170 A	124 A	88 A	58 A	33 A	4,956
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/13/2014	MON	10 A	6 A	10 A	23 A	45 A	169 A	337 A	553 A	557 A	532 A	536 A	592 A	585 A	584 A	494 A	832 A	598 A	491 A	304 A	174 A	123 A	88 A	46 A	24 A	7,713
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/14/2014	TUE	12 A	24 A	11 A	27 A	64 A	143 A	366 A	599 A	602 A	546 A	564 A	611 A	598 A	619 A	586 A	734 A	592 A	591 A	360 A	209 A	147 A	103 A	71 A	33 A	8,212
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	01/15/2014	WED	13 A	23 A	9 A	24 A	52 A	146 A	378 A	696 A	723 A	505 A	553 A	558 C	576 C	664 C	618 C	734 C	604 C	501 C	335 C	191 C	160 C	114 C	70 C	34 C	8,281
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/03/2014	THU											661 A	797 A	755 A	712 A	827 A	823 A	764 A	793 A	449 A	300 A	187 A	131 A	93 A	65 A	7,357
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/04/2014	FRI	19 A	25 A	12 A	31 A	55 A	142 A	333 A	520 A	730 A	622 A	687 A	749 A	795 A	786 A	749 A	802 A	724 A	584 A	468 A	316 A	253 A	170 A	121 A	89 A	9,782
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/05/2014	SAT	59 A	15 A	13 A	17 A	15 A	66 A	165 A	228 A	351 A	436 A	476 A	546 A	572 A	705 A	793 A	817 A	858 A	817 A	576 A	394 A	258 A	204 A	354 A	447 A	9,182
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/06/2014	SUN	55 A	41 A	26 A	21 A	24 A	39 A	85 A	193 A	295 A	508 A	625 A	674 A	618 A	737 A	713 A	744 A	594 A	646 A	430 A	308 A	262 A	444 A	223 A	53 A	8,358
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/07/2014	MON	30 A	13 A	16 A	22 A	55 A	147 A	412 A	559 A	686 A	608 A	706 A	1067 A	1162 A	1094 A	1164 A	1274 A	1082 A	789 A	620 A	399 A	305 A	186 A	136 A	81 A	12,613
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/08/2014	TUE	22 A	36 A	22 A	41 A	71 A	274 A	635 A	938 A	1079 A	883 A	900 A	993 A	1087 A	1169 A	1093 A	1160 A	1001 A	918 A	565 A	438 A	330 A	229 A	152 A	70 A	14,106
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/09/2014	WED	30 A	39 A	23 A	27 A	103 A	264 A	604 A	1062 A	1070 A	970 A	1014 A	1107 A	1051 A	1004 A	1088 A	1158 A	1089 A	918 A	658 A	615 A	376 A	247 A	138 A	88 A	14,743
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/10/2014	THU	36 A	29 A	22 A	49 A	108 A	244 A	647 A	989 A	1071 A	1005 A	955 A	1138 A	1125 A	1025 A	1072 A	1157 A	1178 A	937 A	693 A	518 A	378 A	199 A	173 A	79 A	14,827
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	04/11/2014	FRI	49 A	46 A	30 A	57 A	119 A	257 A	639 A	1052 A	1140 A	945 A	930 A	1136 A	1192 A	1174 A	1228 A	1244 A	1179 A	1027 A	753 A	593 A	398 A	286 A	242 A	164 A	15,880
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/17/2014	THU												605 A	618 A	631 A	618 A	650 A	584 A	542 A	456 A	330 A	366 A	175 A	103 A	73 A	5,751
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/18/2014	FRI	32 A	20 A	17 A	39 A	78 A	236 A	313 A	507 A	575 A	531 A	575 A	581 A	584 A	550 A	580 A	595 A	586 A	494 A	448 A	292 A	267 A	174 A	123 A	107 A	8,304
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/19/2014	SAT	68 A	32 A	22 A	27 A	45 A	116 A	119 A	220 A	320 A	401 A	500 A	506 A	560 A	575 A	555 A	569 A	597 A	547 A	594 A	422 A	279 A	238 A	227 A	174 A	7,713
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/20/2014	SUN	94 A	38 A	45 A	13 A	22 A	49 A	93 A	184 A	266 A	405 A	521 A	543 A	619 A	571 A	565 A	612 A	566 A	627 A	505 A	331 A	254 A	175 A	106 A	72 A	7,276
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/21/2014	MON	27 A	17 A	16 A	26 A	80 A	214 A	346 A	529 A	527 A	523 A	575 A	573 A	604 A	611 A	589 A	631 A	572 A	578 A	462 A	306 A	252 A	151 A	77 A	57 A	8,343
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/22/2014	TUE	18 A	35 A	17 A	22 A	69 A	245 A	336 A	490 A	517 A	550 A	528 A	531 A	595 A	573 A	565 A	564 A	576 A	526 A	420 A	302 A	224 A	158 A	84 A	60 A	8,005
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/23/2014	WED	29 A	27 A	8 A	29 A	54 A	239 A	346 A	507 A	559 A	537 A	518 A	557 A	549 A	544 A	590 A	701 A	577 A	507 A	413 A	311 A	257 A	166 A	90 A	58 A	8,173
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/24/2014	THU	32 A	32 A	11 A	23 A	68 A	234 A	353 A	474 A	569 A	553 A	601 A	611 A	633 A	629 A	682 A	759 A	646 A	555 A	472 A	298 A	224 A	175 A	138 A	77 A	8,849
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/25/2014	FRI	24 A	32 A	20 A	23 A	66 A	261 A	361 A	553 A	598 A	606 A	643 A	742 A	818 A	779 A	785 A	699 A	686 A	579 A	464 A	344 A	285 A	219 A	147 A	98 A	9,832
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/26/2014	SAT	48 A	32 A	15 A	22 A	45 A	114 A	125 A	237 A	292 A	420 A	459 A	604 A	680 A	724 A	692 A	748 A	748 A	812 A	619 A	372 A	280 A	253 A	221 A	140 A	8,702
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/27/2014	SUN	62 A	33 A	29 A	8 A	31 A	53 A	94 A	186 A	257 A	428 A	519 A	741 A	683 A	789 A	784 A	690 A	697 A	636 A	543 A	322 A	243 A	203 A	151 A	88 A	8,270
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/28/2014	MON	27 A	14 A	23 A	28 A	80 A	254 A	358 A	538 A	653 A	729 A	644 A	759 A	696 A	710 A	754 A	769 A	604 A	526 A	402 A	314 A	207 A	175 A	102 A	54 A	9,420
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/29/2014	TUE	27 A	25 A	14 A	31 A	64 A	237 A	350 A	538 A	620 A	629 A	622 A	742 A	692 A	761 A	726 A	776 A	595 A	556 A	393 A	306 A	199 A	195 A	125 A	59 A	9,282
4	NAP	029		28.75	A	S	ST. HELENA- ADAMS STREET	07/30/2014	WED	34 A	37 A	13 A	22 A	61 A	248 A	372 A	544 A	599 A	547 A	634 A	761 E	701 E	761 E	721 E	771 E	577 C	507 C	413 C	311 C	257 C	166 C	90 C	58 C	9,205
4	NAP	029		28.75	A	N	ST. HELENA- ADAMS STREET	10/20/2016	THU									566 A	625 A	612 A	630 A	659 A	644 A	520 A	382 A	384 A	236 A	196 A	112 A	61 A	33 A	33 A	23 A	5,716
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/21/2016	FRI	40 A	105 A	415 A	455 A	500 A	490 A	550 A	578 A	607 A	550 A	329 A	675 A	627 A	611 A	543 A	425 A	352 A	293 A	368 A	176 A	88 A	52 A	23 A	26 A	8,878
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/22/2016	SAT	27 A	90 A	224 A	265 A	417 A	548 A	606 A	595 A	600 A	606 A	600 A	606 A	563 A	502 A	423 A	371 A	279 A	227 A	242 A	181 A	126 A	56 A	35 A	10 A	8,199
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/23/2016	SUN	20 A	37 A	100 A	147 A	242 A	384 A	439 A	649 A	672 A	711 A	630 A	590 A	533 A	441 A	379 A	313 A	245 A	190 A	154 A	91 A	37 A	25 A	25 A	9 A	7,063
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/24/2016	MON	52 A	123 A	388 A	420 A	510 A	524 A	564 A	559 A	580 A	589 A	629 A	602 A	630 A	572 A	478 A	247 A	241 A	187 A	151 A	83 A	41 A	38 A	34 A	9 A	8,251
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/25/2016	TUE	26 A	41 A	112 A	154 A	249 A	404 A	452 A	651 A	679 A	724 A	639 A	598 A	546 A	448 A	389 A	361 A	274 A	198 A	168 A	101 A	89 A	38 A	29 A	4 A	7,374
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/26/2016	WED	28 A	44 A	122 A	157 A	251 A	420 A	455 A	654 A	683 A	729 A	641 A	605 A	549 A	449 A	392 A	365 A	279 A	201 A	171 A	106 A	98 A	51 A	30 A	8 A	7,488
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	10/27/2016	THU	29 A	46 A	127 A	158 A	256 A	477 A	659 A	686 A	734 A	648 A	608 A	552 A	396 A	366 A	281 A	255 A	182 A	109 A	99 A	62 A	42 A	9 A	0 A	4 A	6,785
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/17/2017	TUE													659 A	688 A	627 A	774 A	679 A	688 A	498 A	343 A	287 A	211 A	133 A	52 A	5,639
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/18/2017	WED	59 A	20 A	10 A	25 A	57 A	160 A	434 A	587 A	668 A	653 A	673 A	573 A	596 A	565 A	578 A	621 A	703 A	601 A	426 A	298 A	254 A	175 A	135 A	72 A	8,943
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/19/2017	THU	29 A	24 A	12 A	27 A	45 A	126 A	393 A	500 A	598 A	569 A	576 A	518 A	583 A	581 A	572 A	615 A	665 A	645 A	493 A	308 A	257 A	208 A	154 A	84 A	8,582
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/20/2017	FRI	37 A	31 A	23 A	24 A	50 A	142 A	363 A	517 A	579 A	577 A	563 A	579 A	539 A	544 A	632 A	655 A	627 A	666 A	587 A	428 A	355 A	295 A	230 A	134 A	9,177
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/21/2017	SAT	84 A	57 A	26 A	18 A	38 A	44 A	150 A	202 A	345 A	413 A	516 A	508 A	529 A	580 A	591 A	577 A	504 A	453 A	392 A	251 A	231 A	195 A	170 A	108 A	6,982
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/22/2017	SUN	57 A	46 A	27 A	13 A	22 A	38 A	54 A	102 A	213 A	295 A	327 A	412 A	408 A	443 A	489 A	447 A	315 A	258 A	279 A	245 A	188 A	161 A	120 A	85 A	5,044
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/23/2017	MON	60 A	19 A	14 A	13 A	44 A	170 A	463 A	580 A	660 A	598 A	508 A	545 A	547 A	493 A	563 A	599 A	718 A	675 A	442 A	265 A	224 A	180 A	177 A	56 A	8,613
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/24/2017	TUE	26 A	29 A	15 A	12 A	33 A	190 A	446 A	515 A	599 A	602 A	535 A	583 A	555 A	595 A	561 A	646 A	672 A	692 A	477 A	310 A	342 A	192 A	130 A	99 A	8,856
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	01/25/2017	WED	40 A	25 A	13 A	25 A	66 A	175 A	576 A	594 A																		1,514
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/11/2017	TUE											851 A	774 A	745 A	649 A	655 A	697 A	673 A	617 A	499 A	354 A	297 A	204 A	169 A	61 A	7,245
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/12/2017	WED	35 A	19 A	16 A	27 A	63 A	72 A	0 A	0 A	0 A	1 A	0 A	188 A	557 A	572 A	626 A	626 A	648 A	696 A	458 A	346 A	326 A	246 A	178 A	86 A	5,786
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/13/2017	THU	55 A	31 A	19 A	44 A	80 A	176 A	527 A	545 A	622 A	592 A	656 A	583 A	590 A	567 A	641 A	659 A	648 A	600 A	443 A	353 A	346 A	234 A	183 A	95 A	9,289
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/14/2017	FRI	51 A	40 A	25 A	20 A	56 A	144 A	373 A	410 A	503 A	510 A	553 A	542 A	535 A	565 A	557 A	649 A	568 A	549 A	473 A	367 A	332 A	260 A	175 A	117 A	8,374
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/15/2017	SAT	66 A	35 A	33 A	18 A	24 A	78 A	209 A	213 A	345 A	487 A	528 A	469 A	531 A	554 A	557 A	557 A	477 A	417 A	354 A	263 A	261 A	248 A	193 A	126 A	7,043
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/16/2017	SUN	63 A	42 A	32 A	15 A	12 A	34 A	68 A	112 A	174 A	283 A	391 A	447 A	481 A	427 A	472 A	406 A	357 A	321 A	245 A	219 A	227 A	149 A	109 A	53 A	5,139
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/17/2017	MON	40 A	22 A	9 A	19 A	59 A	156 A	423 A	428 A	385 A	479 A	456 A	476 A	509 A	502 A	525 A	549 A	562 A	531 A	349 A	264 A	231 A	155 A	123 A	54 A	7,306
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/18/2017	TUE	38 A	15 A	14 A	23 A	44 A	165 A	436 A	453 A	481 A	425 A	520 A	517 A	506 A	497 A	511 A	526 A	610 A	573 A	375 A	225 A	272 A	204 A	112 A	71 A	7,613
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/19/2017	WED	39 A	17 A	14 A	23 A	62 A	168 A	486 A	475 A	535 A	484 A	509 A	486 A	471 A	551 A	528 A	602 A	573 A	569 A	401 A	430 A	504 A	315 A	212 A	122 A	8,576
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	04/20/2017	THU	53 A	31 A	25 A	46 A	124 A	274 A	742 A	776 A	840 A	910 A	656 C	583 C	590 C	567 C	641 C	659 C	648 C	600 C	443 C	353 C	346 C	234 C	183 C	95 C	10,419

Traffic Volumes Counts

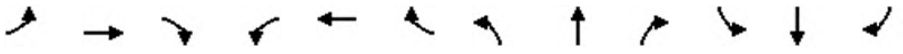
Dist	Cnty	Rte	Prefi	PM	Leg	Dir	Description	Date	Day	24 hour Period Hourly Counts																								24hr total
										0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/07/2017	FRI												521 A	516 A	551 A	590 A	576 A	606 A	566 A	483 A	352 A	341 A	273 A	270 A	128 A	5,773
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/08/2017	SAT	78 A	46 A	36 A	14 A	83 A	349 A	177 A	266 A	354 A	483 A	510 A	532 A	547 A	550 A	566 A	594 A	463 A	433 A	334 A	302 A	286 A	269 A	254 A	144 A	7,670
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/09/2017	SUN	82 A	35 A	47 A	25 A	28 A	68 A	102 A	142 A	246 A	379 A	418 A	447 A	518 A	519 A	553 A	497 A	450 A	379 A	312 A	255 A	235 A	247 A	165 A	96 A	6,245
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/10/2017	MON	36 A	21 A	10 A	17 A	108 A	399 A	386 A	447 A	509 A	507 A	524 A	472 A	530 A	515 A	545 A	542 A	590 A	576 A	407 A	295 A	272 A	222 A	134 A	96 A	8,160
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/11/2017	TUE	35 A	16 A	8 A	16 A	106 A	376 A	391 A	447 A	459 A	503 A	535 A	503 A	485 A	532 A	541 A	571 A	572 A	552 A	419 A	301 A	269 A	229 A	156 A	82 A	8,104
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/12/2017	WED	42 A	28 A	12 A	12 A	84 A	383 A	417 A	471 A	470 A	559 A	505 A	500 A	510 A	554 A	511 A	557 A	539 A	599 A	425 A	289 A	299 A	239 A	168 A	86 A	8,259
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/13/2017	THU	38 A	23 A	23 A	23 A	81 A	346 A	400 A	415 A	468 A	469 A	524 A	473 A	496 A	520 A	551 A	569 A	588 A	586 A	448 A	341 A	302 A	247 A	228 A	113 A	8,272
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/14/2017	FRI	66 A	46 A	31 A	23 A	98 A	396 A	433 A	475 A	515 A	485 A	552 A	493 A	516 A	515 A	539 A	581 A	611 A	583 A	498 A	398 A	393 A	334 A	317 A	176 A	9,074
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/15/2017	SAT	85 A	63 A	43 A	26 A	68 A	251 A	179 A	367 A	381 A	484 A	540 A	551 A	508 A	564 A	563 A	617 A	539 A	490 A	393 A	313 A	279 A	297 A	301 A	194 A	8,036
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/16/2017	SUN	116 A	57 A	22 A	26 A	13 A	65 A	119 A	153 A	240 A	417 A	469 A	526 A	506 A	590 A	510 A	526 A	448 A	387 A	300 A	296 A	242 A	229 A	202 A	108 A	6,567
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/17/2017	MON	54 A	31 A	28 A	18 A	97 A	380 A	417 A	464 A	452 A	532 A	528 A	466 A	548 A	542 A	515 A	577 A	596 A	556 A	399 A	297 A	241 A	247 A	166 A	98 A	8,249
4	NAP	029		28.75	A	N	ST. HELENA, ADAMS STREET	07/18/2017	TUE	53 A	25 A	21 A	21 A	123 A	405 A	496 A	519 A	459 C	503 C	535 C	503 C	485 C	532 C	541 C	571 C	572 C	552 C	419 C	301 C	269 C	229 C	156 C	82 C	8,372
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/12/2016	WED												974 A	959 A	981 A	944 A	951 A	723 A	602 A	450 A	308 A	191 A	128 A	82 A	7,293
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/13/2016	THU	47 A	50 A	52 A	56 A	79 A	224 A	518 A	726 A	755 A	821 A	829 A	828 A	904 A	890 A	989 A	793 A	836 A	868 A	657 A	419 A	246 A	218 A	146 A	85 A	12,036
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/14/2016	FRI	38 A	25 A	31 A	59 A	75 A	166 A	392 A	688 A	764 A	858 A	841 A	972 A	949 A	881 A	823 A	813 A	894 A	832 A	561 A	386 A	284 A	227 A	170 A	179 A	11,908
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/15/2016	SAT	74 A	49 A	36 A	39 A	45 A	94 A	203 A	364 A	513 A	685 A	764 A	810 A	929 A	833 A	861 A	844 A	837 A	531 A	213 A	138 A	92 A	108 A	92 A	72 A	9,226
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/16/2016	SUN	41 A	22 A	19 A	3 A	14 A	28 A	55 A	106 A	186 A	147 A	91 A	61 A	36 A	40 A	50 A	70 A	29 A	36 A	29 A	32 A	27 A	10 A	5 A	2 A	1,139
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/17/2016	MON	4 A	0 A	3 A	3 A	7 A	17 A	32 A	37 A	43 A	56 A	107 A	116 A	80 A	74 A	66 A	61 A	40 A	33 A	47 A	14 A	12 A	13 A	13 A	12 A	890
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/18/2016	TUE	4 A	3 A	9 A	3 A	9 A	20 A	47 A	103 A	142 A	267 A	190 A	118 A	96 A	85 A	46 A	79 A	107 A	80 A	88 A	46 A	36 A	10 A	14 A	6 A	1,608
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/19/2016	WED	3 A	5 A	8 A	1 A	12 A	22 A	14 A	9 A	68 A	91 A	117 A	174 A	96 A	106 A	102 A	103 A	100 A	67 A	51 A	23 A	14 A	6 A	4 A	8 A	1,204
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/20/2016	THU	2 A	2 A	1 A	3 A	5 A	9 A	8 A	42 A	192 A	261 A	277 A	222 A	169 A	227 A	135 A	106 A	105 A	184 A	81 A	42 A	29 A	22 A	11 A	10 A	2,145
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/21/2016	FRI	7 A	3 A	3 A	9 A	12 A	24 A	24 A	17 A	47 A	119 A	115 A	105 A	193 A	82 A	49 A	92 A	149 A	150 A	122 A	38 A	33 A	27 A	17 A	11 A	1,448
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	10/22/2016	SAT	6 A	4 A	3 A	5 A	5 A	7 A	7 A	8 A	10 A	25 A	27 A	64 A	252 A	198 A	186 A	184 A	171 A	221 A	90 A	27 A	34 A	26 A	30 A	19 A	1,609
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/17/2017	TUE												826 A	854 A	852 A	764 A	879 A	708 A	383 A	255 A	163 A	137 A	84 A	62 A	5,967
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/18/2017	WED	28 A	18 A	12 A	24 A	40 A	144 A	369 A	545 A	559 A	564 A	522 A	547 A	509 A	514 A	574 A	641 A	473 A	431 A	321 A	225 A	132 A	126 A	90 A	61 A	7,469
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/19/2017	THU	22 A	14 A	16 A	20 A	44 A	125 A	336 A	499 A	569 A	518 A	518 A	549 A	592 A	574 A	523 A	630 A	499 A	602 A	333 A	214 A	155 A	144 A	111 A	55 A	7,662
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/20/2017	FRI	22 A	25 A	14 A	31 A	41 A	129 A	311 A	473 A	534 A	513 A	441 A	554 A	669 A	546 A	562 A	594 A	616 A	533 A	429 A	307 A	245 A	196 A	180 A	120 A	8,085
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/21/2017	SAT	59 A	45 A	19 A	16 A	32 A	56 A	125 A	182 A	327 A	340 A	394 A	473 A	496 A	558 A	574 A	548 A	559 A	534 A	318 A	201 A	139 A	167 A	144 A	94 A	6,400
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/22/2017	SUN	27 A	25 A	33 A	14 A	11 A	35 A	65 A	132 A	104 A	51 A	20 A	76 A	134 A	86 A	103 A	137 A	87 A	51 A	40 A	44 A	23 A	17 A	19 A	8 A	1,342
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/23/2017	MON	5 A	2 A	2 A	1 A	5 A	30 A	92 A	168 A	120 A	58 A	74 A	51 A	48 A	66 A	82 A	91 A	69 A	70 A	32 A	25 A	17 A	11 A	5 A	8 A	1,132
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/24/2017	TUE	3 A	2 A	0 A	0 A	0 A	10 A	5 A	16 A	40 A	45 A	139 A	236 A	150 A	150 A	92 A	71 A	79 A	25 A	8 A	13 A	1 A	2 A	6 A	2 A	1,095
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	01/25/2017	WED	3 A	1 A	0 A	2 A	0 A	8 A	25 A	13 A	68 A																120
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/07/2017	FRI										587 A	568 A	574 A	574 A	595 A	584 A	520 A	422 A	311 A	258 A	216 A	185 A	109 A	5,503
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/08/2017	SAT	55 A	31 A	28 A	26 A	50 A	134 A	175 A	250 A	324 A	400 A	503 A	591 A	612 A	559 A	598 A	546 A	572 A	581 A	475 A	367 A	302 A	246 A	265 A	179 A	7,869
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/09/2017	SUN	72 A	46 A	25 A	19 A	25 A	46 A	100 A	261 A	283 A	393 A	489 A	561 A	565 A	571 A	626 A	599 A	574 A	549 A	473 A	323 A	242 A	201 A	112 A	76 A	7,231
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/10/2017	MON	46 A	16 A	15 A	27 A	80 A	241 A	301 A	494 A	528 A	569 A	627 A	577 A	585 A	573 A	642 A	604 A	549 A	491 A	381 A	250 A	216 A	189 A	95 A	86 A	8,182
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/11/2017	TUE	33 A	13 A	16 A	24 A	77 A	244 A	416 A	520 A	540 A	608 A	563 A	583 A	556 A	579 A	593 A	617 A	538 A	485 A	356 A	261 A	241 A	176 A	119 A	68 A	8,226
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/12/2017	WED	24 A	17 A	25 A	26 A	92 A	271 A	420 A	558 A	582 A	564 A	538 A	598 A	580 A	607 A	629 A	601 A	577 A	498 A	399 A	284 A	242 A	193 A	95 A	87 A	8,507
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/13/2017	THU	40 A	23 A	17 A	19 A	72 A	281 A	366 A	533 A	552 A	531 A	545 A	543 A	582 A	587 A	607 A	617 A	597 A	484 A	466 A	294 A	260 A	216 A	142 A	82 A	8,456
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/14/2017	FRI	30 A	19 A	17 A	35 A	73 A	279 A	389 A	542 A	605 A	571 A	518 A	605 A	572 A	581 A	548 A	597 A	618 A	506 A	451 A	341 A	275 A	212 A	170 A	135 A	8,689
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/15/2017	SAT	78 A	54 A	33 A	16 A	59 A	153 A	189 A	305 A	309 A	454 A	544 A	519 A	633 A	589 A	555 A	531 A	539 A	613 A	477 A	415 A	299 A	299 A	212 A	189 A	8,064
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/16/2017	SUN	98 A	46 A	35 A	20 A	30 A	76 A	115 A	234 A	296 A	439 A	478 A	553 A	593 A	605 A	568 A	588 A	523 A	577 A	491 A	347 A	273 A	194 A	126 A	73 A	7,378
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/17/2017	MON	45 A	17 A	18 A	26 A	68 A	252 A	404 A	524 A	555 A	579 A	576 A	578 A	598 A	578 A	564 A	608 A	509 A	457 A	384 A	262 A	207 A	161 A	117 A	77 A	8,164
4	NAP	029		28.75	A	S	ST. HELENA, ADAMS STREET	07/18/2017	TUE	27 A	19 A	24 A	18 A	64 A	265 A	426 A	546 A	540 C	608 C	563 C	583 C	556 C	579 C	593 C	617 C	538 C	485 C	356 C	261 C	241 C	176 C	119 C	68 C	8,272

APPENDIX C

Synchro & Signal Warrant Worksheets

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Conditions
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	39	40	12	52	70	37	588	18	92	517	84
Future Volume (veh/h)	89	39	40	12	52	70	37	588	18	92	517	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	100	44	45	13	58	79	42	661	20	103	581	94
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	218	84	66	75	126	153	335	843	26	341	733	119
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	724	474	374	65	708	861	758	1273	39	753	1106	179
Grp Volume(v), veh/h	189	0	0	150	0	0	42	0	681	103	0	675
Grp Sat Flow(s),veh/h/ln	1573	0	0	1634	0	0	758	0	1311	753	0	1285
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	2.6	0.0	22.6	6.9	0.0	23.1
Cycle Q Clear(g_c), s	6.4	0.0	0.0	5.1	0.0	0.0	25.7	0.0	22.6	29.4	0.0	23.1
Prop In Lane	0.53		0.24	0.09		0.53	1.00		0.03	1.00		0.14
Lane Grp Cap(c), veh/h	368	0	0	353	0	0	335	0	868	341	0	851
V/C Ratio(X)	0.51	0.00	0.00	0.42	0.00	0.00	0.13	0.00	0.78	0.30	0.00	0.79
Avail Cap(c_a), veh/h	774	0	0	818	0	0	716	0	1527	719	0	1496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	0.0	23.0	0.0	0.0	16.6	0.0	7.3	17.7	0.0	7.4
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.6	0.0	0.0	0.2	0.0	2.3	0.7	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	2.0	0.0	0.0	0.4	0.0	5.0	1.1	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	0.0	23.6	0.0	0.0	16.8	0.0	9.6	18.4	0.0	9.9
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		189			150			723			778	
Approach Delay, s/veh		24.2			23.6			10.0			11.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	16.2	45.7	16.2
Change Period (Y+Rc), s	* 4.7	* 5.2	* 4.7	* 5.2
Max Green Setting (Gmax), s	* 72	* 29	* 72	* 29
Max Q Clear Time (g_c+I1), s	27.7	8.4	31.4	7.1
Green Ext Time (p_c), s	9.6	0.9	9.5	0.7

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Conditions
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	89	33	29	62	33	50	555	46	43	480	46
Future Volume (veh/h)	55	89	33	29	62	33	50	555	46	43	480	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.91	0.96		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	60	97	36	32	67	36	54	603	50	47	522	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	186	59	107	193	87	144	645	53	133	629	60
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.08	0.54	0.54	0.08	0.53	0.53
Sat Flow, veh/h	371	939	300	237	977	442	1767	1200	99	1767	1183	113
Grp Volume(v), veh/h	193	0	0	135	0	0	54	0	653	47	0	572
Grp Sat Flow(s),veh/h/ln	1610	0	0	1656	0	0	1767	0	1299	1767	0	1297
Q Serve(g_s), s	2.7	0.0	0.0	0.0	0.0	0.0	2.2	0.0	34.7	1.9	0.0	27.5
Cycle Q Clear(g_c), s	7.7	0.0	0.0	5.0	0.0	0.0	2.2	0.0	34.7	1.9	0.0	27.5
Prop In Lane	0.31		0.19	0.24		0.27	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	381	0	0	387	0	0	144	0	699	133	0	689
V/C Ratio(X)	0.51	0.00	0.00	0.35	0.00	0.00	0.38	0.00	0.93	0.35	0.00	0.83
Avail Cap(c_a), veh/h	572	0	0	580	0	0	380	0	1048	380	0	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	0.0	26.0	0.0	0.0	32.4	0.0	16.0	32.7	0.0	14.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.6	0.0	8.7	0.6	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	2.1	0.0	0.0	0.9	0.0	10.7	0.8	0.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	0.0	26.2	0.0	0.0	33.0	0.0	24.7	33.3	0.0	16.7
LnGrp LOS	C	A	A	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		193			135			707			619	
Approach Delay, s/veh		27.3			26.2			25.3			17.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	44.2		19.4	10.3	44.7		19.4
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	14.2	29.5		7.0	3.9	36.7		9.7
Green Ext Time (p_c), s	0.0	2.8		0.3	0.0	3.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	18	633	94	20	522
Future Vol, veh/h	27	18	633	94	20	522
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	28	19	659	98	21	544

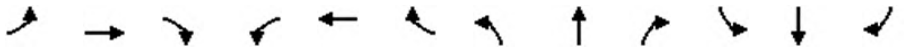
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1299	715	0	0	762	0
Stage 1	713	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	177	429	-	-	846	-
Stage 1	484	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	172	426	-	-	842	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	482	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.9	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	349	842	-
HCM Lane V/C Ratio	-	-	0.134	0.025	-
HCM Control Delay (s)	-	-	16.9	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Conditions
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	168	175	33	122	77	605	50	76	469	4
Future Volume (veh/h)	0	0	168	175	33	122	77	605	50	76	469	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	181	188	35	131	83	651	54	82	504	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	186	231	43	221	111	693	21	111	712	6
Arrive On Green	0.00	0.00	0.07	0.15	0.15	0.15	0.06	0.55	0.55	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1332	1501	279	1434	1767	1198	99	1767	1306	10
Grp Volume(v), veh/h	0	0	181	223	0	131	83	0	705	82	0	508
Grp Sat Flow(s),veh/h/ln	0	1856	1332	1780	0	1434	1767	0	1297	1767	0	1316
Q Serve(g_s), s	0.0	0.0	9.0	16.7	0.0	11.7	6.4	0.0	74.6	6.3	0.0	39.4
Cycle Q Clear(g_c), s	0.0	0.0	9.0	16.7	0.0	11.7	6.4	0.0	74.6	6.3	0.0	39.4
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	186	274	0	221	111	0	714	111	0	717
V/C Ratio(X)	0.00	0.00	0.97	0.81	0.00	0.59	0.75	0.00	0.99	0.74	0.00	0.71
Avail Cap(c_a), veh/h	0	121	186	453	0	365	321	0	707	321	0	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.1	56.3	0.0	54.2	63.4	0.0	31.3	63.4	0.0	23.2
Incr Delay (d2), s/veh	0.0	0.0	58.3	5.8	0.0	2.5	3.8	0.0	30.7	3.6	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	246.4	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.4	8.0	0.0	4.4	3.0	0.0	78.1	3.0	0.0	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	118.5	62.0	0.0	56.7	67.2	0.0	308.4	67.0	0.0	26.0
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		181			354			788			590	
Approach Delay, s/veh		118.5			60.1			283.0			31.7	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		28.9	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.4	41.4		18.7	8.3	76.6		11.0				
Green Ext Time (p_c), s	0.1	2.4		1.7	0.1	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		148.7	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	13	130	10	14	109	12
Future Vol, veh/h	13	130	10	14	109	12
Conflicting Peds, #/hr	0	2	2	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	16	157	12	17	131	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	175	0	139	98
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1395	-	852	955
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	978	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1392	-	842	952
Mov Cap-2 Maneuver	-	-	-	-	842	-
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	968	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	852	-	-	1392	-
HCM Lane V/C Ratio	0.171	-	-	0.009	-
HCM Control Delay (s)	10.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	90	70	15	47	34	71	101	55	59	65	12
Future Vol, veh/h	18	90	70	15	47	34	71	101	55	59	65	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	105	81	17	55	40	83	117	64	69	76	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10	9.1	10.6	9.7
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	31%	10%	16%	43%
Vol Thru, %	44%	51%	49%	48%
Vol Right, %	24%	39%	35%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	227	178	96	136
LT Vol	71	18	15	59
Through Vol	101	90	47	65
RT Vol	55	70	34	12
Lane Flow Rate	264	207	112	158
Geometry Grp	1	1	1	1
Degree of Util (X)	0.356	0.282	0.158	0.224
Departure Headway (Hd)	4.858	4.912	5.08	5.106
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	734	722	697	696
Service Time	2.939	2.999	3.178	3.197
HCM Lane V/C Ratio	0.36	0.287	0.161	0.227
HCM Control Delay	10.6	10	9.1	9.7
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.6	1.2	0.6	0.9

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	50	51	13	3	28	183	5	3	10	132	4	10
Future Vol, veh/h	50	51	13	3	28	183	5	3	10	132	4	10
Conflicting Peds, #/hr	15	0	15	15	0	15	0	0	4	4	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	61	16	4	34	220	6	4	12	159	5	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	269	0	0	92	0	0	365	481	88	368	379	159
Stage 1	-	-	-	-	-	-	204	204	-	167	167	-
Stage 2	-	-	-	-	-	-	161	277	-	201	212	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1289	-	-	1496	-	-	589	483	968	587	552	884
Stage 1	-	-	-	-	-	-	796	731	-	833	758	-
Stage 2	-	-	-	-	-	-	839	679	-	799	725	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1271	-	-	1475	-	-	546	445	951	543	509	871
Mov Cap-2 Maneuver	-	-	-	-	-	-	546	445	-	543	509	-
Stage 1	-	-	-	-	-	-	746	686	-	781	745	-
Stage 2	-	-	-	-	-	-	820	667	-	743	680	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.5	0.1	10.5	14.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	681	1271	-	-	1475	-	-	556
HCM Lane V/C Ratio	0.032	0.047	-	-	0.002	-	-	0.316
HCM Control Delay (s)	10.5	8	0	-	7.4	0	-	14.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.4

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	82	29	0	25	2	8	0	0	0	0	9
Future Vol, veh/h	37	82	29	0	25	2	8	0	0	0	0	9
Conflicting Peds, #/hr	5	0	3	3	0	5	1	0	2	2	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	108	38	0	33	3	11	0	0	0	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	149	0	0	270	269	132	267	287	41
Stage 1	-	-	-	-	-	-	228	228	-	40	40	-
Stage 2	-	-	-	-	-	-	42	41	-	227	247	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1562	-	-	1426	-	-	681	636	915	684	621	1027
Stage 1	-	-	-	-	-	-	772	714	-	972	860	-
Stage 2	-	-	-	-	-	-	970	859	-	773	700	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1422	-	-	653	609	911	662	595	1021
Mov Cap-2 Maneuver	-	-	-	-	-	-	653	609	-	662	595	-
Stage 1	-	-	-	-	-	-	743	688	-	934	856	-
Stage 2	-	-	-	-	-	-	958	855	-	745	674	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	10.6	8.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	1555	-	-	1422	-	-	1021
HCM Lane V/C Ratio	0.016	0.031	-	-	-	-	-	0.012
HCM Control Delay (s)	10.6	7.4	0	-	0	-	-	8.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	12	65	11	21	81	8
Future Vol, veh/h	12	65	11	21	81	8
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	14	76	13	25	95	9
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.1	7.6	8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	91%	0%	34%
Vol Thru, %	0%	16%	66%
Vol Right, %	9%	84%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	89	77	32
LT Vol	81	0	11
Through Vol	0	12	21
RT Vol	8	65	0
Lane Flow Rate	105	91	38
Geometry Grp	1	1	1
Degree of Util (X)	0.125	0.092	0.045
Departure Headway (Hd)	4.3	3.656	4.274
Convergence, Y/N	Yes	Yes	Yes
Cap	830	967	829
Service Time	2.344	1.73	2.348
HCM Lane V/C Ratio	0.127	0.094	0.046
HCM Control Delay	8	7.1	7.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.3	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	185	365	60	66	25
Future Vol, veh/h	9	185	365	60	66	25
Conflicting Peds, #/hr	4	0	0	4	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	10	208	410	67	74	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	481	0	-	0	676	449
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	228	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1076	-	-	-	417	608
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	808	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1072	-	-	-	409	605
Mov Cap-2 Maneuver	-	-	-	-	409	-
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	805	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1072	-	-	-	449
HCM Lane V/C Ratio	0.009	-	-	-	0.228
HCM Control Delay (s)	8.4	0	-	-	15.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	126	114	88	262	8	119	0	48	8	1	17
Future Vol, veh/h	13	126	114	88	262	8	119	0	48	8	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	143	130	100	298	9	135	0	55	9	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	273	0	0	751	745	208	769	806	303
Stage 1	-	-	-	-	-	-	238	238	-	503	503	-
Stage 2	-	-	-	-	-	-	513	507	-	266	303	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1248	-	-	1284	-	-	326	341	830	317	314	734
Stage 1	-	-	-	-	-	-	763	706	-	549	540	-
Stage 2	-	-	-	-	-	-	542	538	-	737	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1248	-	-	1284	-	-	295	311	830	276	286	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	311	-	276	286	-
Stage 1	-	-	-	-	-	-	754	698	-	542	498	-
Stage 2	-	-	-	-	-	-	486	496	-	680	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	2	22.1	13.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	295	830	1248	-	-	1284	-	-	467
HCM Lane V/C Ratio	0.458	0.066	0.012	-	-	0.078	-	-	0.063
HCM Control Delay (s)	27.1	9.6	7.9	-	-	8	-	-	13.2
HCM Lane LOS	D	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.3	0.2	0	-	-	0.3	-	-	0.2

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	102	74	179	428	316	206
Future Vol, veh/h	102	74	179	428	316	206
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	106	77	186	446	329	215

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1147	329	544	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	219	710	1020	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	710	1020	-	-	-
Mov Cap-2 Maneuver	365	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18	2.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1020	-	459	-	-
HCM Lane V/C Ratio	0.183	-	0.399	-	-
HCM Control Delay (s)	9.3	-	18	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.7	-	1.9	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	4	491	39	4	496
Future Vol, veh/h	26	4	491	39	4	496
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	27	4	506	40	4	511

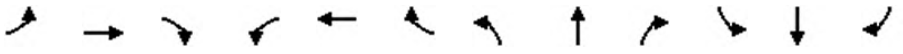
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1025	506	0	0	546	0
Stage 1	506	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	259	564	-	-	1018	-
Stage 1	603	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	258	564	-	-	1018	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	593	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	408	1018	-
HCM Lane V/C Ratio	-	-	0.076	0.004	-
HCM Control Delay (s)	-	-	14.5	8.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Conditions
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	29	17	10	36	152	20	637	16	60	583	53
Future Volume (veh/h)	109	29	17	10	36	152	20	637	16	60	583	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1329	1870	1329
Adj Flow Rate, veh/h	111	30	17	10	37	155	20	650	16	61	595	54
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	66	27	72	63	228	477	830	20	280	1086	99
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	850	361	146	34	342	1239	782	1291	32	547	1689	153
Grp Volume(v), veh/h	158	0	0	202	0	0	20	0	666	61	0	649
Grp Sat Flow(s),veh/h/ln	1357	0	0	1614	0	0	782	0	1323	547	0	1842
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	0.8	0.0	20.7	5.2	0.0	11.1
Cycle Q Clear(g_c), s	6.0	0.0	0.0	6.6	0.0	0.0	11.9	0.0	20.7	25.8	0.0	11.1
Prop In Lane	0.70		0.11	0.05		0.77	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	357	0	0	363	0	0	477	0	851	280	0	1185
V/C Ratio(X)	0.44	0.00	0.00	0.56	0.00	0.00	0.04	0.00	0.78	0.22	0.00	0.55
Avail Cap(c_a), veh/h	780	0	0	880	0	0	960	0	1667	617	0	2322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	0.0	21.7	0.0	0.0	8.9	0.0	7.3	16.6	0.0	5.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.0	0.0	0.0	0.1	0.0	2.3	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	2.5	0.0	0.0	0.1	0.0	4.6	0.6	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	0.0	22.7	0.0	0.0	9.0	0.0	9.6	17.2	0.0	6.2
LnGrp LOS	C	A	A	C	A	A	A	A	A	B	A	A
Approach Vol, veh/h		158			202			686			710	
Approach Delay, s/veh		22.0			22.7			9.6			7.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.4		15.7		41.4		15.7				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		22.7		8.0		27.8		8.6				
Green Ext Time (p_c), s		9.1		0.8		8.9		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Conditions
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	100	26	64	71	61	29	534	34	69	508	33
Future Volume (veh/h)	78	100	26	64	71	61	29	534	34	69	508	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.87	0.97		0.84	1.00		0.90	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	80	103	27	66	73	63	30	551	35	71	524	34
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	201	45	153	155	109	101	597	38	169	646	42
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.06	0.49	0.49	0.10	0.53	0.53
Sat Flow, veh/h	476	909	204	390	699	494	1781	1227	78	1781	1230	80
Grp Volume(v), veh/h	210	0	0	202	0	0	30	0	586	71	0	558
Grp Sat Flow(s),veh/h/ln	1590	0	0	1583	0	0	1781	0	1305	1781	0	1310
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	1.2	0.0	30.0	2.7	0.0	25.2
Cycle Q Clear(g_c), s	7.7	0.0	0.0	7.4	0.0	0.0	1.2	0.0	30.0	2.7	0.0	25.2
Prop In Lane	0.38		0.13	0.33		0.31	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	421	0	0	417	0	0	101	0	635	169	0	688
V/C Ratio(X)	0.50	0.00	0.00	0.48	0.00	0.00	0.30	0.00	0.92	0.42	0.00	0.81
Avail Cap(c_a), veh/h	587	0	0	581	0	0	398	0	1093	398	0	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	24.7	0.0	0.0	32.4	0.0	17.1	30.5	0.0	14.1
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	0.6	0.0	4.4	0.6	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	3.0	0.0	0.0	0.5	0.0	8.8	1.2	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	0.0	0.0	25.0	0.0	0.0	33.0	0.0	21.5	31.2	0.0	15.1
LnGrp LOS	C	A	A	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		210			202			616			629	
Approach Delay, s/veh		25.0			25.0			22.1			16.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	42.3		20.5	11.5	39.6		20.5
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	3.2	27.2		9.4	4.7	32.0		9.7
Green Ext Time (p_c), s	0.0	2.8		0.5	0.0	2.9		0.5

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	23	574	66	27	571
Future Vol, veh/h	31	23	574	66	27	571
Conflicting Peds, #/hr	12	12	0	1	54	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	24	604	69	28	601

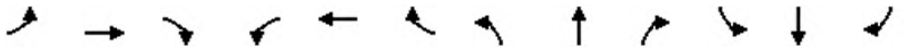
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1362	705	0	0	727	0
Stage 1	693	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	163	436	-	-	876	-
Stage 1	496	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	148	409	-	-	831	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.3	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	328	831	-
HCM Lane V/C Ratio	-	-	0.173	0.034	-
HCM Control Delay (s)	-	-	18.3	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Conditions
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Future Volume (veh/h)	0	0	191	139	26	91	83	549	51	85	513	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	203	148	28	97	88	584	54	90	546	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	200	192	36	188	115	720	22	116	740	5
Arrive On Green	0.00	0.00	0.08	0.13	0.13	0.13	0.07	0.51	0.51	0.07	0.51	0.51
Sat Flow, veh/h	0	1870	1462	1509	286	1479	1781	1192	110	1781	1317	10
Grp Volume(v), veh/h	0	0	203	176	0	97	88	0	638	90	0	550
Grp Sat Flow(s),veh/h/ln	0	1870	1462	1795	0	1479	1781	0	1303	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.0	0.0	7.1	5.6	0.0	54.5	5.7	0.0	40.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	200	229	0	188	115	0	741	116	0	746
V/C Ratio(X)	0.00	0.00	1.01	0.77	0.00	0.52	0.76	0.00	0.86	0.78	0.00	0.74
Avail Cap(c_a), veh/h	0	145	229	540	0	445	383	0	840	383	0	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.1	56.3	0.0	54.4	61.4	0.0	29.3	61.5	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.0	60.4	2.1	0.0	0.8	3.9	0.0	7.5	4.2	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.2	5.9	0.0	3.1	3.1	0.0	61.6	3.2	0.0	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	118.5	58.4	0.0	55.2	65.3	0.0	216.7	65.6	0.0	24.2
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		203			273			726			640	
Approach Delay, s/veh		118.5			57.3			198.3			30.0	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	67.2		23.2	12.2	67.2		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	7.6	42.2		13.0	7.7	56.5		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	3.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		110.1	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	94	5	13	191	6
Future Vol, veh/h	9	94	5	13	191	6
Conflicting Peds, #/hr	0	2	2	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	113	6	16	230	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	126	0	98	71
Stage 1	-	-	-	-	70	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1460	-	901	991
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	995	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	896	988
Mov Cap-2 Maneuver	-	-	-	-	896	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	991	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	899	-	-	1457	-
HCM Lane V/C Ratio	0.264	-	-	0.004	-
HCM Control Delay (s)	10.4	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	121	85	57	140	96	55	88	29	51	72	26
Future Vol, veh/h	15	121	85	57	140	96	55	88	29	51	72	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	127	89	60	147	101	58	93	31	54	76	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.8	12	10.8	10.5
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	7%	19%	34%
Vol Thru, %	51%	55%	48%	48%
Vol Right, %	17%	38%	33%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	221	293	149
LT Vol	55	15	57	51
Through Vol	88	121	140	72
RT Vol	29	85	96	26
Lane Flow Rate	181	233	308	157
Geometry Grp	1	1	1	1
Degree of Util (X)	0.281	0.333	0.436	0.245
Departure Headway (Hd)	5.579	5.147	5.094	5.625
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	643	698	706	637
Service Time	3.624	3.19	3.134	3.672
HCM Lane V/C Ratio	0.281	0.334	0.436	0.246
HCM Control Delay	10.8	10.8	12	10.5
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	1.5	2.2	1

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	67	3	2	29	135	3	10	6	185	6	16
Future Vol, veh/h	21	67	3	2	29	135	3	10	6	185	6	16
Conflicting Peds, #/hr	31	0	1	1	0	31	7	0	5	5	0	7
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	76	3	2	33	153	3	11	7	210	7	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	217	0	0	80	0	0	260	348	84	285	273	148
Stage 1	-	-	-	-	-	-	127	127	-	145	145	-
Stage 2	-	-	-	-	-	-	133	221	-	140	128	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1353	-	-	1518	-	-	693	576	975	667	634	899
Stage 1	-	-	-	-	-	-	877	791	-	858	777	-
Stage 2	-	-	-	-	-	-	870	720	-	863	790	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1313	-	-	1517	-	-	658	547	969	620	602	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	658	547	-	620	602	-
Stage 1	-	-	-	-	-	-	859	775	-	817	753	-
Stage 2	-	-	-	-	-	-	838	698	-	824	774	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.1	10.7	14
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	654	1313	-	-	1517	-	-	633
HCM Lane V/C Ratio	0.033	0.018	-	-	0.001	-	-	0.372
HCM Control Delay (s)	10.7	7.8	0	-	7.4	0	-	14
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.7

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	69	47	9	0	81	0	31	0	1	6	1	45
Future Vol, veh/h	69	47	9	0	81	0	31	0	1	6	1	45
Conflicting Peds, #/hr	4	0	8	8	0	4	4	0	6	6	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	85	58	11	0	100	0	38	0	1	7	1	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	104	0	0	77	0	0	375	346	78	344	351	108
Stage 1	-	-	-	-	-	-	242	242	-	104	104	-
Stage 2	-	-	-	-	-	-	133	104	-	240	247	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1488	-	-	1522	-	-	582	577	983	610	573	946
Stage 1	-	-	-	-	-	-	762	705	-	902	809	-
Stage 2	-	-	-	-	-	-	870	809	-	763	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1482	-	-	1510	-	-	516	536	970	576	532	939
Mov Cap-2 Maneuver	-	-	-	-	-	-	516	536	-	576	532	-
Stage 1	-	-	-	-	-	-	711	657	-	844	806	-
Stage 2	-	-	-	-	-	-	814	806	-	712	654	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0	12.4	9.5
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	524	1482	-	-	1510	-	-	864
HCM Lane V/C Ratio	0.075	0.057	-	-	-	-	-	0.074
HCM Control Delay (s)	12.4	7.6	0	-	0	-	-	9.5
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	75	6	12	63	7
Future Vol, veh/h	15	75	6	12	63	7
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	85	7	14	72	8
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.1	7.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	90%	0%	33%
Vol Thru, %	0%	17%	67%
Vol Right, %	10%	83%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	70	90	18
LT Vol	63	0	6
Through Vol	0	15	12
RT Vol	7	75	0
Lane Flow Rate	80	102	20
Geometry Grp	1	1	1
Degree of Util (X)	0.094	0.102	0.024
Departure Headway (Hd)	4.266	3.589	4.219
Convergence, Y/N	Yes	Yes	Yes
Cap	838	991	842
Service Time	2.299	1.639	2.275
HCM Lane V/C Ratio	0.095	0.103	0.024
HCM Control Delay	7.7	7.1	7.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.3	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	226	261	57	68	15
Future Vol, veh/h	18	226	261	57	68	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	246	284	62	74	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	346	0	-	0	601	315
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1213	-	-	-	463	725
Stage 1	-	-	-	-	740	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1213	-	-	-	454	725
Mov Cap-2 Maneuver	-	-	-	-	454	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	763	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1213	-	-	-	487
HCM Lane V/C Ratio	0.016	-	-	-	0.185
HCM Control Delay (s)	8	0	-	-	14.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	242	39	19	226	6	33	0	24	4	0	20
Future Vol, veh/h	31	242	39	19	226	6	33	0	24	4	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	249	40	20	233	6	34	0	25	4	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	239	0	0	289	0	0	620	612	269	622	629	236
Stage 1	-	-	-	-	-	-	333	333	-	276	276	-
Stage 2	-	-	-	-	-	-	287	279	-	346	353	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1328	-	-	1273	-	-	400	408	770	399	399	803
Stage 1	-	-	-	-	-	-	681	644	-	730	682	-
Stage 2	-	-	-	-	-	-	720	680	-	670	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1328	-	-	1273	-	-	378	392	770	375	383	803
Mov Cap-2 Maneuver	-	-	-	-	-	-	378	392	-	375	383	-
Stage 1	-	-	-	-	-	-	665	629	-	712	671	-
Stage 2	-	-	-	-	-	-	690	669	-	633	616	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.6	13.1	10.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	378	770	1328	-	-	1273	-	-	675
HCM Lane V/C Ratio	0.09	0.032	0.024	-	-	0.015	-	-	0.037
HCM Control Delay (s)	15.5	9.8	7.8	-	-	7.9	-	-	10.5
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	92	164	103	395	573	177
Future Vol, veh/h	92	164	103	395	573	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	178	112	429	623	192

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1276	623	815	0	-	0
Stage 1	623	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	184	486	812	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	159	486	812	-	-	-
Mov Cap-2 Maneuver	358	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.3	2.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	812	-	431	-	-
HCM Lane V/C Ratio	0.138	-	0.646	-	-
HCM Control Delay (s)	10.1	-	27.3	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.5	-	4.4	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	10	471	16	5	702
Future Vol, veh/h	48	10	471	16	5	702
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	11	506	17	5	755

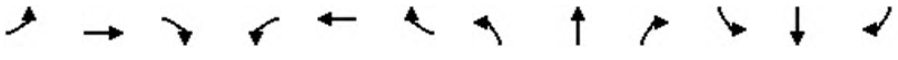
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1271	506	0	0	523	0
Stage 1	506	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	185	566	-	-	1043	-
Stage 1	606	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	184	566	-	-	1043	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	457	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	345	1043	-
HCM Lane V/C Ratio	-	-	0.181	0.005	-
HCM Control Delay (s)	-	-	17.7	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Conditions
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	25	37	11	15	73	16	546	6	53	561	74
Future Volume (veh/h)	71	25	37	11	15	73	16	546	6	53	561	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	25	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	73	26	38	11	15	75	16	563	6	55	578	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	206	73	68	85	52	188	254	860	9	466	778	78
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	641	470	427	78	326	1164	773	1302	14	835	1139	150
Grp Volume(v), veh/h	137	0	0	101	0	0	16	0	569	55	0	654
Grp Sat Flow(s),veh/h/ln	1538	0	0	1567	0	0	773	0	1316	835	0	1289
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0	13.9	2.3	0.0	18.8
Cycle Q Clear(g_c), s	3.5	0.0	0.0	2.7	0.0	0.0	19.6	0.0	13.9	16.2	0.0	18.8
Prop In Lane	0.53		0.28	0.11		0.74	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	347	0	0	325	0	0	254	0	869	466	0	856
V/C Ratio(X)	0.40	0.00	0.00	0.31	0.00	0.00	0.06	0.00	0.65	0.12	0.00	0.76
Avail Cap(c_a), veh/h	1005	0	0	1023	0	0	1013	0	1987	1168	0	1947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	23.2	0.0	0.0	23.7	0.0	5.6	10.6	0.0	8.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.1	0.0	1.2	0.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	1.3	0.0	0.0	0.2	0.0	2.9	0.4	0.0	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	0.0	23.6	0.0	0.0	23.8	0.0	6.8	10.8	0.0	36.2
LnGrp LOS	C	A	A	C	A	A	C	A	A	B	A	D
Approach Vol, veh/h		137			101			585			709	
Approach Delay, s/veh		24.2			23.6			7.3			34.2	
Approach LOS		C			C			A			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.1		13.6		34.1		13.6				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		21.6		5.5		20.8		4.7				
Green Ext Time (p_c), s		7.2		0.7		8.6		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			22.3									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Conditions
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	54	28	42	35	44	27	487	24	41	548	20
Future Volume (veh/h)	37	54	28	42	35	44	27	487	24	41	548	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	20	0
Ped-Bike Adj(A_pbT)	0.75		0.67	0.75		0.68	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	38	56	29	43	36	45	28	502	25	42	565	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	134	176	78	142	111	111	91	638	32	118	677	17
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.05	0.47	0.47	0.07	0.48	0.48
Sat Flow, veh/h	314	715	317	341	453	452	1767	1238	62	1767	1258	47
Grp Volume(v), veh/h	123	0	0	124	0	0	28	0	527	42	0	586
Grp Sat Flow(s),veh/h/ln	1347	0	0	1246	0	0	1767	0	1300	1767	0	1305
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	1.1	0.0	27.3	1.7	0.0	31.6
Cycle Q Clear(g_c), s	4.6	0.0	0.0	5.0	0.0	0.0	1.1	0.0	27.3	1.7	0.0	31.6
Prop In Lane	0.31		0.24	0.35		0.36	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	389	0	0	364	0	0	91	0	670	118	0	694
V/C Ratio(X)	0.32	0.00	0.00	0.34	0.00	0.00	0.31	0.00	0.79	0.36	0.00	0.84
Avail Cap(c_a), veh/h	488	0	0	458	0	0	375	0	1035	375	0	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	0.0	26.6	0.0	0.0	38.9	0.0	16.5	38.0	0.0	18.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.7	0.0	1.0	0.7	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.4
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	2.1	0.0	0.0	0.6	0.0	7.8	0.9	0.0	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	0.0	26.8	0.0	0.0	39.6	0.0	17.5	38.6	0.0	59.9
LnGrp LOS	C	A	A	C	A	A	D	A	B	D	A	E
Approach Vol, veh/h		123			124			555			628	
Approach Delay, s/veh		26.6			26.8			18.6			58.5	
Approach LOS		C			C			B			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	41.2		25.4	10.0	39.9		25.4
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	3.1	33.6		7.0	3.7	29.3		6.6
Green Ext Time (p_c), s	0.0	2.9		0.3	0.0	2.5		0.3

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	28	510	67	22	596
Future Vol, veh/h	32	28	510	67	22	596
Conflicting Peds, #/hr	39	71	0	169	169	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	33	29	531	70	23	621

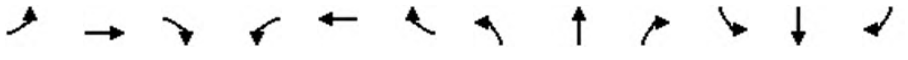
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1441	806	0	0	770	0
Stage 1	735	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	145	380	-	-	840	-
Stage 1	473	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	113	297	-	-	705	-
Mov Cap-2 Maneuver	245	-	-	-	-	-
Stage 1	397	-	-	-	-	-
Stage 2	454	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.6	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	267	705	-
HCM Lane V/C Ratio	-	-	0.234	0.033	-
HCM Control Delay (s)	-	-	22.6	10.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.9	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Conditions
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Future Volume (veh/h)	0	0	153	128	38	71	57	506	55	63	559	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.49	1.00		0.74	1.00		0.90	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	156	131	39	72	58	516	56	64	570	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	124	139	220	65	177	104	676	21	107	707	4
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.07	0.47	0.47	0.07	0.47	0.47
Sat Flow, veh/h	0	1856	766	1377	410	1157	1767	1155	125	1767	1301	14
Grp Volume(v), veh/h	0	0	156	170	0	72	58	0	572	64	0	576
Grp Sat Flow(s),veh/h/ln	0	1856	766	1787	0	1157	1767	0	1280	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.0	0.0	6.3	3.7	0.0	49.6	4.1	0.0	47.7
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	124	139	285	0	177	104	0	712	107	0	689
V/C Ratio(X)	0.00	0.00	1.12	0.60	0.00	0.41	0.56	0.00	0.80	0.60	0.00	0.84
Avail Cap(c_a), veh/h	0	144	163	541	0	350	382	0	830	382	0	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	61.9	52.9	0.0	51.2	62.0	0.0	31.3	62.0	0.0	30.5
Incr Delay (d2), s/veh	0.0	0.0	108.6	2.0	0.0	1.5	1.7	0.0	4.2	2.0	0.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	164.3	0.0	0.0	57.6
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.1	5.6	0.0	2.3	2.0	0.0	56.4	2.2	0.0	32.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	170.5	54.9	0.0	52.7	63.7	0.0	199.9	64.0	0.0	93.1
LnGrp LOS	A	A	F	D	A	D	E	A	F	E	A	F
Approach Vol, veh/h		156			242			630			640	
Approach Delay, s/veh		170.5			54.3			187.4			90.2	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	62.3		28.4	11.5	62.0		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	5.7	49.7		12.0	6.1	51.6		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.3	0.1	2.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			129.2									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	73	8	11	109	10
Future Vol, veh/h	10	73	8	11	109	10
Conflicting Peds, #/hr	0	2	2	0	6	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	79	9	12	118	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	92	0	89	59
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	36	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1496	-	909	1004
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1493	-	896	996
Mov Cap-2 Maneuver	-	-	-	-	896	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	904	-	-	1493	-
HCM Lane V/C Ratio	0.143	-	-	0.006	-
HCM Control Delay (s)	9.6	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	67	39	22	69	44	30	71	18	44	52	14
Future Vol, veh/h	8	67	39	22	69	44	30	71	18	44	52	14
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	75	44	25	78	49	34	80	20	49	58	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	8.7	8.8	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	7%	16%	40%
Vol Thru, %	60%	59%	51%	47%
Vol Right, %	15%	34%	33%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	119	114	135	110
LT Vol	30	8	22	44
Through Vol	71	67	69	52
RT Vol	18	39	44	14
Lane Flow Rate	134	128	152	124
Geometry Grp	1	1	1	1
Degree of Util (X)	0.175	0.162	0.192	0.164
Departure Headway (Hd)	4.709	4.557	4.556	4.764
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	759	785	786	751
Service Time	2.75	2.597	2.595	2.805
HCM Lane V/C Ratio	0.177	0.163	0.193	0.165
HCM Control Delay	8.8	8.5	8.7	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.6	0.7	0.6

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	59	2	1	42	84	1	2	2	93	2	20
Future Vol, veh/h	26	59	2	1	42	84	1	2	2	93	2	20
Conflicting Peds, #/hr	27	0	18	18	0	27	4	0	7	7	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	61	2	1	43	87	1	2	2	96	2	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	157	0	0	81	0	0	239	293	87	241	251	119
Stage 1	-	-	-	-	-	-	134	134	-	116	116	-
Stage 2	-	-	-	-	-	-	105	159	-	125	135	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1417	-	-	1510	-	-	713	616	969	711	650	930
Stage 1	-	-	-	-	-	-	867	784	-	886	798	-
Stage 2	-	-	-	-	-	-	898	764	-	877	783	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1484	-	-	669	577	946	674	609	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	669	577	-	674	609	-
Stage 1	-	-	-	-	-	-	835	755	-	846	776	-
Stage 2	-	-	-	-	-	-	870	743	-	850	754	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.1	10.1	11.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	707	1381	-	-	1484	-	-	704
HCM Lane V/C Ratio	0.007	0.019	-	-	0.001	-	-	0.168
HCM Control Delay (s)	10.1	7.7	0	-	7.4	0	-	11.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	8	3	0	5	1	1	2	0	0	1	30
Future Vol, veh/h	43	8	3	0	5	1	1	2	0	0	1	30
Conflicting Peds, #/hr	1	0	4	4	0	1	3	0	1	1	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	53	10	4	0	6	1	1	2	0	0	1	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	8	0	0	18	0	0	151	130	17	128	132	11
Stage 1	-	-	-	-	-	-	122	122	-	8	8	-
Stage 2	-	-	-	-	-	-	29	8	-	120	124	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1606	-	-	1592	-	-	814	759	1059	843	757	1067
Stage 1	-	-	-	-	-	-	880	793	-	1011	887	-
Stage 2	-	-	-	-	-	-	985	887	-	882	791	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1586	-	-	759	730	1054	818	728	1063
Mov Cap-2 Maneuver	-	-	-	-	-	-	759	730	-	818	728	-
Stage 1	-	-	-	-	-	-	847	764	-	977	886	-
Stage 2	-	-	-	-	-	-	947	886	-	849	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.8	0	9.9	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	739	1604	-	-	1586	-	-	1047
HCM Lane V/C Ratio	0.005	0.033	-	-	-	-	-	0.037
HCM Control Delay (s)	9.9	7.3	0	-	0	-	-	8.6
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	46	5	8	44	11
Future Vol, veh/h	6	46	5	8	44	11
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	7	53	6	9	51	13
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	6.8	7.3	7.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	80%	0%	38%
Vol Thru, %	0%	12%	62%
Vol Right, %	20%	88%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	55	52	13
LT Vol	44	0	5
Through Vol	0	6	8
RT Vol	11	46	0
Lane Flow Rate	64	60	15
Geometry Grp	1	1	1
Degree of Util (X)	0.073	0.06	0.018
Departure Headway (Hd)	4.121	3.543	4.187
Convergence, Y/N	Yes	Yes	Yes
Cap	870	1007	853
Service Time	2.143	1.579	2.224
HCM Lane V/C Ratio	0.074	0.06	0.018
HCM Control Delay	7.5	6.8	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	188	213	39	36	9
Future Vol, veh/h	17	188	213	39	36	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	192	217	40	37	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	257	0	-	0	463	237
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1302	-	-	-	555	800
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1302	-	-	-	547	800
Mov Cap-2 Maneuver	-	-	-	-	547	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	809	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1302	-	-	-	584
HCM Lane V/C Ratio	0.013	-	-	-	0.079
HCM Control Delay (s)	7.8	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	193	18	19	218	4	13	0	22	9	0	16
Future Vol, veh/h	14	193	18	19	218	4	13	0	22	9	0	16
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	205	19	20	232	4	14	0	23	10	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	224	0	0	528	523	215	532	530	236
Stage 1	-	-	-	-	-	-	245	245	-	276	276	-
Stage 2	-	-	-	-	-	-	283	278	-	256	254	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1323	-	-	1339	-	-	459	457	822	457	453	801
Stage 1	-	-	-	-	-	-	756	702	-	728	680	-
Stage 2	-	-	-	-	-	-	722	679	-	746	695	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1320	-	-	1339	-	-	440	444	822	434	440	799
Mov Cap-2 Maneuver	-	-	-	-	-	-	440	444	-	434	440	-
Stage 1	-	-	-	-	-	-	748	694	-	719	668	-
Stage 2	-	-	-	-	-	-	696	667	-	717	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.6	10.9	11.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	440	822	1320	-	-	1339	-	-	613
HCM Lane V/C Ratio	0.031	0.028	0.011	-	-	0.015	-	-	0.043
HCM Control Delay (s)	13.4	9.5	7.8	-	-	7.7	-	-	11.1
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	110	114	121	471	423	125
Future Vol, veh/h	110	114	121	471	423	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	116	120	127	496	445	132

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1195	445	577	0	-	0
Stage 1	445	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	205	611	992	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	179	611	992	-	-	-
Mov Cap-2 Maneuver	376	-	-	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	465	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.2	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	992	-	468	-	-
HCM Lane V/C Ratio	0.128	-	0.504	-	-
HCM Control Delay (s)	9.2	-	20.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.8	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	15	558	23	8	520
Future Vol, veh/h	28	15	558	23	8	520
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	29	16	581	24	8	542

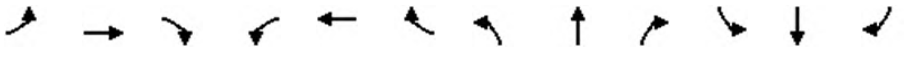
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1140	583	0	0	606	0
Stage 1	582	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	221	510	-	-	967	-
Stage 1	557	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	509	-	-	966	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	566	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	398	966	-
HCM Lane V/C Ratio	-	-	0.113	0.009	-
HCM Control Delay (s)	-	-	15.2	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	39	40	12	54	74	39	590	18	94	517	84
Future Volume (veh/h)	89	39	40	12	54	74	39	590	18	94	517	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.98		0.95	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	100	44	45	13	61	83	44	663	20	106	581	94
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	215	84	66	73	127	155	336	845	25	339	734	119
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	712	470	369	63	709	865	758	1273	38	752	1106	179
Grp Volume(v), veh/h	189	0	0	157	0	0	44	0	683	106	0	675
Grp Sat Flow(s),veh/h/ln	1551	0	0	1637	0	0	758	0	1311	752	0	1285
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	2.7	0.0	23.0	7.2	0.0	23.4
Cycle Q Clear(g_c), s	6.6	0.0	0.0	5.4	0.0	0.0	26.1	0.0	23.0	30.2	0.0	23.4
Prop In Lane	0.53		0.24	0.08		0.53	1.00		0.03	1.00		0.14
Lane Grp Cap(c), veh/h	365	0	0	355	0	0	336	0	870	339	0	853
V/C Ratio(X)	0.52	0.00	0.00	0.44	0.00	0.00	0.13	0.00	0.78	0.31	0.00	0.79
Avail Cap(c_a), veh/h	757	0	0	805	0	0	700	0	1502	701	0	1472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	0.0	23.4	0.0	0.0	16.7	0.0	7.4	18.0	0.0	7.5
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.6	0.0	0.0	0.2	0.0	2.3	0.7	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	2.1	0.0	0.0	0.5	0.0	5.1	1.2	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	0.0	24.1	0.0	0.0	17.0	0.0	9.7	18.8	0.0	9.9
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		189			157			727			781	
Approach Delay, s/veh		24.7			24.1			10.1			11.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.4		16.4		46.4		16.4				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		28.1		8.6		32.2		7.4				
Green Ext Time (p_c), s		9.7		0.9		9.5		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			13.2									
HCM 6th LOS			B									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	89	33	30	64	37	50	555	46	45	480	46
Future Volume (veh/h)	55	89	33	30	64	37	50	555	46	45	480	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.91	0.96		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	60	97	36	33	70	40	54	603	50	49	522	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	185	59	105	188	91	143	645	53	136	631	60
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.08	0.54	0.54	0.08	0.53	0.53
Sat Flow, veh/h	373	941	301	233	958	463	1767	1200	99	1767	1183	113
Grp Volume(v), veh/h	193	0	0	143	0	0	54	0	653	49	0	572
Grp Sat Flow(s),veh/h/ln	1615	0	0	1654	0	0	1767	0	1299	1767	0	1297
Q Serve(g_s), s	2.3	0.0	0.0	0.0	0.0	0.0	2.2	0.0	34.9	2.0	0.0	27.5
Cycle Q Clear(g_c), s	7.7	0.0	0.0	5.4	0.0	0.0	2.2	0.0	34.9	2.0	0.0	27.5
Prop In Lane	0.31		0.19	0.23		0.28	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	381	0	0	385	0	0	143	0	698	136	0	691
V/C Ratio(X)	0.51	0.00	0.00	0.37	0.00	0.00	0.38	0.00	0.93	0.36	0.00	0.83
Avail Cap(c_a), veh/h	571	0	0	577	0	0	379	0	1044	379	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	0.0	26.3	0.0	0.0	32.5	0.0	16.1	32.7	0.0	14.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.6	0.0	8.8	0.6	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	2.2	0.0	0.0	0.9	0.0	10.8	0.9	0.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	0.0	26.5	0.0	0.0	33.1	0.0	24.9	33.3	0.0	16.6
LnGrp LOS	C	A	A	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		193			143			707			621	
Approach Delay, s/veh		27.5			26.5			25.5			17.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	44.5		19.4	10.4	44.9		19.4				
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7				
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24				
Max Q Clear Time (g_c+I1), s	14.2	29.5		7.4	4.0	36.9		9.7				
Green Ext Time (p_c), s	0.0	2.8		0.3	0.0	3.3		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	36	18	633	98	20	523
Future Vol, veh/h	36	18	633	98	20	523
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	38	19	659	102	21	545

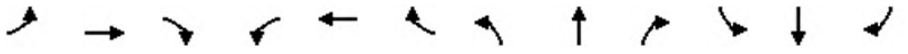
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1302	717	0	0	766	0
Stage 1	715	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	177	428	-	-	843	-
Stage 1	483	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	172	425	-	-	839	-
Mov Cap-2 Maneuver	310	-	-	-	-	-
Stage 1	481	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.6	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	341	839	-
HCM Lane V/C Ratio	-	-	0.165	0.025	-
HCM Control Delay (s)	-	-	17.6	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Plus Project
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	168	188	33	122	77	609	55	76	480	4
Future Volume (veh/h)	0	0	168	188	33	122	77	609	55	76	480	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.91	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	181	202	35	131	83	655	59	82	516	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	184	242	42	229	110	687	23	110	707	5
Arrive On Green	0.00	0.00	0.06	0.16	0.16	0.16	0.06	0.54	0.54	0.06	0.54	0.54
Sat Flow, veh/h	0	1856	1331	1517	263	1437	1767	1188	107	1767	1306	10
Grp Volume(v), veh/h	0	0	181	237	0	131	83	0	714	82	0	520
Grp Sat Flow(s),veh/h/ln	0	1856	1331	1780	0	1437	1767	0	1295	1767	0	1316
Q Serve(g_s), s	0.0	0.0	9.0	17.9	0.0	11.7	6.4	0.0	75.0	6.3	0.0	41.4
Cycle Q Clear(g_c), s	0.0	0.0	9.0	17.9	0.0	11.7	6.4	0.0	75.0	6.3	0.0	41.4
Prop In Lane	0.00		1.00	0.85		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	0	121	184	283	0	229	110	0	709	110	0	713
V/C Ratio(X)	0.00	0.00	0.98	0.84	0.00	0.57	0.75	0.00	1.01	0.75	0.00	0.73
Avail Cap(c_a), veh/h	0	121	184	450	0	363	319	0	701	319	0	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	60.6	56.5	0.0	53.8	63.9	0.0	31.7	63.9	0.0	24.1
Incr Delay (d2), s/veh	0.0	0.0	60.4	7.6	0.0	2.2	3.9	0.0	35.5	3.7	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	253.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.5	8.7	0.0	4.4	3.0	0.0	80.1	3.0	0.0	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	121.0	64.0	0.0	56.1	67.7	0.0	321.0	67.6	0.0	27.4
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		181			368			797			602	
Approach Delay, s/veh		121.0			61.2			294.6			32.9	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	82.7		29.8	12.3	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.4	43.4		19.9	8.3	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.5		1.7	0.1	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	153.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	13	132	10	14	115	12
Future Vol, veh/h	13	132	10	14	115	12
Conflicting Peds, #/hr	0	2	2	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	16	159	12	17	139	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	177	0	140	99
Stage 1	-	-	-	-	98	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1393	-	851	954
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	978	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1390	-	841	951
Mov Cap-2 Maneuver	-	-	-	-	841	-
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	968	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	850	-	-	1390	-
HCM Lane V/C Ratio	0.18	-	-	0.009	-
HCM Control Delay (s)	10.2	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	92	70	15	54	40	71	101	55	61	65	12
Future Vol, veh/h	18	92	70	15	54	40	71	101	55	61	65	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	107	81	17	63	47	83	117	64	71	76	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	9.4	10.9	9.9
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	31%	10%	14%	44%
Vol Thru, %	44%	51%	50%	47%
Vol Right, %	24%	39%	37%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	227	180	109	138
LT Vol	71	18	15	61
Through Vol	101	92	54	65
RT Vol	55	70	40	12
Lane Flow Rate	264	209	127	160
Geometry Grp	1	1	1	1
Degree of Util (X)	0.367	0.294	0.183	0.234
Departure Headway (Hd)	5.009	5.056	5.192	5.259
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	721	714	692	684
Service Time	3.021	3.07	3.221	3.287
HCM Lane V/C Ratio	0.366	0.293	0.184	0.234
HCM Control Delay	10.9	10.2	9.4	9.9
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.7	1.2	0.7	0.9

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	50	55	13	3	38	183	5	3	10	132	4	10
Future Vol, veh/h	50	55	13	3	38	183	5	3	10	132	4	10
Conflicting Peds, #/hr	15	0	15	15	0	15	0	0	4	4	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	66	16	4	46	220	6	4	12	159	5	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	281	0	0	97	0	0	382	498	93	385	396	171
Stage 1	-	-	-	-	-	-	209	209	-	179	179	-
Stage 2	-	-	-	-	-	-	173	289	-	206	217	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1276	-	-	1490	-	-	574	472	961	572	540	870
Stage 1	-	-	-	-	-	-	791	727	-	820	749	-
Stage 2	-	-	-	-	-	-	827	671	-	794	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1258	-	-	1469	-	-	532	435	944	529	497	858
Mov Cap-2 Maneuver	-	-	-	-	-	-	532	435	-	529	497	-
Stage 1	-	-	-	-	-	-	740	681	-	768	736	-
Stage 2	-	-	-	-	-	-	808	660	-	738	676	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0.1	10.6	14.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	669	1258	-	-	1469	-	-	542
HCM Lane V/C Ratio	0.032	0.048	-	-	0.002	-	-	0.325
HCM Control Delay (s)	10.6	8	0	-	7.5	0	-	14.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	1.4

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	37	86	29	0	36	2	8	0	0	0	0	9
Future Vol, veh/h	37	86	29	0	36	2	8	0	0	0	0	9
Conflicting Peds, #/hr	5	0	3	3	0	5	1	0	2	2	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	113	38	0	47	3	11	0	0	0	0	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	55	0	0	154	0	0	289	288	137	286	306	55
Stage 1	-	-	-	-	-	-	233	233	-	54	54	-
Stage 2	-	-	-	-	-	-	56	55	-	232	252	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1544	-	-	1420	-	-	661	620	909	664	606	1009
Stage 1	-	-	-	-	-	-	768	710	-	956	848	-
Stage 2	-	-	-	-	-	-	954	847	-	769	697	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1537	-	-	1416	-	-	633	593	905	642	580	1003
Mov Cap-2 Maneuver	-	-	-	-	-	-	633	593	-	642	580	-
Stage 1	-	-	-	-	-	-	739	683	-	918	844	-
Stage 2	-	-	-	-	-	-	942	843	-	741	671	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	10.8	8.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	633	1537	-	-	1416	-	-	1003
HCM Lane V/C Ratio	0.017	0.032	-	-	-	-	-	0.012
HCM Control Delay (s)	10.8	7.4	0	-	0	-	-	8.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	12	65	11	21	0	81	7	8	0	22	12
Future Vol, veh/h	4	12	65	11	21	0	81	7	8	0	22	12
Peak Hour Factor	0.92	0.85	0.85	0.85	0.85	0.92	0.85	0.92	0.85	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	14	76	13	25	0	95	8	9	0	24	13
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.7	8.1	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	84%	5%	34%	0%
Vol Thru, %	7%	15%	66%	65%
Vol Right, %	8%	80%	0%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	81	32	34
LT Vol	81	4	11	0
Through Vol	7	12	21	22
RT Vol	8	65	0	12
Lane Flow Rate	112	95	38	37
Geometry Grp	1	1	1	1
Degree of Util (X)	0.135	0.099	0.046	0.042
Departure Headway (Hd)	4.327	3.766	4.354	4.055
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	822	933	809	870
Service Time	2.389	1.863	2.454	2.141
HCM Lane V/C Ratio	0.136	0.102	0.047	0.043
HCM Control Delay	8.1	7.3	7.7	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0.1	0.1

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	185	365	64	78	36
Future Vol, veh/h	13	185	365	64	78	36
Conflicting Peds, #/hr	4	0	0	4	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	15	208	410	72	88	40

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	486	0	-	0	688	451
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1072	-	-	-	411	606
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	799	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1068	-	-	-	401	603
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	627	-
Stage 2	-	-	-	-	796	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1068	-	-	-	448
HCM Lane V/C Ratio	0.014	-	-	-	0.286
HCM Control Delay (s)	8.4	0	-	-	16.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.2

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	136	116	88	266	8	119	0	48	8	1	17
Future Vol, veh/h	13	136	116	88	266	8	119	0	48	8	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	155	132	100	302	9	135	0	55	9	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	287	0	0	768	762	221	786	824	307
Stage 1	-	-	-	-	-	-	251	251	-	507	507	-
Stage 2	-	-	-	-	-	-	517	511	-	279	317	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1244	-	-	1269	-	-	317	333	816	309	307	731
Stage 1	-	-	-	-	-	-	751	697	-	546	538	-
Stage 2	-	-	-	-	-	-	539	535	-	725	652	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	1269	-	-	287	303	816	269	279	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	287	303	-	269	279	-
Stage 1	-	-	-	-	-	-	742	689	-	539	495	-
Stage 2	-	-	-	-	-	-	482	493	-	668	644	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	2	22.9	13.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	287	816	1244	-	-	1269	-	-	460
HCM Lane V/C Ratio	0.471	0.067	0.012	-	-	0.079	-	-	0.064
HCM Control Delay (s)	28.2	9.7	7.9	-	-	8.1	-	-	13.4
HCM Lane LOS	D	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2.4	0.2	0	-	-	0.3	-	-	0.2

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	81	182	428	316	208
Future Vol, veh/h	106	81	182	428	316	208
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	110	84	190	446	329	217

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1155	329	546	0	-	0
Stage 1	329	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	217	710	1018	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	176	710	1018	-	-	-
Mov Cap-2 Maneuver	362	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	428	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	2.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1018	-	460	-	-
HCM Lane V/C Ratio	0.186	-	0.423	-	-
HCM Control Delay (s)	9.3	-	18.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.7	-	2.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	4	494	40	4	498
Future Vol, veh/h	26	4	494	40	4	498
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	27	4	509	41	4	513

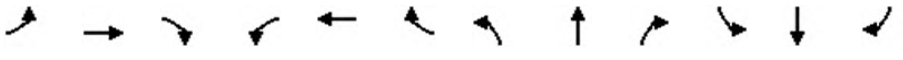
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1030	509	0	0	550	0
Stage 1	509	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	258	562	-	-	1015	-
Stage 1	602	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	257	562	-	-	1015	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	407	1015	-
HCM Lane V/C Ratio	-	-	0.076	0.004	-
HCM Control Delay (s)	-	-	14.6	8.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	31	19	10	38	154	21	639	16	64	585	53
Future Volume (veh/h)	109	31	19	10	38	154	21	639	16	64	585	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1329	1870	1329
Adj Flow Rate, veh/h	111	32	19	10	39	157	21	652	16	65	597	54
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	69	29	71	65	228	477	834	20	279	1092	99
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	817	373	158	33	352	1235	781	1291	32	546	1690	153
Grp Volume(v), veh/h	162	0	0	206	0	0	21	0	668	65	0	651
Grp Sat Flow(s),veh/h/ln	1348	0	0	1620	0	0	781	0	1323	546	0	1843
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.0	0.9	0.0	21.1	5.6	0.0	11.3
Cycle Q Clear(g_c), s	6.4	0.0	0.0	6.9	0.0	0.0	12.2	0.0	21.1	26.7	0.0	11.3
Prop In Lane	0.69		0.12	0.05		0.76	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	353	0	0	364	0	0	477	0	855	279	0	1190
V/C Ratio(X)	0.46	0.00	0.00	0.57	0.00	0.00	0.04	0.00	0.78	0.23	0.00	0.55
Avail Cap(c_a), veh/h	762	0	0	863	0	0	935	0	1631	599	0	2271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	0.0	22.2	0.0	0.0	9.0	0.0	7.4	16.9	0.0	5.7
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.0	0.0	0.0	0.1	0.0	2.3	0.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	2.6	0.0	0.0	0.1	0.0	4.7	0.7	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	0.0	0.0	23.3	0.0	0.0	9.0	0.0	9.7	17.5	0.0	6.2
LnGrp LOS	C	A	A	C	A	A	A	A	A	B	A	A
Approach Vol, veh/h		162			206			689			716	
Approach Delay, s/veh		22.6			23.3			9.6			7.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.4		16.0		42.4		16.0				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		23.1		8.4		28.7		8.9				
Green Ext Time (p_c), s		9.1		0.8		9.0		1.0				

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Plus Project
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	102	26	65	72	63	29	534	35	73	508	33
Future Volume (veh/h)	78	102	26	65	72	63	29	534	35	73	508	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.87	0.97		0.84	1.00		0.90	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	80	105	27	67	74	65	30	551	36	75	524	34
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	202	45	152	153	110	100	597	39	172	649	42
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.06	0.49	0.49	0.10	0.53	0.53
Sat Flow, veh/h	470	911	202	389	690	498	1781	1224	80	1781	1230	80
Grp Volume(v), veh/h	212	0	0	206	0	0	30	0	587	75	0	558
Grp Sat Flow(s),veh/h/ln	1583	0	0	1577	0	0	1781	0	1304	1781	0	1310
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.0	1.2	0.0	30.4	2.9	0.0	25.4
Cycle Q Clear(g_c), s	8.0	0.0	0.0	7.7	0.0	0.0	1.2	0.0	30.4	2.9	0.0	25.4
Prop In Lane	0.38		0.13	0.33		0.32	1.00		0.06	1.00		0.06
Lane Grp Cap(c), veh/h	419	0	0	415	0	0	100	0	636	172	0	691
V/C Ratio(X)	0.51	0.00	0.00	0.50	0.00	0.00	0.30	0.00	0.92	0.44	0.00	0.81
Avail Cap(c_a), veh/h	580	0	0	573	0	0	393	0	1080	393	0	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	0.0	25.0	0.0	0.0	32.8	0.0	17.3	30.8	0.0	14.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	0.6	0.0	4.8	0.6	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	3.1	0.0	0.0	0.5	0.0	9.0	1.2	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.4	0.0	0.0	25.4	0.0	0.0	33.4	0.0	22.1	31.5	0.0	15.2
LnGrp LOS	C	A	A	C	A	A	C	A	C	C	A	B
Approach Vol, veh/h		212			206			617			633	
Approach Delay, s/veh		25.4			25.4			22.7			17.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.8	42.9		20.7	11.7	40.0		20.7
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	3.2	27.4		9.7	4.9	32.4		10.0
Green Ext Time (p_c), s	0.0	2.8		0.5	0.0	2.9		0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	23	575	77	27	572
Future Vol, veh/h	37	23	575	77	27	572
Conflicting Peds, #/hr	12	12	0	1	54	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	24	605	81	28	602

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1370	712	0	0	740	0
Stage 1	700	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	161	432	-	-	867	-
Stage 1	493	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	146	405	-	-	822	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.9	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	321	822	-
HCM Lane V/C Ratio	-	-	0.197	0.035	-
HCM Control Delay (s)	-	-	18.9	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Plus Project
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	191	147	26	91	83	561	65	85	520	4
Future Volume (veh/h)	0	0	191	147	26	91	83	561	65	85	520	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	203	156	28	97	88	597	69	90	553	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	126	199	199	36	194	115	710	27	115	737	5
Arrive On Green	0.00	0.00	0.07	0.13	0.13	0.13	0.07	0.53	0.53	0.07	0.53	0.53
Sat Flow, veh/h	0	1870	1454	1521	273	1480	1781	1163	134	1781	1317	10
Grp Volume(v), veh/h	0	0	203	184	0	97	88	0	666	90	0	557
Grp Sat Flow(s),veh/h/ln	0	1870	1454	1794	0	1480	1781	0	1297	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	12.3	0.0	7.5	6.0	0.0	61.2	6.1	0.0	42.0
Cycle Q Clear(g_c), s	0.0	0.0	9.0	12.3	0.0	7.5	6.0	0.0	61.2	6.1	0.0	42.0
Prop In Lane	0.00		1.00	0.85		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	126	199	235	0	194	115	0	737	115	0	743
V/C Ratio(X)	0.00	0.00	1.02	0.78	0.00	0.50	0.76	0.00	0.90	0.78	0.00	0.75
Avail Cap(c_a), veh/h	0	136	215	507	0	418	359	0	785	359	0	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	58.4	56.4	0.0	54.2	61.7	0.0	29.5	61.7	0.0	22.4
Incr Delay (d2), s/veh	0.0	0.0	65.2	2.2	0.0	0.7	3.9	0.0	12.8	4.3	0.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	200.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.4	6.2	0.0	3.1	3.1	0.0	66.7	3.2	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	123.6	58.6	0.0	54.9	65.6	0.0	243.1	66.0	0.0	25.5
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	C
Approach Vol, veh/h		203			281			754			647	
Approach Delay, s/veh		123.6			57.3			222.4			31.1	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	73.6		24.3	12.3	73.6		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.0	44.0		14.3	8.1	63.2		11.0				
Green Ext Time (p_c), s	0.1	2.7		0.9	0.1	2.7		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	121.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	9	100	5	13	195	6
Future Vol, veh/h	9	100	5	13	195	6
Conflicting Peds, #/hr	0	2	2	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	120	6	16	235	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	133	0	101	74
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1452	-	898	988
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	995	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1449	-	893	985
Mov Cap-2 Maneuver	-	-	-	-	893	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	991	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	895	-	-	1449	-
HCM Lane V/C Ratio	0.271	-	-	0.004	-
HCM Control Delay (s)	10.5	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	128	85	57	144	100	55	88	29	57	72	26
Future Vol, veh/h	15	128	85	57	144	100	55	88	29	57	72	26
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	135	89	60	152	105	58	93	31	60	76	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11	12.4	10.9	10.7
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	7%	19%	37%
Vol Thru, %	51%	56%	48%	46%
Vol Right, %	17%	37%	33%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	228	301	155
LT Vol	55	15	57	57
Through Vol	88	128	144	72
RT Vol	29	85	100	26
Lane Flow Rate	181	240	317	163
Geometry Grp	1	1	1	1
Degree of Util (X)	0.284	0.347	0.452	0.258
Departure Headway (Hd)	5.646	5.201	5.134	5.69
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	634	689	700	630
Service Time	3.698	3.248	3.178	3.743
HCM Lane V/C Ratio	0.285	0.348	0.453	0.259
HCM Control Delay	10.9	11	12.4	10.7
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.2	1.6	2.4	1

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	78	3	2	35	135	3	10	6	185	6	16
Future Vol, veh/h	21	78	3	2	35	135	3	10	6	185	6	16
Conflicting Peds, #/hr	31	0	1	1	0	31	7	0	5	5	0	7
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	89	3	2	40	153	3	11	7	210	7	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	224	0	0	93	0	0	280	368	97	305	293	155
Stage 1	-	-	-	-	-	-	140	140	-	152	152	-
Stage 2	-	-	-	-	-	-	140	228	-	153	141	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1345	-	-	1501	-	-	672	561	959	647	618	891
Stage 1	-	-	-	-	-	-	863	781	-	850	772	-
Stage 2	-	-	-	-	-	-	863	715	-	849	780	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1305	-	-	1500	-	-	636	532	954	600	586	859
Mov Cap-2 Maneuver	-	-	-	-	-	-	636	532	-	600	586	-
Stage 1	-	-	-	-	-	-	846	765	-	809	747	-
Stage 2	-	-	-	-	-	-	830	692	-	811	764	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.1	10.8	14.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	638	1305	-	-	1500	-	-	614
HCM Lane V/C Ratio	0.034	0.018	-	-	0.002	-	-	0.383
HCM Control Delay (s)	10.8	7.8	0	-	7.4	0	-	14.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.8

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	69	60	9	0	88	0	31	0	1	6	1	45
Future Vol, veh/h	69	60	9	0	88	0	31	0	1	6	1	45
Conflicting Peds, #/hr	4	0	8	8	0	4	4	0	6	6	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	85	74	11	0	109	0	38	0	1	7	1	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	113	0	0	93	0	0	400	371	94	369	376	117
Stage 1	-	-	-	-	-	-	258	258	-	113	113	-
Stage 2	-	-	-	-	-	-	142	113	-	256	263	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1476	-	-	1501	-	-	560	559	963	588	555	935
Stage 1	-	-	-	-	-	-	747	694	-	892	802	-
Stage 2	-	-	-	-	-	-	861	802	-	749	691	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1470	-	-	1490	-	-	495	519	950	554	515	928
Mov Cap-2 Maneuver	-	-	-	-	-	-	495	519	-	554	515	-
Stage 1	-	-	-	-	-	-	696	646	-	834	799	-
Stage 2	-	-	-	-	-	-	805	799	-	698	643	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.8	0	12.8	9.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	503	1470	-	-	1490	-	-	849
HCM Lane V/C Ratio	0.079	0.058	-	-	-	-	-	0.076
HCM Control Delay (s)	12.8	7.6	0	-	0	-	-	9.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	0.2

HCM 6th AWSC
9: Starr Ave/Project Access & Hunt Ave

Existing Plus Project
Timing Plan: PM Peak Hour

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	15	75	6	12	0	63	25	7	0	14	8
Future Vol, veh/h	14	15	75	6	12	0	63	25	7	0	14	8
Peak Hour Factor	0.92	0.88	0.88	0.88	0.88	0.92	0.88	0.92	0.88	0.92	0.92	0.92
Heavy Vehicles, %	3	2	2	2	2	3	2	3	2	3	3	3
Mvmt Flow	15	17	85	7	14	0	72	27	8	0	15	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.5	8	7.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	66%	13%	33%	0%
Vol Thru, %	26%	14%	67%	64%
Vol Right, %	7%	72%	0%	36%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	104	18	22
LT Vol	63	14	6	0
Through Vol	25	15	12	14
RT Vol	7	75	0	8
Lane Flow Rate	107	117	20	24
Geometry Grp	1	1	1	1
Degree of Util (X)	0.127	0.124	0.025	0.027
Departure Headway (Hd)	4.279	3.786	4.319	4.054
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	831	933	816	871
Service Time	2.337	1.866	2.412	2.136
HCM Lane V/C Ratio	0.129	0.125	0.025	0.028
HCM Control Delay	8	7.4	7.5	7.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	0.1	0.1

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	226	261	71	76	22
Future Vol, veh/h	30	226	261	71	76	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	246	284	77	83	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	361	0	-	0	635	323
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	312	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1198	-	-	-	443	718
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1198	-	-	-	429	718
Mov Cap-2 Maneuver	-	-	-	-	429	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	742	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1198	-	-	-	472
HCM Lane V/C Ratio	0.027	-	-	-	0.226
HCM Control Delay (s)	8.1	0	-	-	14.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	249	39	19	238	6	35	0	24	4	0	20
Future Vol, veh/h	31	249	39	19	238	6	35	0	24	4	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	257	40	20	245	6	36	0	25	4	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	251	0	0	297	0	0	640	632	277	642	649	248
Stage 1	-	-	-	-	-	-	341	341	-	288	288	-
Stage 2	-	-	-	-	-	-	299	291	-	354	361	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1314	-	-	1264	-	-	388	398	762	387	389	791
Stage 1	-	-	-	-	-	-	674	639	-	720	674	-
Stage 2	-	-	-	-	-	-	710	672	-	663	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1314	-	-	1264	-	-	366	382	762	363	373	791
Mov Cap-2 Maneuver	-	-	-	-	-	-	366	382	-	363	373	-
Stage 1	-	-	-	-	-	-	658	624	-	703	663	-
Stage 2	-	-	-	-	-	-	681	661	-	626	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.6	13.5	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	366	762	1314	-	-	1264	-	-	661
HCM Lane V/C Ratio	0.099	0.032	0.024	-	-	0.015	-	-	0.037
HCM Control Delay (s)	15.9	9.9	7.8	-	-	7.9	-	-	10.7
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	0.1	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	94	168	110	395	573	181
Future Vol, veh/h	94	168	110	395	573	181
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	183	120	429	623	197

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1292	623	820	0	-	0
Stage 1	623	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	180	486	809	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	509	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	153	486	809	-	-	-
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	456	-	-	-	-	-
Stage 2	509	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.6	2.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	809	-	428	-	-
HCM Lane V/C Ratio	0.148	-	0.665	-	-
HCM Control Delay (s)	10.2	-	28.6	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.5	-	4.7	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	10	473	16	5	706
Future Vol, veh/h	49	10	473	16	5	706
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	11	509	17	5	759

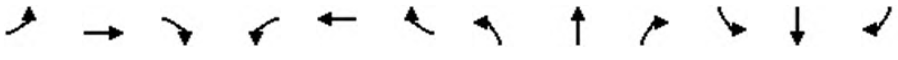
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1278	509	0	0	526	0
Stage 1	509	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	183	564	-	-	1041	-
Stage 1	604	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	182	564	-	-	1041	-
Mov Cap-2 Maneuver	317	-	-	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.9	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	1041	-
HCM Lane V/C Ratio	-	-	0.185	0.005	-
HCM Control Delay (s)	-	-	17.9	8.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

Existing Plus Project
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	29	39	11	19	80	18	551	6	60	566	74
Future Volume (veh/h)	71	29	39	11	19	80	18	551	6	60	566	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	25	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	73	30	40	11	20	82	19	568	6	62	584	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	199	77	70	82	58	185	250	864	9	463	783	77
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	623	496	435	70	362	1142	768	1302	14	831	1141	148
Grp Volume(v), veh/h	143	0	0	113	0	0	19	0	574	62	0	660
Grp Sat Flow(s),veh/h/ln	1554	0	0	1574	0	0	768	0	1316	831	0	1290
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	1.0	0.0	14.2	2.6	0.0	19.2
Cycle Q Clear(g_c), s	3.6	0.0	0.0	3.0	0.0	0.0	20.2	0.0	14.2	16.8	0.0	19.2
Prop In Lane	0.51		0.28	0.10		0.73	1.00		0.01	1.00		0.12
Lane Grp Cap(c), veh/h	345	0	0	325	0	0	250	0	873	463	0	860
V/C Ratio(X)	0.41	0.00	0.00	0.35	0.00	0.00	0.08	0.00	0.66	0.13	0.00	0.77
Avail Cap(c_a), veh/h	991	0	0	1012	0	0	986	0	1957	1141	0	1918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	0.0	23.8	0.0	0.0	24.2	0.0	5.7	10.9	0.0	8.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.5	0.0	0.0	0.2	0.0	1.2	0.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.2
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	1.5	0.0	0.0	0.2	0.0	3.1	0.5	0.0	12.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	0.0	0.0	24.2	0.0	0.0	24.4	0.0	6.9	11.1	0.0	36.5
LnGrp LOS	C	A	A	C	A	A	C	A	A	B	A	D
Approach Vol, veh/h		143			113			593			722	
Approach Delay, s/veh		24.7			24.2			7.5			34.3	
Approach LOS		C			C			A			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.8		13.7		34.8		13.7				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		22.2		5.6		21.2		5.0				
Green Ext Time (p_c), s		7.3		0.7		8.8		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

Existing Plus Project
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	56	28	43	37	50	27	488	25	47	549	20
Future Volume (veh/h)	37	56	28	43	37	50	27	488	25	47	549	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	20	0
Ped-Bike Adj(A_pbT)	0.76		0.67	0.75		0.68	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	38	58	29	44	38	52	28	503	26	48	566	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	133	181	78	135	108	118	91	631	33	127	678	17
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.46	0.46	0.08	0.49	0.49
Sat Flow, veh/h	312	737	317	315	444	481	1767	1235	64	1767	1258	47
Grp Volume(v), veh/h	125	0	0	134	0	0	28	0	529	48	0	587
Grp Sat Flow(s),veh/h/ln	1365	0	0	1240	0	0	1767	0	1299	1767	0	1305
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	1.2	0.0	27.8	1.9	0.0	31.8
Cycle Q Clear(g_c), s	4.7	0.0	0.0	5.7	0.0	0.0	1.2	0.0	27.8	1.9	0.0	31.8
Prop In Lane	0.30		0.23	0.33		0.39	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	393	0	0	361	0	0	91	0	663	127	0	695
V/C Ratio(X)	0.32	0.00	0.00	0.37	0.00	0.00	0.31	0.00	0.80	0.38	0.00	0.84
Avail Cap(c_a), veh/h	493	0	0	455	0	0	375	0	1033	375	0	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	0.0	26.9	0.0	0.0	38.9	0.0	16.9	37.7	0.0	18.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.7	0.0	1.1	0.7	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.4
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0	2.3	0.0	0.0	0.6	0.0	8.0	1.0	0.0	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	0.0	27.1	0.0	0.0	39.7	0.0	18.0	38.4	0.0	60.0
LnGrp LOS	C	A	A	C	A	A	D	A	B	D	A	E
Approach Vol, veh/h		125			134			557			635	
Approach Delay, s/veh		26.7			27.1			19.1			58.3	
Approach LOS		C			C			B			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	41.3		25.4	10.4	39.6		25.4				
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7				
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24				
Max Q Clear Time (g_c+I1), s	3.2	33.8		7.7	3.9	29.8		6.7				
Green Ext Time (p_c), s	0.0	2.9		0.4	0.0	2.6		0.3				

Intersection Summary	
HCM 6th Ctrl Delay	37.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	29	511	72	23	597
Future Vol, veh/h	37	29	511	72	23	597
Conflicting Peds, #/hr	39	71	0	169	169	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	39	30	532	75	24	622

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1448	810	0	0	776	0
Stage 1	739	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	144	378	-	-	836	-
Stage 1	471	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	112	296	-	-	701	-
Mov Cap-2 Maneuver	243	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	264	701	-
HCM Lane V/C Ratio	-	-	0.26	0.034	-
HCM Control Delay (s)	-	-	23.4	10.3	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Plus Project
Timing Plan: Saturday Mid-Day

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	153	135	38	71	57	511	62	63	564	6
Future Volume (veh/h)	0	0	153	135	38	71	57	511	62	63	564	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.48	1.00		0.73	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	156	138	39	72	58	521	63	64	576	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	123	139	222	63	177	104	674	24	107	708	4
Arrive On Green	0.00	0.00	0.08	0.18	0.18	0.18	0.06	0.48	0.48	0.07	0.48	0.48
Sat Flow, veh/h	0	1856	761	1392	394	1153	1767	1139	138	1767	1301	14
Grp Volume(v), veh/h	0	0	156	177	0	72	58	0	584	64	0	582
Grp Sat Flow(s),veh/h/ln	0	1856	761	1786	0	1153	1767	0	1277	1767	0	1315
Q Serve(g_s), s	0.0	0.0	9.0	10.7	0.0	6.5	3.8	0.0	52.0	4.2	0.0	48.8
Cycle Q Clear(g_c), s	0.0	0.0	9.0	10.7	0.0	6.5	3.8	0.0	52.0	4.2	0.0	48.8
Prop In Lane	0.00		1.00	0.78		1.00	1.00		0.11	1.00		0.01
Lane Grp Cap(c), veh/h	0	123	139	285	0	177	104	0	711	107	0	696
V/C Ratio(X)	0.00	0.00	1.12	0.62	0.00	0.41	0.56	0.00	0.82	0.60	0.00	0.84
Avail Cap(c_a), veh/h	0	141	160	528	0	341	373	0	808	373	0	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	62.0	53.4	0.0	51.4	62.3	0.0	31.4	62.3	0.0	30.6
Incr Delay (d2), s/veh	0.0	0.0	110.3	2.2	0.0	1.5	1.7	0.0	5.4	2.0	0.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	173.1	0.0	0.0	56.9
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.2	5.9	0.0	2.3	2.0	0.0	58.3	2.2	0.0	33.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	172.3	55.6	0.0	52.9	64.1	0.0	209.8	64.3	0.0	93.0
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	F
Approach Vol, veh/h		156			249			642			646	
Approach Delay, s/veh		172.3			54.8			196.7			90.1	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	64.7		28.7	11.6	64.5		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	5.8	50.8		12.7	6.2	54.0		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		132.9	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	84	8	11	120	10
Future Vol, veh/h	10	84	8	11	120	10
Conflicting Peds, #/hr	0	2	2	0	6	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	91	9	12	130	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	104	0	95	65
Stage 1	-	-	-	-	59	-
Stage 2	-	-	-	-	36	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1481	-	902	996
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	984	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1478	-	889	988
Mov Cap-2 Maneuver	-	-	-	-	889	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	972	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	896	-	-	1478	-
HCM Lane V/C Ratio	0.158	-	-	0.006	-
HCM Control Delay (s)	9.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	76	39	22	78	54	30	72	18	54	53	14
Future Vol, veh/h	8	76	39	22	78	54	30	72	18	54	53	14
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	85	44	25	88	61	34	81	20	61	60	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	9	8.9	9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	7%	14%	45%
Vol Thru, %	60%	62%	51%	44%
Vol Right, %	15%	32%	35%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	123	154	121
LT Vol	30	8	22	54
Through Vol	72	76	78	53
RT Vol	18	39	54	14
Lane Flow Rate	135	138	173	136
Geometry Grp	1	1	1	1
Degree of Util (X)	0.18	0.178	0.221	0.184
Departure Headway (Hd)	4.805	4.64	4.594	4.862
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	743	770	779	734
Service Time	2.858	2.689	2.641	2.914
HCM Lane V/C Ratio	0.182	0.179	0.222	0.185
HCM Control Delay	8.9	8.7	9	9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.6	0.8	0.7

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	26	65	2	1	48	85	1	2	2	94	2	20
Future Vol, veh/h	26	65	2	1	48	85	1	2	2	94	2	20
Conflicting Peds, #/hr	27	0	18	18	0	27	4	0	7	7	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	27	67	2	1	49	88	1	2	2	97	2	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	164	0	0	87	0	0	252	306	93	253	263	125
Stage 1	-	-	-	-	-	-	140	140	-	122	122	-
Stage 2	-	-	-	-	-	-	112	166	-	131	141	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1408	-	-	1503	-	-	699	606	961	698	640	923
Stage 1	-	-	-	-	-	-	861	779	-	880	793	-
Stage 2	-	-	-	-	-	-	891	759	-	870	778	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1372	-	-	1477	-	-	656	568	938	662	600	895
Mov Cap-2 Maneuver	-	-	-	-	-	-	656	568	-	662	600	-
Stage 1	-	-	-	-	-	-	829	750	-	840	772	-
Stage 2	-	-	-	-	-	-	863	739	-	843	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.1	10.2	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	1372	-	-	1477	-	-	692
HCM Lane V/C Ratio	0.007	0.02	-	-	0.001	-	-	0.173
HCM Control Delay (s)	10.2	7.7	0	-	7.4	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	43	27	3	0	24	1	1	2	0	0	1	30
Future Vol, veh/h	43	27	3	0	24	1	1	2	0	0	1	30
Conflicting Peds, #/hr	1	0	4	4	0	1	3	0	1	1	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	53	33	4	0	30	1	1	2	0	0	1	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	32	0	0	41	0	0	198	177	40	175	179	35
Stage 1	-	-	-	-	-	-	145	145	-	32	32	-
Stage 2	-	-	-	-	-	-	53	32	-	143	147	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1574	-	-	1562	-	-	759	715	1028	785	713	1035
Stage 1	-	-	-	-	-	-	855	775	-	982	866	-
Stage 2	-	-	-	-	-	-	957	866	-	857	774	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1573	-	-	1556	-	-	707	687	1023	761	685	1031
Mov Cap-2 Maneuver	-	-	-	-	-	-	707	687	-	761	685	-
Stage 1	-	-	-	-	-	-	823	746	-	948	865	-
Stage 2	-	-	-	-	-	-	919	865	-	824	745	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.3	0	10.2	8.7
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1573	-	-	1556	-	-	1014
HCM Lane V/C Ratio	0.005	0.034	-	-	-	-	-	0.038
HCM Control Delay (s)	10.2	7.4	0	-	0	-	-	8.7
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	6	46	5	8	0	44	13	11	0	13	8
Future Vol, veh/h	8	6	46	5	8	0	44	13	11	0	13	8
Peak Hour Factor	0.92	0.86	0.86	0.86	0.86	0.92	0.86	0.92	0.86	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	7	53	6	9	0	51	14	13	0	14	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	7.4	7.6	7.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	65%	13%	38%	0%
Vol Thru, %	19%	10%	62%	62%
Vol Right, %	16%	77%	0%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	60	13	21
LT Vol	44	8	5	0
Through Vol	13	6	8	13
RT Vol	11	46	0	8
Lane Flow Rate	78	69	15	23
Geometry Grp	1	1	1	1
Degree of Util (X)	0.09	0.071	0.018	0.025
Departure Headway (Hd)	4.145	3.702	4.255	3.926
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	863	959	835	906
Service Time	2.179	1.757	2.315	1.974
HCM Lane V/C Ratio	0.09	0.072	0.018	0.025
HCM Control Delay	7.6	7	7.4	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	188	213	47	44	14
Future Vol, veh/h	22	188	213	47	44	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	22	192	217	48	45	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	265	0	-	0	477	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	236	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1293	-	-	-	545	795
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	801	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1293	-	-	-	535	795
Mov Cap-2 Maneuver	-	-	-	-	535	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	801	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1293	-	-	-	581
HCM Lane V/C Ratio	0.017	-	-	-	0.102
HCM Control Delay (s)	7.8	0	-	-	11.9
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	201	18	19	226	4	13	0	22	9	0	16
Future Vol, veh/h	14	201	18	19	226	4	13	0	22	9	0	16
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	15	214	19	20	240	4	14	0	23	10	0	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	246	0	0	233	0	0	545	540	224	549	547	244
Stage 1	-	-	-	-	-	-	254	254	-	284	284	-
Stage 2	-	-	-	-	-	-	291	286	-	265	263	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1314	-	-	1329	-	-	448	447	813	445	443	792
Stage 1	-	-	-	-	-	-	748	695	-	721	675	-
Stage 2	-	-	-	-	-	-	715	673	-	738	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1311	-	-	1329	-	-	430	434	813	423	431	790
Mov Cap-2 Maneuver	-	-	-	-	-	-	430	434	-	423	431	-
Stage 1	-	-	-	-	-	-	740	687	-	712	664	-
Stage 2	-	-	-	-	-	-	689	662	-	709	681	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.6	11.1	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	430	813	1311	-	-	1329	-	-	602
HCM Lane V/C Ratio	0.032	0.029	0.011	-	-	0.015	-	-	0.044
HCM Control Delay (s)	13.7	9.6	7.8	-	-	7.8	-	-	11.3
HCM Lane LOS	B	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	112	120	127	471	423	127
Future Vol, veh/h	112	120	127	471	423	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	118	126	134	496	445	134

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1209	445	579	0	-	0
Stage 1	445	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	201	611	990	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	174	611	990	-	-	-
Mov Cap-2 Maneuver	370	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21	2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	990	-	465	-	-
HCM Lane V/C Ratio	0.135	-	0.525	-	-
HCM Control Delay (s)	9.2	-	21	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.5	-	3	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	15	560	23	8	522
Future Vol, veh/h	28	15	560	23	8	522
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	29	16	583	24	8	544

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1144	585	0	0	608	0
Stage 1	584	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	220	509	-	-	966	-
Stage 1	555	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	218	508	-	-	965	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	554	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	397	965	-
HCM Lane V/C Ratio	-	-	0.113	0.009	-
HCM Control Delay (s)	-	-	15.2	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

2040 GP Buildout
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	50	50	20	60	80	40	610	20	120	610	110
Future Volume (veh/h)	100	50	50	20	60	80	40	610	20	120	610	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	112	56	56	22	67	90	45	685	22	135	685	124
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	183	83	68	68	143	168	189	878	28	322	750	136
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	618	417	345	116	719	845	669	1270	41	735	1086	197
Grp Volume(v), veh/h	224	0	0	179	0	0	45	0	707	135	0	809
Grp Sat Flow(s),veh/h/ln	1379	0	0	1680	0	0	669	0	1311	735	0	1282
Q Serve(g_s), s	5.3	0.0	0.0	0.0	0.0	0.0	5.4	0.0	32.4	13.5	0.0	47.3
Cycle Q Clear(g_c), s	14.0	0.0	0.0	8.6	0.0	0.0	52.7	0.0	32.4	45.8	0.0	47.3
Prop In Lane	0.50		0.25	0.12		0.50	1.00		0.03	1.00		0.15
Lane Grp Cap(c), veh/h	334	0	0	378	0	0	189	0	906	322	0	886
V/C Ratio(X)	0.67	0.00	0.00	0.47	0.00	0.00	0.24	0.00	0.78	0.42	0.00	0.91
Avail Cap(c_a), veh/h	510	0	0	577	0	0	266	0	1055	407	0	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	0.0	32.2	0.0	0.0	33.6	0.0	9.3	24.7	0.0	11.6
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.7	0.0	0.0	0.9	0.0	3.7	1.2	0.0	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	3.5	0.0	0.0	0.9	0.0	8.6	2.3	0.0	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	0.0	0.0	32.9	0.0	0.0	34.5	0.0	13.0	25.9	0.0	23.1
LnGrp LOS	D	A	A	C	A	A	C	A	B	C	A	C
Approach Vol, veh/h		224			179			752			944	
Approach Delay, s/veh		36.0			32.9			14.3			23.5	
Approach LOS		D			C			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.5		22.9		66.5		22.9				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		54.7		16.0		49.3		10.6				
Green Ext Time (p_c), s		7.1		1.0		10.1		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			22.3									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

2040 GP Buildout
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	90	40	30	70	40	50	570	50	70	540	70
Future Volume (veh/h)	60	90	40	30	70	40	50	570	50	70	540	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.91	0.96		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	65	98	43	33	76	43	54	620	54	76	587	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	133	169	65	97	187	91	136	656	57	158	641	83
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.55	0.55	0.09	0.56	0.56
Sat Flow, veh/h	397	880	337	229	971	473	1767	1194	104	1767	1142	148
Grp Volume(v), veh/h	206	0	0	152	0	0	54	0	674	76	0	663
Grp Sat Flow(s),veh/h/ln	1614	0	0	1674	0	0	1767	0	1298	1767	0	1290
Q Serve(g_s), s	2.9	0.0	0.0	0.0	0.0	0.0	2.4	0.0	40.5	3.4	0.0	38.6
Cycle Q Clear(g_c), s	9.3	0.0	0.0	6.4	0.0	0.0	2.4	0.0	40.5	3.4	0.0	38.6
Prop In Lane	0.32		0.21	0.22		0.28	1.00		0.08	1.00		0.11
Lane Grp Cap(c), veh/h	367	0	0	374	0	0	136	0	713	158	0	724
V/C Ratio(X)	0.56	0.00	0.00	0.41	0.00	0.00	0.40	0.00	0.95	0.48	0.00	0.92
Avail Cap(c_a), veh/h	512	0	0	524	0	0	340	0	937	340	0	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	0.0	29.8	0.0	0.0	36.5	0.0	17.6	36.0	0.0	16.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	0.7	0.0	13.7	0.8	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	2.7	0.0	0.0	1.1	0.0	13.6	1.5	0.0	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	0.0	0.0	30.0	0.0	0.0	37.2	0.0	31.3	36.9	0.0	26.5
LnGrp LOS	C	A	A	C	A	A	D	A	C	D	A	C
Approach Vol, veh/h		206			152			728			739	
Approach Delay, s/veh		31.3			30.0			31.7			27.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	51.4		20.7	12.1	50.4		20.7
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	4.4	40.6		8.4	5.4	42.5		11.3
Green Ext Time (p_c), s	0.0	3.2		0.3	0.0	3.2		0.4

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	41	20	650	110	20	590
Future Vol, veh/h	41	20	650	110	20	590
Conflicting Peds, #/hr	0	2	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	43	21	677	115	21	615

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1397	742	0	0	797	0
Stage 1	740	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	155	414	-	-	821	-
Stage 1	470	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	150	411	-	-	817	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	501	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	320	817	-
HCM Lane V/C Ratio	-	-	0.199	0.025	-
HCM Control Delay (s)	-	-	19	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

2040 GP Buildout
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	170	201	40	150	80	610	80	100	521	10
Future Volume (veh/h)	0	0	170	201	40	150	80	610	80	100	521	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.92	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	183	216	43	161	86	656	86	108	560	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	117	180	250	50	243	108	657	31	131	696	14
Arrive On Green	0.00	0.00	0.06	0.17	0.17	0.17	0.06	0.53	0.53	0.07	0.54	0.54
Sat Flow, veh/h	0	1856	1324	1486	296	1443	1767	1137	149	1767	1288	25
Grp Volume(v), veh/h	0	0	183	259	0	161	86	0	742	108	0	571
Grp Sat Flow(s),veh/h/ln	0	1856	1324	1781	0	1443	1767	0	1286	1767	0	1314
Q Serve(g_s), s	0.0	0.0	9.0	20.1	0.0	14.9	6.8	0.0	75.0	8.6	0.0	50.3
Cycle Q Clear(g_c), s	0.0	0.0	9.0	20.1	0.0	14.9	6.8	0.0	75.0	8.6	0.0	50.3
Prop In Lane	0.00		1.00	0.83		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	0	117	180	300	0	243	108	0	688	131	0	709
V/C Ratio(X)	0.00	0.00	1.02	0.86	0.00	0.66	0.80	0.00	1.08	0.83	0.00	0.81
Avail Cap(c_a), veh/h	0	117	180	438	0	355	310	0	678	310	0	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	62.7	57.6	0.0	55.4	65.9	0.0	33.7	65.0	0.0	26.6
Incr Delay (d2), s/veh	0.0	0.0	71.7	11.5	0.0	3.1	5.0	0.0	57.4	4.9	0.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	261.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	10.1	10.1	0.0	5.7	3.3	0.0	84.3	4.1	0.0	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	134.4	69.0	0.0	58.5	70.9	0.0	352.7	69.9	0.0	32.9
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		183			420			828			679	
Approach Delay, s/veh		134.4			65.0			323.4			38.8	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	84.5		31.7	14.2	82.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	8.8	52.3		22.1	10.6	77.0		11.0				
Green Ext Time (p_c), s	0.1	2.7		1.8	0.1	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		164.0	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	150	10	20	120	20
Future Vol, veh/h	30	150	10	20	120	20
Conflicting Peds, #/hr	0	2	2	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	36	181	12	24	145	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	219	0	178	130
Stage 1	-	-	-	-	129	-
Stage 2	-	-	-	-	49	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1344	-	809	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1341	-	799	914
Mov Cap-2 Maneuver	-	-	-	-	799	-
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	961	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	814	-	-	1341	-
HCM Lane V/C Ratio	0.207	-	-	0.009	-
HCM Control Delay (s)	10.6	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0	-

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	100	80	20	50	40	80	110	60	60	70	20
Future Vol, veh/h	30	100	80	20	50	40	80	110	60	60	70	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	35	116	93	23	58	47	93	128	70	70	81	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.1	9.7	11.8	10.4
HCM LOS	B	A	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	14%	18%	40%
Vol Thru, %	44%	48%	45%	47%
Vol Right, %	24%	38%	36%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	250	210	110	150
LT Vol	80	30	20	60
Through Vol	110	100	50	70
RT Vol	60	80	40	20
Lane Flow Rate	291	244	128	174
Geometry Grp	1	1	1	1
Degree of Util (X)	0.416	0.353	0.192	0.262
Departure Headway (Hd)	5.157	5.205	5.416	5.408
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	698	691	661	663
Service Time	3.19	3.239	3.456	3.446
HCM Lane V/C Ratio	0.417	0.353	0.194	0.262
HCM Control Delay	11.8	11.1	9.7	10.4
HCM Lane LOS	B	B	A	B
HCM 95th-tile Q	2.1	1.6	0.7	1

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	50	60	20	10	41	190	10	10	10	140	10	10
Future Vol, veh/h	50	60	20	10	41	190	10	10	10	140	10	10
Conflicting Peds, #/hr	15	0	15	15	0	15	0	0	4	4	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	60	72	24	12	49	229	12	12	12	169	12	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	293	0	0	111	0	0	419	536	103	423	434	179
Stage 1	-	-	-	-	-	-	219	219	-	203	203	-
Stage 2	-	-	-	-	-	-	200	317	-	220	231	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1263	-	-	1473	-	-	543	450	949	539	514	861
Stage 1	-	-	-	-	-	-	781	720	-	797	732	-
Stage 2	-	-	-	-	-	-	800	652	-	780	711	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1245	-	-	1452	-	-	494	411	932	487	469	849
Mov Cap-2 Maneuver	-	-	-	-	-	-	494	411	-	487	469	-
Stage 1	-	-	-	-	-	-	730	674	-	745	714	-
Stage 2	-	-	-	-	-	-	768	636	-	715	665	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	0.3	12.1	16.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	542	1245	-	-	1452	-	-	499
HCM Lane V/C Ratio	0.067	0.048	-	-	0.008	-	-	0.386
HCM Control Delay (s)	12.1	8	0	-	7.5	0	-	16.7
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	1.8

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	90	30	0	31	10	10	0	0	0	0	10
Future Vol, veh/h	40	90	30	0	31	10	10	0	0	0	0	10
Conflicting Peds, #/hr	5	0	3	3	0	5	1	0	2	2	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	53	118	39	0	41	13	13	0	0	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	59	0	0	160	0	0	302	306	143	299	319	54
Stage 1	-	-	-	-	-	-	247	247	-	53	53	-
Stage 2	-	-	-	-	-	-	55	59	-	246	266	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1538	-	-	1413	-	-	648	606	902	651	596	1010
Stage 1	-	-	-	-	-	-	755	700	-	957	849	-
Stage 2	-	-	-	-	-	-	955	844	-	756	687	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1531	-	-	1409	-	-	619	578	898	628	569	1004
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	578	-	628	569	-
Stage 1	-	-	-	-	-	-	724	671	-	916	845	-
Stage 2	-	-	-	-	-	-	942	840	-	726	659	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0	10.9	8.6
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	619	1531	-	-	1409	-	-	1004
HCM Lane V/C Ratio	0.021	0.034	-	-	-	-	-	0.013
HCM Control Delay (s)	10.9	7.4	0	-	0	-	-	8.6
HCM Lane LOS	B	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0

HCM 6th AWSC
9: Starr Ave/Project Access & Hunt Ave

2040 GP Buildout
Timing Plan: AM Peak Hour

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	20	80	20	30	0	110	8	10	0	26	15
Future Vol, veh/h	5	20	80	20	30	0	110	8	10	0	26	15
Peak Hour Factor	0.92	0.85	0.85	0.85	0.85	0.92	0.85	0.92	0.85	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	5	24	94	24	35	0	129	9	12	0	28	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	8	8.6	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	86%	5%	40%	0%
Vol Thru, %	6%	19%	60%	63%
Vol Right, %	8%	76%	0%	37%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	105	50	41
LT Vol	110	5	20	0
Through Vol	8	20	30	26
RT Vol	10	80	0	15
Lane Flow Rate	150	123	59	45
Geometry Grp	1	1	1	1
Degree of Util (X)	0.189	0.138	0.075	0.053
Departure Headway (Hd)	4.537	4.026	4.613	4.299
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	796	892	778	834
Service Time	2.537	2.04	2.63	2.318
HCM Lane V/C Ratio	0.188	0.138	0.076	0.054
HCM Control Delay	8.6	7.7	8	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.5	0.2	0.2

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	210	390	90	101	31
Future Vol, veh/h	10	210	390	90	101	31
Conflicting Peds, #/hr	4	0	0	4	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	236	438	101	113	35

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	543	0	-	0	751	494
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	258	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1021	-	-	-	377	573
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1017	-	-	-	369	570
Mov Cap-2 Maneuver	-	-	-	-	369	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	780	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	19.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1017	-	-	-	402
HCM Lane V/C Ratio	0.011	-	-	-	0.369
HCM Control Delay (s)	8.6	0	-	-	19.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.7

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	181	120	90	320	10	120	0	50	10	10	20
Future Vol, veh/h	20	181	120	90	320	10	120	0	50	10	10	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	23	206	136	102	364	11	136	0	57	11	11	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	342	0	0	911	899	274	923	962	370
Stage 1	-	-	-	-	-	-	320	320	-	574	574	-
Stage 2	-	-	-	-	-	-	591	579	-	349	388	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1178	-	-	1211	-	-	254	278	762	249	255	673
Stage 1	-	-	-	-	-	-	690	651	-	502	502	-
Stage 2	-	-	-	-	-	-	492	499	-	665	607	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1178	-	-	1211	-	-	218	250	762	212	229	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	218	250	-	212	229	-
Stage 1	-	-	-	-	-	-	676	638	-	492	460	-
Stage 2	-	-	-	-	-	-	425	457	-	603	595	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.8	35.2	17.6
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	218	762	1178	-	-	1211	-	-	332
HCM Lane V/C Ratio	0.626	0.075	0.019	-	-	0.084	-	-	0.137
HCM Control Delay (s)	45.6	10.1	8.1	-	-	8.2	-	-	17.6
HCM Lane LOS	E	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.7	0.2	0.1	-	-	0.3	-	-	0.5

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	101	220	480	450	220
Future Vol, veh/h	140	101	220	480	450	220
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	146	105	229	500	469	229

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1427	469	698	0	-	0
Stage 1	469	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	148	592	894	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 110	592	894	-	-	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	48.1	3.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	894	-	318	-	-
HCM Lane V/C Ratio	0.256	-	0.789	-	-
HCM Control Delay (s)	10.4	-	48.1	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	1	-	6.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	10	580	40	10	640
Future Vol, veh/h	30	10	580	40	10	640
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	10	598	41	10	660

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1278	598	0	0	639	0
Stage 1	598	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	183	500	-	-	940	-
Stage 1	547	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	181	500	-	-	940	-
Mov Cap-2 Maneuver	319	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	495	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	351	940	-
HCM Lane V/C Ratio	-	-	0.117	0.011	-
HCM Control Delay (s)	-	-	16.6	8.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

2040 GP Buildout
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	50	20	20	50	180	30	650	20	80	600	60
Future Volume (veh/h)	120	50	20	20	50	180	30	650	20	80	600	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1329	1870	1329
Adj Flow Rate, veh/h	122	51	20	20	51	184	31	663	20	82	612	61
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	84	26	68	84	257	446	838	25	251	1093	109
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	652	397	121	70	401	1220	765	1283	39	539	1673	167
Grp Volume(v), veh/h	193	0	0	255	0	0	31	0	683	82	0	673
Grp Sat Flow(s),veh/h/ln	1170	0	0	1691	0	0	765	0	1322	539	0	1840
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	1.7	0.0	27.0	9.4	0.0	14.6
Cycle Q Clear(g_c), s	11.9	0.0	0.0	10.2	0.0	0.0	16.3	0.0	27.0	36.4	0.0	14.6
Prop In Lane	0.63		0.10	0.08		0.72	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	327	0	0	410	0	0	446	0	864	251	0	1202
V/C Ratio(X)	0.59	0.00	0.00	0.62	0.00	0.00	0.07	0.00	0.79	0.33	0.00	0.56
Avail Cap(c_a), veh/h	572	0	0	708	0	0	701	0	1305	431	0	1817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	26.8	0.0	0.0	11.3	0.0	9.1	22.1	0.0	6.9
Incr Delay (d2), s/veh	1.3	0.0	0.0	1.2	0.0	0.0	0.1	0.0	2.6	1.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.0	4.1	0.0	0.0	0.3	0.0	6.8	1.2	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	0.0	0.0	28.0	0.0	0.0	11.4	0.0	11.7	23.2	0.0	7.5
LnGrp LOS	C	A	A	C	A	A	B	A	B	C	A	A
Approach Vol, veh/h		193			255			714			755	
Approach Delay, s/veh		28.5			28.0			11.7			9.2	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		52.3		20.6		52.3		20.6				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		29.0		13.9		38.4		12.2				
Green Ext Time (p_c), s		9.4		0.9		9.2		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

2040 GP Buildout
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	100	30	70	80	70	40	550	40	80	520	40
Future Volume (veh/h)	80	100	30	70	80	70	40	550	40	80	520	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.87	0.97		0.84	1.00		0.90	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	82	103	31	72	82	72	41	567	41	82	536	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	185	48	146	147	108	121	609	44	171	643	49
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.07	0.50	0.50	0.10	0.53	0.53
Sat Flow, veh/h	456	840	217	384	669	492	1781	1214	88	1781	1214	93
Grp Volume(v), veh/h	216	0	0	226	0	0	41	0	608	82	0	577
Grp Sat Flow(s),veh/h/ln	1513	0	0	1545	0	0	1781	0	1302	1781	0	1307
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	1.7	0.0	33.8	3.4	0.0	28.8
Cycle Q Clear(g_c), s	9.7	0.0	0.0	9.8	0.0	0.0	1.7	0.0	33.8	3.4	0.0	28.8
Prop In Lane	0.38		0.14	0.32		0.32	1.00		0.07	1.00		0.07
Lane Grp Cap(c), veh/h	398	0	0	402	0	0	121	0	653	171	0	692
V/C Ratio(X)	0.54	0.00	0.00	0.56	0.00	0.00	0.34	0.00	0.93	0.48	0.00	0.83
Avail Cap(c_a), veh/h	527	0	0	530	0	0	368	0	1008	368	0	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	0.0	0.0	27.3	0.0	0.0	34.4	0.0	18.1	33.2	0.0	15.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.0	0.6	0.0	8.0	0.8	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	3.7	0.0	0.0	0.7	0.0	10.7	1.5	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	0.0	0.0	27.8	0.0	0.0	35.0	0.0	26.1	33.9	0.0	18.0
LnGrp LOS	C	A	A	C	A	A	D	A	C	C	A	B
Approach Vol, veh/h		216			226			649			659	
Approach Delay, s/veh		27.6			27.8			26.7			20.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	45.7		21.8	12.2	43.5		21.8
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	3.7	30.8		11.8	5.4	35.8		11.7
Green Ext Time (p_c), s	0.0	2.9		0.5	0.0	3.0		0.4

Intersection Summary		
HCM 6th Ctrl Delay	24.4	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	30	600	81	30	590
Future Vol, veh/h	60	30	600	81	30	590
Conflicting Peds, #/hr	12	12	0	1	54	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	32	632	85	32	621

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1426	741	0	0	771	0
Stage 1	729	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	149	416	-	-	844	-
Stage 1	477	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	134	390	-	-	801	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	453	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.3	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	302	801	-
HCM Lane V/C Ratio	-	-	0.314	0.039	-
HCM Control Delay (s)	-	-	22.3	9.7	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

2040 GP Buildout
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	210	161	30	120	100	561	71	110	531	10
Future Volume (veh/h)	0	0	210	161	30	120	100	561	71	110	531	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	223	171	32	128	106	597	76	117	565	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	122	209	210	39	206	129	687	29	141	714	14
Arrive On Green	0.00	0.00	0.07	0.14	0.14	0.14	0.07	0.53	0.53	0.08	0.54	0.54
Sat Flow, veh/h	0	1870	1444	1512	283	1483	1781	1148	146	1781	1298	25
Grp Volume(v), veh/h	0	0	223	203	0	128	106	0	673	117	0	576
Grp Sat Flow(s),veh/h/ln	0	1870	1444	1795	0	1483	1781	0	1294	1781	0	1323
Q Serve(g_s), s	0.0	0.0	9.0	14.6	0.0	10.8	7.8	0.0	67.2	8.6	0.0	47.2
Cycle Q Clear(g_c), s	0.0	0.0	9.0	14.6	0.0	10.8	7.8	0.0	67.2	8.6	0.0	47.2
Prop In Lane	0.00		1.00	0.84		1.00	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	0	122	209	249	0	206	129	0	716	141	0	728
V/C Ratio(X)	0.00	0.00	1.07	0.81	0.00	0.62	0.82	0.00	0.94	0.83	0.00	0.79
Avail Cap(c_a), veh/h	0	127	213	472	0	390	335	0	730	335	0	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	59.7	57.6	0.0	55.9	63.0	0.0	31.4	62.6	0.0	24.7
Incr Delay (d2), s/veh	0.0	0.0	80.8	2.5	0.0	1.1	4.8	0.0	19.5	4.7	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	224.3	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	12.1	7.1	0.0	4.3	3.9	0.0	71.7	4.3	0.0	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	140.5	60.1	0.0	57.1	67.8	0.0	275.3	67.2	0.0	29.8
LnGrp LOS	A	A	F	E	A	E	E	A	F	E	A	C
Approach Vol, veh/h		223			331			779			693	
Approach Delay, s/veh		140.5			58.9			247.0			36.1	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	79.6		26.4	14.3	78.7		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	9.8	49.2		16.6	10.6	69.2		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.0	0.1	1.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		132.4
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	110	10	30	210	10
Future Vol, veh/h	30	110	10	30	210	10
Conflicting Peds, #/hr	0	2	2	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	133	12	36	253	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	171	0	165	106
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1406	-	826	948
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1403	-	817	945
Mov Cap-2 Maneuver	-	-	-	-	817	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	822	-	-	1403	-
HCM Lane V/C Ratio	0.322	-	-	0.009	-
HCM Control Delay (s)	11.5	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.4	-	-	0	-

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	130	90	60	150	100	60	90	30	60	80	30
Future Vol, veh/h	20	130	90	60	150	100	60	90	30	60	80	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	137	95	63	158	105	63	95	32	63	84	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.6	13.1	11.4	11.2
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	8%	19%	35%
Vol Thru, %	50%	54%	48%	47%
Vol Right, %	17%	38%	32%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	240	310	170
LT Vol	60	20	60	60
Through Vol	90	130	150	80
RT Vol	30	90	100	30
Lane Flow Rate	189	253	326	179
Geometry Grp	1	1	1	1
Degree of Util (X)	0.304	0.374	0.477	0.288
Departure Headway (Hd)	5.78	5.327	5.264	5.798
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	620	672	682	617
Service Time	3.842	3.383	3.317	3.862
HCM Lane V/C Ratio	0.305	0.376	0.478	0.29
HCM Control Delay	11.4	11.6	13.1	11.2
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.3	1.7	2.6	1.2

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	30	81	10	10	50	140	10	10	10	190	10	20
Future Vol, veh/h	30	81	10	10	50	140	10	10	10	190	10	20
Conflicting Peds, #/hr	31	0	1	1	0	31	7	0	5	5	0	7
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	92	11	11	57	159	11	11	11	216	11	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	247	0	0	104	0	0	350	436	104	372	362	175
Stage 1	-	-	-	-	-	-	167	167	-	190	190	-
Stage 2	-	-	-	-	-	-	183	269	-	182	172	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1319	-	-	1488	-	-	605	514	951	585	565	868
Stage 1	-	-	-	-	-	-	835	760	-	812	743	-
Stage 2	-	-	-	-	-	-	819	687	-	820	756	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1280	-	-	1487	-	-	558	480	946	533	527	837
Mov Cap-2 Maneuver	-	-	-	-	-	-	558	480	-	533	527	-
Stage 1	-	-	-	-	-	-	811	738	-	766	714	-
Stage 2	-	-	-	-	-	-	772	660	-	772	734	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.4	11.3	16.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	608	1280	-	-	1487	-	-	551
HCM Lane V/C Ratio	0.056	0.027	-	-	0.008	-	-	0.454
HCM Control Delay (s)	11.3	7.9	0	-	7.4	0	-	16.8
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	2.3

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	70	51	10	0	90	0	40	0	10	10	10	50
Future Vol, veh/h	70	51	10	0	90	0	40	0	10	10	10	50
Conflicting Peds, #/hr	4	0	8	8	0	4	4	0	6	6	0	4
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	86	63	12	0	111	0	49	0	12	12	12	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	115	0	0	83	0	0	401	364	83	368	370	119
Stage 1	-	-	-	-	-	-	249	249	-	115	115	-
Stage 2	-	-	-	-	-	-	152	115	-	253	255	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1474	-	-	1514	-	-	560	564	976	588	560	933
Stage 1	-	-	-	-	-	-	755	701	-	890	800	-
Stage 2	-	-	-	-	-	-	850	800	-	751	696	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1468	-	-	1502	-	-	484	523	963	548	520	926
Mov Cap-2 Maneuver	-	-	-	-	-	-	484	523	-	548	520	-
Stage 1	-	-	-	-	-	-	704	653	-	832	797	-
Stage 2	-	-	-	-	-	-	778	797	-	692	648	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.1	0	12.6	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	537	1468	-	-	1502	-	-	765
HCM Lane V/C Ratio	0.115	0.059	-	-	-	-	-	0.113
HCM Control Delay (s)	12.6	7.6	0	-	0	-	-	10.3
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.4

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	20	100	10	20	0	90	29	10	0	17	10
Future Vol, veh/h	17	20	100	10	20	0	90	29	10	0	17	10
Peak Hour Factor	0.92	0.88	0.88	0.88	0.88	0.92	0.88	0.92	0.88	0.92	0.92	0.92
Heavy Vehicles, %	3	2	2	2	2	3	2	3	2	3	3	3
Mvmt Flow	18	23	114	11	23	0	102	32	11	0	18	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.8	8.4	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	70%	12%	33%	0%
Vol Thru, %	22%	15%	67%	63%
Vol Right, %	8%	73%	0%	37%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	137	30	27
LT Vol	90	17	10	0
Through Vol	29	20	20	17
RT Vol	10	100	0	10
Lane Flow Rate	145	155	34	29
Geometry Grp	1	1	1	1
Degree of Util (X)	0.176	0.171	0.043	0.035
Departure Headway (Hd)	4.377	3.983	4.563	4.294
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	807	906	788	836
Service Time	2.475	1.986	2.57	2.306
HCM Lane V/C Ratio	0.18	0.171	0.043	0.035
HCM Control Delay	8.4	7.8	7.8	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.6	0.1	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	260	300	81	110	21
Future Vol, veh/h	31	260	300	81	110	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	283	326	88	120	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	414	0	-	0	721	370
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	351	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1145	-	-	-	394	676
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1145	-	-	-	380	676
Mov Cap-2 Maneuver	-	-	-	-	380	-
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	713	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	18.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1145	-	-	-	409
HCM Lane V/C Ratio	0.029	-	-	-	0.348
HCM Control Delay (s)	8.2	0	-	-	18.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.5

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	300	40	20	301	10	40	0	30	10	0	20
Future Vol, veh/h	40	300	40	20	301	10	40	0	30	10	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	309	41	21	310	10	41	0	31	10	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	320	0	0	350	0	0	780	774	330	784	789	315
Stage 1	-	-	-	-	-	-	412	412	-	357	357	-
Stage 2	-	-	-	-	-	-	368	362	-	427	432	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1240	-	-	1209	-	-	313	329	712	311	323	725
Stage 1	-	-	-	-	-	-	617	594	-	661	628	-
Stage 2	-	-	-	-	-	-	652	625	-	606	582	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1240	-	-	1209	-	-	293	313	712	286	307	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	313	-	286	307	-
Stage 1	-	-	-	-	-	-	597	574	-	639	617	-
Stage 2	-	-	-	-	-	-	622	614	-	561	563	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.5	15.4	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	293	712	1240	-	-	1209	-	-	480
HCM Lane V/C Ratio	0.141	0.043	0.033	-	-	0.017	-	-	0.064
HCM Control Delay (s)	19.3	10.3	8	-	-	8	-	-	13
HCM Lane LOS	C	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	0.1	0.1	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	20.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	200	131	530	620	230
Future Vol, veh/h	130	200	131	530	620	230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	141	217	142	576	674	250

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1534	674	924	0	-	0
Stage 1	674	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 128	455	739	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 103	455	739	-	-	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	409	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	108.8	2.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	739	-	332	-	-
HCM Lane V/C Ratio	0.193	-	1.08	-	-
HCM Control Delay (s)	11	-	108.8	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	13.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	10	640	20	10	800
Future Vol, veh/h	50	10	640	20	10	800
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	11	688	22	11	860

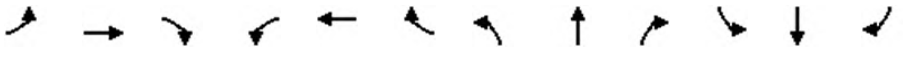
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1570	688	0	0	710	0
Stage 1	688	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	122	446	-	-	889	-
Stage 1	499	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	121	446	-	-	889	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	400	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.9	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	277	889	-
HCM Lane V/C Ratio	-	-	0.233	0.012	-
HCM Control Delay (s)	-	-	21.9	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0	-

HCM 6th Signalized Intersection Summary
1: Main St & Madrona Ave/Fulton Ln

2040 GP Buildout
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	30	40	20	20	81	20	570	10	61	590	80
Future Volume (veh/h)	80	30	40	20	20	81	20	570	10	61	590	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	25	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	82	31	41	21	21	84	21	588	10	63	608	82
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	201	69	65	94	60	168	231	877	15	453	799	80
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	693	461	419	146	381	1053	747	1292	22	813	1136	153
Grp Volume(v), veh/h	154	0	0	126	0	0	21	0	598	63	0	690
Grp Sat Flow(s),veh/h/ln	1573	0	0	1579	0	0	747	0	1314	813	0	1289
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	1.2	0.0	15.4	2.8	0.0	21.3
Cycle Q Clear(g_c), s	4.2	0.0	0.0	3.6	0.0	0.0	22.5	0.0	15.4	18.3	0.0	21.3
Prop In Lane	0.53		0.27	0.17		0.67	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	335	0	0	322	0	0	231	0	892	453	0	879
V/C Ratio(X)	0.46	0.00	0.00	0.39	0.00	0.00	0.09	0.00	0.67	0.14	0.00	0.78
Avail Cap(c_a), veh/h	938	0	0	954	0	0	880	0	1847	1039	0	1812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	0.0	25.5	0.0	0.0	26.3	0.0	5.8	11.5	0.0	8.6
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.6	0.0	0.0	0.2	0.0	1.3	0.2	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	1.8	0.0	0.0	0.3	0.0	3.5	0.5	0.0	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	0.0	26.1	0.0	0.0	26.6	0.0	7.0	11.7	0.0	37.9
LnGrp LOS	C	A	A	C	A	A	C	A	A	B	A	D
Approach Vol, veh/h		154			126			619			753	
Approach Delay, s/veh		26.7			26.1			7.7			35.7	
Approach LOS		C			C			A			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		37.4		13.8		37.4		13.8				
Change Period (Y+Rc), s		* 4.7		* 5.2		* 4.7		* 5.2				
Max Green Setting (Gmax), s		* 72		* 29		* 72		* 29				
Max Q Clear Time (g_c+I1), s		24.5		6.2		23.3		5.6				
Green Ext Time (p_c), s		7.8		0.8		9.4		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
2: Main St & Adams St

2040 GP Buildout
Timing Plan: Saturday Mid-Day



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	60	30	50	40	51	30	520	30	51	580	20
Future Volume (veh/h)	40	60	30	50	40	51	30	520	30	51	580	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	20	0
Ped-Bike Adj(A_pbT)	0.75		0.65	0.74		0.66	1.00		0.91	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	41	62	31	52	41	53	31	536	31	53	598	21
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	127	171	74	138	101	105	96	652	38	130	705	16
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.06	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	317	735	316	354	437	451	1767	1226	71	1767	1261	44
Grp Volume(v), veh/h	134	0	0	146	0	0	31	0	567	53	0	619
Grp Sat Flow(s),veh/h/ln	1368	0	0	1242	0	0	1767	0	1297	1767	0	1306
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0	1.3	0.0	31.9	2.3	0.0	35.5
Cycle Q Clear(g_c), s	5.5	0.0	0.0	6.7	0.0	0.0	1.3	0.0	31.9	2.3	0.0	35.5
Prop In Lane	0.31		0.23	0.36		0.36	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	371	0	0	344	0	0	96	0	689	130	0	721
V/C Ratio(X)	0.36	0.00	0.00	0.42	0.00	0.00	0.32	0.00	0.82	0.41	0.00	0.86
Avail Cap(c_a), veh/h	466	0	0	431	0	0	354	0	975	354	0	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	0.0	29.4	0.0	0.0	40.8	0.0	17.3	39.6	0.0	19.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	0.7	0.0	2.7	0.8	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	2.7	0.0	0.0	0.7	0.0	9.4	1.1	0.0	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	0.0	29.7	0.0	0.0	41.5	0.0	20.0	40.4	0.0	62.7
LnGrp LOS	C	A	A	C	A	A	D	A	B	D	A	E
Approach Vol, veh/h		134			146			598			672	
Approach Delay, s/veh		29.2			29.7			21.1			61.0	
Approach LOS		C			C			C			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	45.2		25.5	10.9	43.4		25.5
Change Period (Y+Rc), s	* 4.7	* 4.7		* 4.7	* 4.7	* 4.7		* 4.7
Max Green Setting (Gmax), s	* 16	* 60		* 24	* 16	* 60		* 24
Max Q Clear Time (g_c+I1), s	3.3	37.5		8.7	4.3	33.9		7.5
Green Ext Time (p_c), s	0.0	3.0		0.4	0.0	2.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
3: Main St & Hunt Ave

2040 GP Buildout
Timing Plan: Saturday Mid-Day

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	30	550	70	20	640
Future Vol, veh/h	40	30	550	70	20	640
Conflicting Peds, #/hr	39	71	0	169	169	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	85	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	42	31	573	73	21	667

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1527	850	0	0	815	0
Stage 1	779	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	129	359	-	-	808	-
Stage 1	451	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	101	281	-	-	678	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	378	-	-	-	-	-
Stage 2	435	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	249	678	-
HCM Lane V/C Ratio	-	-	0.293	0.031	-
HCM Control Delay (s)	-	-	25.3	10.5	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

2040 GP Buildout
Timing Plan: Saturday Mid-Day

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	160	131	40	80	60	541	61	70	601	10
Future Volume (veh/h)	0	0	160	131	40	80	60	541	61	70	601	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	25	0
Ped-Bike Adj(A_pbT)	1.00		0.48	1.00		0.72	1.00		0.91	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1318	1318	1856	1318	1318
Adj Flow Rate, veh/h	0	0	163	134	41	82	61	552	62	71	613	10
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	121	140	216	66	174	104	686	24	108	714	4
Arrive On Green	0.00	0.00	0.07	0.17	0.17	0.17	0.06	0.50	0.50	0.07	0.50	0.50
Sat Flow, veh/h	0	1856	752	1368	419	1139	1767	1151	129	1767	1292	21
Grp Volume(v), veh/h	0	0	163	175	0	82	61	0	614	71	0	623
Grp Sat Flow(s),veh/h/ln	0	1856	752	1787	0	1139	1767	0	1280	1767	0	1313
Q Serve(g_s), s	0.0	0.0	9.0	11.2	0.0	8.0	4.2	0.0	57.4	4.9	0.0	55.9
Cycle Q Clear(g_c), s	0.0	0.0	9.0	11.2	0.0	8.0	4.2	0.0	57.4	4.9	0.0	55.9
Prop In Lane	0.00		1.00	0.77		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	0	121	140	282	0	174	104	0	710	108	0	718
V/C Ratio(X)	0.00	0.00	1.16	0.62	0.00	0.47	0.59	0.00	0.86	0.66	0.00	0.87
Avail Cap(c_a), veh/h	0	134	154	503	0	320	355	0	772	355	0	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	62.0	54.3	0.0	52.9	63.3	0.0	31.5	63.4	0.0	31.3
Incr Delay (d2), s/veh	0.0	0.0	125.7	2.2	0.0	2.0	1.9	0.0	8.8	2.6	0.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192.8	0.0	0.0	65.6
%ile BackOfQ(50%),veh/ln	0.0	0.0	9.9	5.9	0.0	2.7	2.2	0.0	62.8	2.5	0.0	38.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	187.7	56.5	0.0	54.8	65.2	0.0	233.1	65.9	0.0	105.6
LnGrp LOS	A	A	F	E	A	D	E	A	F	E	A	F
Approach Vol, veh/h		163			257			675			694	
Approach Delay, s/veh		187.7			56.0			217.9			101.5	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.6	70.1		28.9	11.9	69.8		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	25.0	* 75		* 35	25.0	* 75		9.0				
Max Q Clear Time (g_c+I1), s	6.2	57.9		13.2	6.9	59.4		11.0				
Green Ext Time (p_c), s	0.1	2.8		1.4	0.1	2.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		146.8	
HCM 6th LOS		F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
5: Railroad Ave & Fulton Ln

2040 GP Buildout
Timing Plan: Saturday Mid-Day

Intersection	
Int Delay, s/veh	5.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	30	91	20	30	121	20
Future Vol, veh/h	30	91	20	30	121	20
Conflicting Peds, #/hr	0	2	2	0	6	6
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	33	99	22	33	132	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	134	0	168	91
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	83	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1444	-	820	964
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	938	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1441	-	800	957
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	934	-
Stage 2	-	-	-	-	917	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	819	-	-	1441	-
HCM Lane V/C Ratio	0.187	-	-	0.015	-
HCM Control Delay (s)	10.4	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0	-

HCM 6th AWSC
6: Railroad Ave & Adams St

2040 GP Buildout
Timing Plan: Saturday Mid-Day

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	71	40	20	71	51	30	70	20	51	60	20
Future Vol, veh/h	10	71	40	20	71	51	30	70	20	51	60	20
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	80	45	22	80	57	34	79	22	57	67	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.8	8.9	9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	8%	14%	39%
Vol Thru, %	58%	59%	50%	46%
Vol Right, %	17%	33%	36%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	121	142	131
LT Vol	30	10	20	51
Through Vol	70	71	71	60
RT Vol	20	40	51	20
Lane Flow Rate	135	136	160	147
Geometry Grp	1	1	1	1
Degree of Util (X)	0.179	0.175	0.204	0.196
Departure Headway (Hd)	4.772	4.641	4.608	4.792
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	748	770	775	746
Service Time	2.822	2.689	2.654	2.841
HCM Lane V/C Ratio	0.18	0.177	0.206	0.197
HCM Control Delay	8.9	8.7	8.8	9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.6	0.8	0.7

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	71	10	10	71	90	0	0	0	100	0	30
Future Vol, veh/h	40	71	10	10	71	90	0	0	0	100	0	30
Conflicting Peds, #/hr	27	0	18	18	0	27	4	0	7	7	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	73	10	10	73	93	0	0	0	103	0	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	193	0	0	101	0	0	338	391	103	334	350	152
Stage 1	-	-	-	-	-	-	178	178	-	167	167	-
Stage 2	-	-	-	-	-	-	160	213	-	167	183	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1374	-	-	1485	-	-	614	543	949	618	573	892
Stage 1	-	-	-	-	-	-	821	750	-	833	758	-
Stage 2	-	-	-	-	-	-	840	724	-	833	746	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1339	-	-	1460	-	-	562	499	927	580	527	865
Mov Cap-2 Maneuver	-	-	-	-	-	-	562	499	-	580	527	-
Stage 1	-	-	-	-	-	-	781	714	-	786	732	-
Stage 2	-	-	-	-	-	-	800	699	-	801	710	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.6	0.4	0	12.3
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1339	-	-	1460	-	-	628
HCM Lane V/C Ratio	-	0.031	-	-	0.007	-	-	0.213
HCM Control Delay (s)	0	7.8	0	-	7.5	0	-	12.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.8

HCM 6th TWSC
8: Library Ln & Adams St

2040 GP Buildout
Timing Plan: Saturday Mid-Day

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	12	0	0	12	0	0	0	0	0	0	30
Future Vol, veh/h	40	12	0	0	12	0	0	0	0	0	0	30
Conflicting Peds, #/hr	1	0	4	4	0	1	3	0	1	1	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	15	0	0	15	0	0	0	0	0	0	37

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	16	0	0	19	0	0	154	133	20	130	133	19
Stage 1	-	-	-	-	-	-	117	117	-	16	16	-
Stage 2	-	-	-	-	-	-	37	16	-	114	117	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1595	-	-	1591	-	-	811	756	1055	840	756	1056
Stage 1	-	-	-	-	-	-	885	797	-	1001	880	-
Stage 2	-	-	-	-	-	-	976	880	-	888	797	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1593	-	-	1585	-	-	759	729	1050	818	729	1052
Mov Cap-2 Maneuver	-	-	-	-	-	-	759	729	-	818	729	-
Stage 1	-	-	-	-	-	-	854	769	-	969	879	-
Stage 2	-	-	-	-	-	-	939	879	-	860	769	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	5.6	0	0	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1593	-	-	1585	-	-	1052
HCM Lane V/C Ratio	-	0.031	-	-	-	-	-	0.035
HCM Control Delay (s)	0	7.3	0	-	0	-	-	8.5
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	60	10	10	0	60	16	20	0	16	10
Future Vol, veh/h	10	10	60	10	10	0	60	16	20	0	16	10
Peak Hour Factor	0.92	0.86	0.86	0.86	0.86	0.92	0.86	0.92	0.86	0.92	0.92	0.92
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	12	70	12	12	0	70	17	23	0	17	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.6	7.8	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	62%	12%	50%	0%
Vol Thru, %	17%	12%	50%	62%
Vol Right, %	21%	75%	0%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	80	20	26
LT Vol	60	10	10	0
Through Vol	16	10	10	16
RT Vol	20	60	0	10
Lane Flow Rate	110	92	23	28
Geometry Grp	1	1	1	1
Degree of Util (X)	0.128	0.097	0.028	0.031
Departure Headway (Hd)	4.174	3.783	4.364	4.007
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	855	935	810	883
Service Time	2.222	1.859	2.448	2.077
HCM Lane V/C Ratio	0.129	0.098	0.028	0.032
HCM Control Delay	7.8	7.3	7.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.3	0.1	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	220	240	51	61	11
Future Vol, veh/h	31	220	240	51	61	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	32	224	245	52	62	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	297	0	-	0	559	271
Stage 1	-	-	-	-	271	-
Stage 2	-	-	-	-	288	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1259	-	-	-	488	765
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1259	-	-	-	474	765
Mov Cap-2 Maneuver	-	-	-	-	474	-
Stage 1	-	-	-	-	750	-
Stage 2	-	-	-	-	759	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1259	-	-	-	503
HCM Lane V/C Ratio	0.025	-	-	-	0.146
HCM Control Delay (s)	7.9	0	-	-	13.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	241	20	20	291	10	20	0	30	20	0	20
Future Vol, veh/h	20	241	20	20	291	10	20	0	30	20	0	20
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	90	-	-	110	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	256	21	21	310	11	21	0	32	21	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	323	0	0	277	0	0	677	674	267	685	679	318
Stage 1	-	-	-	-	-	-	309	309	-	360	360	-
Stage 2	-	-	-	-	-	-	368	365	-	325	319	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1231	-	-	1280	-	-	365	375	769	361	372	720
Stage 1	-	-	-	-	-	-	699	658	-	656	625	-
Stage 2	-	-	-	-	-	-	650	622	-	685	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1229	-	-	1280	-	-	345	362	769	336	359	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	362	-	336	359	-
Stage 1	-	-	-	-	-	-	687	647	-	644	614	-
Stage 2	-	-	-	-	-	-	620	611	-	645	640	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.5	12.4	13.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	345	769	1229	-	-	1280	-	-	458
HCM Lane V/C Ratio	0.062	0.042	0.017	-	-	0.017	-	-	0.093
HCM Control Delay (s)	16.1	9.9	8	-	-	7.9	-	-	13.7
HCM Lane LOS	C	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	0.1	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	14.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	151	161	620	560	160
Future Vol, veh/h	140	151	161	620	560	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	225
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	147	159	169	653	589	168

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1580	589	757	0	-	0
Stage 1	589	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	~ 119	506	849	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 95	506	849	-	-	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	358	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	82.1	2.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	849	-	314	-	-
HCM Lane V/C Ratio	0.2	-	0.976	-	-
HCM Control Delay (s)	10.3	-	82.1	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	10.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	20	730	30	10	680
Future Vol, veh/h	40	20	730	30	10	680
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	50	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	42	21	760	31	10	708

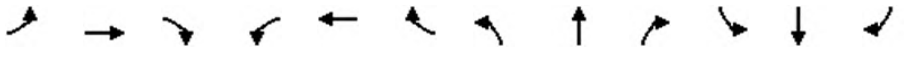
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1489	762	0	0	792	0
Stage 1	761	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.227	-
Pot Cap-1 Maneuver	136	403	-	-	824	-
Stage 1	459	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	134	402	-	-	823	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	306	823	-
HCM Lane V/C Ratio	-	-	0.204	0.013	-
HCM Control Delay (s)	-	-	19.8	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0	-

HCM 6th Signalized Intersection Summary
4: Main St & Mitchell Dr/Pope Street

Existing Plus Project - MITIGATION
Timing Plan: PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	191	147	26	91	83	561	65	85	520	4
Future Volume (veh/h)	0	0	191	147	26	91	83	561	65	85	520	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	50	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.93	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1329	1329	1870	1329	1329
Adj Flow Rate, veh/h	0	0	203	156	28	97	88	597	69	90	553	4
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	103	173	185	33	276	107	784	30	109	815	6
Arrive On Green	0.00	0.00	0.07	0.13	0.13	0.13	0.07	0.54	0.54	0.07	0.54	0.54
Sat Flow, veh/h	0	1870	1453	1521	273	1479	1781	1163	134	1781	1317	10
Grp Volume(v), veh/h	0	0	203	184	0	97	88	0	666	90	0	557
Grp Sat Flow(s),veh/h/ln	0	1870	1453	1794	0	1479	1781	0	1297	1781	0	1327
Q Serve(g_s), s	0.0	0.0	9.0	12.4	0.0	7.0	6.0	0.0	61.1	6.2	0.0	41.9
Cycle Q Clear(g_c), s	0.0	0.0	9.0	12.4	0.0	7.0	6.0	0.0	61.1	6.2	0.0	41.9
Prop In Lane	0.00		1.00	0.85		1.00	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	0	103	173	218	0	276	107	0	814	109	0	821
V/C Ratio(X)	0.00	0.00	1.17	0.84	0.00	0.35	0.82	0.00	0.82	0.83	0.00	0.68
Avail Cap(c_a), veh/h	0	135	214	350	0	398	261	0	1055	176	0	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	72.9	70.6	0.0	58.7	76.3	0.0	31.4	76.2	0.0	20.6
Incr Delay (d2), s/veh	0.0	0.0	120.0	5.4	0.0	0.3	5.7	0.0	3.1	7.3	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	139.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	13.1	8.0	0.0	3.6	3.9	0.0	63.7	4.0	0.0	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	192.9	76.0	0.0	59.0	82.0	0.0	174.0	83.5	0.0	21.5
LnGrp LOS	A	A	F	E	A	E	F	A	F	F	A	C
Approach Vol, veh/h		203			281			754			647	
Approach Delay, s/veh		192.9			70.1			163.2			30.1	
Approach LOS		F			E			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	74.5		24.2	12.3	74.5		13.7				
Change Period (Y+Rc), s	3.7	* 7.7		* 7.7	3.7	* 7.7		4.7				
Max Green Setting (Gmax), s	18.3	* 92		* 24	12.3	* 1E2		9.0				
Max Q Clear Time (g_c+I1), s	8.0	43.9		14.4	8.2	63.1		11.0				
Green Ext Time (p_c), s	0.1	2.8		0.7	0.0	3.6		0.0				

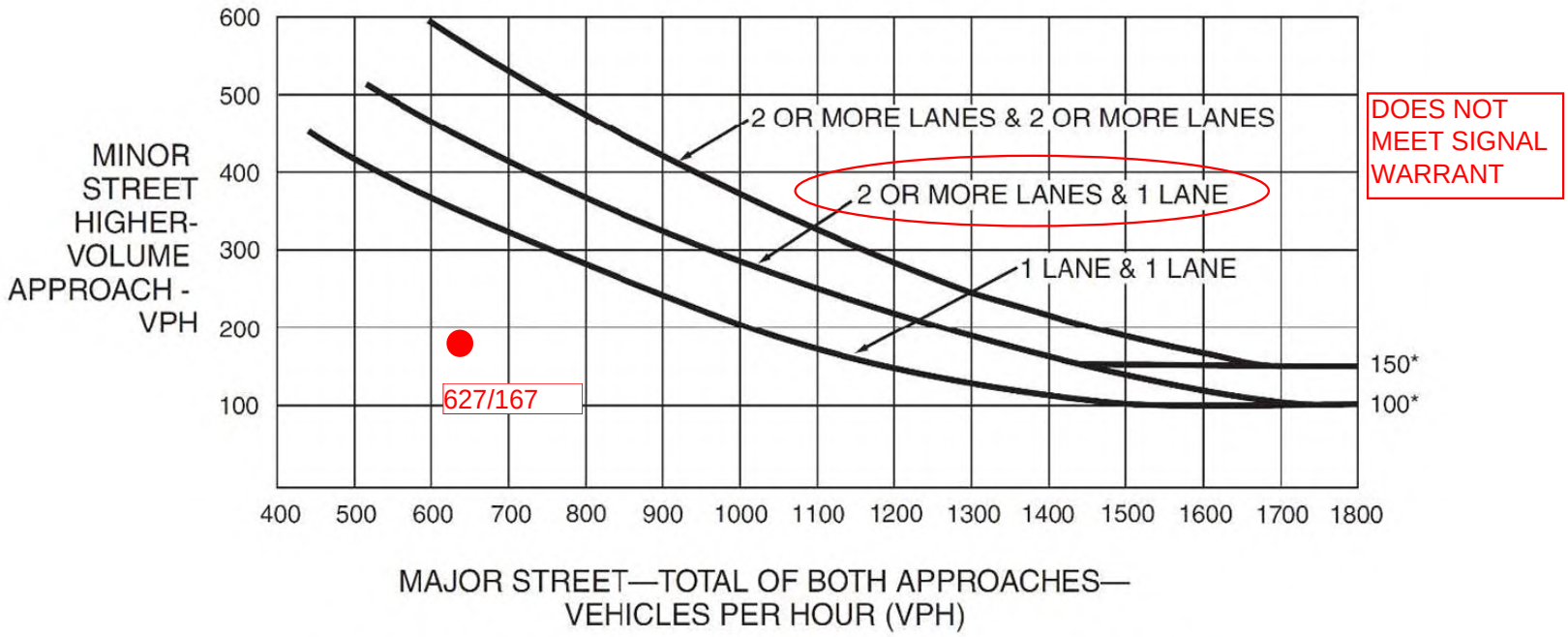
Intersection Summary		
HCM 6th Ctrl Delay		106.9
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Existing plus Project - AM PEAK HOUR (College Ave/Paseo Grand Dr & Pope St)

Figure 4C-3. Warrant 3, Peak Hour

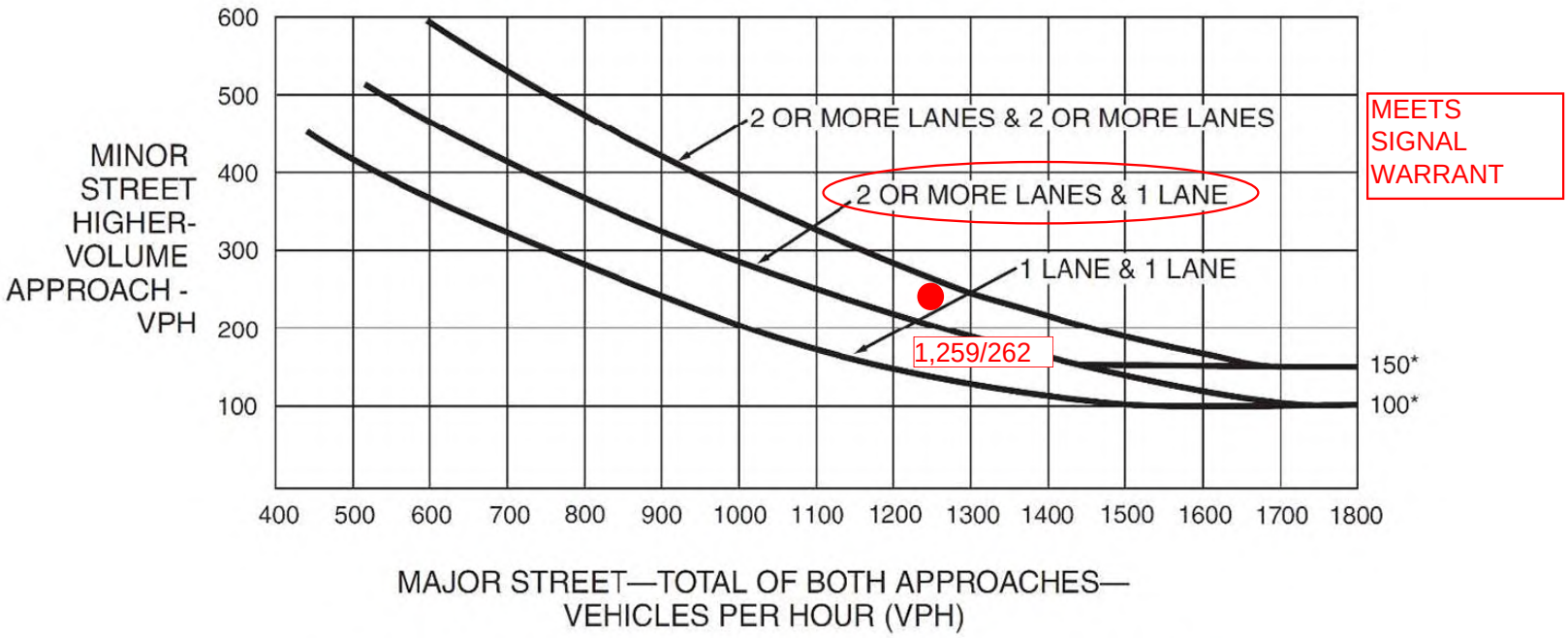


DOES NOT MEET SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Existing plus Project - PM PEAK HOUR (Silverado Trail & Pope St)

Figure 4C-3. Warrant 3, Peak Hour

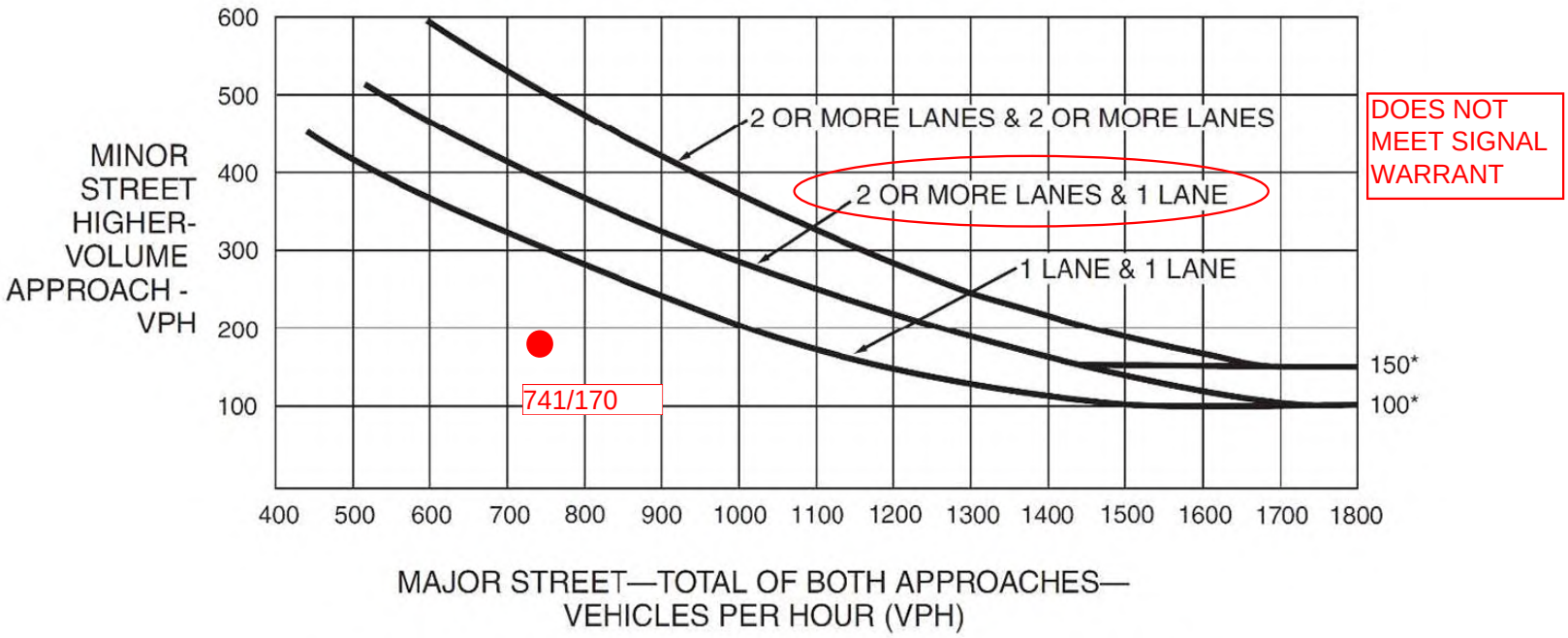


MEETS SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2040 - AM PEAK HOUR (College Ave/Paseo Grand Dr & Pope St)

Figure 4C-3. Warrant 3, Peak Hour

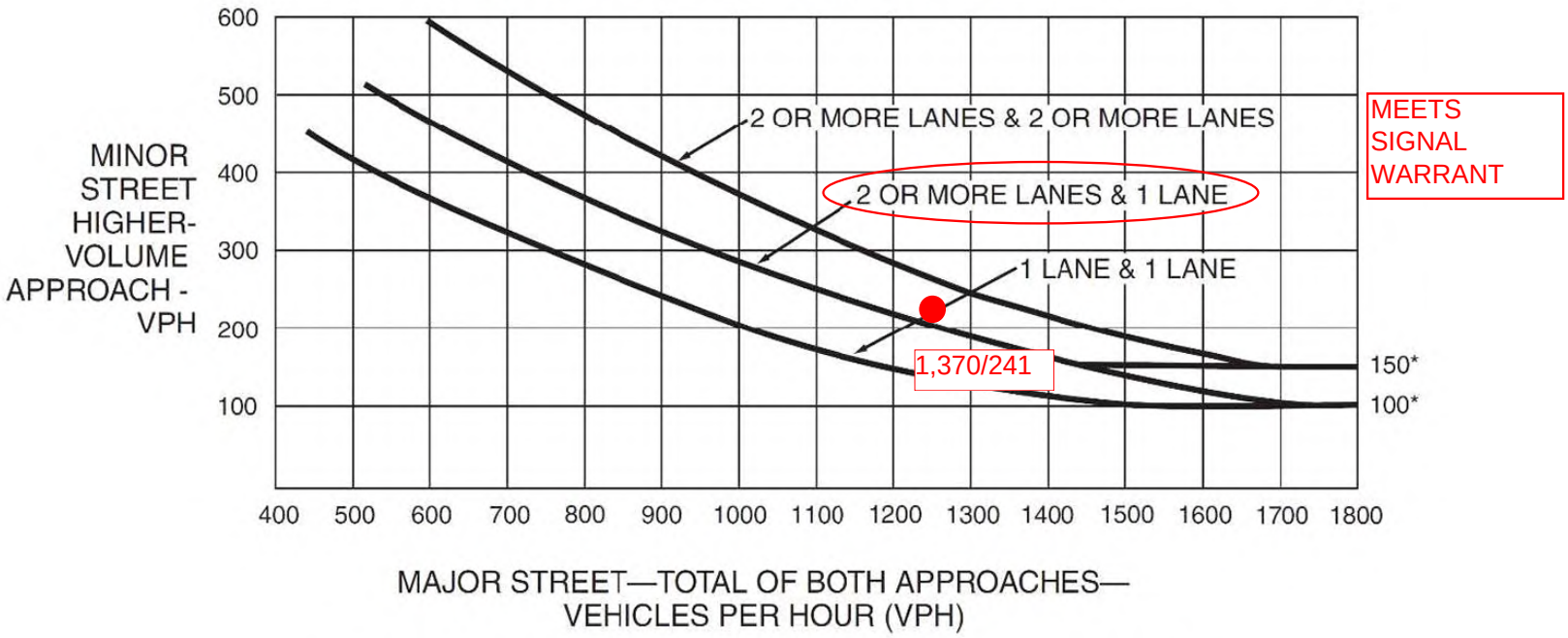


DOES NOT MEET SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2040 - AM PEAK HOUR (Silverado Trail & Pope St)

Figure 4C-3. Warrant 3, Peak Hour

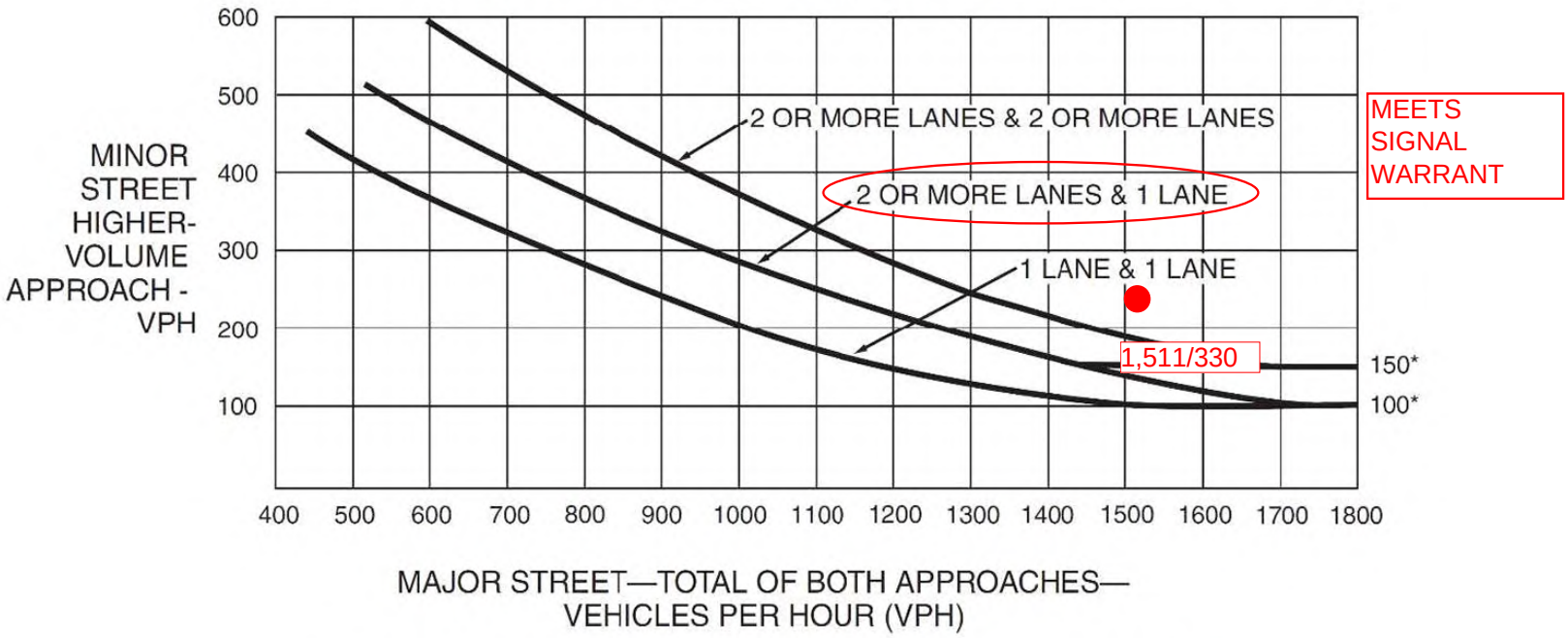


MEETS SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2040 - PM PEAK HOUR (Silverado Trail & Pope St)

Figure 4C-3. Warrant 3, Peak Hour

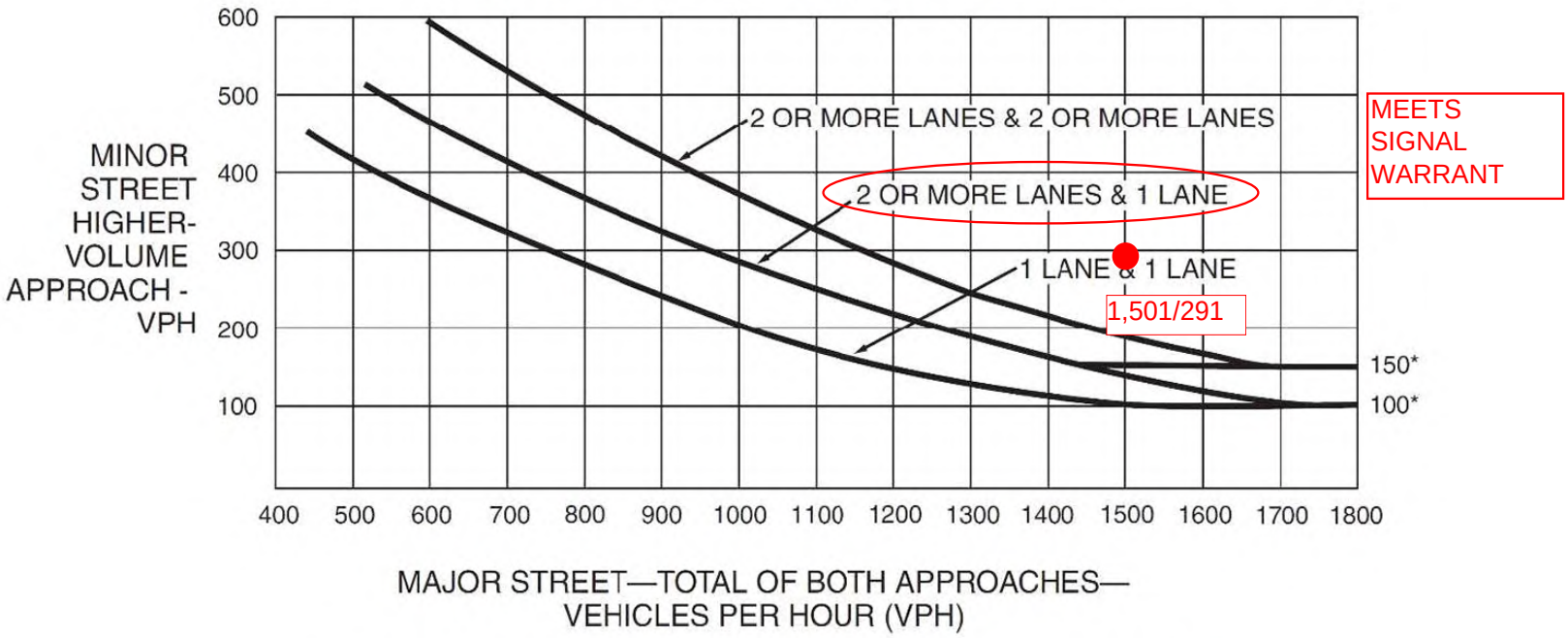


MEETS SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

2040 - Saturday Mid-Day PEAK HOUR (Silverado Trail & Pope St)

Figure 4C-3. Warrant 3, Peak Hour



MEETS SIGNAL WARRANT

*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Queuing and Blocking Report
Existing Conditions

Existing Conditions
AM Peak Hour

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	188	152	111	436	119	345
Average Queue (ft)	99	65	29	168	53	132
95th Queue (ft)	167	121	86	354	106	273
Link Distance (ft)	432	351		998		789
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)			1	12	2	9
Queuing Penalty (veh)			8	4	12	9

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	168	150	174	421	149	412
Average Queue (ft)	87	65	57	217	46	184
95th Queue (ft)	150	122	145	386	125	341
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	3					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	15	0	14
Queuing Penalty (veh)			0	7	0	6

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	91	86	47	41
Average Queue (ft)	33	4	12	2
95th Queue (ft)	72	30	39	17
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	250	350	145	165	745	150	478
Average Queue (ft)	123	162	96	91	359	58	187
95th Queue (ft)	211	307	173	181	663	150	393
Link Distance (ft)	428	910			2047		581
Upstream Blk Time (%)							0
Queuing Penalty (veh)							1
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		14	3	1	29	0	17
Queuing Penalty (veh)		18	6	8	23	1	13

Intersection: 5: Railroad Ave & Fulton Ln

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	24	64
Average Queue (ft)	2	33
95th Queue (ft)	13	55
Link Distance (ft)	172	1044
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	87	79	84	76
Average Queue (ft)	49	36	45	40
95th Queue (ft)	77	59	71	66
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	48	36	27	71
Average Queue (ft)	13	2	14	31
95th Queue (ft)	41	14	35	55
Link Distance (ft)	192	2129	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	24	35	31
Average Queue (ft)	1	9	9
95th Queue (ft)	12	33	31
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave & Hunt Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	70	65	68
Average Queue (ft)	34	22	35
95th Queue (ft)	59	51	57
Link Distance (ft)	2129	367	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Pope Street & Starr Ave

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	59	10	96
Average Queue (ft)	5	0	40
95th Queue (ft)	28	5	71
Link Distance (ft)	1374	1095	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	26	16	65	96	74	48
Average Queue (ft)	4	1	17	37	20	16
95th Queue (ft)	20	9	47	69	47	40
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	259	103	91	10	39
Average Queue (ft)	90	46	3	0	7
95th Queue (ft)	191	84	48	5	26
Link Distance (ft)	872		420	161	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100			225
Storage Blk Time (%)		1			
Queuing Penalty (veh)		2			

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB
Directions Served	LR	R	L
Maximum Queue (ft)	52	38	17
Average Queue (ft)	20	1	1
95th Queue (ft)	47	17	7
Link Distance (ft)	355		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		50	100
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Zone Summary

Zone wide Queuing Penalty: 118

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	249	221	126	374	119	293
Average Queue (ft)	98	88	22	159	40	123
95th Queue (ft)	184	161	81	314	88	227
Link Distance (ft)	432	350		998		1089
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)			0	11	0	9
Queuing Penalty (veh)			0	2	3	6

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	172	243	174	422	149	410
Average Queue (ft)	115	108	44	226	70	179
95th Queue (ft)	181	194	136	386	150	335
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	7	0				
Queuing Penalty (veh)	0	0				
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)				18	0	14
Queuing Penalty (veh)				5	0	9

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	85	110	55	142
Average Queue (ft)	34	19	15	19
95th Queue (ft)	69	70	44	78
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)				1
Queuing Penalty (veh)				0

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	291	245	143	164	558	150	470
Average Queue (ft)	142	110	62	81	277	64	229
95th Queue (ft)	244	197	137	167	482	162	409
Link Distance (ft)	428	909			988		581
Upstream Blk Time (%)							0
Queuing Penalty (veh)							1
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		9	0	1	23	0	23
Queuing Penalty (veh)		9	1	7	19	0	19

Intersection: 5: Railroad Ave & Fulton Ln

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	18	68
Average Queue (ft)	1	39
95th Queue (ft)	11	60
Link Distance (ft)	172	1044
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	109	112	91	86
Average Queue (ft)	60	61	41	44
95th Queue (ft)	95	95	74	72
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	38	54	27	89
Average Queue (ft)	6	3	11	38
95th Queue (ft)	27	28	33	68
Link Distance (ft)	192	2129	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	34	10	58	56
Average Queue (ft)	6	1	21	27
95th Queue (ft)	26	10	48	51
Link Distance (ft)	334	195	120	488
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Starr Ave & Hunt Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	62	35	66
Average Queue (ft)	36	12	32
95th Queue (ft)	57	37	54
Link Distance (ft)	2129	367	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Pope Street & Starr Ave

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	54	83
Average Queue (ft)	7	37
95th Queue (ft)	33	63
Link Distance (ft)	1374	1269
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	WB	NB	NB	SB
Directions Served	L	L	L	TR	LTR
Maximum Queue (ft)	30	28	50	35	36
Average Queue (ft)	9	3	17	11	15
95th Queue (ft)	29	17	41	29	37
Link Distance (ft)				510	612
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	85	90	110		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB	SB
Directions Served	LR	L	T	R
Maximum Queue (ft)	287	81	10	35
Average Queue (ft)	137	36	0	4
95th Queue (ft)	255	66	7	19
Link Distance (ft)	872		161	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		225
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	78	30
Average Queue (ft)	32	2
95th Queue (ft)	61	13
Link Distance (ft)	355	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 81

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	187	111	78	310	119	261
Average Queue (ft)	73	49	16	112	34	111
95th Queue (ft)	134	92	59	247	84	208
Link Distance (ft)	432	351		998		1089
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)				6	0	7
Queuing Penalty (veh)				1	2	4

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	148	171	174	414	149	418
Average Queue (ft)	68	69	41	192	46	202
95th Queue (ft)	126	140	126	337	113	364
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)				13	0	16
Queuing Penalty (veh)				3	0	7

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	125	233	97	236
Average Queue (ft)	50	63	19	58
95th Queue (ft)	98	157	56	157
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	3
Queuing Penalty (veh)			0	1

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	199	250	145	165	518	150	464
Average Queue (ft)	112	118	55	45	228	49	241
95th Queue (ft)	188	216	124	133	442	145	428
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	1						0
Queuing Penalty (veh)	0						0
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		9	0	0	18	0	22
Queuing Penalty (veh)		7	0	0	10	1	14

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	6	24	65
Average Queue (ft)	0	2	35
95th Queue (ft)	6	13	55
Link Distance (ft)	351	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	80	95	69	69
Average Queue (ft)	41	41	32	36
95th Queue (ft)	65	70	56	60
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	39	11	27	64
Average Queue (ft)	5	1	3	27
95th Queue (ft)	24	8	18	50
Link Distance (ft)	192	2129	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	11	30	49
Average Queue (ft)	1	3	20
95th Queue (ft)	7	18	46
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave & Hunt Ave

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	53	32	60
Average Queue (ft)	27	12	28
95th Queue (ft)	52	37	50
Link Distance (ft)	2129	367	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Pope Street & Starr Ave

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	62	66
Average Queue (ft)	6	28
95th Queue (ft)	35	59
Link Distance (ft)	1374	1269
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	26	26	28	31	39	53
Average Queue (ft)	4	1	4	9	10	14
95th Queue (ft)	20	14	20	29	27	39
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	300	84	26	13	25
Average Queue (ft)	124	36	1	0	3
95th Queue (ft)	262	66	19	6	16
Link Distance (ft)	872		420	161	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100			225
Storage Blk Time (%)		0			
Queuing Penalty (veh)		1			

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	NB	SB	SB
Directions Served	LR	T	R	L	T
Maximum Queue (ft)	82	18	24	29	6
Average Queue (ft)	28	1	1	3	0
95th Queue (ft)	59	10	15	18	0
Link Distance (ft)	355	161			2786
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			50	100	
Storage Blk Time (%)		0	0		
Queuing Penalty (veh)		0	0		

Zone Summary

Zone wide Queuing Penalty: 52

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	210	168	129	390	119	382
Average Queue (ft)	94	71	33	147	56	132
95th Queue (ft)	171	138	99	309	110	271
Link Distance (ft)	432	350		998		529
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)			0	10	4	9
Queuing Penalty (veh)			0	4	26	9

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	168	152	174	444	149	382
Average Queue (ft)	97	66	63	226	53	181
95th Queue (ft)	161	125	154	382	130	334
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	3			0		
Queuing Penalty (veh)	0			0		
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	17	0	14
Queuing Penalty (veh)			0	8	0	6

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	128	82	63	31
Average Queue (ft)	42	6	13	1
95th Queue (ft)	86	44	44	19
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			1	

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	211	395	145	165	876	149	399
Average Queue (ft)	122	169	99	74	393	54	197
95th Queue (ft)	199	311	177	176	775	148	368
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	2						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		18	2	0	29	0	18
Queuing Penalty (veh)		22	5	2	22	1	14

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	11	23	66
Average Queue (ft)	0	1	33
95th Queue (ft)	8	12	54
Link Distance (ft)	350	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	107	84	80	80
Average Queue (ft)	54	38	44	40
95th Queue (ft)	86	66	69	65
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	56	57	31	89
Average Queue (ft)	14	4	12	34
95th Queue (ft)	42	24	34	67
Link Distance (ft)	192	2127	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	24	30	35
Average Queue (ft)	1	7	8
95th Queue (ft)	12	28	31
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	58	59	63	60
Average Queue (ft)	29	24	34	21
95th Queue (ft)	51	53	52	50
Link Distance (ft)	2127	358	1269	206
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	57	17	100
Average Queue (ft)	6	1	45
95th Queue (ft)	33	9	79
Link Distance (ft)	1374	1095	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	26	16	65	97	46	43
Average Queue (ft)	3	1	21	37	18	19
95th Queue (ft)	17	7	50	69	35	41
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB	SB
Directions Served	LR	L	T	R
Maximum Queue (ft)	211	91	9	48
Average Queue (ft)	87	43	0	7
95th Queue (ft)	177	75	4	28
Link Distance (ft)	872		161	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		225
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB
Directions Served	LR	R	L
Maximum Queue (ft)	70	12	23
Average Queue (ft)	22	0	1
95th Queue (ft)	52	9	11
Link Distance (ft)	355		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		50	100
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Zone Summary

Zone wide Queuing Penalty: 122

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	212	193	127	392	120	325
Average Queue (ft)	100	84	24	179	37	137
95th Queue (ft)	189	153	85	348	85	251
Link Distance (ft)	432	350		998		529
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)				13	1	11
Queuing Penalty (veh)				3	4	7

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	178	234	174	472	149	442
Average Queue (ft)	120	113	38	228	63	188
95th Queue (ft)	186	196	115	395	132	358
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	11			0		
Queuing Penalty (veh)	0			0		
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	17	0	14
Queuing Penalty (veh)			0	5	0	10

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	105	117	52	56
Average Queue (ft)	39	17	15	8
95th Queue (ft)	77	71	43	36
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	212	272	144	165	466	150	418
Average Queue (ft)	124	111	64	66	214	61	182
95th Queue (ft)	208	205	141	162	412	155	353
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	4						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		9	0	0	16	0	16
Queuing Penalty (veh)		8	1	3	14	0	14

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	12	78
Average Queue (ft)	0	0	42
95th Queue (ft)	3	6	66
Link Distance (ft)	350	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	135	125	78	92
Average Queue (ft)	64	64	40	43
95th Queue (ft)	108	105	66	72
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	34	21	32	69
Average Queue (ft)	5	1	14	35
95th Queue (ft)	24	10	36	60
Link Distance (ft)	192	2126	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	38	57	58
Average Queue (ft)	7	24	28
95th Queue (ft)	28	52	50
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	50	40	66	34
Average Queue (ft)	32	16	32	14
95th Queue (ft)	50	42	53	37
Link Distance (ft)	2126	358	1269	229
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	72	9	88
Average Queue (ft)	12	0	41
95th Queue (ft)	46	5	68
Link Distance (ft)	1374	1095	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	35	4	28	59	38	31
Average Queue (ft)	6	0	5	18	11	15
95th Queue (ft)	26	3	22	43	29	37
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB
Directions Served	LR	L	R
Maximum Queue (ft)	520	80	32
Average Queue (ft)	176	36	4
95th Queue (ft)	405	68	21
Link Distance (ft)	872		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	225
Storage Blk Time (%)		0	
Queuing Penalty (veh)		1	

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB
Directions Served	LR	T	L
Maximum Queue (ft)	94	4	29
Average Queue (ft)	32	0	1
95th Queue (ft)	66	3	12
Link Distance (ft)	355	161	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 69

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	143	114	113	306	113	275
Average Queue (ft)	66	47	18	104	31	109
95th Queue (ft)	122	89	66	224	74	212
Link Distance (ft)	432	351		998		530
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)			0	6	0	7
Queuing Penalty (veh)			0	1	0	4

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	143	170	174	351	149	419
Average Queue (ft)	66	74	39	195	59	205
95th Queue (ft)	118	139	123	326	140	348
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)				14	0	17
Queuing Penalty (veh)				4	0	8

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	106	186	81	252
Average Queue (ft)	49	58	18	64
95th Queue (ft)	93	143	53	162
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	2
Queuing Penalty (veh)			0	1

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	207	244	145	165	418	150	475
Average Queue (ft)	112	102	56	46	196	52	227
95th Queue (ft)	193	193	128	135	368	148	417
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	2						0
Queuing Penalty (veh)	0						0
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		6	0	0	16	0	22
Queuing Penalty (veh)		5	1	1	9	0	14

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	11	17	63
Average Queue (ft)	0	0	34
95th Queue (ft)	8	6	54
Link Distance (ft)	351	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	78	76	65	79
Average Queue (ft)	44	41	34	37
95th Queue (ft)	69	66	57	61
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	55	21	27	63
Average Queue (ft)	6	1	4	28
95th Queue (ft)	29	9	19	50
Link Distance (ft)	192	2129	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	24	30	64
Average Queue (ft)	1	3	24
95th Queue (ft)	9	19	50
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	56	30	68	35
Average Queue (ft)	24	10	30	14
95th Queue (ft)	47	33	54	38
Link Distance (ft)	2129	356	1269	198
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	61	68
Average Queue (ft)	8	29
95th Queue (ft)	36	55
Link Distance (ft)	1374	1269
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	26	11	39	28	40	40
Average Queue (ft)	3	0	4	7	12	17
95th Queue (ft)	15	8	24	25	32	39
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB	SB
Directions Served	LR	L	T	R
Maximum Queue (ft)	269	89	4	27
Average Queue (ft)	123	35	0	3
95th Queue (ft)	227	68	3	15
Link Distance (ft)	872		161	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		225
Storage Blk Time (%)		0		
Queuing Penalty (veh)		1		

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB	SB
Directions Served	LR	R	L	T
Maximum Queue (ft)	66	10	35	15
Average Queue (ft)	25	0	4	1
95th Queue (ft)	56	7	22	11
Link Distance (ft)	355			2786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		50	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 48

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	216	168	129	359	120	562
Average Queue (ft)	123	83	38	178	78	303
95th Queue (ft)	204	147	102	334	138	590
Link Distance (ft)	432	350		998		529
Upstream Blk Time (%)						12
Queuing Penalty (veh)						0
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)			1	14	6	21
Queuing Penalty (veh)			4	6	47	25

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	175	185	175	445	149	438
Average Queue (ft)	106	84	58	237	68	230
95th Queue (ft)	168	150	154	387	146	400
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	4					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	18	0	20
Queuing Penalty (veh)			0	9	2	14

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	104	33	54	42
Average Queue (ft)	40	2	13	1
95th Queue (ft)	84	14	42	11
Link Distance (ft)	192	581		515
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	221	426	145	165	1092	150	545
Average Queue (ft)	147	230	104	86	694	86	261
95th Queue (ft)	234	385	184	191	1585	183	474
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	7				2		0
Queuing Penalty (veh)	0				0		0
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		31	3	1	36	3	24
Queuing Penalty (veh)		46	8	9	29	13	24

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	10	29	69
Average Queue (ft)	1	2	36
95th Queue (ft)	8	15	58
Link Distance (ft)	350	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	124	77	101	88
Average Queue (ft)	61	38	49	45
95th Queue (ft)	106	61	80	73
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	56	35	45	84
Average Queue (ft)	16	3	17	33
95th Queue (ft)	47	15	41	60
Link Distance (ft)	192	2128	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	27	30	31
Average Queue (ft)	1	9	8
95th Queue (ft)	10	31	29
Link Distance (ft)	334	120	488
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	71	61	81	58
Average Queue (ft)	35	27	39	23
95th Queue (ft)	59	54	64	49
Link Distance (ft)	2128	357	1269	268
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	69	112
Average Queue (ft)	6	49
95th Queue (ft)	36	86
Link Distance (ft)	1374	1269
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	58	160	68	106	103	67
Average Queue (ft)	6	20	23	45	24	25
95th Queue (ft)	36	139	53	86	76	54
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)		5	0	0	2	
Queuing Penalty (veh)		1	0	0	2	

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB	SB
Directions Served	LR	L	T	R
Maximum Queue (ft)	841	109	15	34
Average Queue (ft)	546	56	1	7
95th Queue (ft)	926	95	9	26
Link Distance (ft)	872		161	
Upstream Blk Time (%)	7			
Queuing Penalty (veh)	15			
Storage Bay Dist (ft)		100		225
Storage Blk Time (%)		1		
Queuing Penalty (veh)		4		

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB
Directions Served	LR	R	L
Maximum Queue (ft)	67	10	30
Average Queue (ft)	26	0	4
95th Queue (ft)	56	7	20
Link Distance (ft)	355		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		50	100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 258

Queuing and Blocking Report
2040 GP Buildout

2040 GP Buildout
PM Peak Hour

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	223	233	129	440	119	387
Average Queue (ft)	120	115	28	193	53	161
95th Queue (ft)	200	197	83	369	107	294
Link Distance (ft)	432	350		998		529
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)				16	3	14
Queuing Penalty (veh)				5	18	12

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	175	243	174	461	150	437
Average Queue (ft)	121	116	50	237	84	207
95th Queue (ft)	189	217	138	408	166	376
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	15	0		0		
Queuing Penalty (veh)	0	1		0		
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	18	1	18
Queuing Penalty (veh)			0	7	7	14

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	144	161	56	97
Average Queue (ft)	64	31	15	17
95th Queue (ft)	125	107	45	64
Link Distance (ft)	192	581		515
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	210	264	145	165	534	150	478
Average Queue (ft)	153	123	78	84	257	79	222
95th Queue (ft)	233	225	153	189	466	174	422
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	7						0
Queuing Penalty (veh)	0						0
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		11	1	1	21	1	20
Queuing Penalty (veh)		14	2	4	21	8	23

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	24	85
Average Queue (ft)	0	2	43
95th Queue (ft)	3	13	71
Link Distance (ft)	350	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	146	130	95	93
Average Queue (ft)	69	61	41	48
95th Queue (ft)	115	106	73	79
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	38	40	45	73
Average Queue (ft)	7	4	18	37
95th Queue (ft)	29	24	42	64
Link Distance (ft)	192	2129	404	517
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Library Ln & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	30	4	52	57
Average Queue (ft)	5	0	28	29
95th Queue (ft)	23	3	49	50
Link Distance (ft)	334	195	120	488
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	72	35	67	56
Average Queue (ft)	40	20	39	17
95th Queue (ft)	63	44	62	45
Link Distance (ft)	2129	356	1269	257
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	384	13	310
Average Queue (ft)	93	1	100
95th Queue (ft)	418	8	314
Link Distance (ft)	1374	1095	1269
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	104	711	31	86	310	101
Average Queue (ft)	25	382	6	22	96	33
95th Queue (ft)	94	1139	24	68	348	105
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)		11			4	
Queuing Penalty (veh)		41			0	
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)	0	45		0	21	
Queuing Penalty (veh)	0	18		0	8	

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB
Directions Served	LR	L	R
Maximum Queue (ft)	816	93	35
Average Queue (ft)	712	41	6
95th Queue (ft)	1104	72	24
Link Distance (ft)	872		
Upstream Blk Time (%)	35		
Queuing Penalty (veh)	118		
Storage Bay Dist (ft)		100	225
Storage Blk Time (%)		0	
Queuing Penalty (veh)		1	

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	84	31
Average Queue (ft)	38	4
95th Queue (ft)	72	20
Link Distance (ft)	355	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 321

Intersection: 1: Main St & Madrona Ave/Fulton Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	194	120	114	368	114	365
Average Queue (ft)	82	57	19	124	37	129
95th Queue (ft)	154	106	68	277	87	257
Link Distance (ft)	432	351		998		530
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			105		95	
Storage Blk Time (%)				8	0	9
Queuing Penalty (veh)				2	3	5

Intersection: 2: Main St & Adams St

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	158	169	174	392	150	412
Average Queue (ft)	76	80	41	202	56	210
95th Queue (ft)	139	145	127	340	129	375
Link Distance (ft)	147	318		515		998
Upstream Blk Time (%)	1					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			150		125	
Storage Blk Time (%)			0	15	0	19
Queuing Penalty (veh)			0	4	0	10

Intersection: 3: Main St & Hunt Ave

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	186	294	85	200
Average Queue (ft)	70	89	16	70
95th Queue (ft)	154	207	56	165
Link Distance (ft)	192	581		515
Upstream Blk Time (%)	4			
Queuing Penalty (veh)	4			
Storage Bay Dist (ft)			85	
Storage Blk Time (%)			0	4
Queuing Penalty (veh)			0	1

Intersection: 4: Main St & Mitchell Dr/Pope Street

Movement	EB	WB	WB	NB	NB	SB	SB
Directions Served	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	205	293	145	165	526	150	491
Average Queue (ft)	117	127	64	54	259	54	269
95th Queue (ft)	188	228	144	156	468	152	446
Link Distance (ft)	195	910			2038		581
Upstream Blk Time (%)	1						0
Queuing Penalty (veh)	0						0
Storage Bay Dist (ft)			120	140		125	
Storage Blk Time (%)		12	0		22	0	27
Queuing Penalty (veh)		10	0		13	1	19

Intersection: 5: Railroad Ave & Fulton Ln

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (ft)	4	56	71
Average Queue (ft)	0	6	37
95th Queue (ft)	3	30	60
Link Distance (ft)	351	172	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Railroad Ave & Adams St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	79	74	64	74
Average Queue (ft)	41	42	33	39
95th Queue (ft)	66	67	56	62
Link Distance (ft)	318	334	517	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Railroad Ave & Hunt Ave

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	59	85	80
Average Queue (ft)	10	8	32
95th Queue (ft)	39	60	66
Link Distance (ft)	192	2128	517
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Library Ln & Adams St

Movement	EB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	5	44
Average Queue (ft)	0	20
95th Queue (ft)	4	46
Link Distance (ft)	334	488
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Starr Ave/Project Access & Hunt Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	74	40	65	52
Average Queue (ft)	32	14	35	18
95th Queue (ft)	58	39	56	45
Link Distance (ft)	2128	357	1269	202
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Pope Street & Starr Ave

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	120	102
Average Queue (ft)	16	36
95th Queue (ft)	73	81
Link Distance (ft)	1374	1269
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: College Ave/Paseo Grand Dr & Pope Street

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	TR	L	L	TR	LTR
Maximum Queue (ft)	93	787	31	98	302	158
Average Queue (ft)	21	267	4	13	92	50
95th Queue (ft)	90	821	20	59	310	151
Link Distance (ft)		1095			510	612
Upstream Blk Time (%)		1			1	
Queuing Penalty (veh)		4			0	
Storage Bay Dist (ft)	85		90	110		
Storage Blk Time (%)		44		0	22	
Queuing Penalty (veh)		9		0	4	

Intersection: 12: Silverado Trail & Pope Street

Movement	EB	NB	SB	SB
Directions Served	LR	L	T	R
Maximum Queue (ft)	823	105	16	46
Average Queue (ft)	667	48	1	6
95th Queue (ft)	1165	87	9	25
Link Distance (ft)	872		161	
Upstream Blk Time (%)	39			
Queuing Penalty (veh)	112			
Storage Bay Dist (ft)		100		225
Storage Blk Time (%)		0		
Queuing Penalty (veh)		3		

Intersection: 13: Silverado Trail & Howell Mountain Rd

Movement	WB	NB	SB	SB
Directions Served	LR	T	L	T
Maximum Queue (ft)	86	4	34	11
Average Queue (ft)	38	0	6	0
95th Queue (ft)	73	3	26	8
Link Distance (ft)	355	161		2786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 203

APPENDIX D

SWITRS Data

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

REPORT 8 - TOTAL COLLISIONS

01/01/2014 thru 12/31/2014 | *Total Count: 70* | Jurisdiction(s): Saint Helena

Include State Highways cases | *Report Run On: 03/27/2019*

Primary Rd **100TH AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **SULPHUR** *NCIC* **2803** *State Hwy?* **Y** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20141015** *Time* **0800** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150623**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	M	H	HNBD		PROC ST	N	A	0100	FORD	2006	- 3	N		-	L G
2	DRVR	32	M	W	HNBD		STOPPED	N	D	7200	NISSA	2013	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		19	F	4	0	G	-
PASS		18	M	3	0	G	-

Primary Rd **ADAMS ST** *Distance (ft)* **206** *Direction* **W** *Secondary Rd* **KEARNEY ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **19** *Collision Date* **20141110** *Time* **1245** *Day* **MON**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150629**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	26	M	W	HNBD		PROC ST	W	D	2200	GMC	2012	- 3	A	22107	-	M G
2	PRKD	998	-				PARKED	-	A	0100	BMW	2005	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ADAMS ST** *Distance (ft)* **94** *Direction* **E** *Secondary Rd* **OAK AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **21** *Collision Date* **20141124** *Time* **0945** *Day* **MON**
Primary Collision Factor **STRTNG\|BCKNG** *Violation* **22106** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150720**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	OTHR	998	-			null		-	-	0000	-		- -	-		-	- -
2	PRKD	998	-		HBD-NUI		PARKED	W	A	0700	INFIN	2013	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ADAMS ST** *Distance (ft)* **90** *Direction* **E** *Secondary Rd* **OAK ST** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **28.75** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **19** *Collision Date* **20140530** *Time* **1050** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160412**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **I** *Ramp/Int* **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	F	H	HNBD		UNS TURN	W	A	0100	TOYOT	2007	- 3	A	22107	-	M G
2	OTHR	998	-				PARKED	-	-	0000	-		- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **ALLISON AV** Distance (ft) **0** Direction Secondary Rd **BROWN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **19** Collision Date **20141114** Time **1930** Day **FRI**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150708**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	32	M	W	HBD-UI		PROC ST	N	A	0100	VOLKS	1999	- 3	N		-	M	G
2	PRKD	998	-				PARKED	N	A	0700	LEXUS	2006	- 3	N		-	-	-
3	PRKD	998	-				PARKED	N	A	0700	FORD	1998	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHARTER OAK AV** Distance (ft) **0** Direction Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20141226** Time **1405** Day **FRI**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150728**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	61	F	W	HBD-UI		PROC ST	W	A	0100	LEXUS	1999	- 3	A	22350	-	M	B
2	PRKD	998	-				PARKED	E	A	0100	PORSC	1997	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **EDWARDS ST** Distance (ft) **135** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20140621** Time **1935** Day **SAT**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150411**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	53	M	H	IMP UNK	IMP UNK	BACKING	E	D	2200	FORD	2000	- 3	N		-	M	B
2	PRKD	998	-				PARKED	N	A	0100	LAND	2009	- -	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HOWELL MOUNTAIN** Distance (ft) **0** Direction Secondary Rd **PADDLE MARKER** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20141010** Time **1652** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150609**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	17	F	H	HNBD		PROC ST	N	A	0100	MAZDA	2006	- 3	A		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		17	M	2	0	-	B
PASS		18	F	3	0	-	B
PASS		17	F	4	0	-	B

Primary Rd **MAIN ST** Distance (ft) **152** Direction **N** Secondary Rd **BRITTON WY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.88** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20140531** Time **0130** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160414**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	F		HBD-UNK		PROC ST	N	A	0100	HONDA		- 3	-		-	B	-
2	PRKD	998	-				PARKED	N	D	2200	DODGE	1955	- -	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **83** Direction **N** Secondary Rd **CHAIX LN** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20141023** Time **1220** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150605**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	27	F	W	HNBD		PROC ST	N	A	0100	JEEP	2002	- 3	G		-	M G								
2	DRVR	22	M		HNBD		STOPPED	N	A	0100	FORD	2006	- 3	N		-	M H								

Primary Rd **MAIN ST** Distance (ft) **208** Direction **N** Secondary Rd **CHARTER OAK** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.36** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **002** Type **0** CalTrans **4** Badge **21** Collision Date **20140908** Time **1125** Day **MON**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	21	M	H	HBD-NUI		PROC ST	N	C	0300	HONDA	2011	- 3	N		-	P W								
2	DRVR	18	M	H	HBD-NUI		RGT TURN	N	A	0100	CHEVR	2007	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **20** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.36** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20140721** Time **1050** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	25	M	W	HNBD		PROC ST	N	-	0000	FORD	2001	- 3	G		-	M G								
2	DRVR	65	M	W	HNBD		STOPPED	N	A	0100	LEXUS	2015	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **94** Direction **S** Secondary Rd **CIA DRWY** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20141107** Time **0653** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150713**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	56	M	W	HNBD		PROC ST	S	F	2600	FORD	2000	- 3	N		-	M G								
2	DRVR	25	M	H	HNBD		PROC ST	S	I	1100	FREIG	2008	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **200** Direction **N** Secondary Rd **CITY LIMIT** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.52** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **25** Collision Date **20140815** Time **1224** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	21	M	W	HNBD		PROC ST	N	A	0100	HONDA	1997	- 3	A	22350	G	M G								
2	DRVR	54	M	W	HNBD		SLOWING	N	A	0100	TOYOT	2011	- 3	G		-	M G								
3	DRVR	16	F	W	HNBD		STOPPED	N	A	0100	BMW	2011	- 3	G		-	M G								

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Primary Rd **MAIN ST** *Distance (ft)* **58** *Direction* **N** *Secondary Rd* **CRINELLA DR** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **40** *Collision Date* **20140411** *Time* **1900** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150313**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	UNS TURN	N	-	9900	-		-	3	N	-	B -
2	PRKD	998	-				PARKED	N	A	0700	FORD	2010	-	3	N	-	- -

Primary Rd **MAIN ST** *Distance (ft)* **137** *Direction* **S** *Secondary Rd* **CRINELLA DR** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.01** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **14** *Collision Date* **20140509** *Time* **1300** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20160412**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	F	H	HNBD		PROC ST	N	A	0100	CHEVR	2008	-	3	N	-	L G
2	DRVR	52	F	H	HNBD		STOPPED	N	A	0100	NISSA	2012	-	3	N	-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	52	F	1	0	G	-

Primary Rd **MAIN ST** *Distance (ft)* **305** *Direction* **N** *Secondary Rd* **CRINELLA DR** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.1** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **14** *Collision Date* **20140622** *Time* **1215** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20160414**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M		HNBD		PROC ST	N	D	2200	TOYOT	2002	-	3	N	-	M C
2	DRVR	44	F		HNBD		STOPPED	N	A	0100	TOYOT	2005	-	3	N	-	M G
3	DRVR	38	M		HNBD		STOPPED	N	A	0100	ACURA	2013	-	3	N	-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		22	F	3	0	G	-
DRVR	COMP PN	44	F	1	0	G	-
PASS		56	F	3	0	G	-
PASS		38	F	3	0	G	-

Primary Rd **MAIN ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **EL BONITA AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20140608** *Time* **1730** *Day* **SUN**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20140809**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M	H	HNBD		LFT TURN	E	A	0100	HONDA	2006	-	3	N	-	L G
2	DRVR	53	M	W	HNBD		PROC ST	S	D	2200	GMC	2008	-	3	N	-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	18	M	1	0	G	-

Primary Rd **MAIN ST** *Distance (ft)* **222** *Direction* **S** *Secondary Rd* **ELMHURST AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.11** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **14** *Collision Date* **20140607** *Time* **1405** *Day* **SAT**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **Y** *Process Date* **20160413**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	M		HNBD		PROC ST	N	A	0100	TOYOT	2013	-	3	N	-	L G
2	DRVR	28	M		HNBD		STOPPED	N	A	0100	BMW	2007	-	3	N	-	M G
3	DRVR	28	F		HNBD		STOPPED	N	A	0100	VOLVO	2006	-	3	N	-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	COMP PN	23	F	3	0	G	-
PASS	COMP PN	24	F	3	0	G	-

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Primary Rd **MAIN ST** Distance (ft) **30** Direction **S** Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.14** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20140706** Time **1510** Day **SUN**
Primary Collision Factor **OTHER HAZ** Violation **22109** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	49	F		HNBD		STOPPED	N	A	0100	NISSA	2000	- 3	F		-	M G
2	DRVR	43	-		HNBD		PROC ST	N	J	4800	FORD	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		55	M	3	0	G	-
PASS		19	F	4	0	G	-

Primary Rd **MAIN ST** Distance (ft) **16** Direction **S** Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **002** Type **0** CalTrans Badge **21** Collision Date **20141010** Time **0628** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150530**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	16	F	W	HNBD		LFT TURN	N	A	0700	BMW	2013	- 3	N		-	L G
2	DRVR	29	F	W	HNBD		PROC ST	S	A	0100	TOYOT	2008	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **210** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.13** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **006** Type **0** CalTrans **4** Badge **21** Collision Date **20140902** Time **0000** Day **TUE**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	67	M	W	HBD-NUI		PROC ST	S	A	0100	CHEVR	2003	- 3	N		-	P G
2	DRVR	39	M	H	HBD-NUI		PROC ST	S	A	0100	HONDA	1994	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		36	M	3	0	-	G
PASS		998	M	4	0	-	H

Primary Rd **MAIN ST** Distance (ft) **25** Direction **S** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.62** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **23** Collision Date **20140116** Time **1945** Day **THU**
Primary Collision Factor **HAZ PARKING** Violation **22515A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20151216**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	OTHR	998	-				OTHER	-	D	2200	NISSA	2006	- -	-		-	- -
2	PRKD	998	-				PARKED	-	A	0700	NISSA	2005	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **70** Direction **S** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.62** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20140719** Time **2500** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	UNS TURN	N	-	0000	-	-	- 3	-		-	B -
2	PRKD	998	-				PARKED	N	D	2200	FORD	2012	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.61** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20140816** Time **1510** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	28	M		HNBD		PROC ST	N	A	0100	MINI	2012	- 3	F		-	M	G
2	PRKD	998	-				PARKED	N	A	0100	NISSA	2012	- 3	N		-	-	-
3	PRKD	998	-				PARKED	N	D	2200	FORD	2012	- 3	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 1342** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **001** Type **0** CalTrans Badge **21** Collision Date **20140306** Time **1310** Day **THU**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20151117**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	48	M	W	HNBD		PROC ST	N	A	0100	FORD	1994	- 3	N		-	L	G
2	DRVR	29	M	W	HNBD		STOPPED	N	A	0800	FORD	2012	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	48	M	1	0	G	-
DRVR	COMP PN	29	M	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **270** Direction **N** Secondary Rd **MILLS LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.14** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20140910** Time **0930** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20160514**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	34	M	W	HNBD		PROC ST	N	A	0100	TOYOT	1997	- 3	F		-	M	G
2	DRVR	48	F	W	HNBD		STOPPED	N	A	0100	NISSA	2013	- 3	-		-	M	G
3	DRVR	32	F		HNBD		STOPPED	N	A	0100	CHEVR	2000	- 3	-		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	48	F	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **138** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20141026** Time **1250** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150605**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	22	F	W	HNBD		PROC ST	N	A	0800	PLYMO	1997	- 3	N		-	M	G
2	DRVR	53	M	W	HNBD		STOPPED	N	A	0100	FERRA	2014	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20141222** Time **1809** Day **MON**
Primary Collision Factor **OTHER IMPROP DRV** Violation Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20150728**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	32	M	W	HNBD		PROC ST	S	D	2200	CHEVR	1997	- 3	F		-	M	G
2	DRVR	32	F	W	HNBD		STOPPED	S	A	0100	VOLVO	2008	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	32	F	1	0	G	-

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Primary Rd **MAIN ST** Distance (ft) **14** Direction **S** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.76** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **8** Collision Date **20140321** Time **1400** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160308**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	65	M	W	HNBD		U-TURN	N	A	0100	CADIL	2013	- 3	-		-	M G
2	DRVR	43	M	W	HNBD		PROC ST	N	A	0700	FORD	2012	- 3	A	21460	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.54** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **42** Collision Date **20140504** Time **1746** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160412**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	F	W	HNBD		LFT TURN	N	A	0100	TOYOT	2007	- 3	A	22107	G	M B
2	DRVR	76	M	W	HNBD			N	A	0100	TOYOT	2012	- 3	N		-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **25** Collision Date **20140619** Time **0823** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150409**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	M				LFT TURN	-	A	0100	VOLKS		- 3	N		-	- B
2	DRVR	61	M	H	HNBD		LFT TURN	N	A	0100	NISSA	2006	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **131** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.59** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20140912** Time **2341** Day **FRI**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	21	M	H	HBD-UNK		BACKING	S	D	2200	DODGE	2006	- 3	N		-	M G
2	PRKD	998	-				PARKED	S	D	2200	TOYOT	2001	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **280** Direction **S** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **006** Type **0** CalTrans Badge **21** Collision Date **20141124** Time **1540** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150703**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	52	M	H	HNBD		PROC ST	N	D	2200	FORD	1991	- 3	N		-	M G
2	DRVR	25	M		HNBD		STOPPED	N	A	0100	SUBAR	2013	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		58	M	3	0	G	-

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Primary Rd **MAIN ST** Distance (ft) **50** Direction **N** Secondary Rd **VIDOVICH** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20141209** Time **1220** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150723**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M		HNBD		PROC ST	S	A	0100	TOYOT	2008	- 3	N		-	M G
2	DRVR	56	M	W	HNBD		STOPPED	S	D	2200	TOYOT	2004	- 3	N		-	M G
3	DRVR	39	F	W	HNBD		STOPPED	S	A	0100	TOYOT	2009	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **VINTAGE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.79** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20140509** Time **1555** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21802B** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160412**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	75	F	W	HNBD		CHANG LN	N	A	0100	TOYOT	2011	- 3	N		-	M G
2	DRVR	31	F	W	HNBD		LFT TURN	W	A	0100	TOYOT	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		79	M	3	0	G	-
PASS		58	M	6	0	G	-
PASS		6	F	6	0	Q	-

Primary Rd **MONEY WY** Distance (ft) **331** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20141013** Time **1500** Day **MON**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150612**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	71	M	W			BACKING	N	A	0700	CHEVR	2013	- 3	N		-	M G
2	DRVR	29	F	W	HNBD			E	A	0700	MAZDA	2011	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		70	F	3	0	G	-

Primary Rd **OAK AV** Distance (ft) **218** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20140816** Time **1110** Day **SAT**
Primary Collision Factor **NOT STATED** Violation Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150511**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	998	-		IMP UNK	IMP UNK		-	-	9900	-		- 3	O		-	B -
2	PRKD	998	-				PARKED	-	A	0100	CHEVR	2013	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **OAK AV** Distance (ft) **50** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20140726** Time **1525** Day **SAT**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150415**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	28	F	W	HNBD		BACKING	S	A	0700	MERCE	2009	- 3	N		-	M G
2	DRVR	46	M	H	HNBD		STOPPED	N	A	0100	DODGE	1998	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **OAK AV** Distance (ft) **50** Direction **N** Secondary Rd **TAINTER ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist **NAPA** Beat Type **0** CalTrans Badge **6** Collision Date **20140214** Time **1100** Day **FRI**
Primary Collision Factor **UNKNOWN** Violation Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	998	-			null		-	-	0000	-		-	-	-	-	- - -
2	PRKD	998	-				PARKED	N	A	0100	SUBAR	2011	-	3	N	-	- - -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **5** Direction **E** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.485** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20140307** Time **0933** Day **FRI**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160308**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT FNCT** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	28	M	W	HNBD		BACKING	W	A	0700	NISSA	1996	-	3	N	-	M	G
2	DRVR	31	M	W	HNBD		STOPPED	W	A	0100	CHEVR	1995	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **PRATT AV** Distance (ft) **22** Direction **E** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **42** Collision Date **20140220** Time **0904** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160308**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	57	F	W	HNBD		STOPPED	W	A	0100	BMW	2008	-	3	N	-	M	B
2F	DRVR	998	M	H	IMP UNK	IMP UNK	RGT TURN	-	A	0100	HONDA		-	3	N	-	-	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.76** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20140818** Time **0520** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		HNBD		PROC ST	S	C	0200	YAMAH	2003	-	3	A	22350	P	A
2	DRVR	51	F	W	HNBD		STOPPED	S	A	0100	GMC	2005	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **134** Direction **N** Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.07** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20141212** Time **1009** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20160613**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	27	F	H	HNBD	FATG	UNS TURN	N	A	0100	TOYOT	2006	-	3	N	-	L	G
2	PRKD	998	-				PARKED	N	A	0100	CHRYS	2000	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 27		F	1	0	G	-

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Primary Rd **RT 29** Distance (ft) **273** Direction **S** Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.1** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **002** Type **0** CalTrans **4** Badge **21** Collision Date **20140926** Time **1010** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	41	F	W			PROC ST	S	A	0800	CHEVR	2006	-	-	-	-	M G
2	PRKD	998	-			null		S	A	0100	TOYOT	1994	-	-	-	-	- -
3	PRKD	998	-			null		S	D	2200	FORD	1995	-	-	-	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **208** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.9** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20140108** Time **1215** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160308**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	76	M			FATG	PROC ST	S	A	0800	TOYOT	2006	-	3	N	-	M G
2	PRKD	998	-				PARKED	S	A	0100	MERCE	2006	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **0** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.92** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20140418** Time **1521** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20160128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	M	W	HNBD		PROC ST	S	A	0700	FORD	2001	-	3	F	-	M G
2	DRVR	51	M	W	HNBD		PROC ST	S	A	0100	HONDA	2000	-	3	N	-	M G
3	DRVR	50	M	W	HNBD		STOPPED	S	A	0100	BMW	2007	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
OTHR	COMP PN	50	F	3	0	G	-
PASS		40	F	3	0	G	-

Primary Rd **RT 29** Distance (ft) **87** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20140820** Time **1044** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20140916**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	24	F	H	HNBD		STOPPED	S	A	0100	NISSA	2006	-	3	N	-	M G
2F	DRVR	23	M		HNBD		PROC ST	S	A	0100	TOYOT	1998	-	3	F	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	24	F	1	0	G	-
PASS		6	F	3	0	G	-

Primary Rd **RT 29** Distance (ft) **105** Direction **N** Secondary Rd **MILE MARKER 29-** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.63** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **25** Collision Date **20140820** Time **1631** Day **WED**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	32	F	W	HBD-UI	DRUG	PROC ST	S	A	0100	SUBAR	2001	-	3	E	-	M G
2	DRVR	58	F	W	HNBD		PROC ST	S	A	0100	TOYOT	2000	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	32	F	1	0	G	-

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Primary Rd **RT 29** Distance (ft) **294** Direction **N** Secondary Rd **MILLS LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.15** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20140610** Time **1533** Day **TUE**
Primary Collision Factor **NOT STATED** Violation Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160413**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	27	M	H	HNBD		SLOWING	N	A	0100	CHEVR	2012	- 3	N		-	M G
2F	DRVR	31	F		HNBD		SLOWING	N	A	0700	MAZDA	2015	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **236** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.45** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20140729** Time **1355** Day **TUE**
Primary Collision Factor **WRONG SIDE** Violation **21460A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	21	F	W	HNBD		PROC ST	N	A	0100	CADIL	1997	- 3	N		-	M B
2	DRVR	45	M	A	HNBD		STOPPED	N	A	0800	MAZDA	2013	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	PASS		18	M	3	0	B	-
2	PASS		4	M	4	0	Q	-

Primary Rd **RT 29** Distance (ft) **65** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.5** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20140821** Time **1615** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160513**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	67	M	W	HNBD		PROC ST	S	A	0100	DODGE	2014	- 3	N		-	M G
2	DRVR	43	F	A	HNBD		STOPPED	S	A	0100	MAZDA	2013	- 3	N		-	M G
3	DRVR	68	F	W	HNBD		STOPPED	S	A	0100	TOYOT	2011	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20140807** Time **0758** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160513**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	70	M		HNBD		RGT TURN	W	A	0100	CHRYS	2004	- 3	N		-	M G
2	DRVR	17	M	H	HNBD		PROC ST	N	A	0100	HONDA	1988	- 3	N		-	P G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **166** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.54** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20140218** Time **1308** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160308**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	21	F	A	HNBD		PROC ST	S	A	0100	NISSA	2009	- 3	N		-	M G
2F	DRVR	63	M	W	HNBD		ENT TRAF	E	A	0100	LINCO	2013	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	PASS		998	M	6	0	G	-

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Primary Rd **RT 29** Distance (ft) **71** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.55** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **8** Collision Date **20140412** Time **1512** Day **SAT**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160413**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	53	M	W	HBD-UI		UNS TURN	N	A	0100	CHRYS	2013	- 3	A		-	M	G
2	PRKD	998	-				PARKED	N	A	0700	FORD	2003	- 3	N		-	-	-
3	PRKD	998	-				PARKED	N	A	0700	HUMM	2008	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		45	F	3	0	G	-

Primary Rd **RT 29** Distance (ft) **36** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20141207** Time **0048** Day **SUN**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150723**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	61	M	H	HBD-UI		BACKING	N	D	2200	DODGE	1987	- 3	N		-	P	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **Y** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **006** Type **0** CalTrans Badge **21** Collision Date **20140912** Time **1510** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21804B** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20150519**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	46	F	H	HNBD		PROC ST	N	A	0100	NISSA	2010	- 3	G		-	M	G
2	DRVR	56	M	W	HNBD		LFT TURN	W	F	2700	INTER	1990	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	46	F	1	0	G	-

Primary Rd **S CRANE AV** Distance (ft) **0** Direction Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20140815** Time **1202** Day **FRI**
Primary Collision Factor **STOP SGN|SIG** Violation **22450A** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150506**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	79	F	W	HNBD		PROC ST	S	A	0100	HONDA	2003	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **50** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **23** Collision Date **20140129** Time **0030** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20150112**
Weather1 **SNOWING** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	60	M	A	HNBD		RAN OFF RD	N	A	0100	BMW	1998	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	60	M	1	0	G	-

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Primary Rd **SILVERADO TRL** Distance (ft) **44** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20140530** Time **1522** Day **FRI**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20140801**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	34	F	B	HNBD		SLOWING	S	A	0100	NISSA	2010	- 3	N		-	M G
2F	DRVR	62	M	W	HNBD		SLOWING	S	F	2700	PETER	2015	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	34	F	1	0	G	-

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20140609** Time **1725** Day **MON**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150410**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	88	M	H	HNBD		LFT TURN	E	A	0100	TOYOT	2013	- 3	N		-	M G
2	DRVR	25	M	W	HNBD		PROC ST	N	A	0100	HONDA	1999	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20140918** Time **1310** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150610**
Weather1 **CLEAR** Weather2 **CLOUDY** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	59	M	W	HNBD		LFT TURN	E	D	2200	GMC	1994	- 3	N		-	M G
2	DRVR	60	F	O	HNBD		PROC ST	S	A	0100	NISSA	1999	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		32	M	3	0	G	-

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20141122** Time **1249** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20150116**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	64	F		HNBD		PROC ST	S	A	0100	FORD	2009	- 3	N		-	L -
2F	DRVR	41	F	H	HNBD		LFT TURN	N	A	0100	NISSA	1994	- 3	A	21802	-	L -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	64	F	1	0	L	-
DRVR	COMP PN	41	F	1	0	L	-

Primary Rd **SPRING MOUNTAIN** Distance (ft) **0** Direction Secondary Rd **HILLVIEW PL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20140815** Time **0749** Day **FRI**
Primary Collision Factor **STOP SGN|SIG** Violation **22450A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20150511**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	F		HNBD		LFT TURN	E	A	0100	MAZDA	2012	- 3	A	21801	-	L G
2	DRVR	75	F		HNBD		PROC ST	-	A	0100	LEXUS	2014	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	75	F	1	0	G	-

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Primary Rd **SPRING ST** Distance (ft) **20** Direction **W** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20140315** Time **2004** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150302**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	25	F	W	HNBD		UNS TURN	W	A	0700	MERCE	2012	-	3	N	-	N	B								
2	PRKD	998	-				PARKED	-	A	0100	MERCE	2013	-	3	N	-	-	-								

Primary Rd **SPRING ST** Distance (ft) **159** Direction **S** Secondary Rd **STOCKTON ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20141113** Time **0000** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150624**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	OTHR	998	-		HBD-UNK			E	-	0000	-		-	3	N	-	-	-								
2	PRKD	998	-				PARKED	E	A	0100	NISSA	2011	-	3	N	-	-	-								

Primary Rd **TAINTER** Distance (ft) **139** Direction **W** Secondary Rd **OAK AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20140224** Time **1500** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	38	F	H	HNBD		RGT TURN	W	A	0700	NISSA	2008	-	3	-	-	M	G								
2	PRKD	998	-				PARKED	-	A	0100	HONDA	1996	-	3	-	-	-	-								

Primary Rd **TAINTER ST** Distance (ft) **117** Direction **W** Secondary Rd **KEARNEY ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20140708** Time **1205** Day **TUE**
Primary Collision Factor **UNKNOWN** Violation Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150416**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	PRKD	998	-				PARKED	W	A	0100	DODGE	2013	-	3	N	-	-	-								
2	DRVR	998	-		IMP UNK	IMP UNK	OTHER	N	-	9900	-		-	3	N	-	M	B								

Primary Rd **VINTAGE AV** Distance (ft) **209** Direction **W** Secondary Rd **LA FATA ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20140116** Time **1356** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150106**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	41	M	W	HNBD		PROC ST	W	D	7200	TOYOT	1994	-	3	N	-	M	G								
2F	DRVR	28	M	H	HNBD		ENT TRAF	W	A	7100	NISSA	2009	-	3	N	-	M	G								

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Primary Rd **VINTAGE AV** Distance (ft) **0** Direction Secondary Rd **LAFATA** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **25** Collision Date **20140717** Time **0800** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150417**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **OBSTR ON RD** Rdwy Cond2 **CONS ZONE** Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **OBSCR** Loc Type Ramp/Int

Party Info																		Victim Info						
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	33	M	H	IMP UNK	IMP UNK	RGT TURN	S	F	2500	STRIC	1995	-	3	A	22107	N	M	G						
2	PRKD	998	-				PARKED	-	A	0100	CHEVR	1999	-	3	N		-	-	-						

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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

REPORT 8 - TOTAL COLLISIONS

01/01/2015 thru 12/31/2015 | *Total Count: 90* | Jurisdiction(s): Saint Helena

Include State Highways cases | *Report Run On: 03/27/2019*

Primary Rd **ADAMS ST** *Distance (ft)* **84** *Direction* **E** *Secondary Rd* **RAILROAD AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **20** *Collision Date* **20151008** *Time* **1541** *Day* **THU**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20160126**
Weather1 **CLEAR** *Weather2* **CLOUDY** *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	43	F	W	HBD-UI		ENT TRAF	S	A	0100	JEEP	1994	- 3	N		-	P B
2	DRVR	46	M	W	HNBD		PROC ST	W	A	0800	CHRYS	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety EQUIP	Ejected

Primary Rd **ADAMS ST** *Distance (ft)* **53** *Direction* **W** *Secondary Rd* **RAILROAD AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **28** *Collision Date* **20151229** *Time* **0800** *Day* **TUE**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160812**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **CONS ZONE** *Rdwy Cond2* **NO UNUSL CND** *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	31	F	W	IMP UNK	IMP UNK	PROC ST	W	A	0700	CHEVR	2015	- 3	N		-	M G
2	PRKD	998	-				PARKED	W	D	2200	CHEVR	2007	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety EQUIP	Ejected

Primary Rd **ADAMS ST** *Distance (ft)* **86** *Direction* **E** *Secondary Rd* **RT 29** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **28.75** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **28** *Collision Date* **20151105** *Time* **1155** *Day* **THU**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170125**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **1** *Ramp/Int* **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	47	M	H	HNBD		ENT TRAF	S	A	0800	PLYMO	1998	- 3	N		-	M G
2	DRVR	64	M	W	HNBD		PROC ST	W	A	0100	HONDA	2007	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety EQUIP	Ejected

Primary Rd **CHARTER OAK AV** *Distance (ft)* **329** *Direction* **E** *Secondary Rd* **ALLISON ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **28** *Collision Date* **20150923** *Time* **1600** *Day* **WED**
Primary Collision Factor **NOT STATED** *Violation* *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160808**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	48	M	A	HNBD		PROC ST	E	E	2231	INTER	2015	- 3	J		N	M G
2F	OTHR	998	-				PROC ST	S	-	0000	-	-	-	M		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety EQUIP	Ejected

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Primary Rd **CHARTER OAK AV** Distance (ft) **195** Direction **E** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20151106** Time **1250** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	49	F	W	IMP UNK	IMP UNK	PARKING	N	A	0100	BMW	2013	-	3	N		-	M	B
2	PRKD	998	-				PARKED	-	A	0100	MAZDA	2013	-	-	N		-	-	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CHILES AV** Distance (ft) **19** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20150704** Time **2102** Day **SAT**
Primary Collision Factor **UNKNOWN** Violation **23103** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20150728**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	24	M	W	IMP UNK	IMP UNK	RAN OFF RD	E	A	0100	ACURA	1999	-	3	N		-	L	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	COMP PN	24	M	1	0	G	-

Primary Rd **CHURCH ST** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150115** Time **1055** Day **THU**
Primary Collision Factor **UNKNOWN** Violation Collision Type **SIDESWIPE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20150219**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **BICYCLE** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	BICY	46	M	W	HNBD		PROC ST	N	L	0400	-		-	3	N		-	-	-
2	DRVR	53	M	W	HNBD		PROC ST	N	A	0100	FORD	2005	-	3	N		-	M	B

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	BICY	OTH VIS	46	M	9	3	A	-
2	PASS		45	F	3	0	B	-
	PASS		28	M	4	0	B	-
	PASS		28	M	6	0	B	-

Primary Rd **DOWDELL LN** Distance (ft) **95** Direction **E** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.97** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150922** Time **1500** Day **TUE**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	48	M	W	HNBD		BACKING	W	G	7531	FREIG	2012	-	3	N		-	M	G
2	DRVR	59	M	W	HNBD		STOPPED	W	C	0200	HONDA	2004	-	3	N		-	P	W

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **EDWARDS ST** Distance (ft) **128** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **26** Collision Date **20150326** Time **1135** Day **THU**
Primary Collision Factor **NOT STATED** Violation Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150902**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	PRKD	998	-				PARKED	N	A	0100	VOLKS	2005	-	3	N		-	-	-
2	DRVR	998	-		IMP UNK	IMP UNK	OTHER	-	-	0000	-		-	3	N		-	-	B

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **EL BONITA AV** Distance (ft) **88** Direction **W** Secondary Rd **EL BONITA CT** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20151126** Time **1015** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160210**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK		W	-	9900	-		-	3	N	-	N B
2	PRKD	998	-				PARKED	-	A	0100	TOYOT	2007	-	-	-	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ELMHURST AV** Distance (ft) **34** Direction **W** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20150206** Time **2031** Day **FRI**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150818**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	27	M	W	HBD-UI		LFT TURN	W	A	0100	TOYOT	2014	-	3	A	N	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FULTON LN** Distance (ft) **44** Direction **E** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150218** Time **0725** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350A** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150818**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	21	M	H	HNBD		PROC ST	W	A	0100	TOYOT	1992	-	3	N	-	M B
2F	DRVR	26	M	H	HNBD		STOPPED	W	A	0100	LINCO	2005	-	3	N	-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **FULTON LN** Distance (ft) **105** Direction **W** Secondary Rd **RAILROAD AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20151002** Time **1735** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160123**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	W	A	0100	-		-	3	N	-	B -
2	PRKD	998	-				PARKED	W	A	0700	HONDA	2013	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HILLVIEW PL** Distance (ft) **0** Direction Secondary Rd **SPRING** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150407** Time **1643** Day **TUE**
Primary Collision Factor **STOP SGN|SIG** Violation **22450A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20150429**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **BICYCLE** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	BICY	11	M	W	HNBD			E	L	0400	-		-	3	F	-	- -
2	DRVR	64	F	W	HNBD		PROC ST	N	A	0100	LEXUS	2007	-	3	E	-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
BICY	OTH VIS	11	M	1	1	W	-

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Primary Rd **HOWELL MOUNTAIN** Distance (ft) **509** Direction **E** Secondary Rd **OAKWOOD** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150604** Time **2318** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20151029**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	29	M		IMP UNK	IMP UNK		W	-	0000	FORD	1995	-	3	N	-	M B								

Primary Rd **HUNT AV** Distance (ft) **0** Direction Secondary Rd **CHURCH ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20150130** Time **0819** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150729**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	41	F	H	HNBD		LFT TURN	N	A	0100	HONDA	2010	-	3	N	-	M G								
2	DRVR	55	M		HNBD		PROC ST	E	D	2200	TOYOT	2001	-	3	N	-	M G								

Primary Rd **HUNT AV** Distance (ft) **127** Direction **E** Secondary Rd **CHURCH ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20151224** Time **1200** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160225**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	48	F	W	IMP UNK	IMP UNK	PARKING	E	D	2200	DODGE	1999	-	3	A	22107	- M G								
2	PRKD	998	-				PARKED	-	A	0100	HONDA	2012	-	-	-	-	- -								

Primary Rd **KEARNEY ST** Distance (ft) **94** Direction **S** Secondary Rd **TAINTER ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20151110** Time **0930** Day **TUE**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		HNBD		BACKING	S	A	0100	-	-	3	M		-	M G								
2	PRKD	998	-		null			-	A	0700	DODGE	2015	-	-	-	-	- -								

Primary Rd **MADRONA AV** Distance (ft) **43** Direction **W** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20150716** Time **1014** Day **THU**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170112**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	30	M		PHYS		PROC ST	E	A	0100	VOLVO	2003	-	3	A	22107	M M H								

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Primary Rd **MADRONA AV** Distance (ft) **0** Direction Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150908** Time **1518** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	44	M	W	HNBD		RGT TURN	E	-	0031	WABA	2004	-	3	N	-	M G								

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **100 MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.68** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20150404** Time **2500** Day **SAT**
Primary Collision Factor **IMPROP PASS** Violation **21755A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT FNCT** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	33	M	W			PASSING	S	A	0100	HONDA	2008	-	3	N	-	B -								
2	DRVR	41	M	H	HNBD		PROC ST	S	A	0100	NISSA	1990	-	3	N	-	G -								

Primary Rd **MAIN ST** Distance (ft) **107** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.73** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **42** Collision Date **20150217** Time **1129** Day **TUE**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161025**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	68	F	W	IMP UNK	IMP UNK	BACKING	N	A	0100	TOYOT	2007	-	3	F	-	M B								
2	PRKD	60	M	W			PARKED	-	A	0100	MERCE	2006	-	3	N	-	M B								

Primary Rd **MAIN ST** Distance (ft) **262** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.8** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20150728** Time **1818** Day **TUE**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170119**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	30	F	W	HNBD		SLOWING	S	A	0100	HYUND	2015	-	3	N	-	L G								
2	DRVR	19	M	W	HNBD		SLOWING	S	A	0800	HONDA	1997	-	3	N	-	M G	PASS		19	M	3	0	G	-
																		PASS		18	M	6	0	G	-
3	DRVR	47	M	W	HNBD		STOPPED	S	A	0700	JEEP	2014	-	3	N	-	M G								

Primary Rd **MAIN ST** Distance (ft) **55** Direction **E** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20150906** Time **1405** Day **SUN**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160122**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	56	M	W	HNBD		BACKING	W	-	0035	CHEVR	2006	-	3	-	-	M G								
2	OTHR	998	-			null		-	-	0000	-		-	-	-	-	- -								

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Primary Rd **MAIN ST** Distance (ft) **210** Direction **N** Secondary Rd **BRITTON WY** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20151220** Time **2045** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160202**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	46	M	H	HNBD		PROC ST	N	J	4300	OTHER	2001	-	3	M	-	P G
2	PRKD	998	-				PARKED	N	A	0100	NISSA	2008	-	-	-	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		19	M	9	0	-	B

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **CHARTER OAK** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.33** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20151106** Time **1025** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170201**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	57	F	W	HNBD		PROC ST	N	A	0100	NISSA	2011	-	3	G	-	M G
2	DRVR	29	F	W	HNBD		SLOWING	N	A	0100	HONDA	2009	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 29		F	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **0** Direction **N** Secondary Rd **CHARTER OAK** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.37** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20151106** Time **1744** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21804** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	58	F	A	HNBD		ENT TRAF	S	A	0700	CHEVR	2004	-	3	N	-	M G
2	DRVR	38	F	W	HNBD		ENT TRAF	N	A	0100	HONDA	2011	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **48** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.33** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **002** Type **0** CalTrans **4** Badge **21** Collision Date **20150223** Time **1540** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20161017**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	47	F	W	HBD-NUI		PROC ST	S	A	0100	TOYOT	2006	-	3	G	-	M G
2	DRVR	45	M	W	HBD-NUI		STOPPED	S	A	0700	FORD	2013	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 5		M	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **50** Direction **N** Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.04** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20150325** Time **1945** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161027**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK		N	A	0100	-		-	3	-	-	- B
2	PRKD	998	-				PARKED	N	A	0100	MITSU	2000	-	-	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.04** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20150921** Time **1635** Day **MON**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170112**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	21	M	H	HNBD		LFT TURN	W	A	0100	FORD	2011	- 3	N		-	M G
2	DRVR	49	M		HNBD		PROC ST	N	A	0100	FORD	2015	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		23	F	4	0	G	-
PASS		49	F	3	0	G	-
PASS		22	M	6	0	G	-

Primary Rd **MAIN ST** Distance (ft) **900** Direction **S** Secondary Rd **DEER PARK RD** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20150614** Time **1120** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20150630**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	91	F	W	HNBD		PROC ST	S	A	0100	MAZDA	2002	- 3	N		-	L G
2	DRVR	65	F	W	HNBD		SLOWING	S	-	0000	SUBAR	2014	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	91	F	1	0	G	-
PASS		65	F	3	0	G	-
PASS	COMP PN	63	F	4	0	G	-

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **EL BONITA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.74** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **42** Collision Date **20150120** Time **1656** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350A** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20161017**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	M	W			PROC ST	N	A	0100	CHEVR	1998	- 3	-		-	M G
2	DRVR	34	M	W	HNBD		PROC ST	N	A	0100	TOYOT	2008	- 3	N		-	L G
3	DRVR	21	M	H	HNBD		PROC ST	N	A	0100	VOLKS	2011	- 3	G		-	M G
4	DRVR	69	F	W			PROC ST	N	A	0100	HONDA	2013	- 3	G		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		9	F	4	0	G	-
PASS		11	M	6	0	G	-
DRVR	OTH VIS	34	M	1	0	G	-
PASS		1	M	6	0	Q	-
PASS		19	F	3	0	G	-
DRVR	COMP PN	69	F	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150107** Time **0815** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350A** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20150801**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	F	H	HNBD		PROC ST	N	A	0100	MAZDA	2008	- 3	N		-	L G
2	DRVR	50	F	H	HNBD		STOPPED	N	A	0100	HONDA	2008	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **528** Direction **N** Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.27** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20151221** Time **2305** Day **MON**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170114**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		
1F	DRVR	22	M	H	HBD-UI		PROC ST	N	A	0100	SUBAR	1999	-	3	N	-	L	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	22	M	1	0	G	-

Primary Rd **MAIN ST** Distance (ft) **9** Direction **N** Secondary Rd **FULTON LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.95** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20150226** Time **2219** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161026**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		
1F	DRVR	30	F	H	HBD-UNK		LFT TURN	S	A	0100	DODGE	2012	-	3	N	-	L	B	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **359** Direction **N** Secondary Rd **GRAYSON** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.16** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20151231** Time **1447** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **MV ON OTHER RD** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		
1F	DRVR	29	M	A	HNBD		PROC ST	N	A	0100	MERCE	2010	-	3	E	-	N	G	
2	DRVR	47	M	W	HNBD		STOPPED	N	A	0100	MAZDA	2014	-	3	G	-	M	G	
3	DRVR	68	F	W	HNBD		STOPPED	N	D	2200	TOYOT	2013	-	3	G	-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		58	M	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **46** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.09** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20151228** Time **1245** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		
1F	DRVR	26	F		HNBD		MERGING	N	A	0100	HYUND	2015	-	3	N	-	M	G	
2	DRVR	37	M	W	HNBD		MERGING	N	A	0100	SUBAR	2015	-	3	A	22107	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		24	F	3	0	G	-
PASS		38	M	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **230** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.67** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20150916** Time **1657** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170123**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip		
1F	DRVR	47	F	W	IMP UNK	IMP UNK	ENT TRAF	S	A	0100	BUICK	2012	-	3	N	-	M	G	
2	PRKD	998	-				PARKED	S	A	0100	CHEVR	2015	-	-	-	-	-	-	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **95** Direction Secondary Rd **LEWELLING LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.5** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20151128** Time **1535** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **4** Tow Away? **N** Process Date **20170130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	55	M	W	HNBD		PROC ST	N	D	2200	FORD	2002	- 1	-		-	M	G
2	DRVR	21	F	H	HNBD		STOPPED	N	A	0100	NISSA	2005	- 3	-		-	M	G
3	DRVR	36	F		HNBD		STOPPED	N	A	0100	MERCE	2004	- 3	-		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 21	F	1	0	G	-	
DRVR	COMP PN 36	F	1	0	G	-	
PASS	COMP PN 998	F	3	0	G	-	
PASS	COMP PN 998	F	6	0	G	-	

Primary Rd **MAIN ST** Distance (ft) **239** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.99** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **26** Collision Date **20150311** Time **1245** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161025**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	23	F	W	HNBD		PROC ST	S	A	0100	VOLKS	2006	- 3	F		-	L	G
2	DRVR	59	M	W	HNBD		STOPPED	S	A	0100	TOYOT	2010	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		61	F	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **172** Direction Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.91** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20151128** Time **1037** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	64	M	H	HNBD		PARKING	S	D	2300	CHEVR	1998	- 3	N		-	M	G
2	PRKD	998	-		HNBD		PARKED	-	A	0100	HONDA	2012	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **40** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.95** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20151206** Time **1913** Day **SUN**
Primary Collision Factor **UNKNOWN** Violation Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170204**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1	DRVR	53	F	W			STOPPED	S	A	0700	LEXUS	2015	- -	-		-	M	G
2	DRVR	998	-		HNBD		PROC ST	S	A	0100	-		- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **381** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.01** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20151230** Time **1536** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170201**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	25	F	W	HNBD		PROC ST	S	A	0100	TOYOT	2015	- 3	N		-	L	G
2	DRVR	69	F	W	HNBD		SLOWING	S	D	2200	NISSA	2013	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	25	F	1	0	G	-

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 1040** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.43** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **26** Collision Date **20150428** Time **0000** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		HBD-UNK		PROC ST	N	D	2200	DODGE	2015	-	3	-	-	B -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 900** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.34** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20150620** Time **1759** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20161105**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	72	F	W	HNBD		RAN OFF RD	N	A	0100	CADIL	2008	-	3	-	-	L	G
2	PRKD	998	-				PARKED	-	A	0100	TOYOT	2011	-	-	-	-	-	-
3	PRKD	998	-				PARKED	-	A	0100	MERCE	2008	-	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	72	F	1	0	G	-
PASS	OTH VIS	10	M	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **205** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.29** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20150617** Time **1614** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	63	F		HNBD		PROC ST	N	A	0100	HONDA	1991	-	3	N	-	P	G
2	DRVR	56	M	W	HNBD		STOPPED	N	D	8200	CHEVR	2014	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **6** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.56** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20151028** Time **1125** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	47	M	W	HNBD		LFT TURN	W	G	7531	OTHER	2008	-	3	N	-	M	G
2	DRVR	72	F	W	HNBD		SLOWING	S	A	0100	HONDA	2011	-	-	G	N	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **644** Direction Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.54** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20150506** Time **1753** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	64	F	W	HNBD		LFT TURN	E	A	0700	MERCE	2013	-	3	N	-	M	G
2	DRVR	35	F	H			PROC ST	S	A	0700	KIA	2012	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		37	F	4	0	G	-
PASS		62	F	6	0	G	-
PASS		34	F	3	0	G	-

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.66** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **40** Collision Date **20150703** Time **1922** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HEAD-ON** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	18	F	W	HNBD		LFT TURN	W	A	0100	JEEP	1996	-	3	N	-	M	G
2	DRVR	44	M	H	HNBD		PROC ST	S	A	0100	TOYOT	2004	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		16	F	3	0	G	-
PASS		47	F	3	0	G	-
PASS	COMP PN	54	M	4	0	G	-

Primary Rd **MAIN ST** Distance (ft) **420** Direction **N** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.74** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **006** Type **0** CalTrans **4** Badge **21** Collision Date **20150602** Time **0540** Day **TUE**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	43	M	H	HNBD		PROC ST	S	A	0100	FORD	1999	-	3	N	-	M	G
2	DRVR	19	M	H	HNBD		STOPPED	S	D	2200	TOYOT	2012	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **218** Direction **S** Secondary Rd **VIDOVICH** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.21** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20150313** Time **1038** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20160906**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	M	W	HNBD		PROC ST	N	A	0100	SUBAR	1995	-	3	N	-	M	G
2	DRVR	27	M	W	HNBD		STOPPED	N	A	0100	NISSA	2013	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	27	M	1	0	G	-
PASS	COMP PN	29	F	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **155** Direction **S** Secondary Rd **VIDOVICH AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.2** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20150516** Time **1440** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20161104**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	M	H	HNBD		PROC ST	N	A	0100	LINCO	1999	-	3	G	-	M	G
2	DRVR	33	F	W	HNBD		SLOWING	N	A	0100	HYUND	2005	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		26	M	3	0	G	-
PASS	COMP PN	39	M	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **202** Direction **S** Secondary Rd **VIDOVICH AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.21** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150904** Time **1128** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170123**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	60	F	W	HNBD		PROC ST	N	A	0100	TOYOT	2009	-	3	N	-	M	G
2	DRVR	78	F	W	HNBD		STOPPED	N	A	0100	ALFA	1974	-	3	N	-	P	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **VINTAGE AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **42** *Collision Date* **20150205** *Time* **1348** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350A** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150817**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	37	M	H	HNBD		PROC ST	S	A	0700	FORD	1991	- 3	F		N	M	G
2	DRVR	34	M	W	HNBD		STOPPED	S	D	2200	TOYOT	2002	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MCCORKLE AV** *Distance (ft)* **165** *Direction* **W** *Secondary Rd* **ALLISON ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20150919** *Time* **2500** *Day* **SAT**
Primary Collision Factor **UNKNOWN** *Violation* *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160120**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	998	-		IMP UNK	IMP UNK		-	-	0000	-		- 3	-		-	B	-
2	PRKD	998	-				PARKED	W	A	0100	SUBAR	2011	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MCCORMICK ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **VINTAGE AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20151204** *Time* **1530** *Day* **FRI**
Primary Collision Factor **R-O-W AUTO** *Violation* **21801A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20160212**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	15	M		HNBD		U-TURN	S	A	0100	HONDA	1990	- 3	N		-	M	G
2	DRVR	26	M		HNBD		PROC ST	W	A	0100	ACURA	2013	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MONEY WY** *Distance (ft)* **100** *Direction* **S** *Secondary Rd* **ADAMS ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **6** *Collision Date* **20150309** *Time* **0953** *Day* **MON**
Primary Collision Factor **STRTNG\|BCKNG** *Violation* **22106** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20150325**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	34	M	H	HNBD			W	F	2600	FORD	2008	- 3	N		-	M	G
2	PRKD	998	-				PARKED	E	-	0000	HONDA	2013	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MONEY WY** *Distance (ft)* **44** *Direction* **S** *Secondary Rd* **ADAMS ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **20** *Collision Date* **20151223** *Time* **1428** *Day* **WED**
Primary Collision Factor **STRTNG\|BCKNG** *Violation* **22106** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160220**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT FNCT** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	29	M	H	HNBD		BACKING	W	A	0700	CHEVR	2007	- 3	N		-	M	G
2	DRVR	63	M	W	HNBD		STOPPED	N	A	0100	VOLKS	2008	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MONEY WY** Distance (ft) **330** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **42** Collision Date **20150402** Time **1732** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20150921**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **BICYCLE** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	BICY	9	M	W	HNBD			E	L	0400	-	-	3	A	21804	F	- -
2	DRVR	65	M	W	HNBD		PROC ST	N	A	0100	SUBAR	2007	- 3	N		-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
BICY	OTH VIS	9	M	1	1	W	-

Primary Rd **POPE ST** Distance (ft) **54** Direction **E** Secondary Rd **CHILES AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **11** Collision Date **20151221** Time **0053** Day **MON**
Primary Collision Factor **DRVR ALC/DRG** Violation **23152A** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160222**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	M	W	HBD-UI		RAN OFF RD	E	A	0100	FORD	1996	- 3	A	22107	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **330** Direction **E** Secondary Rd **COLLEGE AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20151003** Time **2048** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160125**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M	H	HNBD			W	-	0000	-		- 3	A	22107	N	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **30** Direction **E** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.485** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **26** Collision Date **20150320** Time **1417** Day **FRI**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161025**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	73	M	W	IMP UNK	IMP UNK	SLOWING	W	A	0100	VOLKS	2013	- 3	N		-	M G
2	DRVR	74	F	W	HNBD		STOPPED	W	A	0100	HONDA	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **008** Type **0** CalTrans Badge **21** Collision Date **20150404** Time **1709** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20150921**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	49	F	W	HNBD		LFT TURN	E	A	0100	TOYOT	2013	- 3	N		-	M G
2	DRVR	29	M		HNBD		PROC ST	S	A	0100	BMW	2011	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	29	M	1	0	G	-

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Primary Rd **PRATT AV** Distance (ft) **10** Direction **W** Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge Collision Date **20150612** Time **1500** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160401**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	66	F	W	HNBD		RGT TURN	E	M	5900	OTHER	2015	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **371** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.82** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20150422** Time **1853** Day **WED**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	34	F	W	HNBD		ENT TRAF	S	A	0700	JEEP	2005	-	3	N	-	M G
2F	DRVR	52	F	B	HBD-UI		PROC ST	S	A	0100	NISSA	2014	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **155** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.78** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20151001** Time **0550** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170125**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	N	F	2600	-		-	3	N	-	N B
2	PRKD	998	-				PARKED	N	A	0100	JEEP	2013	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **304** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.37** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20150526** Time **1349** Day **TUE**
Primary Collision Factor **DRVR ALC|DRG** Violation **212005** Collision Type **OTHER** Severity **FATAL** #Killed **1** #Injured **0** Tow Away? **N** Process Date **20150805**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **BICYCLE** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	BICY	31	F	W	HBD-UI		ENT TRAF	W	L	0400	-		-	3	A	21804	- - -
2	DRVR	37	M	B	HNBD		PROC ST	N	F	2600	ISUZU	2007	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
BICY	KILLED	31	F	1	2	V	-

Primary Rd **RT 29** Distance (ft) **102** Direction **S** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.3** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20150617** Time **1503** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20161105**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	M	H	HNBD		PROC ST	S	D	2200	FORD	2005	-	3	A	22350	G M G
2	DRVR	36	M	W	HNBD		STOPPED	S	D	2200	TOYOT	2014	-	3	G	-	M G
3	DRVR	36	F	W	HNBD		STOPPED	S	A	0700	KIA	2009	-	3	G	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 36	M	1	0	G	-	
DRVR	COMP PN 36	F	1	0	G	-	

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Primary Rd **RT 29** Distance (ft) **11** Direction **S** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.315** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20151111** Time **0900** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170125**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	F	W	HNBD		PROC ST	N	A	0100	VOLKS	2010	-	3	G	-	M G
2	DRVR	39	M	A	HNBD		SLOWING	N	A	0100	KIA	2015	-	3	G	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		39	F	6	0	-	G
PASS		5	F	4	0	-	Q

Primary Rd **RT 29** Distance (ft) **140** Direction **S** Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20150731** Time **1247** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	62	M	B	HNBD		PROC ST	S	A	0700	GMC	2011	-	3	N	-	M G
2	DRVR	66	F	W	HNBD		SLOWING	S	A	0100	LEXUS	2002	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **3** Direction **N** Secondary Rd **DOWDELL LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.97** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150826** Time **1308** Day **WED**
Primary Collision Factor **UNKNOWN** Violation Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	42	M	H	HNBD		RGT TURN	W	G	2531	FREIG	2001	-	3	N	-	M G
2	DRVR	22	F	H	HNBD		RGT TURN	W	A	0100	FORD	2016	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **270** Direction **S** Secondary Rd **EL BONITA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.74** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20150522** Time **1137** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	F	H	HNBD		PROC ST	N	A	8100	TOYOT	1999	A	3	N	-	M G
2	DRVR	28	M	H	HNBD		SLOWING	N	-	0000	-	-	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **108** Direction **S** Secondary Rd **EL BONITA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.75** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20151112** Time **1637** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	85	M	H	HNBD		PROC ST	S	D	2200	CHEVR	1968	-	3	M	-	P C
2	DRVR	42	M	H	HNBD		SLOWING	S	I	1100	GMC	2006	-	2	N	-	M G
3	DRVR	19	M	H	HNBD		SLOWING	S	A	0100	FORD	2000	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	85	M	1	0	C	-
DRVR	COMP PN	42	M	1	0	G	-

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Primary Rd **RT 29** Distance (ft) **264** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.14** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150929** Time **1533** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	21	F	W	HNBD		PROC ST	N	A	0100	ACURA	1993	- 3	N		-	M	G
2	DRVR	42	M	A	HNBD		STOPPED	N	A	0100	HONDA	2003	- 3	N		-	M	G
3	DRVR	57	M	W	HBD-NUI		STOPPED	N	D	2200	GMC	2000	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **225** Direction **S** Secondary Rd **MILEPOST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.9** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **42** Collision Date **20150113** Time **0819** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160906**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	90	F	W	HNBD		LFT TURN	E	A	0100	ACURA	2003	- 3	E		-	L	G
2	DRVR	30	F	H	HNBD		PROC ST	N	A	0100	NISSA	2007	- 2	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **25** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.5** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20150602** Time **1530** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	41	F		HNBD		STOPPED	S	A	0700	TOYOT	2005	- 3	N		-	M	G
2F	DRVR	21	M	H	HNBD		PROC ST	S	A	0100	NISSA	2013	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **209** Direction **S** Secondary Rd **POST MARKER** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.46** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150709** Time **1501** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170114**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	51	M	W	HNBD		PROC ST	S	A	0100	HYUND	2013	- 3	N		-	L	G
2	DRVR	41	M	W	HNBD		PROC ST	S	A	0800	VOLKS	2010	- 3	N		-	M	G
3	DRVR	43	F	W	HNBD		SLOWING	S	A	0100	MINI	2013	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	COMP PN 46	F	3	0	G	-	

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150811** Time **1236** Day **TUE**
Primary Collision Factor **IMPROP PASS** Violation **21750A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	66	M	W	HNBD		PASSING	S	A	8100	CADIL	1999	- 3	N		-	M	G
2	DRVR	30	M	W	HNBD		PROC ST	S	A	0100	LINCO	2010	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** Distance (ft) **113** Direction **S** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.23** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20150917** Time **1500** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	F	W	HBD-UNK		PROC ST	S	D	2200	FORD	1993	- 3	N		-	M B
2	PRKD	998	-				PARKED	N	D	2200	TOYOT	2015	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **313** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.31** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20151206** Time **2110** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20170114**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M		HNBD		PROC ST	N	A	0100	BMW	2003	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	18	M	1	0	-	G
PASS	COMP PN	22	F	3	0	-	G

Primary Rd **RT 29** Distance (ft) **280** Direction **N** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.71** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20150601** Time **1604** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161206**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	19	F	W	HNBD		PROC ST	N	A	0100	HONDA	1998	- 3	N		-	L G
2	DRVR	50	F	W	HNBD		STOPPED	N	A	0700	FORD	2003	- 3	N		-	M B
3	DRVR	32	F	W	HNBD		STOPPED	N	A	0700	FORD	2002	- 3	N		-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRAIL** Distance (ft) **0** Direction Secondary Rd **POSE ST** Pope NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20150513** Time **1651** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20151030**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	83	F	W	HNBD		LFT TURN	E	A	0100	TOYOT	2007	- 3	N		-	M G
2	DRVR	32	M	H	HNBD		PROC ST	S	A	0100	TOYOT	2000	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **HOWELL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20150803** Time **1300** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20151228**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	86	M	W	HNBD		ENT TRAF	E	A	0100	BMW	2006	- 3	-		-	M G
2	DRVR	26	M	W	HNBD		PROC ST	N	A	0100	NISSA	2015	- 3	-		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		24	F	3	0	G	-

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Primary Rd **SILVERADO TRL** Distance (ft) **420** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20151113** Time **1231** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	22	M	H	HNBD	FATG	RAN OFF RD	N	A	0100	TOYOT	2001	- 3	N		-	L G								

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20150613** Time **0650** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21801A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20151028**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	17	F	H	HNBD		LFT TURN	W	A	0100	BUICK	1997	- 3	N		-	P G								
2	DRVR	86	M		HNBD		PROC ST	S	A	0100	TOYOT	2011	- 3	N		-	M G								

Primary Rd **SPRING MOUNTAIN** Distance (ft) **112** Direction **N** Secondary Rd **HILLVIEW PL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **19** Collision Date **20150303** Time **1820** Day **TUE**
Primary Collision Factor **UNKNOWN** Violation Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20150917**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	998	-		IMP UNK	IMP UNK	RAN OFF RD	S	A	0100	-		- 3	N		-	- B								

Primary Rd **SPRING MOUNTAIN** Distance (ft) **58** Direction **S** Secondary Rd **SPRING** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20150418** Time **1124** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20151009**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	45	M	H	HNBD		PROC ST	S	I	1132	FORD	2011	- 3	N		-	M G								
2	PRKD	998	-				PARKED	S	A	0100	VOLKS	2012	- 3	N		-	- -								
3	PRKD	998	-				PARKED	W	A	0100	VOLKS	2013	- -	-		-	- -								
4	PRKD	998	-				PARKED	W	A	0700	VOLKS	2009	- -	-		-	- -								

Primary Rd **SPRING MOUNTAIN** Distance (ft) **23** Direction **S** Secondary Rd **SPRING** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20151231** Time **1325** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160303**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	53	M	W	HNBD		BACKING	W	A	0100	HONDA	2016	- 3	N		-	L G								
2	DRVR	52	M	W	HNBD		PROC ST	S	D	2200	FORD	2015	- 3	A	22350	F	M G								

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Primary Rd **STOCKTON ST** Distance (ft) **91** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20150529** Time **0744** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20151015**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	30	M	H	HBD-NUI	FATG	PROC ST	N	A	0100	CHEVR	2003	-	3	N	-	L	G	DRVR	OTH VIS	30	M	1	0	G	-
2	PRKD	998	-				PARKED	N	A	0100	LEXUS	2012	-	3	N	-	-	-	PASS	OTH VIS	66	M	9	3	-	-

Primary Rd **VOORHEES CIR** Distance (ft) **168** Direction **S** Secondary Rd **MITCHELL DR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20150911** Time **2200** Day **FRI**
Primary Collision Factor **UNKNOWN** Violation **23106** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		HBD-UNK		BACKING	-	-	0000	-	-	3	N		-	M	B								
2	PRKD	998	-				PARKED	-	A	0100	NISSA	2005	-	-	-	-	-	-								

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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

REPORT 8 - TOTAL COLLISIONS

01/01/2016 thru 12/31/2016 | *Total Count: 105* | Jurisdiction(s): Saint Helena

Include State Highways cases | *Report Run On: 03/27/2019*

Primary Rd **ADAMS ST** *Distance (ft)* **134** *Direction* **W** *Secondary Rd* **MAIN** *NCIC* **2803** *State Hwy?* **N** *Route* . *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **30** *Collision Date* **20161005** *Time* **1558** *Day* **WED**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20161025**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	51	F	H	HNBD		PROC ST	W	A	0700	CHEVR	2001	- 3	N		-	M G
2	PRKD	998	-		HNBD		PARKED	W	I	1000	MERCE	2015	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		9	F	6	0	M	G

Primary Rd **ADAMS ST** *Distance (ft)* **61** *Direction* **E** *Secondary Rd* **RAILROAD AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **31** *Collision Date* **20161102** *Time* **1630** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20161202**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	51	M	W	HNBD			E	D	2200	TOYOT	2002	- 3	N		-	M G
2	DRVR	32	M	H	HNBD			E	A	0100	SUBAR	2001	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **ALLYN AV** *Distance (ft)* **1** *Direction* **N** *Secondary Rd* **TAINTER ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **28** *Collision Date* **20161113** *Time* **0209** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20161219**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M	W	IMP UNK	IMP UNK	PROC ST	W	A	0100	FORD	2005	- 3	M		-	M B
2	PRKD	998	-				PARKED	S	D	2200	FORD	1997	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **BROWN ST** *Distance (ft)* **552** *Direction* **W** *Secondary Rd* **ALLISON ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* **NAPA** *Beat* *Type* **0** *CalTrans* *Badge* **21** *Collision Date* **20160416** *Time* **1746** *Day* **SAT**
Primary Collision Factor **STRTNG/BCKNG** *Violation* **22106** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20160426**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	M	W	HNBD		BACKING	E	A	0700	CHEVR	2010	- 3	N		-	M G
2	DRVR	16	F	H	HNBD		PARKED	S	A	0700	CHEVR	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **CHARTER OAK** Distance (ft) **0** Direction Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.315** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160517** Time **1249** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **LOOSE MATRL** Rdwy Cond2 **CONS ZONE** Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	LFT TURN	W	-	0000	-		-	3	A	21752	- B -
2	DRVR	77	M	W	HNBD		LFT TURN	W	A	0100	BMW	2015	-	3	N		- L G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **CRINELLA DR** Distance (ft) **0** Direction Secondary Rd **CRINELLA DR 1095** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20160924** Time **2200** Day **SAT**
Primary Collision Factor **NOT STATED** Violation Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161122**
Weather1 Weather2 Rdwy Surface Rdwy Cond1 Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting Ped Action Cntrl Dev Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	998	-					-	-	0000	-		-	3	M		- - -
2	PRKD	998	-				PARKED	-	A	0100	NISSA	2015	-	3	N		- - -

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **EL BONITA AV** Distance (ft) **0** Direction Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.79** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160909** Time **1120** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **SLIPPERY** Rdwy Cond1 **LOOSE MATRL** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M		HNBD		ENT TRAF	S	D	2200	FORD	2000	-	3	M	-	M G
2	DRVR	26	M		HNBD		STOPPED	E	A	0100	MERCE	2003	-	3	N	-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HOWELL MOUNTAIN** Distance (ft) **0** Direction Secondary Rd **HOWELL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20160825** Time **0555** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **OVERTURNED** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160912**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **REDUCED RD** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **NON-CLSN** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	44	M	W	HNBD			E	G	2554	VOLVO	2014	-	3	A	J	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HUNT AV** Distance (ft) **195** Direction **E** Secondary Rd **EDWARDS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20160307** Time **2000** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160317**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	E	-	9900	-		-	3	-	-	B -
2	PRKD	998	-					-	A	0700	HONDA	2004	-	-	N	-	- -

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **HUNT AV** Distance (ft) **0** Direction Secondary Rd **EDWARDS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20161029** Time **1730** Day **SAT**
Primary Collision Factor **R-O-W PED** Violation **21950** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20161110**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	27	F	W	HNBD		LFT TURN	W	A	0100	HONDA	2010	- 3	A		-	M G
2	PED	62	F	H	HNBD			S	N	6000	-		- 3	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	COMP PN	62	F	9	3	N	-

Primary Rd **KEARNEY ST** Distance (ft) **231** Direction **S** Secondary Rd **ANDREA ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20161107** Time **1539** Day **MON**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20161117**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	68	F	W	HNBD		PROC ST	N	A	0100	VOLVO	2011	- 3	N		-	M G
2	DRVR	44	M	H	HNBD		PROC ST	W	A	0100	HONDA	2015	- 3	N		-	L G
3	DRVR	44	F	W	HNBD		STOPPED	S	A	0700	TOYOT	2016	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	44	M	1	0	L	G
PASS		11	M	3	0	M	G
PASS		8	F	4	0	M	G

Primary Rd **MADRONA AV** Distance (ft) **0** Direction Secondary Rd **OAK AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20161208** Time **1818** Day **THU**
Primary Collision Factor **STOP SGN|SIG** Violation **22450** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20161229**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	69	M		HNBD		PROC ST	E	D	2300	CHEVR	2007	- 3	A	23450	N	L G
2	DRVR	78	F	W	HNBD		PROC ST	S	A	0700	LEXUS	2005	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MADRONA AV** Distance (ft) **133** Direction **E** Secondary Rd **SPRING** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20160717** Time **2307** Day **SUN**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20160912**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	F	O	HBD-UI		PROC ST	W	A	0700	SUBAR	2014	- 3	N		-	L G
2	PRKD	998	-				PARKED	W	D	2200	CHEVR	2003	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	36	F	1	0	L	G

Primary Rd **MAIN ST** Distance (ft) **230** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.71** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20160511** Time **1200** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170213**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	M		HNBD		ENT TRAF	S	A	0100	TOYOT	2015	- 3	N		-	M G
2	DRVR	68	M		HNBD		PROC ST	S	F	8700	PETER	2005	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		48	F	3	0	-	G

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Primary Rd **MAIN ST** Distance (ft) **238** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.7** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20160523** Time **1600** Day **MON**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	39	M	H	HNBD		PROC ST	N	A	0100	FORD	2000	- 3	N		-	M	G
2	DRVR	53	M	W	HNBD		STOPPED	N	A	0100	CHRYS	2015	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	53	M	1	0	M	G
PASS		42	F	6	0	M	G
PASS	COMP PN	67	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **156** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.7** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20160828** Time **1117** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170124**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	21	M		IMP UNK	IMP UNK	ENT TRAF	N	A	0100	MITSU	2005	- 3	N		-	B	-
2	DRVR	33	F		HNBD		PROC ST	N	A	0100	FORD	2016	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		30	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **250** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.7** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160910** Time **1748** Day **SAT**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	53	M	A	HNBD		ENT TRAF	N	-	0000	-		- 3	N		-	M	G
2	DRVR	51	F	W	HNBD		PROC ST	N	A	0100	MERCE	2011	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **48** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.74** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20160916** Time **2128** Day **FRI**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	44	F	W	HBD-UI		PROC ST	S	A	0100	KIA	2017	- 1	A	22107	N	M	G
2	PRKD	998	-					S	D	2200	TOYOT	2015	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **93** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.73** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20160925** Time **1220** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	F	A	IMP UNK	IMP UNK	PROC ST	S	-	0000	-		- 3	G		-	B	-
2	DRVR	53	F	W	HNBD		STOPPED	S	A	0100	FIAT	2016	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	53	F	1	0	M	G
PASS		53	M	3	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **226** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.71** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20161208** Time **2010** Day **THU**
Primary Collision Factor **PED VIOL** Violation **21954A** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170415**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DARK - ST** Ped Action **NOT IN X-** Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	53	F	W	HNBD		PROC ST	N	A	0100	CHEVR	2012	- 3	-	-	-	M H
2F	PED	89	F	W			-	N	6000	-	-	-	-	N	-	-	- -

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	OTH VIS	89	F	9	3	-	-

Primary Rd **MAIN ST** Distance (ft) **44** Direction **S** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.315** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **8** Collision Date **20160621** Time **1509** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	69	M	W	HNBD	PHYS	PROC ST	S	A	0100	CHEVR	2003	- 3	A		G	L G
2	DRVR	28	M	H	HNBD		STOPPED	S	A	0700	FORD	2002	- 3	G		-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **20** Direction **S** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.29** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20160726** Time **1655** Day **TUE**
Primary Collision Factor **UNKNOWN** Violation **23123A** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170302**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	23	F		HNBD		STOPPED	N	A	0100	NISSA	2008	- 3	N		-	M G
2F	DRVR	16	M		HNBD		PROC ST	N	A	0100	HYUND	2016	- 1	N		-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	23	F	1	0	M	G

Primary Rd **MAIN ST** Distance (ft) **102** Direction **N** Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.06** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160202** Time **1741** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	M	W	HNBD		PARKING	N	-	0032	OTHER	2003	- 3	N		-	M G

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.04** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20161114** Time **0835** Day **MON**
Primary Collision Factor **R-O-W PED** Violation **21950A** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170222**
Weather1 **OTHER** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	49	M		HNBD		SLOWING	S	D	2200	TOYOT	2010	- 3	E		-	M G
2	PED	45	M	W	HNBD			E	N	6000	-	-	- 3	N		-	- -

Victim Info							
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	COMP PN	45	M	9	0	P	-

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Primary Rd **MAIN ST** *Distance (ft)* **322** *Direction* **S** *Secondary Rd* **DOWDELL LN** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **27.91** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **40** *Collision Date* **20161229** *Time* **1553** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170522**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	93	M	W	HNBD		STOPPED	N	A	0100	CADIL	2008	- 3	G	-	M	G
2	DRVR	24	M	W				N	A	0700	HONDA	2016	- 3	G	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** *Distance (ft)* **317** *Direction* **S** *Secondary Rd* **EL BONITA AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **27.73** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **30** *Collision Date* **20161104** *Time* **1653** *Day* **FRI**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20170222**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	58	M		HNBD		PROC ST	N	A	0100	MERCE	2002	- 3	F		G	L G
2	DRVR	79	M	W	HNBD		PROC ST	N	A	0100	AUDI	2005	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	58	M	1	0	L	G

Primary Rd **MAIN ST** *Distance (ft)* **83** *Direction* **S** *Secondary Rd* **ELMHURST AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.13** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* **NAPA** *Beat* *Type* **0** *CalTrans* **4** *Badge* **6** *Collision Date* **20160805** *Time* **1115** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170124**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	41	M	W	HNBD		PARKING	N	J	4800	-		- 3	N		-	M G
2	PRKD	998	-				PARKED	N	A	0100	MERCU	2011	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		63	F	9	0	N	P

Primary Rd **MAIN ST** *Distance (ft)* **133** *Direction* **N** *Secondary Rd* **ELMHURST AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.18** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **14** *Collision Date* **20161209** *Time* **0630** *Day* **FRI**
Primary Collision Factor **STRTNGJBCKNG** *Violation* **22106** *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170306**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	BACKING	N	-	9900	-		- 3	-		-	- B
2	PRKD	998	-				PARKED	-	A	0100	ACURA	2006	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **GRAYSON AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **128** *Postmile Prefix* **-** *Postmile* **28.09** *Side of Hwy* **W**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **14** *Collision Date* **20160219** *Time* **0850** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **214605** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170211**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **I** *Ramp/Int* **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	26	M	W	HNBD		PROC ST	N	A	0100	VOLKS	2010	- 3	N		-	M G
2	DRVR	38	F	W	HNBD		CHANG LN	N	A	0100	HONDA	2013	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **20** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.1** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20160418** Time **0912** Day **MON**
Primary Collision Factor **WRONG SIDE** Violation **21460A** Collision Type **HEAD-ON** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170211**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	40	F	H	HNBD		OPPOS LN	N	A	0700	MAZDA	2004	- 3	N		-	M E								
2	DRVR	55	M	W	HNBD		PROC ST	N	A	0100	NISSA	2014	- 3	N		-	M G	DRVR	COMP PN	55	M	1	0	M	G

Primary Rd **MAIN ST** Distance (ft) **55** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.64** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160102** Time **0830** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	998	-		IMP UNK	IMP UNK	OTHER	S	-	0000	FORD		- 3	-		-	B -								
2F	DRVR	49	M	W	HNBD		PARKING	S	D	2200	FORD	2015	- 3	N		-	M G								
3	PRKD	998	-				PARKED	S	A	0100	TESLA	2015	- -	-		-	- -								

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.63** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20160921** Time **1221** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **AUTO/PED** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	53	M	W	HNBD			N	A	0100	FORD	2017	- 3	-		-	M G								
2	PED	49	M	W		null		E	N	6000	-		- -	-		-	- -								

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.93** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160226** Time **1710** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170208**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	35	M	W	HNBD		MERGING	S	A	0100	PORSC	2016	- 3	A	21460	N	P G								
2	DRVR	57	M		HNBD		PROC ST	S	A	0100	LEXUS	2006	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **30** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.93** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160417** Time **1219** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	25	F		HNBD		PROC ST	S	A	0100	TOYOT	2013	- 3	-		-	M G								
2	DRVR	58	M	H	HNBD		STOPPED	S	D	2200	TOYOT	2011	- 3	-		-	M G	PASS	COMP PN	33	M	3	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **80** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.96** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160715** Time **1055** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170301**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	37	M	W	HNBD		PROC ST	S	A	0100	DODGE	2002	- 3	N		-	M G	OTHR	COMP PN	35	F	3	0	M	H
2	DRVR	50	M	O	HNBD		STOPPED	S	A	0100	LINCO	2007	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 2500** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.64** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160423** Time **1145** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170213**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	24	F	W	HNBD		PROC ST	N	D	2200	DODGE	1999	- 3	N		-	M G								
2	DRVR	51	M	H	HNBD		STOPPED	N	A	0100	FORD	1999	- 3	N		-	M G								
3	DRVR	26	M		HNBD		STOPPED	N	A	0100	MERCE	2001	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **312** Direction **N** Secondary Rd **MILLS LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.15** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20161003** Time **2004** Day **MON**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170303**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	66	M	W	HNBD		BACKING	W	A	0100	KIA	2016	- 3	N		-	M G	PASS		52	F	3	0	M	G
2	DRVR	31	M	W	HNBD		PROC ST	N	A	0100	HONDA	2000	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **300** Direction **N** Secondary Rd **MITCHELL DR** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.54** Side of Hwy **W**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160220** Time **1500** Day **SAT**
Primary Collision Factor **OTHER EQPMNT** Violation **24002** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	35	M		HNBD		PROC ST	N	G	2535	CHEVR	2004	- 3	N		-	M G								
2	DRVR	40	M		HNBD		PROC ST	S	A	0100	HYUND	2007	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **184** Direction **N** Secondary Rd **PADDLE MARKER** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.63** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160513** Time **1143** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	78	M	W	HNBD		U-TURN	N	A	0800	CHRYS	2016	- 3	A	22107	-	M G								
2	DRVR	20	F	W	HNBD			N	D	2200	TOYOT	1999	- 3	N		-	M G								

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Primary Rd **MAIN ST** Distance (ft) **10** Direction **N** Secondary Rd **PADDLE MARKER** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.83** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160721** Time **0515** Day **THU**
Primary Collision Factor **WRONG SIDE** Violation **21460A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170227**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	20	M	H	HNBD		PROC ST	N	D	2200	OTHER	2013	- 3	N		-	M G
2F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	S	-	0031	-	-	3	-		-	- B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **53** Direction **N** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.86** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20160209** Time **2031** Day **TUE**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	64	M	W	HBD-UI		PROC ST	S	D	8200	FORD	2003	- 3	N		-	L G
2	PRKD	998	-				PARKED	S	A	0100	JEEP	2010	- 3	N		-	- -
3	PRKD	998	-				PARKED	S	A	0100	VOLKS	2010	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **90** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.83** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160526** Time **2500** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170213**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PARKING	S	A	0700	-	-	- 3	N		-	B -
2	PRKD	998	-					S	A	0700	LEXUS	2015	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **182** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.52** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20160217** Time **1602** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	60	M	W	HNBD		ENT TRAF	E	A	0700	FORD	2005	- 3	E		-	M G
2	DRVR	26	F		HNBD		PROC ST	S	A	0100	BMW	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **158** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.52** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20161013** Time **1515** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170127**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **NOT IN X-** Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	37	M	W	HNBD		PROC ST	S	A	0800	HONDA	2016	- 3	F		-	M G
2	PED	65	M	W	HNBD			-	N	6000	-	-	- 3	A	21954	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	SEVERE	65	M	9	3	-	-

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Primary Rd **MAIN ST** Distance (ft) **1500** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **29.53** Side of Hwy **W**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160121** Time **1055** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	47	M	W	HNBD		PROC ST	N	D	2200	DODGE	2016	- 3	F		-	M	G
2	DRVR	48	F	A	HNBD		STOPPED	N	A	0100	MERCE	2005	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **96** Direction **S** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20160607** Time **2230** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160902**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	37	M		HBD-NUI		PROC ST	N	A	0100	MERCE	2016	- 3	N		-	M	G
2	PRKD	998	-				PARKED	-	A	0100	NISSA	2012	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **107** Direction **S** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.15** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20160609** Time **1730** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	M	W	HNBD	FATG		S	A	0100	TOYOT	2014	- 3	A	22107	F	L	G
2	DRVR	42	M		HNBD		PROC ST	N	A	0100	DODGE	2008	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **331** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.31** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20161002** Time **1358** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **Y** Process Date **20170127**
Weather1 **RAINING** Weather2 **OTHER** Rdwy Surface **WET** Rdwy Cond1 **OTHER** Rdwy Cond2 **NO UNUSL CND** Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	24	M	W	HNBD		PROC ST	S	A	0700	VOLKS	2012	- 3	F		G	L	G
2	DRVR	63	M	W	HNBD		STOPPED	S	A	0700	JEEP	2015	- 3	G		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 24	M	1	0	L	G	
DRVR	COMP PN 63	M	1	0	M	G	
PASS	COMP PN 62	F	3	0	M	G	

Primary Rd **MAIN ST** Distance (ft) **7** Direction **W** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.84** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20161005** Time **1644** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170218**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **LOOSE MATRL** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	46	F	B	HNBD		RGT TURN	N	I	2000	OTHER	2014	- 3	A	21658	-	M	G
2	PRKD	998	-				PARKED	N	A	0100	BMW	2011	- 1	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **105** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20160708** Time **1235** Day **FRI**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160722**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	61	M	W	HNBD		ENT TRAF	S	A	0100	MERCE	2001	- 3	N		-	M G
2	DRVR	55	F	B	HNBD		PROC ST	S	F	2500	FREIG	2012	- 3	-		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **204** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.61** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20160913** Time **1040** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	25	M		HNBD		MERGING	S	A	0700	LINCO	2000	- 3	N		-	M -
2	DRVR	46	M		HNBD		PROC ST	S	A	0100	HONDA	2008	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	PASS		42	F	3	0	M	G
	PASS		12	F	4	0	M	G

Primary Rd **MAIN ST** Distance (ft) **8** Direction **S** Secondary Rd **ST ANDREWS CT** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.1** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160819** Time **1601** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22103** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170218**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	35	M	W	HNBD		U-TURN	S	A	0100	TOYOT	2011	- 3	N		-	M G
2	DRVR	36	M	W	HNBD		PROC ST	S	A	0100	NISSA	2013	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **432** Direction **S** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **27.58** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat **006** Type **0** CalTrans **4** Badge **21** Collision Date **20160123** Time **1810** Day **SAT**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	44	M		HNBD		PROC ST	S	A	0700	GMC	2015	- 3	N		-	M G
2	DRVR	52	F	W	HNBD		U-TURN	S	A	0100	MINI	2011	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	PASS		31	F	3	0	G	-
	PASS		22	M	6	0	G	-
	PASS		8	F	4	0	G	-
	PASS		9	F	6	0	G	-
2	PASS		61	M	3	0	G	-

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.79** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20160325** Time **1315** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170208**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	45	F	W	HNBD			W	A	0100	HONDA	1997	- 3	N		-	M G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **OAK AV** Distance (ft) **94** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20160619** Time **2335** Day **SUN**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160630**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	31	M	B	HBD-UI		RGT TURN	N	-	0000	HONDA	2013	-	3	A	22152	-	M	G
2	PRKD	998	-			null		N	A	0100	BMW	2013	-	-	-		-	-	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **OAK AV** Distance (ft) **63** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20160412** Time **1648** Day **TUE**
Primary Collision Factor **WRONG SIDE** Violation **21460A** Collision Type **HEAD-ON** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20160426**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	20	F	B	HNBD		OPPOS LN	S	A	0100	CHEVR	2015	-	3	N	-	L	G
2	DRVR	34	F	W	HNBD		PROC ST	N	A	0100	SUBAR	2011	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	COMP PN	20	F	1	0	L	G
2	DRVR	COMP PN	34	F	1	0	M	G

Primary Rd **OAK AV** Distance (ft) **130** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **6** Collision Date **20160702** Time **1056** Day **SAT**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160719**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	63	M	W	HNBD		LFT TURN	N	A	7100	BMW	2004	-	3	N	-	M	G
2F	DRVR	67	F	W	HNBD		PROC ST	N	A	0100	JAGUA	2004	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **22** Direction **E** Secondary Rd **CHILES AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20161015** Time **2328** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21804** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20161101**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	41	F	W	HNBD		ENT TRAF	N	A	0100	MAZDA	2016	-	3	-	-	M	G
2	DRVR	25	M	O	HNBD		PROC ST	E	A	0100	FORD	2004	-	3	-	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	PASS		42	M	3	0	M	G
	PASS	COMP PN	7	M	6	0	M	Q
	PASS		4	M	5	0	M	Q
	PASS		4	M	4	0	M	Q
2	PASS		26	M	4	0	M	G
	PASS		19	M	3	0	L	G

Primary Rd **POPE ST** Distance (ft) **264** Direction **E** Secondary Rd **COLLEGE AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20160410** Time **2353** Day **SUN**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160421**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	55	M	W	HBD-NUI		PROC ST	E	A	0700	HONDA	2010	-	3	N	-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RAILROAD AV** Distance (ft) **142** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20161220** Time **1153** Day **TUE**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170109**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	83	M	W	HNBD		BACKING	E	A	0700	HONDA	2015	-	3	N	-	M	B
2	DRVR	53	F	W	HNBD		STOPPED	S	A	0100	TOYOT	2016	-	3	N	-	M	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RAILROAD AV** Distance (ft) **175** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **40** Collision Date **20160128** Time **1801** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160819**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	23	F	W	HNBD		BACKING	W	A	0100	HONDA	2003	-	3	N	-	M	G
2	PRKD	998	-				PARKED	-	A	0100	AUDI	2013	-	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RAILROAD AV** Distance (ft) **195** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20161105** Time **1327** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161116**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	95	F	W	HNBD		PROC ST	S	A	0100	CADIL	2003	-	3	M	-	M	G
2	PRKD	998	-				PARKED	S	A	0800	CHRYS	2017	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RAILROAD BEHIND** Distance (ft) **558** Direction **S** Secondary Rd **FULTON** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20161025** Time **0700** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20161104**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-				UNS TURN	S	-	9900	-		-	3	-	-	B	-
2	OTHR	998	-		HNBD		PARKED	-	A	0100	BMW	2010	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **283** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.7** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160915** Time **1301** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	38	F	W	HNBD		PASSING	N	A	0700	CHEVR	2002	-	3	L	-	M	G
2	DRVR	37	M	W	HNBD		SLOWING	N	J	4300	-		-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** Distance (ft) **204** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.79** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20161013** Time **1146** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170218**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	67	M	W	HNBD		ENT TRAF	S	A	0100	CHEVR	2016	-	3	N	-	M	G
2	DRVR	58	M	W	HNBD		PROC ST	S	F	2700	KENW	2015	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		66	F	2	0	M	G

Primary Rd **RT 29** Distance (ft) **148** Direction **N** Secondary Rd **BRITTON WY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.88** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160209** Time **0627** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **SIDESWIPE** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20170214**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	37	M	H	HNBD		PROC ST	N	A	0700	DODGE	2002	-	3	N	-	M	G
2	PRKD	998	-				PARKED	N	A	0700	CHEVR	2007	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	COMP PN	45	M	5	0	G	-
PASS	COMP PN	24	M	6	0	G	-
PASS		58	M	4	0	G	-
PASS		67	M	3	0	G	-
PASS		27	M	7	0	H	-

Primary Rd **RT 29** Distance (ft) **215** Direction **N** Secondary Rd **BRITTON WY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.9** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160905** Time **0356** Day **MON**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170228**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	17	M	H	HBD-UI		PROC ST	N	A	0100	LEXUS	2013	-	3	A	22107	L	G
2	PRKD	998	-				PARKED	N	A	0100	TOYOT	2016	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	17	M	1	0	L	G

Primary Rd **RT 29** Distance (ft) **119** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **26.34** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160323** Time **1019** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20170213**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	68	M	W	HNBD		PROC ST	N	A	0100	HYUND	2016	-	3	G	-	M	G
2	DRVR	54	F	W	HNBD		SLOWING	N	A	0700	GMC	2011	-	3	G	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	68	M	1	0	G	-
PASS	COMP PN	58	M	3	0	G	-
PASS		2	M	4	0	U	-

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Primary Rd **RT 29** Distance (ft) **28** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.37** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160425** Time **0905** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	46	F	W	HNBD		PROC ST	N	A	0700	LAND	2008	- 3	N		-	M G
2	DRVR	51	F	A	HNBD		STOPPED	N	A	0700	BMW	2016	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **378** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.39** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20161013** Time **1639** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170218**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	25	M	H	HNBD		SLOWING	-	D	2200	DODGE	2001	- 3	F		G	M G
2	DRVR	48	M	W	HNBD		STOPPED	N	A	0100	TOYOT	2011	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **426** Direction **N** Secondary Rd **CHARTER OAK** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.4** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160501** Time **1615** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	82	M	W	HNBD		PROC ST	N	D	2200	DODGE	1995	- 3	N		-	M G
2	DRVR	46	M	H	HNBD		STOPPED	N	D	2200	TOYOT	1996	- 3	N		-	M G
3	DRVR	29	F		HNBD			N	-	0000	-		- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		81	F	3	0	M	G
PASS		44	F	3	0	M	G

Primary Rd **RT 29** Distance (ft) **41** Direction **N** Secondary Rd **DOWDELL LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.98** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20160524** Time **0456** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	56	M	W		FATG	UNS TURN	N	J	4100	MERCE	2011	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		30	F	3	0	M	G

Primary Rd **RT 29** Distance (ft) **137** Direction **S** Secondary Rd **EL BONITA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.76** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20161015** Time **1407** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170218**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	F	H	HNBD		SLOWING	N	A	0100	FORD	2004	- 3	N		-	L G
2	DRVR	44	M	W	HBD-NUI		STOPPED	N	A	0100	HYUND	2016	- 3	N		-	M G
3	DRVR	49	F	B	IMP UNK	IMP UNK	STOPPED	N	A	0100	VOLKS	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		7	F	4	0	M	G
PASS		23	F	3	0	M	G

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Primary Rd **RT 29** Distance (ft) **362** Direction **S** Secondary Rd **EL BONITA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.72** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20161031** Time **0912** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170218**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	53	M	W	HNBD		PROC ST	N	A	0100	VOLKS	2013	- 3	N		-	M G
2	DRVR	57	F	W	HNBD		STOPPED	N	A	0700	NISSA	2016	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **76** Direction **N** Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.17** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160707** Time **0705** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170218**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	BACKING	S	-	9900	-	-	- 3	M		-	- B
2	PRKD	998	-				PARKED	N	A	0700	TOYOT	2005	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **298** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.15** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160127** Time **1710** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170204**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M	H	HNBD		PROC ST	N	A	0100	INFIN	2005	- 3	N		-	M G
2	DRVR	25	M	H	HNBD		SLOWING	N	D	2200	NISSA	2004	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		28	M	3	0	E	-

Primary Rd **RT 29** Distance (ft) **96** Direction **S** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.07** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160902** Time **0810** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	19	M	H	HNBD		PROC ST	N	A	0800	PLYMO	1998	- 3	F		G	L G
2	DRVR	41	M	B	HNBD		SLOWING	N	A	0100	FORD	2014	- 1	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **10** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.95** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20160919** Time **1228** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	42	M	W	HNBD		PROC ST	S	D	7200	CHEVR	2006	- 3	F		-	M G
2	DRVR	46	F	H	HNBD		STOPPED	S	A	0800	CHRYS	2002	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** Distance (ft) **141** Direction **N** Secondary Rd **MILLS LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.12** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160624** Time **0927** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20170209**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	63	F	W	HNBD		PROC ST	N	D	2200	TOYOT	2006	- 3	N		-	M G
2	DRVR	50	F	W	HNBD		PROC ST	N	A	0700	GMC	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 63		F	1	0	M	G
DRVR	COMP PN 50		F	1	0	M	G

Primary Rd **RT 29** Distance (ft) **83** Direction **N** Secondary Rd **MITCHELL** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.48** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160128** Time **1226** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	67	F	W	HNBD		PASSING	N	A	0100	LEXUS	2015	- 3	N		-	M G
2	DRVR	40	M	W	HNBD		STOPPED	N	A	0100	SUBAR	2000	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **122** Direction **N** Secondary Rd **MITCHELL DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.51** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20161026** Time **0648** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170218**
Weather1 **FOG** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	51	M	W	HNBD		PROC ST	S	A	0100	HONDA	1993	- 3	N		-	P G
2	DRVR	40	M	H	HNBD		STOPPED	S	D	2200	CHEVR	1997	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **155** Direction **N** Secondary Rd **POPE** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.52** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20161204** Time **0633** Day **SUN**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170306**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	998	-		IMP UNK	IMP UNK	RGT TURN	N	D	2200	-		- 3	N		-	B -
2F	DRVR	34	M		HNBD		PROC ST	N	A	0100	TOYOT	2009	- 3	A	21703	N	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **25** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.5** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160111** Time **0804** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170204**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	F	H	HNBD		STOPPED	S	A	0700	HONDA	2012	- 3	N		-	M G
2	DRVR	59	M	W	HNBD		STOPPED	S	A	0800	DODGE	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** Distance (ft) **177** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.52** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160310** Time **1532** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170207**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	25	F	H	HNBD		ENT TRAF	E	A	0700	NISSA	2006	- 3	N		-	M	G
2	DRVR	35	M	H	HNBD		PROC ST	S	A	0700	HONDA	2012	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	COMP PN 30		M	3	0	G	-

Primary Rd **RT 29** Distance (ft) **158** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.52** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160701** Time **1917** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170302**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	41	M	O	HNBD		LFT TURN	W	A	0100	HONDA	2016	- 3	E		G	M	G
2	DRVR	43	M	H	HNBD		CHANG LN	N	C	0200	HONDA	2004	- 3	A	22350	G	P	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 43		M	1	2	P	-

Primary Rd **RT 29** Distance (ft) **36** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.58** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20160821** Time **0120** Day **SUN**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170218**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	35	M	W	HBD-UI		BACKING	S	A	0100	AUDI	2015	- 3	N		-	M	G
2	PRKD	998	-				PARKED	N	A	0100	TOYOT	1999	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **265** Direction **N** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.71** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20160914** Time **1416** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	18	F	W	HNBD		PROC ST	N	A	0100	FORD	2006	- 3	N		-	M	G
2	DRVR	39	F	W	HNBD		PROC ST	N	A	0100	CHRYS	2010	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.8** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **6** Collision Date **20160528** Time **1638** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170211**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	46	M	W	HNBD		PROC ST	S	A	0100	ACURA	2013	- 3	N		-	M	G
2	DRVR	71	M	W	HNBD		STOPPED	S	D	2200	TOYOT	2006	- 3	N		-	M	G
3	DRVR	54	M	W	HNBD		PROC ST	S	A	0100	FORD	2016	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **SILVERADO TRL** Distance (ft) **181** Direction **S** Secondary Rd **HOWELL MTN** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20160621** Time **1440** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160707**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	30	F		HNBD		LFT TURN	N	A	0700	NISSA	2016	- 3	N		-	M G
2	DRVR	55	M	H	HNBD		PROC ST	N	F	2700	OTHER	2006	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		41	M	3	0	M	G
PASS		30	M	6	0	M	G

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20160208** Time **1550** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20160222**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	71	F	W	HNBD		OPPOS LN	N	A	0100	TOYOT	2007	- 3	A	22802	-	M G
2	DRVR	42	M	H	HNBD		OPPOS LN	S	A	0100	ISUZU	1994	- 3	-		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	71	F	1	0	-	G

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20161120** Time **0953** Day **SUN**
Primary Collision Factor **R-O-W AUTO** Violation **21803A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20170112**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	94	M		HNBD		ENT TRAF	E	A	0100	TOYOT	2002	- 3	N		-	M G
2	DRVR	69	F	W	HNBD		PROC ST	S	A	0100	HONDA	2014	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	94	M	1	0	M	G
PASS		70	M	3	0	L	G

Primary Rd **SPRING ST** Distance (ft) **82** Direction **E** Secondary Rd **HUDSON AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20160816** Time **0000** Day **TUE**
Primary Collision Factor **DRVR ALC|DRG** Violation **23140A** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20160901**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	17	F	W	HBD-UI		UNS TURN	E	A	0100	MINI	2014	- 1	A	22107	-	M G
2	PRKD	998	-				PARKED	-	A	0100	DODGE	2011	- -	-		-	- -
3	PRKD	998	-				PARKED	-	A	0800	KIA	2011	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		67	M	9	3	-	-

Primary Rd **STARR AV** Distance (ft) **0** Direction Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20160224** Time **1250** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160309**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **OBSTR ON RD** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	30	M	W	HNBD		LFT TURN	N	A	0100	MAZDA	2015	- 3	M		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **SULPHUR SPRINGS** Distance (ft) **15** Direction **S** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **8** Collision Date **20160602** Time **1545** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160617**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	42	M	H	HNBD		PROC ST	W	D	2200	DODGE	2000	- 3	N		-	M G
2F	DRVR	998	-		IMP UNK	IMP UNK	SLOWING	S	A	0100	-		- 3	A	20002	-	B -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **TAINTER ST** Distance (ft) **301** Direction **W** Secondary Rd **OAK AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20160915** Time **1515** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20160926**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	BACKING	S	A	0800	-		- 3	N		-	B -
2	PRKD	998	-		HNBD		PARKED	W	A	0100	BMW	2006	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

REPORT 8 - TOTAL COLLISIONS

01/01/2017 thru 12/31/2017 | *Total Count: 86* | Jurisdiction(s): Saint Helena

Include State Highways cases | *Report Run On: 03/27/2019*

Primary Rd **ADAMS ST** *Distance (ft)* **102** *Direction* **W** *Secondary Rd* **LIBRARY LN** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **20** *Collision Date* **20170824** *Time* **1130** *Day* **THU**
Primary Collision Factor **NOT DRIVER** *Violation* *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20170906**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
									Party Info									Victim Info							
1	DRVR	66	F			DRUG	PROC ST	E	A	0100	BMW	2005	-	3	N		- M G								
2	PRKD	998	-				PARKED	N	A	0100	DODGE	2014	-	-	N		- - -								

Primary Rd **ADAMS ST** *Distance (ft)* **52** *Direction* **E** *Secondary Rd* **OAK AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **20** *Collision Date* **20170109** *Time* **1641** *Day* **MON**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170322**
Weather1 **CLOUDY** *Weather2* **RAINING** *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
									Party Info									Victim Info							
1F	DRVR	30	M	W	HNBD		LFT TURN	E	A	0100	SUBAR	2006	-	3	N		- M B								
2	PRKD	998	-				PARKED	E	A	0100	JEEP	2016	-	-	-		- - -								

Primary Rd **ADAMS ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **OAK AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **30** *Collision Date* **20171213** *Time* **0842** *Day* **WED**
Primary Collision Factor **OTHER HAZ** *Violation* **22517** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180608**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
									Party Info									Victim Info							
1F	DRVR	70	F	W	HNBD		PARKED	W	A	0100	HONDA	2014	-	3	N		- M P								
2	DRVR	39	F	W	HNBD		PROC ST	W	A	0700	FORD	2017	-	3	N		- M G								

Primary Rd **CHILES AV** *Distance (ft)* **499** *Direction* **N** *Secondary Rd* **POPE ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **28** *Collision Date* **20170105** *Time* **0134** *Day* **THU**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20170322**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
									Party Info									Victim Info							
1F	DRVR	24	M	W	IMP UNK	IMP UNK	PROC ST	S	A	0100	FORD	2002	-	3	F		- M G								
2	PRKD	998	-				PARKED	S	A	0700	HONDA	2008	-	-	-		- - -								

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Primary Rd **CHURCH ST** Distance (ft) **125** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20170829** Time **1101** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170914**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	65	M	W	HNBD		ENT TRAF	E	I	1100	DODGE	2003	- 3	N		-	M G
2	DRVR	75	F	W	HNBD		PROC ST	S	A	0100	LINCO	2011	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		82	M	3	0	M	G

Primary Rd **HOWELL MOUNTAIN** Distance (ft) **188** Direction **N** Secondary Rd **NAPA 1.50** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20170308** Time **1155** Day **WED**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170405**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **OBSTR ON RD** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	56	M	W	HNBD		BACKING	N	G	2531	INTER	2011	- 3	N		-	P G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **HUNT AV** Distance (ft) **0** Direction Secondary Rd **CHURCH ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20171122** Time **1455** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21804** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180123**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	51	F	W	HNBD		ENT TRAF	N	A	0100	FORD	2004	- 3	A	21804	E	M C
2	DRVR	22	M	W	HNBD		PROC ST	E	A	0100	FORD	2010	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	51	F	1	0	M	C

Primary Rd **HUNT AV** Distance (ft) **30** Direction **N** Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.64** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20170112** Time **0618** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170620**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	31	M	H	HNBD		PROC ST	S	A	0700	FORD	2003	- 3	N		-	M G
2	DRVR	55	M	H	HNBD		STOPPED	S	A	0100	HONDA	2002	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MADRONA AV** Distance (ft) **0** Direction Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170924** Time **1643** Day **SUN**
Primary Collision Factor **STOP SGN|SIG** Violation **21453A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20180622**
Weather1 **CLEAR** Weather2 **FOG** Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M	W	HNBD		PROC ST	N	A	0100	HONDA	2015	- 3	E		-	L G
2	DRVR	23	M	H	HNBD		PROC ST	W	D	2200	TOYOT	1992	- 3	N		-	P G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	23	M	1	0	P	G
PASS	COMP PN	22	F	3	0	P	G

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **ADAMS** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20170825** Time **1054** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180509**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M	W	HNBD		LFT TURN	S	A	0100	FORD	2006	- 3	A	22107	-	M G
2	PED	41	F	W	HNBD			-	N	6000	-		- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	SEVERE	41	F	9	0	P	-

Primary Rd **MAIN ST** Distance (ft) **74** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.76** Side of Hwy **W**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170104** Time **0611** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20170804**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	F		HNBD		LFT TURN	S	A	0100	HONDA	1998	- 3	N		-	L G
2	DRVR	40	M	A	HNBD		PROC ST	N	A	0100	TOYOT	1998	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	24	F	1	0	L	G
DRVR	COMP PN	40	M	1	0	L	G

Primary Rd **MAIN ST** Distance (ft) **98** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.77** Side of Hwy **W**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170508** Time **0948** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180417**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	31	M	H	HNBD		PROC ST	S	I	1100	MITSU	2007	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **71** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.76** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20170708** Time **1055** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180611**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	37	M	H	HNBD		LFT TURN	S	D	2200	CHEVR	2003	- 3	A	22107	-	P G
2	DRVR	30	F	W	HNBD		ENT TRAF	S	A	0100	TOYOT	2016	- 3	N		-	M G
3	PRKD	998	-				PARKED	S	A	0100	FORD	2017	- -	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **150** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.72** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170710** Time **1105** Day **MON**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180611**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	38	M	H	HNBD		PROC ST	N	A	0100	JAGUA	2003	- 3	N		-	L G
2	DRVR	45	M	H	HNBD		STOPPED	-	D	2200	FORD	2015	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **195** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.79** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170711** Time **2140** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180611**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	40	M	W	HNBD		ENT TRAF	N	A	0100	CHEVR	2008	-	3	N	-	M	G
2	DRVR	20	F	H	HNBD		PROC ST	N	A	0100	NISSA	2017	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **261** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.8** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **11** Collision Date **20170712** Time **1247** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180510**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1	DRVR	34	F	W	HNBD		STOPPED	S	A	0700	TOYOT	2003	-	3	N	-	M	G
2	DRVR	65	F	W	HNBD		STOPPED	S	A	0100	HONDA	1998	-	3	N	-	M	G
3F	DRVR	36	M	W	HNBD		PROC ST	S	A	0100	HONDA	2016	-	3	G	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 65		F	1	0	M	G

Primary Rd **MAIN ST** Distance (ft) **223** Direction **N** Secondary Rd **BRITTANY WAY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.87** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170319** Time **1455** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170621**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	64	F		HNBD		PROC ST	N	A	0100	LEXUS	2010	-	3	M	-	L	G
2	PRKD	998	-				PARKED	-	A	0100	JEEP	2005	-	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 64		F	1	0	L	G

Primary Rd **MAIN ST** Distance (ft) **124** Direction **N** Secondary Rd **CHARLES KRUG** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.91** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20170826** Time **0032** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180605**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **FELONY** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	N	A	0100	-		-	3	N	-	-	B
2	DRVR	59	M	W	HNBD		SLOWING	N	C	0200	HARLE	1960	-	3	N	-	P	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	SEVERE	59	M	1	2	P	-

Primary Rd **MAIN ST** Distance (ft) **477** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.41** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20170324** Time **1256** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170628**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	20	F	W	HNBD		PROC ST	N	A	0100	TOYOT	2005	-	3	G	-	M	G
2	DRVR	64	M	W	HNBD		STOPPED	N	A	0100	JAGUA	2014	-	3	-	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 64		M	1	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **2202** Direction **S** Secondary Rd **DEER PARK RD** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.65** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20170217** Time **1631** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170628**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	21	M	H	HNBD		ENT TRAF	N	A	0100	TOYOT	2001	- 3	-		-	M G
2	DRVR	79	M	W	HNBD		PROC ST	N	A	0800	TOYOT	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **940** Direction **S** Secondary Rd **DEER PARK RD** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.88** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20170812** Time **2100** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180614**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	18	M	W	HNBD		SLOWING	S	D	2200	DODGE	2000	- 3	N		-	M G
2	DRVR	32	F	W	HNBD		LFT TURN	S	A	0100	SUBAR	2015	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	32	F	1	0	M	G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **DOWDELL LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.97** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170929** Time **1640** Day **FRI**
Primary Collision Factor **WRONG SIDE** Violation **21752D** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180628**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	M	H	HNBD		PROC ST	N	A	0100	ACURA	1998	- 3	G		-	M G
2	DRVR	54	M	W	HNBD		LFT TURN	W	A	0100	CHEVR	2004	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **37** Direction **N** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.09** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20170113** Time **1836** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180210**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	F	W	HNBD		SLOWING	N	A	0700	GMC	2004	- 3	A	22350	F	M G
2	DRVR	46	M	W	HNBD		SLOWING	N	A	0100	TOYOT	2017	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		51	M	4	0	M	G
PASS		51	F	6	0	M	G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.09** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20170720** Time **1750** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180510**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	M		HNBD		SLOWING	N	A	0100	NISSA	2016	- 3	J		-	L G
2	DRVR	66	M		HNBD		SLOWING	N	D	2200	NISSA	2017	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	66	M	1	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **54** Direction **S** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.62** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20171117** Time **0710** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180706**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	41	M	H	HNBD		SLOWING	N	A	0100	NISSA	2014	- 3	N		-	M	G
2	DRVR	60	M	H	HNBD		STOPPED	N	A	0100	NISSA	2009	- 3	N		-	M	G
3	DRVR	998	M		IMP UNK	IMP UNK	STOPPED	N	A	0100	-	-	3	G		-	B	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MADRONA** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20170528** Time **2326** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170602**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	35	M		HNBD		UNS TURN	N	-	0000	HONDA	2013	- 3	A	22107	-	M	G
2	DRVR	37	F	H	HNBD		PROC ST	N	A	0100	HONDA	2014	- 3	N		-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
2	PASS		15	M	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **139** Direction **S** Secondary Rd **MADRONA** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.91** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20170813** Time **1527** Day **SUN**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180614**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	27	M	H	HNBD		PROC ST	S	A	0100	HONDA	2003	- 3	A	22350	-	M	G
2	DRVR	64	M	W	HNBD		SLOWING	S	-	0000	LINCO	2011	- 3	N		-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
2	PASS		2	F	4	0	P	-
	PASS		55	M	7	0	P	-
	PASS		58	F	6	0	P	-
	PASS		23	F	3	0	P	-

Primary Rd **MAIN ST** Distance (ft) **10** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20170811** Time **1234** Day **FRI**
Primary Collision Factor **OTHER HAZ** Violation **21663** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180413**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	48	M	W	HNBD		RGT TURN	S	F	2500	FREIG	2014	- 3	J		-	M	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 1000** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.37** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20170701** Time **0955** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180611**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	17	M		HNBD		PROC ST	N	A	0100	FORD	2007	- 3	F		-	P	G
2	DRVR	53	M		HNBD			N	A	0100	HYUND	2017	- 3	N		-	P	G

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
2	PASS		55	F	3	0	P	G

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| | | |

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.23** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20170104** Time **0725** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180210**
Weather1 **CLOUDY** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	27	M	W	HBD-UI		PROC ST	N	A	0700	TOYOT	2001	-	3	N	-	M	G
2	PRKD	998	-				PARKED	-	-	0000	FORD	2000	-	-	-	-	-	-
3	PRKD	998	-				PARKED	-	-	0000	FORD	2014	-	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **52** Direction **S** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.23** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170123** Time **0955** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180210**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	55	M	H	HNBD		PARKING	N	I	2000	-	2016	-	3	N	-	P	G
2	PRKD	998	-				PARKED	N	A	0700	TOYOT	2005	-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		36	M	6	0	M	P
PASS		60	F	4	0	M	P

Primary Rd **MAIN ST** Distance (ft) **42** Direction **S** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170227** Time **1245** Day **MON**
Primary Collision Factor **R-O-W PED** Violation **21950A** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170728**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	73	M	W	HNBD		LFT TURN	S	A	0800	HONDA	2014	-	3	N	-	M	G
2	PED	53	M	W	HNBD			E	N	6000	-		-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		73	F	3	0	M	G
PED	COMP PN	53	M	9	0	P	-

Primary Rd **MAIN ST** Distance (ft) **168** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20170504** Time **1815** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170515**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	35	M	A	HNBD		ENT TRAF	S	A	0100	HYUND	2016	-	3	N	-	M	G
2	DRVR	32	F	H	HNBD		PROC ST	S	A	0800	DODGE	2009	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **268** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.29** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170902** Time **1555** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180628**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	61	M	W	HNBD		ENT TRAF	E	A	0100	CHRYS	2017	-	3	E	-	M	G
2	DRVR	47	M		HNBD		PROC ST	S	A	0800	TOYOT	2000	-	3	N	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **129** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.29** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170930** Time **1200** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180510**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	32	F	W	HNBD		STOPPED	N	A	0100	FORD	2017	- 3	N		-	M G	PASS		33	M	3	0	M	G
2F	DRVR	19	F	W	HNBD		PROC ST	N	A	0100	CHEVR	2014	- 3	N		-	M G	PASS		15	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **17** Direction **W** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.12** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20170616** Time **1332** Day **FRI**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180411**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	55	M		HBD-NUI		STOPPED	N	A	0100	FORD	2017	- 3	F		-	M G	PASS		26	F	4	0	M	G
																		PASS		23	F	5	0	M	G
																		PASS		23	F	6	0	M	G
																		PASS		26	M	7	0	M	G
2	DRVR	30	M	W			STOPPED	N	-	0000	TOYOT	2007	- 3	N		-	M G								
3	DRVR	58	M	W	HNBD		PROC ST	N	A	0100	FORD	2006	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **58** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.58** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20170217** Time **1410** Day **FRI**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170801**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	76	M		HNBD		ENT TRAF	S	A	0700	HYUND	2017	- 3	N		-	M G								
2	DRVR	24	M		HNBD		PROC ST	S	A	0700	JEEP	2015	- 3	N		-	M G								

Primary Rd **MAIN ST** Distance (ft) **127** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.54** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20171002** Time **0637** Day **MON**
Primary Collision Factor **PED VIOL** Violation **21950B** Collision Type **AUTO/PED** Severity **FATAL** #Killed **1** #Injured **0** Tow Away? **N** Process Date **20180627**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DARK - ST** Ped Action **NOT IN X-** Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	70	M	W	HNBD		PROC ST	N	A	0100	NISSA	2015	- 3	N		-	M G	PASS		68	F	3	0	M	G
2F	PED	78	M	H				E	N	6000	-	-	- 3	F		-	- -	PED	KILLED	78	M	9	0	P	-

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20170505** Time **1536** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170515**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	65	F	W	HNBD			N	A	0100	TOYOT	2008	- 3	A	22350	-	M G								

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| | | |

Primary Rd **MCCORKLE AV** *Distance (ft)* **195** *Direction* **E** *Secondary Rd* **KIDD RANCH RD** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **32** *Collision Date* **20170824** *Time* **2100** *Day* **THU**
Primary Collision Factor **STRTNG|BCKNG** *Violation* **22106** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20171016**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	BACKING	E	-	0000	-	-	-	3	N	-	B	-								
2	PRKD	998	-				PARKED	-	A	0100	HONDA	2015	-	-	-	-	-	-								

Primary Rd **N CRANE AV** *Distance (ft)* **450** *Direction* **N** *Secondary Rd* **BIRCH ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **21** *Collision Date* **20170703** *Time* **1722** *Day* **MON**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170720**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	41	M	H	HNBD		PROC ST	N	D	2200	NISSA	1996	-	3	N	-	M	G								
2F	DRVR	34	M	H	HNBD		LFT TURN	S	A	0100	HONDA	1994	-	3	-	-	M	G								

Primary Rd **OAK AV** *Distance (ft)* **8** *Direction* **S** *Secondary Rd* **ADAMS ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **11** *Collision Date* **20170503** *Time* **1700** *Day* **WED**
Primary Collision Factor **WRONG SIDE** *Violation* **21650** *Collision Type* **HEAD-ON** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20180321**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	58	M	W	HNBD		STOPPED	N	A	0100	VOLKS	2015	-	3	N	-	M	G								
2F	DRVR	35	F		HNBD		LFT TURN	W	A	0100	NISSA	2014	-	3	A	22107	-	M	G							

Primary Rd **OAK AV** *Distance (ft)* **303** *Direction* **N** *Secondary Rd* **SPRING ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20170225** *Time* **1225** *Day* **SAT**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170310**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	82	M	W	HNBD		RGT TURN	E	D	2200	FORD	2013	-	3	N	-	M	G								
2	PRKD	998	-				PARKED	N	A	0100	LEXUS	2015	-	-	N	-	-	-								

Primary Rd **POPE ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **CHURCH ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **20** *Collision Date* **20170327** *Time* **1657** *Day* **MON**
Primary Collision Factor **NOT DRIVER** *Violation* *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20170411**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	78	M	W	HNBD		PROC ST	S	A	0100	TOYOT	2007	-	3	N	-	M	B	PASS		75	F	3	0	M	B
2	PRKD	998	-				PARKED	E	D	7200	FORD	2002	-	3	N	-	-	-								

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Primary Rd **POPE ST** Distance (ft) **353** Direction **E** Secondary Rd **COLLEGE AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20170828** Time **1230** Day **MON**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170906**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1	DRVR	77	F	W		FATG	RAN OFF RD	E	A	0700	FORD	2014	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **81** Direction **W** Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20170130** Time **1552** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170224**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **REDUCED RD** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	28	F	W	HNBD		PROC ST	-	A	0700	HYUND	2010	- 3	L		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20170214** Time **1700** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? Process Date **20170322**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **FELONY** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	36	M	W	HBD-NUI		SLOWING	E	A	0100	HYUND	2007	- 2	F		G	M	G
2	DRVR	58	M	H	HNBD		SLOWING	E	A	0100	VOLVO	1986	- 3	G		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	58	M	1	0	M	G
PASS		50	M	3	0	M	G
PASS		53	F	4	0	M	G
PASS	COMP PN	57	F	6	0	M	G

Primary Rd **RAILROAD AV** Distance (ft) **348** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20170504** Time **2500** Day **THU**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170602**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	26	M	B	HNBD		BACKING	N	F	2600	FORD	2008	- 3	N		-	M	G
2	PRKD	998	-				PARKED	S	A	0100	BMW	2006	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **152** Direction **N** Secondary Rd **BRITTON WAY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.85** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20170806** Time **1317** Day **SUN**
Primary Collision Factor **LANE CHANGE** Violation **21658A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180530**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	25	M	W	HNBD		PROC ST	N	F	2600	FREIG	2006	- 3	F		-	M	G
2	PRKD	998	-				PARKED	N	A	0700	HONDA	2013	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** *Distance (ft)* **228** *Direction* **N** *Secondary Rd* **BRITTON WY** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **28.89** *Side of Hwy* **N**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **19** *Collision Date* **20170115** *Time* **0021** *Day* **SUN**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20180227**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **PKD MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	33	F	H	HBD-UI		RAN OFF RD	N	A	0100	TOYOT	2007	- 1	F		-	M	G
2	PRKD	998	-				PARKED	N	A	0100	FORD	2002	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** *Distance (ft)* **301** *Direction* **N** *Secondary Rd* **CHARTER OAK AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **28.38** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **28** *Collision Date* **20170512** *Time* **1116** *Day* **FRI**
Primary Collision Factor **R-O-W AUTO** *Violation* **21804A** *Collision Type* **BROADSIDE** *Severity* **INJURY** *#Killed* **0** *#Injured* **3** *Tow Away?* **Y** *Process Date* **20180417**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	40	M	W	HNBD		LFT TURN	W	A	0100	AUDI	2012	- 3	E		N	M	G
2	DRVR	67	M	W	HNBD		LFT TURN	N	A	0700	KIA	2017	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	OTH VIS	73	M	3	0	L	G
PASS	COMP PN	64	F	4	0	L	G
PASS	COMP PN	86	F	6	0	L	G

Primary Rd **RT 29** *Distance (ft)* **73** *Direction* **S** *Secondary Rd* **DOWDELL LN** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **27.96** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **11** *Collision Date* **20170320** *Time* **1545** *Day* **MON**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20170621**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1	DRVR	28	F		HNBD		PROC ST	S	A	0100	INFIN	2011	- 3	N		-	M	G
2	DRVR	52	M		HNBD		PROC ST	S	D	2200	FORD	2008	- 3	N		-	M	G
3F	DRVR	23	M		HNBD		PROC ST	S	A	0100	CHEVR	2010	- 3	A	21703	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	28	F	1	0	M	G

Primary Rd **RT 29** *Distance (ft)* **266** *Direction* **N** *Secondary Rd* **ELMHURST AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **29.2** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **30** *Collision Date* **20170829** *Time* **0645** *Day* **TUE**
Primary Collision Factor **UNKNOWN** *Violation* *Collision Type* **OTHER** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180518**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1	DRVR	998	-		IMP UNK	IMP UNK	OTHER	-	-	0000	-		- 3	N		-	B	-
2	PRKD	998	-				PARKED	S	A	0100	HONDA	1988	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** *Distance (ft)* **333** *Direction* **N** *Secondary Rd* **GRAYSON AV** *NCIC* **2803** *State Hwy?* **Y** *Route* **29** *Postmile Prefix* **-** *Postmile* **28.15** *Side of Hwy* **S**
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* **4** *Badge* **28** *Collision Date* **20170315** *Time* **1708** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20170628**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* **H** *Ramp/Int* **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	38	M	H	HNBD		PROC ST	S	A	0100	LEXUS	2015	- 3	G		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		50	M	3	0	M	G
PASS		53	F	4	0	M	G

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| | | |

Primary Rd **RT 29** Distance (ft) **90** Direction **N** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.87** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20170427** Time **0450** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180703**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M	B	HNBD	FATG	PROC ST	S	A	0100	INFIN	1999	- 3	N		-	L G
2	PRKD	998	-				PARKED	S	A	0700	JEEP	2015	- 3	N		-	- -

Primary Rd **RT 29** Distance (ft) **125** Direction **N** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.85** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20171104** Time **0931** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180706**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	37	M	H				E	A	0800	TOYOT	2005	- 3	A	21804	-	M G
2	DRVR	26	M	H	HNBD			S	A	0100	HONDA	2007	- 3	N		-	M G

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	37	M	1	0	M	G
PASS		8	F	4	0	P	G
PASS		4	F	5	0	P	Q
PASS		2	M	6	0	P	Q

Primary Rd **RT 29** Distance (ft) **113** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **28.52** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20170617** Time **1730** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180411**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	51	F	W	HNBD		PARKING	N	A	0100	AUDI	2016	- 3	G		-	M G
2	DRVR	72	F	W	HNBD		PARKING	N	A	0100	LEXUS	2006	- 3	A	22350	-	M G

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		48	M	3	0	M	G
PASS		1	F	6	0	M	Q

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20170116** Time **1610** Day **MON**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **Y** Process Date **20180620**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	35	M	W	HNBD		ENT TRAF	E	A	0100	SUBAR	2009	- 3	N		-	L G
2	DRVR	62	M	H	HNBD		PROC ST	N	D	8200	FORD	2004	- 3	N		-	M G
3	DRVR	35	F	H	HNBD		STOPPED	W	D	2200	TOYOT	2004	- 3	N		-	M G

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	35	M	1	0	L	G
PASS	COMP PN	37	M	3	0	L	G
DRVR	COMP PN	35	F	1	0	M	G

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Primary Rd **RT 29** Distance (ft) **131** Direction **S** Secondary Rd **VIDOVICH AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.23** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20171107** Time **1824** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180628**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	23	M	W	HBD-UI		RGT TURN	S	A	0100	FORD	2014	- 3	F	-	L	G	
2	DRVR	58	M	W	HNBD		OPPOS LN	S	A	0100	NISSA	2017	- 3	N	-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		63	F	3	0	M	G

Primary Rd **RT 29** Distance (ft) **370** Direction **N** Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.88** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20170419** Time **1210** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180417**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	64	M	H	HNBD		PROC ST	N	G	2531	FREIG	2010	- 3	N	-	P	G	
2	DRVR	25	F	H	HNBD		STOPPED	N	A	0100	FORD	2013	- 3	N	-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	25	F	1	0	M	G

Primary Rd **RT 29** Distance (ft) **356** Direction **N** Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **270.88** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20170620** Time **1451** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **Y** Process Date **20180324**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	50	M	H	HNBD		PROC ST	N	F	2700	INTER	2010	- 3	N	-	M	G	
2	DRVR	29	M	W	HNBD		STOPPED	N	A	0800	DODGE	2017	- 3	N	-	M	G	
3	DRVR	31	M	H	HNBD		STOPPED	N	D	2300	FORD	2000	- 3	N	-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		30	F	4	0	M	E
PASS		36	M	3	0	M	G
PASS		2	F	9	0	M	T
PASS	COMP PN	58	M	4	0	M	G
PASS	COMP PN	54	F	9	0	M	G
DRVR	COMP PN	31	M	1	0	M	G

Primary Rd **SIGNORELLI CIR** Distance (ft) **6** Direction **E** Secondary Rd **SIGNORELLI CIR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20170624** Time **0030** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170727**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	LFT TURN	W	A	0100	-	-	3	N	-	-	-	B
2	PRKD	998	-				PARKED	S	A	0100	FORD	2016	- 3	N	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **SILVERADO TRL** Distance (ft) **650** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20170106** Time **0800** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20170206**
Weather1 **CLOUDY** Weather2 Rdwy Surface **SLIPPERY** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	41	F	H	HNBD		PROC ST	N	A	0100	NISSA	2012	- 3	I		M	M	G
2	DRVR	42	F	W	HNBD		PROC ST	N	A	0100	MINI	2011	- 3	I		M	M	G
3	DRVR	57	M	W	HNBD		PROC ST	N	D	2200	FORD	1999	- 3	I		M	M	G
4	DRVR	57	M	H	HNBD		PROC ST	N	D	2200	TOYOT	2017	- 3	I		M	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20170609** Time **1636** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20170622**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	49	F	W	HNBD			E	A	0100	NISSA	2017	- 3	A	22107	-	L	G
2	DRVR	43	F	H	HNBD		PROC ST	S	A	0100	JEEP	2002	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	43	F	1	0	M	G

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **20** Collision Date **20170815** Time **1519** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21801A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180517**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	52	M	W	HNBD		LFT TURN	W	A	0100	HYUND	2011	- 3	N		-	L	G
2	DRVR	55	M	H	HNBD		PROC ST	S	I	1100	MERCE	2015	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20170918** Time **0705** Day **MON**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20170927**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	33	M	H	HNBD		LFT TURN	E	A	0100	FORD	2015	- 3	M		-	L	G
2	DRVR	23	M		HNBD		SLOWING	S	-	0000	DODGE	1998	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20171212** Time **1705** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **Y** Process Date **20180608**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	56	F	W	HNBD		ENT TRAF	E	A	0100	HONDA	2006	- 3	A	21804	-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	56	F	1	0	L	G
PASS	COMP PN	35	M	3	0	L	G
PASS		32	M	6	0	M	G

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| | | |

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

REPORT 8 - TOTAL COLLISIONS

01/01/2018 thru 12/31/2018 | *Total Count: 99* | Jurisdiction(s): Saint Helena

Include State Highways cases | *Report Run On: 03/27/2019*

Primary Rd **ADAMS ST** *Distance (ft)* **27** *Direction* **W** *Secondary Rd* **KEARNEY ST** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **21** *Collision Date* **20181012** *Time* **1250** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20181030**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	RGT TURN	W	-	9900	-	-	3	N		-	B -								
2	PRKD	998	-				PARKED	W	A	0100	CHEVR 2018	-	-	N		-	- -								

Primary Rd **ALLYN AV** *Distance (ft)* **123** *Direction* **W** *Secondary Rd* **N CRANE AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **21** *Collision Date* **20180416** *Time* **0759** *Day* **MON**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180509**
Weather1 **CLOUDY** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	32	M	H	HNBD		LFT TURN	S	A	0100	SUBAR 1998	-	3	N		-	M G								
2	DRVR	46	F	H			PROC ST	N	A	0800	CHEVR 2008	-	3	-		-	B -								

Primary Rd **CHILES AV** *Distance (ft)* **0** *Direction* *Secondary Rd* **CHILES AV 750** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **30** *Collision Date* **20180602** *Time* **1100** *Day* **SAT**
Primary Collision Factor **UNKNOWN** *Violation* *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20180712**
Weather1 **OTHER** *Weather2* *Rdwy Surface* *Rdwy Cond1* **OTHER** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **PKD MV** *Lighting* *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	998	-		HBD-UNK		OTHER	-	-	9900	-	-	3	M		-	B -	DRVR	COMP PN 998	-	1	1	B	-
2	PRKD	998	-			null		-	D	8200	CHEVR 2016	-	-	-		-	- -								

Primary Rd **COMMUNITY DR** *Distance (ft)* **28** *Direction* **N** *Secondary Rd* **EL BONITA AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **30** *Collision Date* **20180215** *Time* **1905** *Day* **THU**
Primary Collision Factor **DRVR ALC|DRG** *Violation* **23152A** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180627**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **MSDMNR** *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	40	M	W	HBD-UI		PROC ST	W	A	0100	VOLKS 2009	-	1	M		-	- B								

Primary Rd **EDWARDS ST** *Distance (ft)* **0** *Direction* *Secondary Rd* **HUNT AV** *NCIC* **2803** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **Saint Helena** *County* **Napa** *Population* **2** *Rpt Dist* *Beat* *Type* **0** *CalTrans* *Badge* **14** *Collision Date* **20180717** *Time* **0903** *Day* **TUE**
Primary Collision Factor **R-O-W AUTO** *Violation* **21802A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20180801**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	25	M	H	HNBD		LFT TURN	N	A	0100	CHEVR 2014	-	3	N		-	M G								

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2	DRVR	78	M	W	HNBD		PROC ST	E	A	0100	BMW	2000	-	3	N		-	L	G					

Primary Rd **FULTON LN** Distance (ft) **263** Direction **E** Secondary Rd **RAILROAD AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **32** Collision Date **20181008** Time **1641** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181115**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	56	M	W	HBD-NUI		PROC ST	W	C	0200	HONDA	2016	-	3	M	-	P -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **GRAYSON AV** Distance (ft) **0** Direction Secondary Rd **GRAYSON AV 1248** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180226** Time **1820** Day **MON**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180321**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	41	M	H	HBD-NUI		BACKING	S	A	0100	TOYOT	2015	-	3	N	-	M G
2	PRKD	998	-				PARKED	N	D	2200	NISSA	2006	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **GRAYSON AV** Distance (ft) **1080** Direction **W** Secondary Rd **RT 29** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20180126** Time **0857** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180706**
Weather1 **CLEAR** Weather2 Rdwy Surface **WET** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	16	M	W	HNBD		LFT TURN	N	D	7200	CHEVR	1953	-	3	E	-	M C
2	DRVR	30	F	H	HNBD		PROC ST	E	A	0100	HONDA	2011	-	3	N	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	29	F	1	0	L	G

Primary Rd **HOWELL MOUNTAIN** Distance (ft) **75** Direction **E** Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20180317** Time **1325** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **OVERTURNED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180412**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	65	F	W	HNBD		RGT TURN	E	A	0100	MAZDA	2008	-	3	-	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	65	F	1	0	L	G

Primary Rd **HUDSON AV** Distance (ft) **79** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20180608** Time **1251** Day **FRI**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180816**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **NON-CLSN** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	52	M	W	HNBD		PROC ST	S	F	2600	AUTOC	2016	-	3	M	-	M G
2	PRKD	998	-				PARKED	S	A	0100	NISSA	2008	-	-	-	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **HUNT AV** Distance (ft) **29** Direction **E** Secondary Rd **RAILROAD AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20180927** Time **1432** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181022**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	53	M	H	HNBD		RGT TURN	W	F	2500	INTER	2013	-	3	M	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **LA QUINTA WY** Distance (ft) **0** Direction Secondary Rd **DAHLIA ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20181105** Time **1200** Day **MON**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181212**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	BACKING	-	-	9900	-	-	3	N		-	- B
2	PRKD	998	-				PARKED	E	A	0100	TOYOT	2007	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MADRONA AV** Distance (ft) **299** Direction **E** Secondary Rd **HUDSON AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **32** Collision Date **20180402** Time **0210** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180504**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	32	F	W	HNBD	FATG	PROC ST	E	D	2200	TOYOT	2011	- 3	M		-	M G
2	PRKD	998	-				PARKED	-	A	0100	ACURA	2009	- -	-		-	- -
3	PRKD	998	-				PARKED	-	A	0100	BMW	2002	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAGNOLIA AV** Distance (ft) **182** Direction **W** Secondary Rd **ROSEBUD LN** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180603** Time **0157** Day **SUN**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180807**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	32	M	W	HBD-UI		PROC ST	W	D	2200	CHEVR	2007	- 3	N		-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN** Distance (ft) **0** Direction Secondary Rd **MITCHELL** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix - Postmile **28.43** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20181210** Time **1800** Day **MON**
Primary Collision Factor **UNKNOWN** Violation Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190122**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int -

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	54	M	W	IMP UNK	IMP UNK	PROC ST	N	A	0800	CHEVR	1999	- 3	N		-	M B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.75** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20180228** Time **1648** Day **WED**
Primary Collision Factor **R-O-W PED** Violation **21950A** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180802**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	44	M	H	HNBD		LFT TURN	N	A	0100	BUICK	1995	-	3	A	G	M	G
2	PED	21	F					E	N	6000	-		-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	POSSIBL	21	F	9	3	-	-

Primary Rd **MAIN ST** Distance (ft) **285** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.8** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180720** Time **1306** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181018**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	57	F	W	HNBD		PARKING	N	A	0100	TOYOT	2016	-	3	A	22107	-	M	G
2	PRKD	998	-				PARKED	N	A	0100	JEEP	2018	-	3	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.75** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20180920** Time **1831** Day **THU**
Primary Collision Factor **R-O-W PED** Violation **21950A** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20190116**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	20	M	W	HNBD		LFT TURN	N	A	0100	NISSA	2011	-	1	F	-	M	G
2	PED	53	F	H	HNBD			W	N	6000	-		-	3	N	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PED	MINOR	53	F	9	3	N	-

Primary Rd **MAIN ST** Distance (ft) **106** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.77** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20181007** Time **1400** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190114**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	23	M	H	HNBD		RGT TURN	N	D	2200	FORD	2004	-	3	M	-	M	G
2	PRKD	998	-			null		-	A	0100	MERCE	2009	-	-	-	-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **522** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.43** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20180416** Time **1151** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180716**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	32	F	W	HNBD		PROC ST	N	A	0100	NISSA	2018	-	3	-	-	M	G
2	DRVR	33	M	W	HNBD		STOPPED	N	A	0100	SUBAR	2017	-	3	-	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		33	F	3	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.315** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20180619** Time **1157** Day **TUE**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180817**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	62	F	W	HNBD		PROC ST	S	A	0100	FORD	2014	- 3	F		-	M G
2	DRVR	54	F	W	HNBD		ENT TRAF	N	F	2700	PETER	2009	- 3	F		-	M C

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **20** Direction **N** Secondary Rd **CHARTER OAK AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.315** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180927** Time **1330** Day **THU**
Primary Collision Factor **OTHER IMPROP DRV** Violation Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20181030**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	37	M		HNBD		PROC ST	N	A	0800	DODGE	2017	- 3	G		-	M B
2	DRVR	42	F	W	HNBD		STOPPED	N	A	0100	HYUND	2013	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		36	F	3	0	M	G
DRVR	COMP PN	42	F	1	1	M	G
PASS		50	M	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **43** Direction **N** Secondary Rd **CHARTER OAK W** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.33** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20181124** Time **1500** Day **SAT**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20190124**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	F	W	HNBD		STOPPED	S	A	0700	FORD	2015	- 3	N		-	M G
2	DRVR	62	F	W	HNBD		PROC ST	S	A	0100	HYUND	2011	- 3	N		-	L G
3	DRVR	23	F	H	HNBD		PROC ST	S	A	0700	FORD	2018	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	62	F	1	0	L	G

Primary Rd **MAIN ST** Distance (ft) **41** Direction **N** Secondary Rd **CRINELLA DR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.05** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist **1** Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180615** Time **2500** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180817**
Weather1 Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK		N	-	9900	-	-	3	A	22107	-	B -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **DOWDELL LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.99** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20180620** Time **0631** Day **WED**
Primary Collision Factor **OTHER IMPROP DRV** Violation Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180817**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DUSK/DAWN** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	19	F		HNBD		PROC ST	N	A	0100	JEEP	2015	- 3	F		-	M G
2	PRKD	998	-				PARKED	N	G	2731	OTHER	2014	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **DOWDELL LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.16** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180911** Time **0925** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20190109**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	28	M	W	HNBD		PROC ST	N	D	2200	GMC	2015	- 3	N		-	L G
2	DRVR	62	M	W	HNBD		STOPPED	N	A	0100	HONDA	2011	- 3	N		-	L G
3	DRVR	81	F	W	HNBD		STOPPED	N	A	0100	CHEVR	2006	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	62	M	1	0	L	G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **ELMHURST AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.15** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180511** Time **1516** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21801A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	31	M	H	HNBD		LFT TURN	N	-	0000	FREIG	2015	- 3	A	22107	M	M	C
2	DRVR	78	M	W	HNBD		PROC ST	W	A	0700	LAND	2013	- 3	M		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **188** Direction **S** Secondary Rd **FULTON LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.9** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20180421** Time **0506** Day **SAT**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152F** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180822**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	33	F	W		DRUG	RAN OFF RD	N	D	2200	NISSA	2017	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **45** Direction **N** Secondary Rd **FULTON LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20181121** Time **1412** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190130**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	32	M	B	HNBD		RGT TURN	W	-	0000	LINCO	2004	- 3	N		-	M	G
2	DRVR	74	F	W	HNBD		STOPPED	S	A	0100	TOYOT	2012	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **FULTON RD** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.94** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180427** Time **1735** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21801A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180822**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	19	F	H	HNBD		LFT TURN	E	A	0100	MAZDA	2007	- 3	N		-	M	G
2	DRVR	32	M	H	HNBD		PROC ST	N	A	0100	FORD	2014	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		25	M	3	0	M	G
PASS		6	M	4	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **25** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.64** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180622** Time **1715** Day **FRI**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180817**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	21	F	W	HNBD		PROC ST	S	A	0100	CHEVR	2015	- 3	G		-	M B	
2	DRVR	56	M	W	HNBD		PROC ST	S	A	0100	FORD	2017	- 3	N		-	M B	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		77	M	3	0	L	B

Primary Rd **MAIN ST** Distance (ft) **50** Direction **N** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.95** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180301** Time **1432** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180810**
Weather1 **CLOUDY** Weather2 **RAINING** Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	S	-	9900	-	-	3	N		-	B	-	
2	DRVR	19	F	W	HNBD			S	A	0100	HONDA	2014	- 3	N		-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	998	-	1	0	B	-

Primary Rd **MAIN ST** Distance (ft) **282** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.89** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20180702** Time **1750** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181029**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	
1F	DRVR	47	M		HNBD		PROC ST	S	A	0700	GMC	2009	- 3	-		-	M	G	
2	PRKD	998	-				PARKED	S	A	0100	SUBAR	2014	- -	-		-	-	-	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MADRONA ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.289** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180620** Time **0904** Day **WED**
Primary Collision Factor **STOP SGN|SIG** Violation **21453A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180817**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	
1F	DRVR	69	F	W	HNBD		PROC ST	N	A	0100	FORD	2014	- 3	N		-	M	G	
2	DRVR	50	F	W	HNBD		PROC ST	E	A	0100	LEXUS	2013	- 3	N		-	M	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MADRONA ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20181027** Time **2319** Day **SAT**
Primary Collision Factor **STOP SGN|SIG** Violation **21453A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20181113**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip	
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	E	-	0000	-	-	3	A	21453	-	B	-	
2	DRVR	49	M	W	HNBD		PROC ST	S	A	0800	TOYOT	2014	- 3	N		-	L	G	

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN 998		-	1	0	B	-

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 2555** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.77** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180121** Time **1235** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180801**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	51	F	W	HNBD		U-TURN	E	A	0100	CHEVR	2013	-	3	N	-	M	G
2	DRVR	24	M	W	HNBD		PROC ST	S	D	2200	TOYOT	2011	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		50	F	4	0	M	G
PASS		50	F	6	0	M	G
PASS		50	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST 2800** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.83** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **21** Collision Date **20181020** Time **1017** Day **SAT**
Primary Collision Factor **UNKNOWN** Violation **23123A** Collision Type **OVERTURNED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20190110**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	30	F	A	HNBD		PROC ST	N	A	0100	FORD	2008	-	1	N	-	L	H

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	30	F	1	0	L	H

Primary Rd **MAIN ST** Distance (ft) **170** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **36.76** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180531** Time **1544** Day **THU**
Primary Collision Factor **WRONG SIDE** Violation **21460A** Collision Type **HEAD-ON** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	50	F	H			OPPOS LN	N	-	9900	-		-	-	-	-	M	G
2	DRVR	53	F	H	HNBD		PROC ST	N	D	2200	TOYOT	2002	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		998	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **150** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.82** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180702** Time **1415** Day **MON**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181029**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	33	M	W	HNBD		PROC ST	S	D	2200	FORD	2012	-	3	G	-	M	G
2	DRVR	41	M		HNBD		STOPPED	S	A	0100	HONDA	2013	-	3	G	-	M	G
3	DRVR	23	M	W	HNBD		STOPPED	S	A	0100	SUBAR	2017	-	3	G	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **259** Direction **N** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.54** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **29** Collision Date **20180110** Time **1429** Day **WED**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180801**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	67	M	W	HNBD		ENT TRAF	N	A	0100	HONDA	2002	-	3	G	-	M	G
2	DRVR	53	M	W	HNBD		PROC ST	N	D	8200	TOYOT	2017	-	3	G	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.5** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180714** Time **1159** Day **SAT**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181101**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	50	F	W	HNBD		SLOWING	S	A	0100	CHEVR	1997	- 3	M		-	M G
2	DRVR	35	F	W	HNBD		STOPPED	S	A	0100	CHEVR	2018	- 3	M		-	M G

Victim ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		25	F	3	0	M	G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.52** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20181031** Time **1647** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190109**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **MV ON OTHER RD** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	32	M	W	HNBD		PROC ST	S	A	0100	NISSA	1997	- 3	A	22350	-	M G
2	DRVR	43	M	W	HNBD		STOPPED	S	D	2200	FORD	2008	- 3	M		-	M G

Primary Rd **MAIN ST** Distance (ft) **265** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.3** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180315** Time **1440** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180730**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	39	M		HNBD		PROC ST	N	A	0700	TOYOT	2018	- 3	-		-	M G
2	DRVR	29	F	W	HNBD		STOPPED	N	A	0100	HONDA	2010	- 3	-		-	M G

Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **29.31** Side of Hwy **W**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180926** Time **1338** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190107**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	25	M	H	IMP UNK	IMP UNK	PROC ST	S	A	0100	HONDA	2003	- 1	F		-	M E
2	DRVR	38	M	H	HNBD		PROC ST	S	D	2200	NISSA	2005	- 3	-		-	M C

Primary Rd **MAIN ST** Distance (ft) **251** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.3** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20180927** Time **1338** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181218**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	24	F	H	HNBD			N	A	0100	MERCE	2004	- 3	N		-	M G
2	DRVR	54	F	W	HNBD			N	A	0100	HYUND	2019	- 3	N		-	M G

Victim ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		24	F	3	0	M	G
PASS		57	F	3	0	M	G
PASS		76	F	4	0	M	G

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Primary Rd **MAIN ST** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20181002** Time **0258** Day **TUE**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190114**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	M			FATG	PROC ST	S	D	2200	TOYOT	2000	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **360.** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.32** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20181115** Time **1351** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190129**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	77	F	W	HNBD		U-TURN	W	A	0100	VOLVO	2001	-	3	A	21804	- M G
2	DRVR	61	M	W	HNBD		PROC ST	N	-	0033	OTHER	2018	-	3	N		- M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		6	M	6	0	P	G
PASS		6	F	4	0	P	G

Primary Rd **MAIN ST** Distance (ft) **25** Direction **E** Secondary Rd **RT 29** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.53** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20180609** Time **0459** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180817**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	19	M	H		FATG	PROC ST	S	D	2200	NISSA	1997	-	3	F	-	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **74** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.59** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **31** Collision Date **20180317** Time **1132** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180723**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	26	F	W	HNBD		PARKING	N	A	0100	DODGE	2017	-	3	A	22107	- M G
2	PRKD	998	-				PARKED	-	D	2200	TOYOT	2008	-	-	-		- - -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MAIN ST** Distance (ft) **157** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20181011** Time **1500** Day **THU**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181115**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	58	F	B	HNBD		MERGING	S	A	0700	LEXUS	2002	-	3	N	-	M G
2	DRVR	67	F	H	HNBD		MERGING	S	A	0100	TOYOT	2008	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **MCCORKLE AV** Distance (ft) **141** Direction **E** Secondary Rd **ALLISON AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180729** Time **2244** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180828**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	E	A	0100	VOLKS	2002	- 3	N		-	M B
2	PRKD	998	-				PARKED	-	E	2235	WABA	1988	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MCCORMICK ST** Distance (ft) **75** Direction **N** Secondary Rd **VINTAGE AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20180712** Time **0620** Day **THU**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180726**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK	RGT TURN	S	-	0000	-		- 3	N		-	B -
2	PRKD	998	-				PARKED	-	A	0700	NISSA	2013	- 3	N		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **MEADOWCREEK** Distance (ft) **189** Direction **E** Secondary Rd **STARR AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20180618** Time **1905** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180809**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	998	M	H	IMP UNK	IMP UNK	LFT TURN	W	A	0100	OTHER		- 3	-		-	-	B
2	PRKD	998	-				PARKED	W	A	0700	MERCE	2010	- 3	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		998	F	3	0	B	-

Primary Rd **MITCHELL DR** Distance (ft) **0** Direction Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.485** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20180509** Time **1649** Day **WED**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **AUTO/PED** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PED** Lighting **DAYLIGHT** Ped Action **X-WLK AT** Cntrl Dev **FNCTNG** Loc Type **I** Ramp/Int **6**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	47	F	H	HNBD		RGT TURN	S	A	0100	FORD	2011	- 2	N		-	M	G
2	PED	17	F	H	HNBD			-	N	6000	-		- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		9	F	3	0	M	G
PED	OTH VIS	17	F	9	0	P	-

Primary Rd **N CRANE AV** Distance (ft) **10** Direction **N** Secondary Rd **MITCHELL DR** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180824** Time **2045** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350A** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181003**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	24	M	W	IMP UNK	IMP UNK	PROC ST	W	A	0100	NISSA	2013	- 3	N		-	M	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **OAK AV** Distance (ft) **216** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20181021** Time **0121** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181106**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	PROC ST	-	-	0000	-		-	3	A	22107	N B -								
2	PRKD	998	-				PARKED	N	A	0100	TOYOT	2016	-	3	N		- - -								

Primary Rd **OAK AV** Distance (ft) **85** Direction **N** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20181028** Time **2001** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190109**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	F	W	HNBD		PROC ST	N	A	0100	TOYOT	2006	-	3	N		- M G								
2	PRKD	998	-				PARKED	N	A	0100	MERCE	2011	-	3	N		- - -								

Primary Rd **POPE ST** Distance (ft) **82** Direction **W** Secondary Rd **ALLISON AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20181215** Time **0106** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20190110**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **REDUCED RD** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	36	M	W	HBD-UI			W	D	2200	FORD	1999	-	3	A	23152	- M G								

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **CHURCH ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20181203** Time **1015** Day **MON**
Primary Collision Factor **NOT DRIVER** Violation Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190131**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **CONS ZONE** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER OBJ** Lighting **DAYLIGHT** Ped Action **IN RD,** Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	PED	56	M	W	HNBD			-	N	6000	-		-	3	N		- - -								
2	DRVR	19	F	W	HNBD		PROC ST	W	A	0100	KIA	2018	-	3	N		- M G								

Primary Rd **POPE ST** Distance (ft) **487** Direction **E** Secondary Rd **COLLEGE AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **32** Collision Date **20181017** Time **1232** Day **WED**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152F** Collision Type **HIT OBJECT** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181106**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	Victim Info: ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	45	F	W		DRUG	RAN OFF RD	W	A	0100	BMW	2012	-	3	N		- M B								

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Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **EDWARDS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **32** Collision Date **20181105** Time **1549** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181121**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **BICYCLE** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	20	M	H	HNBD			W	D	2200	FORD	2004	- 3	E		-	N E
2	BICY	998	M	W				-	L	0400	-		- -	N		-	- -

Victim Info								
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **EDWARDS ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **30** Collision Date **20181208** Time **1157** Day **SAT**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152F** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190107**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	47	M	W		DRUG	RGT TURN	E	A	0100	TOYOT	1996	- 3	A	23152	-	M G
2	PRKD	998	-				PARKED	-	A	0100	NISSA	2006	- 3	N		-	- -

Victim Info								
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **MAIN ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20181025** Time **1225** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181106**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	F	H	HNBD		PROC ST	W	A	0700	CHEVR	2003	- 3	N		-	M G
2	DRVR	998	-		IMP UNK	IMP UNK	LFT TURN	S	A	0100	-		- 3	E		-	B -

Victim Info								
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **POPE ST** Distance (ft) **0** Direction Secondary Rd **SILVERADO TRL** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20180518** Time **1636** Day **FRI**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180619**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	73	F	W	HNBD			E	A	0100	SUBAR	2017	- 3	G		-	M G
2	DRVR	50	F	W	HNBD			E	A	0100	KIA	2014	- 3	G		N	M G

Victim Info								
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **PRATT AV** Distance (ft) **30** Direction **W** Secondary Rd **NAPA VALLEY** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20180508** Time **1615** Day **TUE**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180625**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT FNCT** Loc Type Ramp/Int

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	45	M		HNBD		BACKING	E	1	0900	GMC	2013	- 3	N		-	M G
2	DRVR	67	F	W	HNBD		STOPPED	E	A	0100	FORD	2011	- 3	N		-	M G

Victim Info								
ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **RT 29** Distance (ft) **545** Direction **N** Secondary Rd **2555 MAIN ST** NCIC **2803** State Hwy? **Y** Route **128** Postmile Prefix **-** Postmile **29.76** Side of Hwy **E**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20181013** Time **1637** Day **SAT**
Primary Collision Factor **R-O-W AUTO** Violation **21801A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20190110**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	21	F	A	HNBD		LFT TURN	N	A	0100	HONDA	2007	- 3	N		-	M	G
2	DRVR	48	F	W	HNBD		PROC ST	N	I	1000	MERCE	2015	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	48	F	1	0	M	G
PASS		43	M	4	0	P	D
PASS		42	F	5	0	P	D
PASS		43	M	6	0	P	D
PASS		41	F	7	0	P	D
PASS		40	F	8	0	P	D
PASS		37	F	9	0	P	C
PASS		36	M	9	0	P	D

Primary Rd **RT 29** Distance (ft) **90** Direction **S** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.73** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180525** Time **1038** Day **FRI**
Primary Collision Factor **OTHER HAZ** Violation **35100A** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180827**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	52	M	H	HNBD			S	F	2100	FREIG	1999	- 3	K		-	M	G
2	PRKD	998	-					-	A	0700	JEEP	2017	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		47	M	3	0	M	G

Primary Rd **RT 29** Distance (ft) **177** Direction **N** Secondary Rd **ADAMS ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.78** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20181103** Time **1620** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190122**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	31	M	B		FATG	PROC ST	S	D	8200	FORD	2015	- 3	N		-	M	G
2	PRKD	998	-				PARKED	S	A	0100	TOYOT	2009	- -	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **140** Direction **N** Secondary Rd **BRITTAN WY** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.93** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180823** Time **1500** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181029**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	22	F		HNBD		PROC ST	N	A	0700	JEEP	2018	- 3	N		-	M	G
2	DRVR	64	F	W	HNBD		STOPPED	N	A	0700	HONDA	2008	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd RT 29 Distance (ft) 234 Direction N Secondary Rd BRITTON WY NCIC 2803 State Hwy? Y Route 29 Postmile Prefix - Postmile 26.27 Side of Hwy N
City Saint Helena County Napa Population 2 Rpt Dist Beat Type 0 CalTrans 4 Badge 29 Collision Date 20181029 Time 0221 Day MON
Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type SIDESWIPE Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20190129
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With PKD MV Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	33	M	H	HNBD		PROC ST	N	A	0100	NISSA	1993	- 3	A	23152	-	L G
2	PRKD	998	-				PARKED	N	A	0100	LAND	2006	- -	-		-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd RT 29 Distance (ft) 340 Direction N Secondary Rd CHARTER OAK NCIC 2803 State Hwy? Y Route 29 Postmile Prefix - Postmile 28.38 Side of Hwy N
City Saint Helena County Napa Population 2 Rpt Dist Beat Type 0 CalTrans 4 Badge 21 Collision Date 20180410 Time 0810 Day TUE
Primary Collision Factor TOO CLOSE Violation 21703 Collision Type REAR END Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20180822
Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	37	M	W	HNBD		PROC ST	N	D	2200	TOYOT	2006	- 3	N		-	M G
2	DRVR	35	M	H	HNBD		STOPPED	N	D	2200	NISSA	2017	- 3	-		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd RT 29 Distance (ft) 438 Direction N Secondary Rd CHARTER OAK AV NCIC 2803 State Hwy? Y Route 29 Postmile Prefix - Postmile 28.4 Side of Hwy N
City Saint Helena County Napa Population 2 Rpt Dist Beat Type 0 CalTrans 4 Badge 20 Collision Date 20180909 Time 1523 Day SUN
Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20181030
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run MSDMNR Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	22	M	H	HNBD		PROC ST	S	D	2200	CHEVR	2001	- 3	A	20002	N	M G
2	DRVR	46	M	W	HBD-NUI		SLOWING	S	A	0700	TOYOT	2008	- 3	-		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		31	F	3	0	M	G

Primary Rd RT 29 Distance (ft) 0 Direction Secondary Rd FULTON LN NCIC 2803 State Hwy? Y Route 29 Postmile Prefix - Postmile 28.94 Side of Hwy N
City Saint Helena County Napa Population 2 Rpt Dist Beat Type 0 CalTrans 4 Badge 33 Collision Date 20180913 Time 1806 Day THU
Primary Collision Factor STOP SGN|SIG Violation 21453A Collision Type BROADSIDE Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20181030
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type I Ramp/Int 5

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	58	M	W	HNBD		PROC ST	N	D	2200	FORD	1997	- 3	N		-	M G
2	DRVR	42	F	W	HNBD		STOPPED	W	A	0100	TOYOT	2012	- 3	N		-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd RT 29 Distance (ft) 458 Direction N Secondary Rd GRAYSON AV NCIC 2803 State Hwy? Y Route 29 Postmile Prefix - Postmile 28.18 Side of Hwy S
City Saint Helena County Napa Population 2 Rpt Dist Beat Type 0 CalTrans 4 Badge 28 Collision Date 20180701 Time 2309 Day SUN
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20181102
Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	41	F	W	HNBD	FATG	RAN OFF RD	S	A	0100	TOYOT	2014	- 3	A	22350	N	L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	41	F	1	0	L	G

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Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.1** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180706** Time **1406** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181029**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	36	F	H	HNBD		PROC ST	N	A	0100	TOYOT	2001	- 3	A	22350	F	M G								
2	DRVR	24	F	W	HNBD		PROC ST	N	A	0100	TOYOT	2014	- 3	N		-	M G								

Primary Rd **RT 29** Distance (ft) **83** Direction **S** Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **2.807** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20180718** Time **1017** Day **WED**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181101**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	37	M	W	HNBD		PROC ST	N	D	2200	DODGE	2006	- 3	N		-	M G								
2	DRVR	78	F	W	HNBD		STOPPED	N	A	0700	VOLVO	2005	- 3	N		-	M G								
3	DRVR	27	M	W	HNBD		STOPPED	N	-	0000	FORD	2016	- 3	N		-	M G								

Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **GRAYSON AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.14** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20181106** Time **1335** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190109**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	78	M	W	HNBD		MERGING	S	A	0100	BMW	2017	- 3	E		-	M G								
2	DRVR	30	M		HNBD		PROC ST	S	A	0100	CHEVR	2018	- 3	M		-	M G								

Primary Rd **RT 29** Distance (ft) **56** Direction **N** Secondary Rd **HUNT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.63** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **28** Collision Date **20180206** Time **2030** Day **TUE**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180731**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **6**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	30	M	H	HNBD		UNS TURN	S	A	0100	FORD	2010	- 3	N		-	M G								
2	PRKD	998	-				PARKED	S	A	0100	AUDI	2009	- -	-		-	- -								

Primary Rd **RT 29** Distance (ft) **528** Direction **S** Secondary Rd **MEE LN** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **25.4** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **30** Collision Date **20181009** Time **0102** Day **TUE**
Primary Collision Factor **DRVR ALC|DRG** Violation **23152A** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20190130**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **FNCTNG** Loc Type **H** Ramp/Int **-**

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	32	M	W	HBD-UI		RAN OFF RD	N	A	0100	VOLKS	2000	- 3	N		-	M G								
2	DRVR	31	F		HNBD		STOPPED	N	A	0100	TOYOT	2016	- 3	N		-	M G								

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Primary Rd **RT 29** Distance (ft) **228** Direction **N** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **10.99** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **32** Collision Date **20180525** Time **1307** Day **FRI**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180823**
Weather1 **RAINING** Weather2 Rdwy Surface **WET** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	28	M	W	HNBD		PROC ST	S	D	2200	NISSA	2004	- 3	M		-	M	G
2	DRVR	63	F	W	HNBD		PROC ST	S	A	0100	TOYOT	2018	- 3	M		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		64	F	3	0	M	G

Primary Rd **RT 29** Distance (ft) **180** Direction **N** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.88** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180823** Time **1700** Day **THU**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **N** Process Date **20181024**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	53	F	A	HNBD		UNS TURN	S	A	0100	MERCE	2016	- 3	A	22107	E	L	G
2	PRKD	998	-				PARKED	S	A	0100	FORD	2018	- -	N		-	-	-
3	PRKD	998	-				PARKED	S	A	0100	TESLA	2012	- -	N		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	48	M	3	0	L	G
PASS	POSSIBL	31	M	4	0	L	G
PASS	POSSIBL	25	F	5	0	L	G
PASS		21	F	6	0	L	G

Primary Rd **RT 29** Distance (ft) **149** Direction **S** Secondary Rd **PINE ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.82** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180831** Time **1226** Day **FRI**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181102**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	26	M	H	HNBD		PROC ST	S	A	0800	FORD	2018	- 3	N		-	M	G
2	DRVR	57	M	W	HNBD		PARKED	S	A	0100	ASTON	2018	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **275** Direction **N** Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.3** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180415** Time **1300** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	30	M	A	HNBD		SLOWING	S	A	0100	FORD	2015	- 3	J		-	M	G
2	DRVR	56	M	W	HNBD		PROC ST	S	A	0700	CHEVR	1994	- 3	A	22350	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	30	M	1	0	M	G
PASS		29	F	3	0	M	G

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Primary Rd **RT 29** Distance (ft) **0** Direction Secondary Rd **PRATT AV** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **29.25** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180519** Time **1502** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **SIDESWIPE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180822**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **I** Ramp/Int **5**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	27	F	W	HNBD		PROC ST	S	A	0100	MAZDA	2018	- 3	N		-	M	G
2	DRVR	57	F	W	HNBD		STOPPED	N	A	0100	TOYOT	2014	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	57	F	1	0	M	G
PASS		58	M	3	0	M	G

Primary Rd **RT 29** Distance (ft) **137** Direction **S** Secondary Rd **SPRING ST** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **28.54** Side of Hwy **S**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **20** Collision Date **20180820** Time **1535** Day **MON**
Primary Collision Factor **TOO CLOSE** Violation **21703** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181029**
Weather1 **CLEAR** Weather2 Rdwy Surface **SLIPPERY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	41	M	H	HNBD		PROC ST	S	A	0100	HONDA	2007	- 3	N		-	M	G
2	DRVR	63	M	W	HNBD		SLOWING	S	A	0700	NISSA	2018	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		998	F	3	0	M	G

Primary Rd **RT 29** Distance (ft) **500** Direction **S** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.57** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **19** Collision Date **20180528** Time **2130** Day **MON**
Primary Collision Factor **OTHER IMPROP DRV** Violation Collision Type **OTHER** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	27	M	W	HNBD		BACKING	N	J	4800	CHEVR	2007	- 3	E		N	M	G
2	PRKD	998	-				PARKED	S	J	4800	CHEVR	2004	- -	-		-	-	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **60** Direction **N** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.67** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **33** Collision Date **20180706** Time **1139** Day **FRI**
Primary Collision Factor **UNSAFE SPEED** Violation **22350** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20181101**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	18	F	W	HNBD			N	A	0100	VOLKS	2017	- 3	G		-	L	G
2	DRVR	55	M	W	HNBD		STOPPED	N	D	2200	FORD	2006	- 3	G		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **RT 29** Distance (ft) **375** Direction **N** Secondary Rd **SULPHUR** NCIC **2803** State Hwy? **Y** Route **29** Postmile Prefix **-** Postmile **27.73** Side of Hwy **N**
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans **4** Badge **14** Collision Date **20180413** Time **0557** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21804A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180823**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type **H** Ramp/Int **-**

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	998	M	H	IMP UNK	IMP UNK	LFT TURN	W	A	0100	SATUR		- 3	-		-	B	-
2	DRVR	78	M		HNBD		PROC ST	N	A	0100	TOYOT	2015	- 3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	998	M	1	0	B	-

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Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **HOWELL MTN RD** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **29** Collision Date **20180402** Time **0850** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **Y** Process Date **20180502**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	45	M	H	HNBD		LFT TURN	S	A	0100	CHRYS	2006	- 3	-		-	L	G
2	DRVR	31	M	H	HNBD		PROC ST	N	A	0100	CADIL	2002	- 3	-		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	OTH VIS	45	M	1	0	L	G
PASS	OTH VIS	36	F	3	0	M	G

Primary Rd **SILVERADO TRL** Distance (ft) **500** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **19** Collision Date **20180318** Time **0727** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **3** Tow Away? **Y** Process Date **20180508**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	23	M	W	HNBD		PROC ST	N	A	0100	CHEVR	2016	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	23	M	1	0	M	G
PASS	POSSIBL	20	F	3	0	M	G
PASS	POSSIBL	20	M	4	0	M	G

Primary Rd **SILVERADO TRL** Distance (ft) **0** Direction Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20180511** Time **1656** Day **FRI**
Primary Collision Factor **R-O-W AUTO** Violation **21802A** Collision Type **BROADSIDE** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **N** Process Date **20180604**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	68	F	O	HNBD		ENT TRAF	E	A	0100	TOYOT	2007	- 3	N		-	L	B
2	DRVR	26	M	H	HNBD		PROC ST	S	A	0100	HONDA	2001	- 3	N		-	M	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	68	F	1	0	L	B
PASS		32	F	3	0	M	G

Primary Rd **SILVERADO TRL** Distance (ft) **50** Direction **S** Secondary Rd **POPE ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20180914** Time **1330** Day **FRI**
Primary Collision Factor **OTHER EQPMNT** Violation **24002** Collision Type **OTHER** Severity **INJURY** #Killed **0** #Injured **2** Tow Away? **N** Process Date **20181004**
Weather1 **CLEAR** Weather2 Rdwy Surface **SLIPPERY** Rdwy Cond1 **OTHER** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **NON-CLSN** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	998	-		IMP UNK	IMP UNK	OTHER	-	-	0000	-		- 3	N		-	B	-
2	DRVR	67	M	W	HNBD		PROC ST	S	C	0200	KAWA	2009	- 3	N		-	P	-
3	DRVR	75	M	W	HNBD		PROC ST	S	C	0200	HARLE	2000	- 3	N		-	P	-

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	67	M	1	1	P	-
DRVR	COMP PN	75	M	1	1	P	-

Primary Rd **SPRING MOUNTAIN** Distance (ft) **57** Direction **S** Secondary Rd **SPRING** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180924** Time **1337** Day **MON**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HIT OBJECT** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20181011**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	18	M	H	HNBD		PROC ST	S	D	2200	TOYOT	2006	- 3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	18	M	1	0	M	G

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Primary Rd **SPRING ST** Distance (ft) **369** Direction **E** Secondary Rd **KEARNEY ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **21** Collision Date **20181028** Time **2000** Day **SUN**
Primary Collision Factor **STOP SGN|SIG** Violation **22450A** Collision Type **BROADSIDE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20181128**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - ST** Ped Action Cntrl Dev **FNCTNG** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK		S	-	0000	-		-	3	N	-	B -
2	DRVR	22	M	H	IMP UNK	IMP UNK	PROC ST	E	A	0100	FORD	2011	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SPRING ST** Distance (ft) **90** Direction **E** Secondary Rd **OAK AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **28** Collision Date **20180512** Time **2115** Day **SAT**
Primary Collision Factor **STRTNG|BCKNG** Violation **22106** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180730**
Weather1 **CLOUDY** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **PKD MV** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	F	W	HBD-UNK		BACKING	S	A	0100	NISSA	2014	-	3	N	-	B -
2	PRKD	998	-				PARKED	-	A	0100	AUDI	2013	-	-	-	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SPRING ST** Distance (ft) **19** Direction **E** Secondary Rd **SPRING BROOK** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **31** Collision Date **20180610** Time **2148** Day **SUN**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **HEAD-ON** Severity **INJURY** #Killed **0** #Injured **1** Tow Away? **Y** Process Date **20180813**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **FIXED OBJ** Lighting **DARK - ST** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	23	M	H	IMP UNK	IMP UNK	LFT TURN	S	A	0100	INFIN	2004	-	3	-	-	L B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	COMP PN	23	M	1	0	L	B

Primary Rd **SPRING ST** Distance (ft) **73** Direction **E** Secondary Rd **STOCKTON ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **32** Collision Date **20180608** Time **2300** Day **FRI**
Primary Collision Factor **NOT STATED** Violation Collision Type **SIDESWIPE** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180809**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run **MSDMNR** Motor Vehicle Involved With **OTHER MV** Lighting **DARK - NO** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	998	-		IMP UNK	IMP UNK		-	-	9900	-		-	3	-	-	B
2	PRKD	998	-				PARKED	-	A	0100	PORSC	1999	-	3	N	-	- -

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **SPRING ST** Distance (ft) **140** Direction **E** Secondary Rd **VALLEYVIEW ST** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **14** Collision Date **20180413** Time **0815** Day **FRI**
Primary Collision Factor **HAZ PARKING** Violation **22500** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **N** Process Date **20180525**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **OTHER MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	50	M	H	HNBD		STOPPED	E	D	2200	TOYOT	2017	-	3	M	-	M G
2	DRVR	39	F	H	HNBD		PROC ST	E	A	0100	TOYOT	2001	-	3	A	22350 M	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS		8	M	6	0	P	G
PASS		9	M	4	0	P	G

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Primary Rd **STOCKTON ST** Distance (ft) **110** Direction **S** Secondary Rd **MADRONA AV** NCIC **2803** State Hwy? **N** Route Postmile Prefix Postmile Side of Hwy
City **Saint Helena** County **Napa** Population **2** Rpt Dist Beat Type **0** CalTrans Badge **33** Collision Date **20180310** Time **1535** Day **SAT**
Primary Collision Factor **IMPROP TURN** Violation **22107** Collision Type **REAR END** Severity **PDO** #Killed **0** #Injured **0** Tow Away? **Y** Process Date **20180419**
Weather1 **CLEAR** Weather2 Rdwy Surface **DRY** Rdwy Cond1 **NO UNUSL CND** Rdwy Cond2 Spec Cond **0**
Hit and Run Motor Vehicle Involved With **PKD MV** Lighting **DAYLIGHT** Ped Action Cntrl Dev **NT PRS/FCTR** Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	15	F	W	HNBD		STOPPED	N	A	0100	LEXUS	2008	-	3	A	12500	N	M	G
2	PRKD	998	-				PARKED	N	A	0100	LAND	2016	-	-	-		-	-	-
3	PRKD	998	-				PARKED	N	A	0100	LAND	2012	-	-	-		-	-	-

Victim Info

Party	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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FINAL

ENVIRONMENTAL IMPACT REPORT

for the

Hunter Subdivision Project

SCH no. 2018032014

Prepared for

City of St. Helena
Planning & Community Improvement Department
1572 Railroad Avenue
St. Helena, California 94574

Contact: Maya DeRosa,
Planning & Building Director
mderosa@cityofsthelena.org



Prepared by
DUDEK 1102 R Street
Sacramento, California 95811

JANUARY 2023

Final Environmental Impact Report
for the
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SCH No. 2018032014

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JANUARY 2023

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CHAPTER 1
INTRODUCTION

1.0 INTRODUCTION

This Final Environmental Impact Report (Final EIR) contains the agency and public comments received during the public review comment period for the Hunter Subdivision Project Draft EIR (Proposed Project).

The EIR is an informational document intended to disclose to the City of St. Helena (City), public agencies and the public the environmental consequences of approving and implementing the Proposed Project or one of the alternatives to the Project described in the Draft EIR. All written comments received during the public review period (September 23, 2021 through November 30, 2021[1]) on the Draft EIR are addressed in this Final EIR, as are oral comments received at the November 2 and November 30, 2021, Planning Commission hearings on the Draft EIR.

The responses in the Final EIR clarify, correct, and/or amplify text in the Draft EIR, as appropriate. Also included are text changes made at the initiative of the Lead Agency (City of St. Helena). These changes (summarized in Chapter 2) do not alter the conclusions of the Draft EIR. This document has been prepared in accordance with the California Environmental Quality Act (CEQA; California Public Resources Code (PRC), Sections 21000–21177).

1.1 BACKGROUND

In accordance with CEQA Guidelines Section 15082, the City released a Notice of Preparation (NOP) on March 6, 2018 through April 9, 2018, for the required 30-day review period. The purpose of the NOP was to provide notification that an EIR for the project was being prepared and to solicit guidance on the scope and content of the document. The Draft EIR was circulated for public review and comment for a period of 67 days[1] from September 23, 2021 through November 30, 2021. Public hearings before the City's Planning Commission to receive oral comments on the Draft EIR were held on November 2, 2021 and November 30, 2021.

The comments and responses that make up the Final EIR, in combination with the Draft EIR, as amended by the text changes, constitute the EIR that will be considered for certification by the decision makers of the City of St. Helena.

[1] In response to requests from the public to extend the comment period, the City extended the comment period an additional 22 days closing on November 30, 2021. The City also held another hearing to take oral comments at the November 30, 2021 Planning Commission hearing.

1.2 CEQA REQUIREMENTS

Under CEQA, the Lead Agency must prepare and certify a Final EIR prior to approving a proposed project. The contents of a Final EIR are specified in Section 15132 of the CEQA Guidelines, which states that the Final EIR shall consist of:

a) The Draft EIR or a revision of the Draft.

b) Comments and recommendations received on the Draft EIR either verbatim or in summary.

c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

e) Any other information added by the Lead Agency.

The Lead Agency must provide each agency that commented on the Draft EIR with a copy of the Lead Agency's response to comments a minimum of 10-days before certifying the Final EIR.

1.3 USE OF THE FINAL EIR

The Final EIR allows commenting agencies and the public and the City an opportunity to review revisions to the Draft EIR and the Responses to Comments received. The Final EIR serves as the environmental document to support approval of the Proposed Project, either in whole or in part, or one of the alternatives to the Project discussed in the Draft EIR.

As required by Section 15090 (a) (1)-(3) of the CEQA Guidelines, a Lead Agency, in certifying a Final EIR, must make the following three determinations:

1. The Final EIR has been completed in compliance with CEQA.
2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
3. The Final EIR reflects the Lead Agency's independent judgment and analysis.

As required by Section 15091 of the CEQA Guidelines, no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings (Findings of Fact) for each of those significant effects, accompanied by a brief explanation of the rationale for each finding supported by substantial evidence in the record. The possible findings set forth in CEQA section 15091 are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

Additionally, pursuant to Section 15093(b) of the CEQA Guidelines, when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the agency must state in writing the reasons supporting the action. The Statement of Overriding Considerations must be supported by substantial evidence in the Lead Agency's administrative record.

The Findings of Fact and Statement of Overriding Considerations are included in a separate document that will be considered for adoption by the City's decision makers at the time of Project review.

1.4 PROJECT UNDER REVIEW

The Proposed Project is located on a 16.9-acre site in the northeastern portion of the city, at the eastern terminus of Adams Street, three blocks east of downtown and State Route 29, and west of the Napa River. The Proposed Project consists of the following:

- A Tentative Subdivision Map to subdivide the site into 51 lots (sized for single-family residences), a 3.4-acre parcel, and two lettered lots: a 0.06-acre parcel (Parcel "A") for an onsite irrigation well and a 0.04-acre parcel (Parcel "B"), as shown in Figure 2-4, Proposed Tentative Map of the Draft EIR. The Project applicant has stated their intent to ultimately develop the 51 lots with 51 single-family, market-rate residences. Additionally, homes on 11 of the 51 lots would be developed with an ADU as part of their initial construction. The applicant intends to ultimately develop the 3.4-acre parcel with 25 attached multifamily residential units.
- An Affordable Housing Agreement, which would require approval by the City Council subsequent to approval of the Tentative Subdivision Map.
- Design Review of the proposed single-family and multi-family units.
- A Conditional Use Permit for the development of multi-family housing. Development of the Proposed Project includes the extension of Adams Street and Starr Avenue to and through the project site and the installation of infrastructure (water, sewer, etc.) to serve the proposed homes.

A detailed project description is contained in the Draft EIR in Chapter 2, Project Description. The environmental impact analysis is included in Chapter 3 of the Draft EIR.

1.5 SUMMARY OF TEXT CHANGES

Chapter 3 in this Final EIR, Changes to the Draft EIR, identifies all changes made to the document by section. These text changes provide additional clarity in response to comments received on the Draft EIR, but do not change the significance of the conclusions presented in the Draft EIR.

1.6 RESPONSES TO COMMENTS

A list of public agencies and individuals commenting on the Draft EIR is included in Chapter 2 in this Final EIR. A total of 122 written comment letters were received along with oral comments received at the public hearings held before the Planning Commission on November 2, 2021 and November 30, 2021. Responses to comments are provided in Chapter 4 of this Final EIR. Each comment letter and each oral comment on the Draft EIR, provided at the public hearings before the Planning Commission, is numbered and presented with brackets indicating how the letter or oral comment has been divided into individual comments. Each comment is given a binomial with the number of the comment letter appearing first, followed by the comment number. For example, comments in Letter 1 are numbered 1-1, 1-2, 1-3, and so on. Immediately following the letter or Planning Commission comments are responses, each numbered to correspond to the bracketed comments. Comments received at the Planning Commission hearings are numbered as PC-1, PC-2, etc. As the subject matter of one topic may overlap between letters, the reader must occasionally refer to one or more responses to review all the information on a given subject. To assist the reader, cross-references to other comments and also Master Responses are provided. A number of comments received raised the same or similar comments; therefore, Master Responses based on specific issues of concern are provided in Chapter 4.

1.7 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) for the Proposed Project includes all of the mitigation measures required of the Project identified in the Draft EIR, as revised in Chapter 3 of this Final EIR. The MMRP is provided as a separate document.

If the City Council chooses to approve the Proposed Project or one of the alternatives described in the Draft EIR, the City Council will be required to adopt the MMRP at the same time it adopts its CEQA Findings, as required by Section 21081.6 of the Public Resources Code.

1.8 OVERVIEW OF THE PUBLIC PARTICIPATION AND REVIEW PROCESS

The City notified all responsible and trustee agencies and all known interested groups, organizations, and individuals that the Draft EIR was available for review. The following list of actions took place during the preparation, distribution, and review of the Draft EIR:

- The City filed a Notice of Completion (NOC) along with copies of the NOP stating the City's intention to prepare an EIR for the Proposed Project with the State Clearinghouse for the required 30-day public review period on March 6, 2018.
- A NOC and copies of the Draft EIR were filed with the State Clearinghouse on September 23, 2021 to start the required 45-day public review period (which was extended to 67 days). The City distributed a Notice of Availability (NOA) to interested groups, organizations, and individuals regarding the availability of the Draft EIR. A public notice was placed in the Napa Valley Register newspaper. A public hearing to take comments on the Draft EIR was held on November 2, 2021 and November 30, 2021.
- Copies of the Draft EIR were available for review on the City's website (https://www.cityofsthelena.org/planning/page/hunter-draft-eir); at the St. Helena library, and at the City's offices located at 1572 Railroad Avenue, St. Helena, CA 94574.

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CHAPTER 2
LIST OF AGENCIES/PERSONS COMMENTING

FEDERAL

There were no comments received from any federal agencies by the close of the comment review period (November 30, 2021).

STATE

There were no comments received from any state agencies by the close of the comment review period (November 30, 2021).

LOCAL

There were no comments received from any local agencies by the close of the comment review period (November 30, 2021).

ORGANIZATIONS

There were two comments received from local organizations; Napa Bicycle Coalition and Our Town St. Helena.

INDIVIDUALS

More than 120 comment letters were received from individuals and organizations.

Comments received from organizations and the public are listed in Table 2-1. Comments received from individuals are listed in alphabetical order. In some instances the same commenter submitted more than one letter. To differentiate between the letters, the date the letter was received is provided; however, there are numerous instances where letters from the same commenter are issued on the same day. The number of each letter reflects the order in which responses are provided in Chapter 4.

Table 2-1. List of Commenters

Letter Number	Commenter
Organizations	
1	Napa County Bicycle Coalition
2	Our Town St. Helena
Individuals	
3	Ron Amoroso (10/26/21)
4	Ron Amoroso (11/2/21)
5	Bette Antor

Table 2-1. List of Commenters

Letter Number	Commenter
6	Craig and Debra Austin
7	Katie and Jacob Avery
8	Trevor Barlow
9	Thomas and Margot Belt
10	Pierre Birebent
11	Earl and Trudy Bouligny
12	Karen and Kevin Bradley
13	Greg Brown
14	Ethan Brown
15	Andree Bryan
16	Bernerd Buckley (10/26/21)
17	Bernerd Buckley (10/26/21)
18	Bernerd Buckley (10/26/21)
19	Bernerd Buckley (11/2/21)
20	Bernerd Buckley (11/2/21)
21	Bernerd Buckley (11/29/21)
22	Jeff Burton
23	Lynda M. Burton
24	Calie Candia
25	Bert Casten
26	Deanna L. Caudill
27	Bob Childs and Nancy Carlson
28	Robb A. Cohen
29	Joseph Cole
30	Arlene and Richard Corsetti
31	Carroll and Ellen Cotten
32	Richard Crebs
33	Nicole and Scott Dale
34	Gayle Davies
35	Priscilla Dell
36	Nancy Dervin
37	Julie Dickson
38	Chris Echols

Table 2-1. List of Commenters

Letter Number	Commenter
39	Cindy and John Ford
40	Chris Fowler
41	Pat Friday (11/8/21)
42	Pat Friday (11/8/21)
43	Alan Galbraith
44	Dottie Gingerelli
45	Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri (no date)
46	Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri (11/2/21)
47	Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri (11/2/21)
48	Elizabeth Green (11/3/21)
49	Elizabeth Green (11/5/21)
50	Rodney and Elizabeth Green (11/1/21)
51	Rodney and Elizabeth Green (11/3/21)
52	Gale Greisen
53	Henry Gundling (10/12/21)
54	Henry Gundling (10/12/21)
55	Kathleen Guneratne
56	Mariam Hansen
57	Donna Hardy
58	Carla Holm
59	Suzanne James
60	Frank and Tracy Jonelis
61	Sherri Kelly (10/27/21)
62	Sherri Kelly (11/3/21)
63	Patrick Kenealy
64	Susan Kenward
65	Grace D. Kistner (11/23/21)
66	Grace D. Kistner (11/29/21)
67	Pamela Koussa
68	Laurel Krsek
69	Gail Morgan Lane
70	Marina Lavagnino and Jenna Lavagnino
71	Lou Lavigne and Nancy Rothman
72	Sandra Lowry

Table 2-1. List of Commenters

Letter Number	Commenter
73	Isobel Luria (11/2/21)
74	Isobel Luria (11/3/21)
75	Isobel Luria (11/8/21)
76	Isobel Luria (11/30/21)
77	Norm Manzer
78	Beth and David Marks
79	Tracy McBride
80	Sandra McCorkle
81	Kathleen McCreedy
82	Joe McGrath
83	John Milliken (11/2/21)
84	John Milliken (11/30/21)
85	Michael Mills
86	Doris Mosler
87	Janell Myhre
88	Timothy Nieman
89	Indrajit Obeysekere
90	Gabriel and Tishna Pastrama
91	Joann Patton
92	Kathleen Paulus
93	Leslie R. Perry (11/1/21), Perry, Johnson, Anderson, Miller & Moskowitz
94	Leslie R. Perry (11/8/21), Perry, Johnson, Anderson, Miller & Moskowitz
95	Vivian Pirchner
96	Charles Pniower
97	Patrick and Laura Pohlen
98	Charlotte Powell
99	Lisa Redmon
100	Greg Reynolds
101	Ringenberg (via email, unsigned letter)
102	Jim Ritchie
103	Vivian L. Robison
104	Linda Rose
105	A. Venezia Rouas
106	Laurence Schlatter
107	John Schoof
108	Cathy Small

Table 2-1. List of Commenters

Letter Number	Commenter
109	Patricia Stephens
110	Carolyn Troyan
111	Vineyard Valley Managing Partners (signed by residents)
112	Vineyard Valley Residents
113	Maria Villegas (10/29/21)
114	Maria Villegas (11/29/21)
115	Maria Villegas (no date)
116	Lori Vrabel
117	Ree Whitford
118	Mark and Jeanette Willey
119	Connie Wilson
120	Terry Wood
121	Angela M. Zivkovic, PhD
Comment Letter Received after the Close of the Comment Period	
122	Daniel Hale

PLANNING COMMISSION HEARING – NOVEMBER 2, 2021 AND NOVEMBER 30, 2021

The transcript and responses to the November 2, 2021 and November 30, 2021 Planning Commission hearings are provided immediately following the comment letters and responses. There were a total of 12 speakers at the November 2, 2021 hearing and 6 speakers at the November 30, 2021 hearing. Table 2-2 lists all the commenters.

Table 2-2. List of Commenters – Planning Commission Hearings

Planning Commission Commenters – November 2, 2021
Angela Zivkovic
Greg Reynolds, Managing Partner Vineyard Valley
Maria Villegas
Patrick Band, Napa County Bicycle Coalition
Tracy McBride
Elizabeth Alderman
Nancy Dervin
Marina Lavagnino
Ben Alderman
Randy Hussong
Michael Mills
Maureen Levandowsky
Planning Commission Commenters – November 30, 2021
Tracy McBride
Marina Lavagnino

Anya Courtney
Greg Reynolds, Managing Partner Vineyard Valley
Jenna Lavagnino
Angela Zivkovic

CHAPTER 3
CHANGES TO THE DRAFT EIR

INTRODUCTION

This chapter presents minor corrections, additions, and revisions made to the Draft EIR initiated by the Lead Agency (City of St. Helena), reviewing agencies, the public, and/or consultants based on their review. New text is indicated in underline and text to be deleted is reflected by ~~strike through~~, unless otherwise noted in the introduction preceding the text change. Text changes are presented in the section and page order in which they appear in the Draft EIR.

It should be noted that the changes represent minor clarifications/amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

Executive Summary

The last sentence on page ES-17 is revised to read:

> Of the alternatives evaluated above, Alternative ~~2~~ 3, the Park/Open Space Preserve alternative is the environmentally superior alternative.

Chapter 1, Introduction

The text on page 1-6 is revised to read:

> **Alternative 3: Park/Open Space Preserve Alternative.** This alternative includes a 1-acre park that would preserve a majority of the on-site wetlands and would include the same number of units as the Proposed Project, including the affordable housing units and accessory dwelling units.

The text on page 1-7 under section 1.5 Organization of the Draft EIR is revised to read:

> ~~**Chapter 2,**~~ **Executive Summary—**Summarizes the elements of the Proposed Project and the environmental impacts that could result from implementation of the Proposed Project and provides a table that lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts before and after mitigation.

Section 3.3, Air Quality

The text in the last paragraph on page 3.3-2 is revised to read:

The greatest precipitation in the City occurs from ~~October~~ November to ~~April~~ March, during which time the rainfall averages 2~~–7~~ 5 inches per month. The average annual precipitation is ~~34.61~~26.09 inches. The City has a mild climate with an annual average temperature of ~~75~~63 degrees Fahrenheit (°F). The coolest months of the year are typically ~~December~~ November through February, with an annual average low of ~~36~~ 41°F. The warmest months are typically June through September, with an annual average high of ~~89~~ 90 °F. Prevailing wind direction in the ~~City~~ Project area (as measured at the ~~St. Helena~~ Napa station, approximately ~~0.42~~ 22 miles ~~southwest~~ southeast of the Project site) is from the west (~~WRCC 2016~~ NOAA 2022)[1].

Section 3.6, Geology and Soils

The third sentence of the first paragraph on page 3.6-12 is revised to read:

The 1906 earthquake was of a substantial magnitude and the 1969 earthquake~~s were~~ was ~~of~~ a more moderate magnitude though with an earthquake epicenter~~s~~ located near downtown Santa Rosa."

Section 3.9, Hydrology and Water Quality

The fourth sentence of the last paragraph on page 4.9-7 is deleted:

~~During such a flood, the style of flooding onsite would be slow and gradual, since the high velocity flows remain limited to the regulatory floodway~~.

The first paragraph on page 3.9-12 is revised to read:

Furthermore, in highly unlikely catastrophic situations (< a 0.5% annual chance) where the levee may be overtopped or in a 200+ year flood event, Proposed Project residents would have ample warning to evacuate prior to flooding. ~~Based on a comparison of the base flood elevation to proposed lot pad elevations, flooding of Proposed Project lots would range between 0 and 5 feet in depth, with the deepest flooding occurring on the northern part of the Project site. This level of flooding would leave upper floors or residences available for refuge. Because of this, the risks from a 200+ year flood and/or levee failure are limited to property damage rather than risk of life.~~ As previously indicated, this would be an impact of the pre-existing environment on the Proposed Project rather than the Proposed Project's impact on the environment.

The first sentence in the second paragraph on page 3.9-19 is revised to read:

[1] NOAA (National Oceanic and Atmospheric Administration). 2022. "NOWData: NOAA Online Weather Data." Accessed September 2022.https://www.weather.gov/wrh/Climate?wfo=mtr.

> Given the proximity and similar setting, groundwater levels are expected to be similar or possibly shallower beneath the Project site. According to the findings of the well capacity and sustainability report (Appendix L), the existing agricultural well on the Project site (proposed to be located in Parcel B on the tentative subdivision map) was constructed in 1976 to a depth of 410 feet bgs; with a current (2022) yield of 350 gallons per minute (gpm).

The second sentence in the last paragraph on page 3.9-43 is revised to read:

> Therefore, the proposed pumping from this well is ~~not~~ likely to have ~~any~~ a less direct effect on surface flow in the Napa River than if it directly pumped from the alluvial deposits.

Section 3.12, Public Services and Recreation

The last paragraph on page 3.12-5 is revised to read[2]:

> Additionally, an approximately 0.6 miles pedestrian path/trail is located parallel to the gravel levee maintenance road located adjacent to the northern boundary of the Project site, as shown in Figure 3.12-1. The levee maintenance road is not a City recreation trail but is used informally as a trail by local residents.

Section 3.13, Utilities and Service Systems

The last sentence in the third complete paragraph on page 3.13-2 is revised to read:

> It is assumed these vineyards have previously been irrigated by the on-site well, which constitutes the only water use on site at present. However, since the well is ~~currently~~ not currently in operation it is likely that ~~if~~ the vineyard is not currently receiving artificial irrigation.

The last paragraph on page 3.13-3 is revised to read:

> In total, the City is authorized to divert and store 1~~3~~,800 acre-feet from Bell Canyon Reservoir each year, and directly divert 1 cubic foot per second between November 15 and April 15 (150 days) of each year~~. Of the City's total authorized amount, 2,000 acre-feet can only be diverted and stored between November 15 and April 15 of each year~~ (City of St. Helena 2010).

The last sentence at the top of page 3.13-8 is revised to read:

> There is an existing well on the Project site that is presently not in operation (see Section 3.9, Hydrology and Water Quality for more information on the existing well and groundwater resources).

The second sentence of the last paragraph on page 3.13-8 is revised to read:

[2] Figure 3.12-1 is included at the end of this chapter.

Water from the Bell Canyon Reservoir is treated by three licensed water treatment operators at the Louis Stralla Water Treatment Plant (WTP), located on Crystal Springs Road ~~in the~~ northeast~~ern part~~ of the City (City of St. Helena 2015a, 2019a).

The second sentence of page 3.13-26 is revised to read:

This translates to a wastewater generation rate of ~~19.88 acre-feet per year, or 0.018 MGD~~ 14,000 gallons per day (0.014 MGD) during average dry weather flows (ADWF) and 23,400 gallons per day (0.0234 MGD) during peak wet weather flows (~~Appendix J~~ Carollo 2022).

The second sentence of the second paragraph on page 3.13-29 is revised to read:

The Proposed Project is expected to generate approximately ~~0.018~~ 0.014 MGD of wastewater during ADWF and 0.0234 MGD during PWWF while in operation (Carollo 2022).

The third and fourth sentences of the fourth paragraph on page 3.13-32 are revised to read:

The Proposed Project is expected to generate approximately ~~0.018~~ 0.014 MGD of wastewater during ADWF and 0.0234 MGD during PWWF (Carollo 2022). As the WWTP currently treats an average flow of 0.384 MGD, the additional ~~0.018~~ 0.014 MGD combined with the current average flow of 0.384 MGD would not exceed the plant's permitted allowable ADWF effluent limit of 0.5 MGD, as specified under its NPDES permit (City of St. Helena 2016).

The second sentence of the second paragraph on page 3.13-36 is revised to read:

The Proposed Project would increase wastewater generation in the City by producing approximately ~~0.018~~ 0.014 MGD at buildout (Carollo 2022).

Section 3.13.6 References shall include the following additional reference:

Carollo Engineers, Incorporated (Carollo), 2022. Hunter Subdivision Hydraulic Modeling Analysis, June 24, 2022.

Section 3.14, Transportation and Circulation

The last sentence in the second paragraph on page 3.14-13 is revised to read:

Weekday service generally occurs every 45 minutes starting at 6:15 a.m. and ending at 10:45 p.m. Weekend service is provided every hour and is truncated during the morning and night periods. ~~Service is not provided on weekends or major holidays.~~

The first sentence in the fourth paragraph on page 3.14-13 is revised to read:

> The Napa Valley Wine Train also passes through the city; however, it is mainly used as a tourist attraction and not for commuting or passenger service ~~purposes~~. Stops are limited and occur on an irregular basis in the city.

Chapter 5, Alternatives

The title of Tables 5-2 and 5-3 on pages 5-10 and 5-11 are revised to read:

Table 5-2
Alternative 2: No Project/~~No Action~~ General Plan Alternative Projected Solid Waste Generation

Land Use	Generation Rate (tons/day/unit)	Waste Disposed (tons per day)
152 Single-family Residential Units	0.0033	0.502
	Total	**0.502**

Source: CalRecycle 2018.

Table 5-3
Alternative 2: No Project/~~No Action~~ General Plan Alternative Student Generation

Grades	Student Generation Rate (per total number of units)	Students Generated
K-2	0.058	8.816
3-5	0.080	12.16
6-8	0.088	13.38
9-12	0.088	15.84
	Total	**57**

Source: SHUSD 2010.

The second sentence in the second paragraph on page 5-11 under the ability of the No Project/General Plan Alternative to meet the Project objectives is revised to read:

> However, this alternative ~~would~~ may not achieve the Proposed Project objective of developing a variety of housing types, including multifamily housing and ADUs. ~~Housing would be less affordable to a range of incomes since development would be limited to single-family homes.~~

Table 5-7 starting on page 5-29 is revised to read:

3.14-6: Under Cumulative conditions, would the Proposed Project increase hazards due to a geometric design feature or incompatible use? This is considered a less than significant impact.	LS	NI	LS~~SU~~	LS~~SU~~	LS~~SU~~

Appendix K

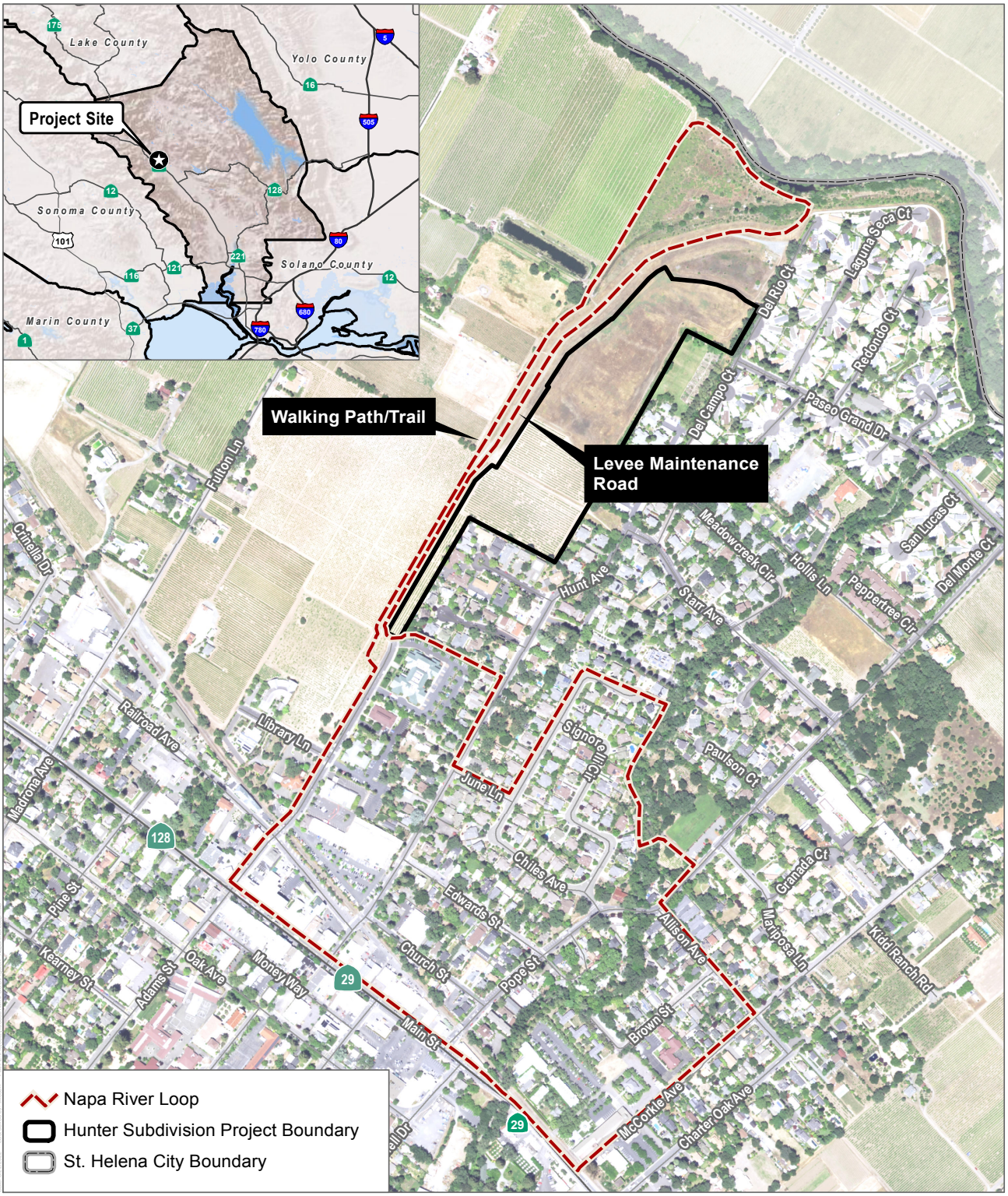
Table 7 of Appendix K, Traffic Impact Study, page 36, is revised to read:

Table 7
Existing plus Project Weekday Peak Hour Intersection Level of Service

Intersection	Control	Existing				Existing Plus Project				Delay Change		Impact?	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[1]	LOS [2]	Delay[1]	LOS [2]	Delay[1]	LOS [2]	Delay[1]	LOS [2]	AM	PM	AM	PM
1. Main Street/Fulton Lane – Madrona Avenue	signalized	13.0	B	11.2	B	13.2	B	11.4	B	0.2	0.2	no	no
2. Main Street/Adams Street	signalized	22.9	C	20.8	C	23.0	C	21.2	C	0.1	0.4	no	no
3. Main Street/Hunt Avenue	unsignalized	16.9	C	18.3	C	17.6	C	18.9	C	0.7	0.6	no	no
4. Main Street/Pope Street – Mitchell Drive	signalized	**148.7**	**F**	**110.1**	**F**	**153.5**	**F**	**121.5**	**F**	4.8	**11.4**	no	**yes**
5. Railroad Avenue/Fulton Lane	unsignalized	10.1	B	10.4	B	10.2	B	10.5	B	0.1	0.1	no	no
6. Railroad Avenue/Adams Street	unsignalized	10.0	A	11.2	B	10.2	B	11.4	B	0.2	0.2	no	no
7. Railroad Avenue/Hunt Avenue	unsignalized	14.4	B	14.0	B	14.8	B	14.5	B	0.4	0.5	no	no
8. Library Lane/Adams Street	unsignalized	10.6	B	12.4	B	10.8	B	12.8	B	0.2	0.4	no	no
9. Starr Avenue/Hunt Avenue	unsignalized	7.6	A	7.4	A	7.7	A	7.6	A	0.1	0.2	no	no
10. Starr Avenue/Pope Street	unsignalized	15.4	C	14.1	B	16.2	C	14.8	B	0.8	0.7	no	no
11. Paseo Grand Drive – College Avenue/Pope Street	unsignalized	**27.1**	**D**	15.5	C	**28.2**	**D**	15.9	C	1.1	0.4	no	no
12. Silverado Trail/Pope Street	unsignalized	18.0	C	27.3	D	18.5	~~E~~C	28.6	D	0.5	1.3	no	no
13. Silverado Trail/Howell Mountain Road	unsignalized	14.5	B	17.7	C	14.6	B	17.9	C	0.1	0.2	no	no

Notes:
[1] Average seconds per vehicle
[2] Level of Service (LOS)
BOLD value indicates unsatisfactory LOS

The change to Table 7 corrects a typographical error. The Existing Plus Project AM Peak Hour for Intersection #12 should read Level of Service (LOS) C, and not E. The analysis in the Traffic Impact Study (TIS) is based on the delay of 18.5 seconds, which corresponds to LOS C. Therefore, the project does not result in an unacceptable level of service for the AM peak hour at Intersection No. 12, and this correction does not change the results of the TIS. It should be noted that the TIS was prepared to meet City development requirements and not for purposes of the California Environmental Quality Act (CEQA). LOS is not considered an indicator of a significant environmental effect under CEQA.



SOURCE: Napa County 2015, Bing 2022

DUDEK

0 305 610 Feet

FIGURE 3.12-1

Napa River Loop

Hunter Subdivision Project

CHAPTER 4
COMMENTS AND RESPONSES

This chapter contains the comment letters received in response to the Draft EIR during the public comment period (September 23 through November 30, 2021), as well as the transcripts from the November 2 and November 30, 2021, Planning Commission hearings on the Draft EIR. A list of all commenters is provided in Chapter 2. Each comment letter or Planning Commission comment is numbered, each comment is bracketed, and responses are provided to each comment. To assist the reader, a brief summary of the comment has been provided; however, it is only a summary and does not repeat the comment verbatim. Please refer back to the letter for the specific comment.

Master Responses have been provided to respond to the same or similar comments raised in numerous comment letters addressing the following issues:

- Emergency evacuation (Master Response 1),
- Availability of adequate water supply and compliance with the City's water neutral requirements (Master Response 2),
- Stability of the Napa River levee and flooding concerns (Master Response 3), and
- Adequacy of the City's wastewater conveyance capacity (Master Response 4) are provided on the following pages.

The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the Draft EIR where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project unrelated to its environmental impacts) are noted for the record. Where text changes in the Draft EIR are warranted based on comments received, updated project information, or information provided by City of St. Helena staff, those changes are noted in the response to comment, and are listed in Chapter 3 of this Final EIR.

Any changes to the analysis contained in the Draft EIR represent only minor clarifications/ amplifications and do not constitute significant new information. In accordance with CEQA Guidelines, Section 15088.5, recirculation of the Draft EIR is not required.

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MASTER RESPONSE 1: EMERGENCY EVACUATION

Numerous comments were raised regarding emergency evacuation, specifically for residents of the adjacent Vineyard Valley Mobile Home Park (Vineyard Valley). Concerns included the addition of vehicles from the Proposed Project and the potential to hinder evacuation of residents in the area, including in the Vineyard Valley development during an emergency. Commentors asked whether this impact was considered and expressed concern about potential adverse impacts to public safety.

Roads that would provide emergency access near the Project site include Pope Street, Hunt Avenue, Starr Avenue, Adams Street, and Silverado Trail as well as the existing levee maintenance road that borders the northwest boundary of the Project site and the adjacent City detention basin. The Vineyard Valley development currently has only one access to enter/exit the development from Pope Street. Emergency access is provided via the maintenance road adjacent to the northern boundary.

On August 3, 2021, the St. Helena Police Department in conjunction with the St. Helena Fire Department conducted a practice emergency evacuation drill of Vineyard Valley residents. The emergency simulated a major incident, such as a fire, where the residents of Vineyard Valley would be asked to leave in a moment's notice in their vehicles. Residents evacuated in approximately 25 to 30 minutes. The attached “After Action Report,” dated Sept 20, 2021, provides additional detail on the evacuation drill.

Based on the results of the evacuation drill, the St. Helena Police Department has concluded that any additional traffic from the Proposed Project would not significantly impact the ability of Vineyard Valley residents to safely evacuate the development in the event of an emergency. The Police Department also concluded that the proposed extension of Starr Avenue to Adams Street will help facilitate future evacuations by providing additional roadway capacity and additional routing options for emergency traffic (J.Tharp September 2021)[1]. If, for some reason, the levee maintenance road is closed residents of Vineyard Valley would exit using the access onto Pope Street.

Another concern with regard to the Proposed Project’s potential impact on emergency evaluation concerned construction activities and their potential to block access to the levee maintenance road in the event of an emergency. Construction equipment would be staged on the Project site and would not be allowed to to park or be stored on or block access to the maintenance road. Access to the maintenance road would be maintained during all construction activities, even during construction of the extension of Adams Street, to ensure adequate emergency access would be available. All construction trucks and equipment would access the site from either Starr Avenue or Adams Street. No construction vehicles would be permitted on the levee maintenance road.

Emergency access and public safety is evaluated in the Draft EIR in Sections 3.8, Hazards and Hazardous Materials, 3.12, Public Services and Recreation and 3.14, Transportation and

[1] City of St. Helena Police Department, After Action Report, Lt. Justin Tharp, September 20, 2021.

Circulation. The St. Helena Fire Department has reviewed the proposed Tentative Subdivision Map and has not identified any issues with the Project's proposed emergency access.

As discussed in Section 3.8, Hazards and Hazardous Materials, Napa County, in coordination with other jurisdictions including the City, has prepared a Draft 2020 Multi-Jurisdictional Hazard Mitigation Plan Update, which has not yet been adopted (DEIR p. 3.8-11). The plan covers each of the major natural hazards that pose risks to County infrastructure and residents and includes:

- Focusing resources on the greatest risks and vulnerabilities,
- Building partnerships by involving citizens, organizations, and businesses,
- Increasing education and awareness of threats and hazards, as well as their risks,
- Communicating priorities to state and federal officials, and
- Aligning risk reduction with other community objectives.

The potential for the Project to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan is evaluated under Impact 3.8-3 on page 3.8-20 of the Draft EIR. As noted in the discussion, the Project includes three points of access -- the extension of Starr Avenue, Adams Street, and emergency vehicle access via the levee maintenance road-- to facilitate the ingress and egress of emergency response vehicles, including the City and County Fire Department's apparatus, Project residents, and Vineyard Valley residents. The emergency vehicle access onto the maintenance road would be designed with bollards or a fence that would be kept locked. In the event of an emergency requiring evacuation, police or fire personnel/vehicles would have access to remove the bollards/unlock the gate through a locked box (e.g., knox box) to enable access to the site and as a third egress option for Project residents to evacuate. The Project has been designed to ensure all streets and roads are adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide multiple points of emergency ingress and egress to ensure a safe evacuation in the event of an emergency.

The ability of the City's police and fire services to protect future Project homes and residents is addressed in Section 3.12, Public Services and Recreation. As discussed, the Project site would be served by the City's police and fire departments located at 1480 Main Street, approximately 0.2 miles from the site. Development of the Project site would increase the demand for fire protection and emergency services; however, as discussed on page 3.12-14, the Project is required to comply with Chapter 15.36 of the City's Municipal Code and the State Building Code, which requires installation of approved automatic sprinkler systems in all single-family and multi-family buildings. The Project would be developed consistent with 1993 General Plan Policy 8.5.6 and 2019 General Plan Policy PS4.D, which requires new development to meet the minimum fire flow rates specified by the City's Fire Code. In addition, as mentioned above all streets and roads are designed to be adequate in terms of width, turning radius, and grade to facilitate access by City firefighting apparatus, and to provide emergency ingress and egress. The site and construction plans for the proposed single family homes and the multi-family development on Lot 52 would be subject to plan review by the City's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included.

Section 3.14, Transportation and Circulation also addresses adequate emergency access under Impact 3.14-4 on page 3.14-51. The analysis reiterates what has previously been mentioned: the Project includes two primary access points, Starr Avenue and Adams Street as well as a

separate emergency vehicle access. In the event of an emergency there would be three roadways that would enable vehicles to safely enter/exit the Project site and all streets and roads would be designed to facilitate access by City firefighting apparatus, and to provide alternative emergency ingress and egress.

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MASTER RESPONSE 2: ST. HELENA WATER SUPPLY AND WATER NEUTRAL POLICY FOR DEVELOPMENT

Numerous commenters have questioned the ability of the City of St. Helena (City) to meet the water demands of the Hunter Subdivision project (Proposed Project or Project), the viability of relying on the City's Water Neutral Policy, how the effects of climate change and current drought conditions are considered, and whether implications of the outcome of the City's Water Audit lawsuit should be included in the analysis. The following responds to these concerns.

Water Demand

The Draft EIR addresses the City's water supply and availability in Section 3.13, Utilities and Service Systems. The City currently sources its water supply from Bell Canyon Reservoir, extracted groundwater from the Stonebridge Well Complex, and water purchased from the City of Napa (DEIR pp. 3.13-2 and 3). Bell Canyon Reservoir has a physical storage capacity of 2,400 acre-feet (AF) with a safe yield estimated at between 500-1,100 AF. Existing water rights permit the City to divert up to 1,800 AF between November 15 and April 15 of each year. The City owns and operates two active groundwater wells, collectively known as the Stonebridge Well Complex, that have a combined capacity of approximately 595 gallons per minute (gpm). These wells have the potential to provide 960 acre-feet of potable water per year if both are operated continuously (DEIR p. 3.13-7). However, the City limits groundwater production to a long-term average not to exceed 450 AF per year. As stated on page 3.9-19 of the Draft EIR, groundwater pumping at these two wells has averaged 350 AFY between 2006 and 2019, with a range of 182 acre-feet in 2012 to a high of 526 acre-feet in 2013. This period captures multi-year drought conditions and according to monitoring data of a groundwater monitoring well located approximately 600 feet from the Project site, the groundwater level trend has been stable through this period (DEIR p. 3.9-42).

The City of Napa is contracted to provide the City with a minimum of 600 AF of water with an option for an additional 200 AF when feasible (DEIR p. 4.13-4). In the 2019 watershed report for Bell Canyon, the reservoir provided 43.6% of the City's water supply, the City of Napa supplied 42.5%, and the Stonebridge Wells the remaining 13.8% in 2018. However, the share of water from each source can change from year to year as the three sources of water supply allow for flexibility in order to adapt to changing conditions.

As shown in Table 3.13-1 on page 3.13-3 of the Draft EIR, the City's water deliveries have varied from year to year but overall have shown a decreasing trend from 1,882 AF in 2013 to 1,629 AF in 2020. The City's Safe Yield Committee determined that the potable water system can provide a total supply of up to 1,950 AF per year as a sustainable rate on a long-term basis (DEIR p. 3.13-11). This safe yield value recognizes that drought periods will be experienced and that circumstances may require the implementation of water restrictions (Phase III) during a dry year, but that these restrictions do not represent "undue hardships" (St. Helena Municipal Code Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 Water Shortage Emergencies, Drought and Water Conservation*)*. The Committee considered "undue hardship" to be Phase IV or V restrictions, or three or more consecutive months of Phase III restrictions. The domestic water demand for the Project at 19.88 AF per year is based on the Water Neutral Report prepared for the Project (Appendix J). The Water Neutral Report also estimates

outdoor/landscaping uses, which would be served by the onsite agricultural well and is therefore separate from the analysis of domestic water use.

The Water Neutral Report conservatively assumes the Proposed Project will include eight persons per single family residence which is much higher than the City's average of 2.45 persons per household (DEIR p. 3.13-24),[2] and therefore likely overstates actual water use. However, assuming this conservative estimate of 19.88 AF of domestic water use per year, the additional demand of the Project in combination with the recent total deliveries (1,629 + 19.88 = 1,648.88 AF) would still be far below the City's adopted safe yield of 1,950. Therefore, the new water demand associated with the Proposed Project could be met by the City's potable water system even without the water offset requirements of the City's Water Neutral Policy, as discussed further below.

Water Neutral Policy

The City's Water Neutral Policy included in Chapter 13.12, Water Use and Efficiency, of the Municipal Code requires that new development be water-neutral (from the City-delivered water system) through any combination of on-site water conservation measures and/or off-site retrofitting and/or use of well water (DEIR p. 3.13-21). For the Proposed Project, there are no opportunities for on-site water conservation since the site has no current water demand. Therefore, the Project must demonstrate water neutrality through off-site retrofitting and system improvements which must be demonstrated in a quantitative water analysis of the Project.

Per Municipal Code Section 13.12.050, the developer is responsible for identifying residential or nonresidential properties eligible for retrofitting and verify to the Department of Public Works that the required number of retrofits have been completed prior to the issuance of a certificate of occupancy. Appendix J of the Draft EIR includes the quantitative water analysis completed for the Project as required by the Water Neutral Policy. The report concluded that the offset of the Project water demands could be met through financial assistance with existing system improvements (e.g., payment of required fee) commensurate with the cost of retrofitting existing residences with low flow fixtures, but also includes a variety of suggested methods to increase domestic water supply or reduce demand to offset the Project's domestic water use.

As detailed in the Water Neutral Policy, the water demand of the Project would equate to retrofitting 333 residences with water conservation fixtures, but this is not to say that the policy can only be met through residential retrofits. For example, the Water Neutral Report referenced the potential for assisting the City in repairs to the transmission line between the City and Rutherford where a substantial amount of water is lost due to the current condition of the old pipeline. Reducing water losses is a gain for the supply system.

As part of the Project's proposed Conditions of Approval it states that no building permits may be issued until the developer has identified and implemented offsite improvements that reduce water loss from the public water distribution system and/or identify and implement offsite improvements that result in a net increase in potable water availability equivalent to 19.8 AFY,

[2] Exterior water demand (landscape irrigation, etc.) would be met by an onsite well and is not included in this estimate, which includes interior domestic uses only.

or a combination of these. Therefore, with adherence to this regulatory requirement and the required Conditions of Approval, occupancy of the Proposed Project would not occur until the City's Public Works Department has verified completion of these retrofits or system improvements that meet the City's construction standards to offset the Project's new water demand. As a result, the City would be able to meet the Project's water supply demand and result in a less-than-significant impact.

Climate Change

One of the effects of global climate change is an increase in variabilities of weather patterns and an increased probability to experience periods of drought. While climate change can create drier years in which precipitation is below annual averages, it can also result in very wet years.

The City recognizes that future periods of drought conditions are likely and may become more frequent. The establishment of the safe yield of 1,950 AF per year completed by the City's Safe Yield Committee provides the parameters for long term management of water supply resources. As discussed above, the new water demands for the Proposed Project would be offset through adherence to the City's Water Neutral Policy where retrofits or system improvements equivalent to the proposed new demands would be in place prior to issuance of building permits for development of the Project.

However, as mentioned above, the City may still be forced to enact water conservation and/or water rationing requirements during drought periods because of strains on the system that would be due to the effects of climate change. The City's Municipal Code (Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 Water Shortage Emergencies, Drought and Water Conservation) establishes the thresholds and requirements for water emergency phases, water conservation, and regulations that can adapt to changing conditions and enact emergency requirements for users as appropriate for long term water supply planning.

Therefore, the Draft EIR does consider the effects of climate change in Project impacts related to water supplies. The EIR determines that the Project can be adequately served based on existing water supplies. Compliance with the City's Water Neutral Policy would further ensure that the Project does not adversely effect the City's future water supplies.

Water Audit Lawsuit

Several comments have referenced the Water Audit lawsuit and have suggested that the outcome of that lawsuit should be considered as part of the analysis of water supply and hydrologic resources related to the Project. The lawsuit claims the City has violated its public trust in its management of water resources. The plaintiffs seek to increase monitoring and oversight of groundwater and surface water resources. The lawsuit claims poor documentation of water uses, including pumping at the City's Stonebridge Well Complex, and water deliveries to vineyards, wineries, and the Meadowood resort.

The Water Audit's complaint does not ask for changes to existing water uses. Instead, it seeks an injunction to stop the City from issuing new groundwater well drilling permits until enough

information is available to make informed water allocation decisions. The Proposed Project does not include a requirement for a new groundwater well drilling permit and so a potential injunction on new well drilling permits would not affect the Project.

As discussed on page 3.9-15 of the Draft EIR, there is an inactive groundwater well located in the northern portion of the Project site that may have been historically used to provide construction water for the City's Flood Protection Project and was used in the past for agricultural irrigation. The Project proposes to use this well for the irrigation of public and private landscaping and all other outdoor uses, which are estimated to require 17.16 AF per year (DEIR p. 3.13-32).

Regarding concerns about hydraulic conductivity with the adjacent Napa River, a site-specific well capacity and sustainability report was prepared that included conducting a 24-hour pump test as part of evaluating the hydrogeologic characteristics of the existing on-site well (Appendix L of the Draft EIR). The pump test ran at a rate of 40 gpm, which was nearly four times as high as the proposed rate for the Project (10.6 gpm). The study concluded that the onsite well draws from an aquifer with high transmissivity (i.e., ability of the water bearing unit to transmit water flow) and that the proposed pumping would not likely adversely affect either local water levels or Napa River flows. The onsite well is screened from 80 feet below ground surface (bgs) to 410 feet bgs, which is within the deeper volcanic aquifer and below the Napa Valley alluvium (the shallow water bearing unit that is considered hydraulically connected to the Napa River).

Therefore, whereas the Water Audit lawsuit is primarily concerned with the management of water resources that would affect the water levels of the Napa River, the well capacity and sustainability report determined that the pumping of the onsite well to supply the Project's public and private landscaping would not adversely affect flows in the Napa River. The analysis under Impact 3.9-2 starting on page 3.9-40 of the Draft EIR provides a detailed analysis of potential impacts associated with using the on-site well.

Considering that the Project does not require obtaining a well drilling permit and that a site-specific hydrogeologic study has demonstrated that the Project would not adversely affect water levels, the outcome of the Water Audit lawsuit would not alter the findings of the Draft EIR.

CEQA requires that the determination of significant effects be based on substantial evidence that include facts, reasonable assumptions predicated upon facts, expert opinion supported by facts, and not speculation (CEQA Guidelines § 21082.2). Therefore, the final outcome of the Water Audit lawsuit may have ramifications for the City in its long-term management of water resources but would not affect the analysis or impact significance determinations that were made in the Draft EIR.

MASTER RESPONSE 3: NAPA RIVER FLOOD PROTECTION/LEVEE

The Hunter Subdivision Project (Project or Proposed Project) was in the past in a flood zone but is now protected from a 200-year flood event (equivalent to less than a 0.5% annual chance) by the St. Helena Comprehensive Flood Protection Project (Flood Protection Project). The Project does not have an impact on the Flood Protection Project's effectiveness or on flood hazards for surrounding communities, either directly or indirectly.

Many commenters have raised concerns that the Project would put people and property at unreasonable risk if a major flood event overtops the levee[3] (i.e., greater than 200-year flood) and/or if the levee fails. These concerns generally revolve around the Project's perceived physical impacts on the levee; the levee's current condition, inspections, and maintenance; a perception that the project would increase existing flood risks for neighboring communities (e.g., Vineyard Valley and Hunt's Grove); confusion over levee certification/accreditation; and legal, liability, and insurance questions.

Comments that raised concerns about growth inducement (due to the levee reducing SFHAs in the City) are comments on the Flood Protection Project, not the Project.

As a general matter, the bulk of the comments received do not question the accuracy of the information contained in the Draft EIR or the adequacy of the analysis presented. Rather, they express differing opinions about levels of acceptable risk and a lack of trust in the design, construction, and maintenance of the Flood Protection Project. The Draft EIR includes a detailed description of the flood hazards present; the engineering, design, and maintenance of the Flood Protection Project; and the City's emergency management procedures in Section 3.9, Hydrology and Water Quality (Draft EIR pp. 3.9-6 through 3.9-13). This information was provided for reference purposes and addresses a majority of the comments received that relate to flooding and levee protection. The reason this information was included in the Environmental Setting section of Section 3.9 (Hydrology and Water Quality), rather than being addressed as an impact, is because impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review.[4]

Flood Risks

The Project does not have an impact on the levee's effectiveness or on flood hazards for surrounding communities, either directly or indirectly. California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369* held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents" but they must analyze hazards the project might risk exacerbating. For example, if a project proposes development on a site with existing subsurface hazards, then grading/development of the project may exacerbate the risk of those existing subsurface hazards.

[3] Note that references to the levee are inclusive of the floodwall component of the Flood Protection Project.

[4] "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (Ballona Wetlands Land Trust v. City of Los Angeles (2011) 201 Cal.App.4th 455, 473.)

Accordingly, the State Office of Planning and Research's 2018 revisions to the CEQA Guidelines—which the City uses as its CEQA thresholds of significance—removed reference to property damage, personal injury, or loss of life due to flooding or levee failure (i.e., pre-existing hazards) from Appendix G (included in the CEQA Guidelines).

Placement of the Project within an area protected from the 200-year flood does not substantially increase public exposure to flood risk, even though the risk is not zero. The Draft EIR acknowledges that there is residual risk to residents which is why the Federal Emergency Management Agency or FEMA encourages the purchase of optional flood insurance (i.e., FEMA preferred risk policy) (Draft EIR p. 3.9-8, first paragraph). The Project's Conditions of Approval require that prior to issuance of building permits, all future occupants will be provided information which describes the flood risk and notifies the buyer of the availability of low-cost Preferred Risk Policy flood insurance. Comments that address legal, liability, and/or insurance issues fall outside the scope of CEQA review, because they are not related to impacts of the project on the environment.

It is not the role of the Draft EIR to guarantee that there would be zero risk to life or property in the event of an extreme (i.e., greater than 200-year) or catastrophic flood event. The level of risk to the Project and its residents is reasonably and acceptably low due to the 200-year level of protection afforded by the Flood Protection Project. The description of flood emergency stages, preparedness, and response (Draft EIR pp. 3.9-11 and 3.9-12) remains accurate and indicates a reasonable plan for alerting and protecting residents from major flood events.

In the last paragraph on page 3.9-7, the Draft EIR speculates as to the style of flooding that would occur in the Project site based on its position outside of the regulatory floodway, if there were a levee overtopping event. The style of flooding would be dependent on the location, speed of water level rise, and levee response to an overtopping event. No portion of the Project site is located within the FEMA regulatory floodway. Therefore, the text on page 3.9-7 is revised to remove the reference to flooding being "slow and gradual." Please see Chapter 3, Changes to the Draft EIR for the revised text.

For the same reasons, the text on page 3.9-12 is also revised to remove the characterization of what could happen in the event of a flood. As previously indicated, this would be an impact of the pre-existing environment on the Proposed Project rather than the Proposed Project's impact on the environment. Please see Chapter 3, Changes to the Draft EIR for the revised text.

Clarification on Terminology/Concepts

Many commenters have expressed concern about the levee's design and construction, because it was not designed and built by the Army Corps of Engineers (ACOE) and is maintained by the City. As noted above, the Project does not have an impact on the levee's effectiveness or on flood hazards for surrounding communities, either directly or indirectly. California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369* held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents" but they must analyze hazards the project might risk exacerbating. Accordingly, comments

regarding existing structures, such as the levee, that will not be directly or indirectly impacted the Project, are outside the scope of CEQA review for this Project.

However, for strictly informational purposes the City provides the following: there are numerous non-federal levees throughout the United States that are safely built and maintained by local and/or state entities. The City of St. Helena Department of Public Works oversees inspection, maintenance and repairs of the levee, and has confirmed that the levee was designed and built by qualified contractors in accordance with ACOE engineering and safety standards (Draft EIR p. 3.9-8).

Levee certification is the process that deals specifically with the design and physical condition of the levee and is the responsibility of the levee owner or community in charge of the levee's operations and maintenance. Certification must be completed for the levee to be eligible for accreditation by FEMA. Certification consists of documentation, signed and sealed by a registered Professional Engineer, as defined in Chapter 44 of the Code of Federal Regulations (44 CFR), Section 65.2. By virtue of FEMA's approval of the City's application for a Letter of Map Revision (LOMR) and subsequent revision of the Flood Insurance Rate Map (FIRM), the levee is a FEMA-accredited levee system[5] that has undergone the certification process. While FEMA does not design, build, maintain, inspect, or certify levees, it uses the best available data about flood hazards and levee conditions to create FIRMs and Flood Risk Products (FRPs). These FIRMs and FRPs are tools that provide a more precise, up-to-date picture of the flood hazards facing levee-impacted areas, which is important given that the flood risks change over time.

The modern construction of the levee makes it more secure than other accredited levee systems that may have received accreditation decades ago, and the 200-year level of protection provides substantial additional protection against flooding that takes into consideration increased rainfall and runoff due to climate change.

Levee Condition and Maintenance/Inspections and City Detention Basin

Several concerns were raised that the levee has not been properly maintained and may be subject to reduced performance due to animal burrows, erosion, and/or pump malfunctions. As discussed below, these issues are outside the scope of CEQA review of the Project, because the Project does not physically infringe upon or otherwise affect the levee. (See *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369.)*

However, for strictly informational purposes, the City provides the following: the City employs qualified individuals to inspect the levee on a monthly basis to detect any potential issues and take action on them as they arise. For example, in the past issues were found with the operation/startup of the detention basin's pump and it will be repaired by a qualified contractor. Further, it is up to the professional judgement of the City's engineer as to when any animal burrows may compromise the levee's safety. Per the inspection reports, the City has an animal

[5] A FEMA-Accredited Levee System is levee system that FEMA has shown on a FIRM that is recognized as reducing the flood hazards posed by a 1-percent-annual-chance flood. This determination is based on the submittal of data and documentation as required by 44CFR§65.10 of the NFIP regulations. The area landward of an accredited levee system is shown as Zone X (shaded) on the FIRM except for areas of residual flooding, such as ponding areas, which are shown as Special Flood Hazard Area (SFHA).

burrow control program in place and conducts burrow control activities as needed. The City also makes its levee inspection reports and summary reports available online here: https://www.cityofsthelena.org/publicworks/page/flood-control-and-river-restoration-project.

Several commenters referred to erosion or runoff from the Project affecting the City's detention basin. These commenters are referred to Draft EIR pages 3.9-44 and 3.9-45, which explains that the detention basin was designed assuming the Project would consist of 70% impervious (developed) area, when in fact it would consist of about 58% impervious area. The estimate of the Project's impervious surface coverage was calculated based on design drawings of the Project. Accordingly, as discussed in the Draft EIR on page 3.9-45, the Project would not contribute increase flows or erosion to off-site properties because the detention basin has been adequately sized and designed.

Commenters also requested information on what funds were used to construct the levee (Flood Control Project), what funds the City uses for repair and maintenance of the levee, what funds would be available to repair homes in the event of a levee breach, would the City be held liable in the event of a levee breach, and is the City non-compliant with the terms of Measure A.[6] Concerns regarding the financing of the levee, ongoing repairs and maintenance, financing to address damages in the event of a catastrophic flood, and liability are outside the scope of CEQA review, because they are not related to impacts of the project on the environment. In addition, economic effects of a project are not considered significant effects on the environment unless the economic changes are connected to physical environmental effects (CEQA Guidelines Section 15131(a)).

Regarding the comment suggesting that the City could be non-compliant with the County's Measure A ordinance, it is assumed the commenter is referencing subsection G, which states "none of the projects are intended or designed to encourage population growth in the County." To clarify, the Project site has been designated and zoned for residential development since the City's 1975 General Plan. The City's Flood Protection Project was designed consistent with the intent of Measure A to provide flood protection to residents and businesses in the County. Development of this site with residential uses would not be considered encouraging new population growth in the City because this site has been planned for future development for over 45 years.

[6] Measure A is an ordinance of the Napa County Flood Protection and Watershed Improvement Authority that adopted by Napa County residents in 1998. It is used to finance the Napa River Flood Protection Project. Each City and Town in Napa County receives a portion of Measure A revenues to fund flood protection projects. Subsection G states "none of the projects are intended or designed to encourage population growth in the County."

MASTER RESPONSE 4: WASTEWATER CONVEYANCE CAPACITY

Numerous commenters raised concerns that the additional wastewater flows from the Hunter Subdivision project (Proposed Project or Project) would significantly exacerbate an existing capacity issue in the vicinity of the Vineyard Valley Mobile Home Park. The concerns include the issue of potential increased backflow incidents that affect the Vineyard Valley mobile home community. Commenters also questioned the assumptions that were used to estimate the flows that would originate from the Project, which they assert underestimate the wastewater flows that would occur with the Project. Capacity of the City's wastewater infrastructure to accommodate the Project was another concern raised in numerous comment letters. The following responds to these concerns.

Wastewater Flow Assessment

The Draft EIR addresses the Project's wastewater flows in Section 3.13, Utilities and Service Systems. To support the findings of the Draft EIR, a hydraulic modeling analysis was recently conducted by Carollo Engineers who prepared the citywide Integrated Utility Master Plan (Carollo 2022). As part of their work for the Master Plan, Carollo had constructed a hydraulic model of the entire wastewater collection system for the City. The purpose of the model was to identify capacity deficiencies within the collection system under both average dry weather flows (ADWF) and peak wet weather flow (PWWF) conditions.

To identify the potential effects of the Project, the model was updated by adding the wastewater loads that would be coming from the Project to the point of connection to the sewer system, which is at the intersection of Del Rio Court and Paseo Grand Drive, upstream of the Vineyard Valley Mobile Home Park. The evaluation criteria for the Project specific analysis was the same used for the Master Plan analysis and included conservative assumptions on surcharge depth[7], maximum flow depth, and peak dry weather flow conditions (i.e., no surcharging is allowed). A copy of the memorandum prepared by Carollo is included as Appendix A to this Final EIR.

For the Proposed Project, the estimated ADWF flows would be 14,000 gallons per day (gpd) (Carollo 2022). The ADWF flows are calculated by multiplying the projected increase in residential units by the residential density of 2.45 persons per household and multiplying the result by the per capita flowrate of 66 gallons per capita per day, consistent with standards used for the citywide Master Plan. The Project's PWWF flows were also calculated based on methods used for the Master Plan and were estimated at 23,400 gpd (Carollo 2022).

The findings of the hydraulic analysis determined that under existing conditions, there is sufficient capacity within the existing sewer system for all ADWF flows. However, under PWWF conditions, there is an existing deficiency upstream of what would be the Project's point of connection that is creating a bottleneck. This bottleneck was identified in the Master Plan as a future upgrade project (Project WWGM-6) that would replace approximately 450 feet of 15-inch and 18-inch diameter pipelines along Del Campo Court, between Hunt Avenue and Paseo

[7] Sewers are surcharged when the supply of water to be carried is greater than the capacity of the pipes to carry the flow. The surface of the wastewater in manholes rises above the top of the sewer pipe, and the sewer is under pressure or a head, rather than at atmospheric pressure.

Grand drive with a 21-inch diameter pipe. In addition, 910 feet of 18-inch diameter pipeline along Paseo Drive, between Del Campo Court and Los Robles Court, would also be upgraded to a 21-inch diameter pipeline under Project WWGM-6.

With the additional wastewater flows that would be attributed to the Proposed Project (14,000 gpd), the hydraulic modeling still shows that under ADWF there would be sufficient capacity within the existing sewer system. Under PWWF conditions, there are deficiencies in the capacity of the system, however the addition of the Project flows (23,400 gpd) did not identify any additional deficiencies that are not already present downstream of the Project site (Carollo 2022). The Project's contribution represents only 0.5% of the PWWF flows, which is not considered to substantively exacerbate this existing deficiency (Carollo 2022).

Once the proposed Master Plan improvements are completed, and the upsizing of the pipes between Hunt Avenue and Los Robles Court is completed, there would be adequate capacity for both PWWF including flows from the Project (Carollo 2022). The hydraulic analysis verified that the recommended improvements provided in the Master Plan would still be valid and appropriate as stated in the plan.

Therefore, according to the hydraulic modeling which is consistent with the modeling being used for the citywide Master Plan, there is adequate capacity for the Project's ADWF under existing conditions. During PWWF, the Project would not create any new deficiencies and would represent only a very small portion (0.5%) of total flows.

The City's Master Plan already identifies existing deficiencies and have targeted projects like WWGM-6, which would upsize segments of the system, to alleviate current constraints such that the impacts would be considered less than significant, consistent with the findings of the Draft EIR.

Wastewater Flow Estimates

As noted above, according to the recent hydraulic analysis of projected wastewater flows from the Proposed Project prepared by Carollo Engineers (see Appendix A to this Final EIR), the Project is estimated to contribute 14,000 gpd during ADWF and 23,400 gpd during PWWF conditions. The PWWF were based on what is known as "peak rain derived inflow and infiltration (RDII)" which were estimated for the Project based on a peak RDII rate of 500 gpd per acre, consistent with the Master Plan.

The Project's ADWF flows were calculated by multiplying the projected increase in residential units by the residential density of 2.45 persons per household and multiplying the result by a per capita flowrate of 66 gallons per capita per day, consistent with standards used for the citywide Master Plan.

The Draft EIR states that wastewater flows would be 18,000 gpd which is in between the ADWF and PWWF calculated in the memorandum. The figures and data from the memorandum are more recent and were calculated by the same engineering firm that is responsible for

developing the citywide Master Plan. As a result, the Draft EIR has been modified to be more consistent with the memorandum and the changes are provided in Chapter 3 of this Final EIR.

The updated estimates for the Project's flows under both ADWF and PWWF, do not change the findings of the Draft EIR's impact assessment, and the wastewater flows attributed to the Project would still be considered less than significant as concluded in the Draft EIR.

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Comment Letter 1

From: Patrick Band <pband@napabike.org>
Sent: Tuesday, November 2, 2021 6:59 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Carlotta Sainato <csainato@napabike.org>
Subject: [External] Request for DEIR Comment Period

Ms. DeRosa -

Following up on my comments at this evening's Planning Commission hearing on the Hunter Subdivision, the Napa County Bicycle Coalition would like to request a 30-day extension of the public comment period on the Draft Environmental Impact Report. 1-1

As we discussed, there are significant shortcomings in the DEIR regarding the various City-adopted Plans that are (and are not) considered, notably the failure to include the 2019 Countywide Bicycle Plan and associated bicycle and multi-use facilities. 1-2

Given the significance of this project for the City, we feel that an additional 30-days to provide sufficient time to more deeply consider and evaluate the DEIR is more than reasonable. 1-3

Thank you for your time and consideration.

--
Patrick Band
Executive Director, Napa County Bicycle Coalition
C: (707) 319-1538
www.NapaBike.org

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Response to Letter 1
Napa County Bicycle Coalition
Patrick Band, Executive Director
November 2, 2021

1-1 The comment is requesting a 30-day extension to the Draft EIR public review period.

The Draft EIR was released for the required 45-day public review period on September 23, 2021 through November 8, 2021. In response to numerous requests, the City extended the comment period through November 30, 2021 for a total of 67 days.

1-2 The comment asserts the Draft has numerous shortcomings but does not provide any substantial evidence as to the basis for this assertion with the exception of stating the Draft EIR failed to include the 2019 Countywide Bicycle Plan and associated bicycle and multi-use facilities.

Information on existing bicycle facilities, specifically Class II bike lanes on area roadways is provided starting on page 3.14-2 in Section 3.14, Transportation and Circulation of the Draft EIR. Existing pedestrian facilities is described on page 3.14-7 and provided on Figure 3.14-3. A discussion of existing bicycle facilities and the transit system in the area is described on page 3.14-8. Figure 3.14-4 provides a graphic of the existing bicycle network in the City of St. Helena. As noted on page 3.14-8 (when the analysis was drafted), “The Napa Valley Transportation Authority (NVTA) adopted the Countywide Bicycle Plan in October 2019, but the City has not yet adopted the plan.” Because the Countywide Bicycle Plan had not been adopted by the City it was not included under section 3.14.3, Regulatory Setting. In addition, a Condition of Approval has been included to require installation of bicycle facilities along the extension of Starr Avennue. The potential for the Project to adversely impact bicycle, pedestrian and transit facilities is addressed under Impact 3.14-1 starting on page 3.14-39.

1-3 The comment reiterates a request to extend the Draft EIR comment period an additional 30 days.

Please see Response to Comment 1-1 that addresses this concern.

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Comment Letter 2

Our Town St. Helena
It all begins at home.

TO: The City of St Helena Planning Commission
RE: Our Town St Helena Comments on Hunter Project

Many people in the community have inquired regarding Our Town St Helena's position on the Hunter Project. Our Town St Helena (OTSH) is a non-profit organization whose mission is to create and preserve housing that is affordable to the people vital to St Helena. The Hunter Project has been under discussion for the entire twelve years of our organization's existence. 2-1

In those 12 years, we have continually advocated for housing that benefits and serves our local community. In this time, we have seen this acute need broaden from housing for the lowest economic rung of our community - agricultural, service and winery workers - to now including the "Missing Middle "– families and professionals making up to $200,000 who cannot afford to purchase or rent a home here. This dramatic change is evident in the 400+ families who have left St Helena between 2000 and 2015 and not been replaced (City of St Helena 2018 Housing Study), and the 6% drop in population recorded in the 2020 census. It is also evident in the increased traffic congestion from commuters and service vehicles. 2-2

We understand this new Draft EIR is analyzing potential environmental impacts of the proposed project, and "housing" is not a specific part of that analysis, yet we feel compelled to comment on the project at this early stage in the process as follows:

1. **The Project is Not Consistent with the City's Basic Requirements for Owner-Occupied and Rental Affordable Units**

The City's Inclusionary Ordinance states that "affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction to market rate units in the same residential project." Further, "Affordable units shall be dispersed throughout the residential project, or, subject to approval of the planning commission, may be clustered within the residential project when this furthers affordable housing opportunities."

In the current Hunter plan, all of the affordable units are two-bedroom rentals while the market rate homes have 3+ bedrooms. The affordable units are isolated to one side of the property and even appear to have a separate entrance. We think that this configuration and siting are not compatible with the City's stated inclusionary basic requirements. We suggest that the City and community would be better served by a more integrated project. 2-3

2. The Project Does Not Serve the Needs of St Helena

The Draft EIR does not address this issue, but it is very important to the community. All new housing does not necessarily serve our community's housing needs. By our rough estimation, based on the size of lots and the cost of construction, the new market rate homes will be priced at or above $2,000,000 each. 2-4

Even with the admirable inclusion of 24 rental units and OTSH's projections that at least some (15%?) of the market-rate homes may be purchased as primary residences, we see little community benefit to St. Helena to building dozens of new second homes. In fact, the migration of primary homes to renovated second homes combined with ever emerging vacation rentals (e.g., Pacaso) is taking "affordable" inventory off the market faster than it can be funded and built. We have seen neighborhoods like Sylvaner and Signorelli, which were built as middle-class subdivisions, slowly slide out of workforce housing and into the multi-million dollar second home market. It would appear the Hunter Project could start out as a primarily second home neighborhood. 2-5 The 2020 US Census confirms that St. Helena does not have a large primary residence market for $2M+ homes. This is a project that makes sense from a developer's standpoint but does not benefit, and in fact could be detrimental to our community by placing even more demand on the services provided to the second homes by a commuting workforce. 2-6

3. Is There a Better Way?

In today's environment, the CEQA process provides somewhat standard mitigations to somewhat standard issues. There is no process to evaluate how the project fulfills the specific needs of the community. But our community IS our environment. If our City had a Housing Strategy, developers might try to design a project that could a) fill our needs and therefore, b) be supported by the community.

St Helena needs homeownership opportunities for families making up to 200K. We need townhomes, triplexes, and fourplexes, for sale and for rent, that are affordable to families making $80K and up. And, we need rental units for the people who are essential to the wine and hospitality industries which drive our economy – these are families making $30K to $80K. This is all workforce housing – housing affordable to the people making $30K to $200K who are integral to a functioning community, who participate in our City life and infrastructure, and enrich the lives and livelihoods of all who live here. Every day, St. Helena imports more and more of its workforce, leading to increased traffic and congestion. This IS an environmental impact. 2-7

Could there be ways to make the Hunter Project fulfill these needs? Maybe. But it will require the City to better define what we need and provide innovative incentives to make it happen, a developer that is willing to think outside the box and a community that is willing to increase density for new developments. 2-8

Respectfully Submitted by the OTSH Board of Directors
November 26, 2021

Response to Letter 2
Our Town St. Helena
Our Town St. Helena Board of Directors
November 26, 2021

2-1 The comment notes Our Town St. Helena (OTSH) is a non-profit organization focused on creating and preserving affordable housing and the Hunter project has been under discussion by OTSH for the past 12 years.

The comment is noted and forwarded to the decision-makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

2-2 The comment references the need to advocate for housing that benefits the community and notes the need for affordable housing has expanded to include a much broader range of incomes.

The comment is noted and forwarded to the decision-makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

2-3 The comment refers to the City's Inclusionary/In-Lieu Fee Requirements (Municipal Code Chapter 17.146) and questions if the proposed Project is consistent with the City's requirements.

As noted in the Draft EIR Project Description on pages 2-18 and 2-32, review of an Affordable Housing Agreement by the City Council will be a subsequent discretionary process and is not part of the Tentative Map being considered by the City at this time. A determination of consistency with the City's Inclusionary/In-Lieu Fee Requirements will be made at the time that subsequent Final Map application is submitted and reviewed.

2-4 The comment is addressing the proposed future cost of the houses.

The CEQA Guidelines do not require the fiscal or economic costs of a project to be evaluated. An EIR evaluates physical changes to the environment attributed to a project. (CEQA Guidelines, Section 15358, subd. (b) ["[e]ffects analyzed under CEQA must be related to a physical change"].) Physical changes result from land disturbance due to project construction and development of the overall project "footprint." In addition, physical changes can also include an increase in demand for services and/or increased traffic associated with generating a new population. However, economic considerations are not required to be analyzed or addressed. Therefore, the comment is noted and forwarded to the decision makers for their

consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

2-5 The comment offers an opinion that the affordable housing component would have little community benefit and that the Project homes may be purchased as second homes instead of primary residences.

The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

2-6 The comment indicates the Project could be detrimental to the community by increasing demand on city services by people that commute into the city to work.

The Draft EIR evaluated the increase in demand for public services assuming the Project would be fully occupied by full-time residences. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

2-7 The comment expresses a desire for the City to develop a housing strategy that meets the needs of the community and is supported by the community and addresses the need to provide workforce housing for a range of income brackets. The comment also notes that people commuting into the City to work create traffic and congestion.

The comment is noted and forwarded to the decision makers for their consideration. The commentor is also invited to review the Housing Element of the St. Helena General Plan, which addresses local housing needs and includes policies and actions the City will undertake to help meet these needs. The comment does not identify any specific areas where the the Draft EIR is inadequate; therefore, no further response is required.

2-8 The comment supports the City providing incentives to developers and increasing density for new development projects.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

Comment Letter 3

-----Original Message-----
From: Ron Amoroso <RJAmoroso@myastound.net>
Sent: Tuesday, October 26, 2021 3:52 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project EIR Comment

Hello:
My name is Ron Amoroso. I am the owner of 1365 Grove Court, St. Helena Ca. The following are my comments on the Draft EIR # 2108032014 (The Hunter Project).

For all the obvious reasons (It's a "Agricultural Area and the reason people (revenue) comes to the Napa Valley) as well as all those much better stated and substantiated in the documentary "Kiss The Ground", I would summarily "disagree" with, and suggest the Planning Department deny allowing this development to be allowed. That movie dramatically shows how plant life causes "Carbon Recapture" that not only reduces pollution, but also "reduces the existing" Co2 buildup that is causing the radical environmental changes we are experiences. Removing the existing acres of vineyards and replacing them with houses, buildings, and other hardscapes will "increase" the production of heat, reduce the production of Carbon recapture back into the soil through "photosynthesis" and reduce air quality as well as the likelihood of adequate rainfall going forward. Please spend a hour and watch this documentary to see how this project will negatively affect this area. Buying "open space somewhere else" as has been proposed by the developer is not going to eradicate the environmental effects on this area. Is that "open space" going to be "prime agricultural" land??
For these considerations, I vote NO on this development!! 3-1 3-2

There are two big "elephants" in the room regarding the immediate impact this proposed project will have directly on this area.

1- Flood potential/The levee/Related Township liabilities

2- Availability of potable water

1- Flood Threat/City/Taxpayer Liability:
The Levee was constructed by the City of St. Helena in an attempt to protect existing "Flood Plains" currently known as Vineyard Valley MHP and the Vineyard where the Hunter Project is being proposed. As such, this levee is only accredited by FEME to 100 year flood specs since it has only been "certified" by FEMA to the 100 year Flood. Currently, it is not "unusual" for those 100 Year Flood values to be surpassed so failure has been deemed by various "experts" as inevitable!! The levee was never inspected by or approved by the Army Core of Engineers or FEMA so the City of St. Helena (Me and all the other St. Helena Tax Payers) are responsible for the results of a breach of that levee. That responsibility, which has been accepted by the City of St. Helena, is one thing when it amounts to Farmland and a MHP, and totally another when it includes 87 new housing units occupied by ?? new residents!! Both in the form of physical bodily risk and financial risk. I am not ready to assume that additional risk so Mr. Hunter can generate a handsome financial gain. Mr. Hunter needs to provide the additional security (possibly a insurance bond) to cover the additional risks that will be incurred as a result of his development converting the existing, former flood plain, "ag-land" into residential housing land. 3-3 3-4

Another reason to vote NO on this development.

2- Water availability:

Adequate potable water availability has been a ongoing issue in St. Helena for the past 15 years that I know of. Not only are there no plans to make it any better, it is routinely getting worse due, in part, to Some of the environmental issues the Hunter Project will only worsen. How can the city of St. Helena approve the addition of 87 new residential units occupied by ?? how many new residents??? Replacing existing toilets with "water saver" toilets is a "clever" idea but also one that is NOT VERIFIABLE. So, where is all the additional water going to come from to support all the new residents who will occupy the 87 new residential units??

3-5

Again, another NO vote on this development.

I don't know if any one of these issues is a "underlying" negative issue against this development. Combined, however, they represent significant and overwhelming reasons to summarily and permanently deny this project to proceed.

3-6

Thank you,

Ron Amoroso

Response to Letter 3
Ron Amoroso
October 26, 2021

3-1 The comment references a movie “Kiss the Ground” that addresses carbon recapture to reduce CO_2. The comment goes on to state that removal of the onsite vineyards and developing homes will increase heat and reduce the recapture of carbon back into the soil through photosynthesis. Lastly, the comment asks if the purchase of open space elsewhere would be “prime agricultural land”.

The Draft EIR addresses climate change in Section 3.7, Greenhouse Gas Emissions. The Project proposes developing the 16.9-acre site, including approximately 6 acres in existing vineyards, with 87 residential units. As discussed in Chapter 2, Project Description, the proposed landscape plan includes planting approximately 185 trees, including scarlet maple (*Acer Rubrum*), Chinese pistache (*Pistacia Chinensis*) and tulip tree (*Liriodendron Tulipifera)*. Furthermore, an approximately one-acre portion of the existing vineyard within the project site would remain. The California Emissions Estimator Model (CalEEMod) includes carbon content values, which are based on Intergovernmental Panel on Climate Change (IPCC) reports, to estimate the loss of sequestered carbon (release of CO_2). Using the factor for “cropland,” the closest land use associated with the existing vineyards, removal of the vines would result in a rate of 6.2 MT CO_2/acre. Regarding carbon sequestration from the planting of a variety of tree species, the Project would result in a sequestration rate of 0.0354 MT CO_2/tree/year assuming growth over 20 years. Therefore, based on these considerations, the Project would result in an overall gain in sequestered carbon, reducing the Project’s GHG emissions presented in Table 3.7-6 of the Draft EIR.

As stated on page 3.2-2 in Section 3.2, Agriculture and Forestry Resources, the state’s Farmland Mapping and Monitoring Program (FMMP) categorizes the eastern portion of the Project site as Farmland of Local Importance (9.0 acres). The western portion of the Project site is predominantly designated as Prime Farmland (5.8 acres), with portions of Farmland of Statewide Importance (0.6 acres) and Urban and Built-Up Land (0.8 acres) in the westernmost area of the Project site. To assess Project impacts the California Land Evaluation and Site Assessment (LESA) Model was used. The model returned a Land Elevaluation or LE score of 35 and a Site Assessemnt or SA score of 13.8 for a total score of 48.8 (see DEIR pp. 3.2-9 – 3.2-10 and Appendix B). As shown in Table 3.2-3 on page 3.2-10, the loss of agricultural resources would be considered significant only if the individual LE and SA subscores are each greater than or equal to 20 points. Therefore, impacts associated with the removal of prime farmland and farmland of statewide importance were found to be less than significant.

If the applicant were to purchase undeveloped land there would be no requirement 5.8 acres would need to be Prime Farmland.

3-2 The commenter requests the City vote no on the Project.

The comment's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

3-3 The comment is addressing concerns regarding the levee and raises FEMA certification of the levee. The comment also notes levees can fail and alleges the levee has never been inspected or approved by FEMA or the Army Corps of Engineers and if the levee were to fail or be breached the City would be liable.

Please see Master Response 3 that addresses all concerns associated with the levee.

3-4 The comment is stating the Project applicant needs to provide additional security to cover any risks that may occur due to developing a former floodplain.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 that addresses concerns associated with the levee and flooding.

3-5 The comment i addresses the availability of water to supply the Project and questions the viability of retrofitting existing fixtures to offset the project's increase in water demand.

Please see Master Response 2 that addresses the issue of water supply.

3-6 The commenter does not support this Project and is recommending the Project not be approved.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 4

-----Original Message-----
From: Ron Amoroso <RJAmoroso@myastound.net>
Sent: Tuesday, November 2, 2021 12:50 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project EIR Comment

Hello:
My name is Ron Amoroso. I own the property at 1365 Grove Court in St. Helena and would like to offer a EIR comment regarding the Hunter Project proposal.

While it is a great idea to discuss the immediate and quite local environmental effects associated with removing almost 17 acres of vineyards in favor of multiple residential housing buildings and streets, we should also be considering the "overall" effects. 4-1

While it is very important and essential to stop or severely limit the continued pollution of our environment and atmosphere, we should also be looking at, considering, and implementing practices that will begin to "cleanse the existing atmospheric pollution. We should be practicing "Regenerative Agriculture" instead of removing it in place of more carbon producing elements such as those suggested in the creation of the Hunter Project. The existing Vineyards and other green/leafy plants have the effect of drawing down the existing carbon/C02 from the atmosphere and depositing it into the ground where it benefits further plant growth and cleanses the "overall" environment in the process. 4-2

Coupled with the reasons stated in a previous comment, please vote NO to the approval of the Hunter Project!!! 4-3

Thank you,

Ron Amoroso

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Response to Letter 4
Ron Amoroso
November 2, 2021

4-1 The comment indicates that the overall effects of the Project should be considered.

The Draft EIR prepared for the Project evaluates both the project-specific direct and indirect effects associated with construction and operation as well as the cumulative effects of conversion of the land from its existing undeveloped condition to a developed environment. The comment does not specify what overall effects the commentor believes were not addressed in the Draft EIR or why the analysis was inaccurate or inadequate. Therefore, no further response is required.

4-2 The comment refers to the practice of "regenerative agriculture" as a way to limit carbon and CO_2 from entering the atmosphere and to "cleanse" the environment.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 3-1.

4-3 The comment is requesting the City not approve the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

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Comment Letter 5

From: Bette Antor <bantor8@gmail.com>
Sent: Monday, November 29, 2021 5:56 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

I live in Vineyard Valley and am opposed to the Hunter Project.

My biggest opposition is that the Hunter Project would jeopardize the health and welfare of the residents of Vineyard Valley. 5-1

We would be subjected to a greater chance of flooding as the Hunter property would turn open space to high-density building and paving. 5-2

Also, water is already at a premium and that capacity would be extremely stretched. St. Helena does not have enough water currently for its residents. 5-3

The gate at the north end of VV is currently used by us as an emergency exit. The construction would block that exit. That would leave us with only one way out, Pope Street. The traffic jam would be enormous. In case of the next fire emergency and evacuation (and experts say there will be a "next time"), this could be a matter of life and death for VV residents. 5-4

There are also concerns about water and sewer being hooked up to VV's utility lines on Paseo Grande, our main street. We don't have the capacity to accommodate said utilities. 5-5

The construction would go on for years. Vineyard Valley would bear the brunt of all the noise, dirt, dust and commotion. 5-6

Many of us enjoy the open space as a place to walk, walk our dogs and bicycle. It makes for a healthier lifestyle as most of us at VV are senior citizens. Continuing to access our town's open space is good for our health. I personally walk every day from VV to the Library and back. Open spaces are good for a small town like St. Helena. 5-7

I strongly oppose the Hunter Project and look forward to your response. 5-8

Bette Antor
415 690 0516
Bantor8@gmail.com

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Response to Letter 5
Bette Antor
November 29, 2021

5-1 The commenter states she lives in the adjacent Vineyard Valley mobile home park and is opposed to the Project because it would affect the health and welfare of the residents of Vineyard Valley.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate or how the Project would affect the health and welfare of Vineyard Valley residents; therefore, no further response is required.

5-2 The comment states that there would be a greater chance of flooding if the Project site would be converted from undeveloped land to "high-density building and paving".

Conversion of the site from undeveloped to developed would not increase flood risks to the adjacent Vineyard Valley residents. Please see Master Response 3, which addresses concerns associated with flooding.

The use of the term "high density" may reflect the commentor's opinion. However, based on the proposed residential density of 5.1 units per acres, the proposed development would be "medium density" as defined in the General Plan, not "high density" as the term is used in the General Plan.

5-3 The comment suggests that the City does not have adequate water supplies to serve current City residents.

Please see Master Response 2 that addresses water availability to serve the Project in addition to existing City residences and businesses.

5-4 The comment states that Project construction would block the emergency evacuation access for Vineyard Valley residents along the existing levee maintenance road resulting in an increase in traffic that could be a "life or death" situation for Vineyard Valley residents.

Project construction activities would not be allowed to block access to the levee maintenance road, as explained in Master Response 1. Access to the levee maintenance road would be maintained during all construction activities and in the event of an emergency access would be available. All construction trucks and equipment would access the site from either Starr Avenue or Adams Street. No truck access would be permitted on the levee maintenance road. Please see Master Response 1 that addresses emergency evacuation concerns for Vineyard Valley residents.

5-5 The comment raises concerns that the Project would tie into the City's existing water and sewer lines that also serve Vineyard Valley and that adequate capacity is not available in the existing water and sewer infrastructure to serve the Project.

The ability of the City's existing water and wastewater infrastructure to serve the Project is addressed in the Draft EIR in Section 3.13, Utilities and Service Systems. An existing 10-foot wide public water line easement containing an active 12-inch water line bisects the north/northeast portion of the Project site. This easement is proposed to be abandoned as part of the Project and the water line relocated within the site. The Project would tie into this new water line with a looped 8-inch water main that would serve all the residences.

Wastewater flows from the western portion of the Project site are proposed to drain into an existing public manhole at the corner of Starr Avenue and Hunt Avenue via new 8-inch sewer pipes. The area east of Starr Avenue, lower in elevation, is proposed to drain east through the Project site via new 8-inch sewer pipes within a public easement and into an existing public manhole in the Vineyard Valley Mobile Home Park. All new sewer mains and lines are sized to accommodate Project flows, per City standards. Please see also Master Response 4 that provides more details regarding the Project's wastewater infrastructure and the ability of the City to convey and treat the Project's wastewater.

5-6 The comment states Vineyard Valley would be affected by noise, dirt, and dust associated with Project construction.

As described in the Draft EIR in Chapter 2, Project Description, the Project applicant is only requesting approval of a Tentative Subdivision Map at this time. If the Tentative Subdivision Map is approved, the Project applicant would need approval from the City on an Affordable Housing Agreement; Design Review; Final Subdivision Map; and a Use Permit to construct the multi-family units before any grading or construction could begin.

If the Tentative Subdivision Map is approved and the applicant seeks and obtains all other required approvals, the first phase of construction would require site clearing, grading, and trenching for utilities followed by construction of the roadways and residences. For the purposes of the EIR it is assumed construction would occur over a 6+ year period, with the exception of the multi-family units, which the applicant proposes to build within a year of approval of all remaining required discretionary requirements (listed above). The secondary impacts of construction activities resulting in noise, dirt and dust are addressed in Section 3.3, Air Quality and Section 3.11, Noise and Vibration of the Draft EIR.

5-7 The comment notes that access to open space is good for peoples' health and well-being and for the City of St. Helena.

The Project site is not publicly-owned and is therefore not a public open space for the local community to enjoy. The commenter's general comments regarding the value of open space is noted and forwarded to the decision makers for their

consideration. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate; therefore, no further response is required. Please see Chapter 3, Changes to the Draft EIR for a copy of the trails map. As shown in the map existing trails will still allow access to the Napa River.

5-8 The commenter is stating opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate; therefore, no further response is required.

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Comment Letter 6

From: Debbie Austin <debraaaustin@comcast.net>
Sent: Tuesday, November 2, 2021 8:55 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Proposed Hunter Project

Planning Commission,

It is hard for us to understand how anyone in Saint Helena would be in favor of the Hunter Project. In Vineyard Valley we have seniors who need assistance in an emergency and we are concerned with the congestion of traffic and how it would effect us in an emergency situation. 6-1

Beyond that and even worse is our current situation regarding the drought. We've already cut back severely, with no end in sight. The city clearly does not have enough of a water supply available to allow for the housing project. 6-2

We have not spoken to one person in Saint Helena who is in favor of the Hunter Project. 6-3

Craig and Debra Austin

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Response to Letter 6
Craig and Debra Austin
November 2, 2021

6-1 The comment states that they oppose the Project due to potential traffic congestion and emergency access.

The commenters' opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, in response to the comment's concern related to traffic congestion impacts on emergency access, please see Master Response 1 for further information on emergency access and evacuation.

6-2 The comment raises a concern that the City does not have a sufficient water supply to support the Project.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. In response to the commenter's concern related to the City's water supply, please see Master Response 2 that addresses water supply.

6-3 The commenters state an opinion that no one in the City supports the Project.

The commenters' opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 7

From: Katie Avery <mrskatieavery@gmail.com>
Sent: Tuesday, November 30, 2021 10:15 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Jacob Avery <jacobavery@gmail.com>
Subject: [External] Hunter Development EIR Resident Comments

Maya,

My husband and I live at 715 Hunt Ave and vehemently disagree that the Hunter Subdivision Project is what Saint Helena needs. We are not opposed to development of this property, but we are opposed to this particular project as it is currently planned. 7-1

The first glaring issue is that the total units will have a significant impact on our water supply. Based on 3.13-2, the finding that it would be a less-than-significant impact is incomprehensible when current residents are not allowed to water their lawns and are being fined thousands of dollars for going over their allotment of water. We do not have enough water in our city for our current residents. The EIR asks whether the proposed project would require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities. The report says there is a less-than-significant impact. How on earth can this be a realistic conclusion? We would need expanded capacity and more water storage if we were to add a total of 87 units and over 325 new residents. The building department is requiring all new projects meet water neutrality requirements, but the idea that minimal upgrades like replacing toilets and fixtures in other houses with more water saving options is somehow going to offset the water usage of 87+ full new homes/units is nowhere near a realistic projection. 7-2

Further, this water neutrality is based on 2.45 people per unit for medium/higher density residential land uses (City of St. Helena 2013, an outdated study almost a decade ago). According to the EIR, using this factor, the 87 units in the applicant's development proposal (including ADUs) would generate 213 new residents. That is a woeful underestimate that is nowhere near a real life projection. We live in this neighborhood and know that a more reasonable estimate is 2 people minimum per BEDROOM. Even if you do estimate only 1 person per bedroom, you would have 204 people in the market rate homes, 22 people in the 1 bedroom ADU's (assuming 2 people per ADU), and then an additional 25 income restricted workforce housing units (currently at 2 bedrooms and would likely have 4 people minimum in each unit (100 people). That means a total of 326 new residents, a conservative estimate, which is still 35% higher than what the EIR reports. 7-3

More realistically, with 87 new units (51 being 3/4 bedrooms (416 ppl), 25 income restricted, workforce housing units, and 11 ADU's with the rest being 2 bedroom units (140 ppl), there are likely 556 people going to be living in this neighborhood, which is nearly triple what the EIR report estimates. At the very least, we demand that the report considers what this number of new residents will mean to our community instead of the implausibly low numbers in their inaccurate estimates. We need to make sure that any EIR will report on the realistic estimations of the maximum number of people that could potentially live in this development and focus on the impact on services such as water, electric, fire, traffic etc of that many new residents, cars, and traffic, and not made up numbers to help the developer's case. 7-4

Additionally, a highly important, but rarely discussed consequence of this project is that it is projected to take more than 7 years to complete. That is 7 years of construction dust, noise, increased traffic, large trucks, and more which will significantly diminish the quality of life in our neighborhood. In the report, it is asked whether in the proposed project, in addition to cumulative development in the City, increase traffic noise that exceeds the City's noise standards. The report says that the project's contribution would not be 7-5

considerable. We completely disagree. With 7 years of construction, the increase in traffic, noise, and dust/debris will be much higher than the standards in which we live currently. 7-5 Cont.

Further, the report seems to downplay the adverse affect on scenic views around Saint Helena. We have very little green space currently and this property allows many residents to take advantage of nature and the view of the vineyards, forests, mountains, creeks, mustard grass and wildflowers. These will be torn out if the project moves forward and turned into concrete, asphalt, buildings and chemically treated lawns. 7-6

In conclusion, there are a number of inaccurate estimates throughout this EIR that make it difficult to truly understand the real life impacts of this project to the city of Saint Helena and its residents. Not only will it destroy a beautiful green space used daily by residents, we will also have 7 years of big rigs, dust, noise, traffic, water runoff, and ground disturbance that could affect our homes nearby. All of this said, the most dramatic miscalculation is the underestimation of water usage and number of people that will be living in each unit. 7-7

We strongly urge the city of Saint Helena to NOT allow this development to go forward as currently proposed. 7-8

Katie and Jacob Avery

Response to Letter 7
Katie and Jacob Avery
November 30, 2021

7-1 The comment states general opposition to this type of Project type in this location.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. As noted in the Draft EIR on page 2-12 in Chapter 2, Project Description, the Project site has been designated for residential development since the 1975 General Plan and is currently designated for Medium Density Residential in the City's recently adopted General Plan Update 2040.

7-2 The comment states that the commenter and other City residents have undergone water saving measures and have been subject to fines for water use. The comment brings up concerns related to the City's water supply and its ability to serve the Project. Specifically, the comment argues that expanded capacity and additional water storage are needed to serve the Project and that water efficiency requirements for plumbing and bathroom fixtures per the building code are not adequate to meet the City's water neutrality requirements.

Please see Master Response 2 that addresses the City's ability to supply water to the Project and also addresses concerns regarding the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

7-3 The comment questions if the City's person per household (PPH) rate of 2.45 is outdated and is an underestimation; the comment suggests that the Project will create a population increase of 326 new occupants. The comment disputes that the PPH rate and estimates Project occupancy should be higher based on anecdotal evidence.

Population changes alone, do not, in and of themselves, constitute a physical effect on the environment. (CEQA Guidelines, Section 15126.2, subd. (d) [CEQA does not assume that "growth in any area is necessarily beneficial, detrimental, or of little significance to the environment"].) The population estimate cited in the Draft EIR is based on the City's PPH rate used for planning purposes and has little bearing, if any, on the evaluation of physical environmental effects. The projection of the number of people a project would generate is only an estimate and has limited utility because environmental impacts are primarily evaluated using a different metric based on the specific issue being evaluated.

The City's rate of 2.45 PPH for determining population is a blended rate used by the City to determine increases in population per unit for medium/higher density residential land uses. This PPH rate is also consistent with the City's 2040 General Plan EIR population assumptions (see Draft EIR p. ES-4).

Other rates are used to evaluate impacts for different purposes. For example, as stated on page 3.13-24 of the Draft EIR, a Water Neutral Report was prepared for the Project that assumes a higher PPH rate, as compared to the City's PPH, to ensure a conservative calculation of water demand. It is not uncommon for an EIR to include different assumptions depending on the issue area to be evaluated.

7-4 The comment states that the Project would result in more new residents than what is analyzed in the EIR. The comment requests that the EIR evaluate impacts related to utilities, public services, and traffic based on higher population estimates.

Please see Response to Comment 7-3. Physical impacts associated with an increase in population are evaluated by analyzing increased demand for services. The Draft EIR properly evaluated the increase in demand for each potentially impacted resource based on industry standard demand rates provided either by the City or the service provider based on the specific land use to analyze potential environmental impacts caused by the Project.

For the purposes of public services analysis, Section 3.12 of the Draft EIR uses a household size of 2.45 PPH, which as discussed above is consistent with the City's 2040 General Plan EIR population assumptions.

For the purposes of traffic and transportation analysis, Section 3.14 of the Draft EIR does not rely on a population growth estimate, but rather daily trip rates according to the types of residential land use proposed by the Project.

7-5 This comment notes the commentor's concern over the Project's construction timeline. Specifically, the commenter disputes that, because of the anticipated length of the construction timeline, effects related to dust, noise, and traffic would be greater to current residents over time; the commenter also argues that standards for these environmental considerations will be made more stringent as construction progresses.

As described in the Draft EIR in Chapter 2, Project Description, buildout of the Project would occur based on market conditions and timeliness of obtaining future approvals and construction permits. At this time the Project is only requesting approval of the Tentative Subdivision Map which does not include the issuance of construction permits. As noted in the Project Description, while the timeline of future construction is not finalized, the Draft EIR conservatively relies on a 6+ year construction period for analysis purposes. The associated air quality, noise and traffic impacts associated with short-term construction activities on both adjacent residences as well as phases of the Project are evaluated in the respective sections.

7-6 The comment states concern about the Project's aesthetic impact on scenic views around St. Helena. The comment also states the Project will have a negative impact on open space in the community and generally result in undesirable aesthetic impacts.

The Project's impacts on views and change in visual character of the Project site is addressed in Section 3.1 of the Draft EIR, Aesthetics/Visual Resources. The analysis

in Section 3.1 reviews Project compliance with the City's General Plan, Zoning Ordinance, and Design Review requirements and also provides visual simulations of the Proposed Project to illustrate how development of the Project would change views of the Project site. As noted in Chapter 2, Project Description, if the Project is approved the City would require additional subsequent discretionary approvals, including Design Review.

Based on the analysis in the Draft EIR, all Aesthetic impacts would be less than significant with the exception of an increase in lighting that would result in a significant impact. Implementation of Mitigation Measure AES-1, which requires lighting design guidelines be developed for the Project to minimize glare and light spillover would reduce that impact to less than significant.

The commenter's opinion that the Project would result in undesirable impacts is noted and forwarded to the decision makers for their consideration.

7-7 The comment summarizes other comments described above (see comments 7-2 through 7-6), involving open space, the proposed construction timeline, and estimations related to population growth.

Please see Responses to Comments 7-2 through 7-6.

7-8 The comment expresses general opposition to the Project as currently proposed.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 8

From: Trevor Barlow <trevor.barlow@gmail.com>
Sent: Saturday, November 6, 2021 1:45 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

This is application must NOT be approved and MUST be denied. Three major issues (there are many more, traffic, water and tax bases. This project effectively could cause loss of life for Vineyard Valley residents and block their emergency exit in case of fire or earthquakes. This would be a murderous proposition is this project is allowed to move forward. The City then must be held responsible for any loss of life involved. Water: we are in a drought - this project must be stopped immediately if St Helena has any chance of weathering this water shortage. It's not enough to say that this drought will pass because we've been in it for 20 years. It would be irresponsible to allow this due to the water situation alone. The taxes gained would not even cover the added expenses to the city so why would you even consider putting more fiscal problems on our city? 8-1 8-2 8-3

THIS IS A TERRIBLE AND UNRESPONSIBLE PROJECT - DO NOT MOVE FORWARD. 8-4

Trevor Barlow
14 Los Robles Ct
St. Helena, CA 94574

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Response to Letter 8
Trevor Barlow
November 6, 2021

8-1 The comment states general opposition to the Project and asks that the Project be denied.

The comment's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

8-2 The comment raises concerns related to emergency evacuation and access in the event of a fire or earthquake.

Please see Master Response 1 that addresses concerns associated with emergency evacuation.

8-3 The comment raises concerns regarding the City's water supply and Project's tax revenue generation. The commenter is concerned that the Project will worsen current drought conditions and that tax revenue generated by the Project would not cover future City expenses.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, in response to the comment's concern related to the City's water supply, please see Master Response 2.

8-4 The comment states general opposition to the Project and asks that the Project be denied.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 9

October 28, 2021
Ms. Maya Derosa,
St. Helena Planning and Building Director

Dear Ms. Derosa,

My wife and I are deeply opposed to the Hunter Subdivision Project primarily because the City of St. Helena has an inadequate water supply during dry and critically dry rainfall years. Since 2018, St. Helena has experienced three critically dry rainfall events. If this project is approved, it will no doubt create an even greater hardship for the city's current water customers during drought periods. 9-1

St. Helena has delayed undertaking several important capital improvements projects (CIPs) for its water enterprise over the last ten years. Two years ago, St. Helena conducted a master water plan which identified 60 million dollars in needed CIPs. Until these improvements are completed, the Hunter Project's 87 additional housing units will likely over burden St. Helena's current water enterprise. 9-2

Currently, there is no plan to increase St. Helena's limited water supply other than to build a new sewage treatment plant having the ability to provide tertiary water for landscaping. Unfortunately, the construction of the treatment plant is years away from completion and the installation of a city-wide tertiary pipe system is a decade away, and at best, a "pipe dream". 9-3

Our opposition also stems from the fact that much of the data and information used in the 2021 Hunter Subdivision Project Draft EIR has been taken from past St. Helena General Plans extending back to 1993. Climate change has become a major concern during the last several years and none of the data from the City's past General Plans have given global warming the serious attention it currently requires. 9-4

In October of 2020, St. Helena imposed a 43% reduction in water use for its residential customers. This required compliance with a 65 gallon/day/occupant water allotment that resulted in fines and penalties exceeding several million dollars. The ensuing year is currently predicted to be another lower-than-normal rainfall year which may result in St. Helena imposing even stricter water restrictions in the future. 9-5

In the last two years, St. Helena is the only city among five cities in the Napa Valley that has imposed mandatory water allotments on its residential and commercial water customers. American Canyon, Napa, Yountville, and Calistoga have all relied upon "voluntarily compliance" with each city's water restrictions. This is indicative that St. Helena currently has an inadequate water supply during one or more critically dry rainfall years. The Hunter Subdivision Project Draft EIR reads the subdivision will require 20-acre feet/year of municipal water to serve the proposed 87 new residences. The simple fact is, St. Helena currently does not have enough water to sustainably support its current citizens, let alone the number of new residents the project will add to our city. 9-6

The Hunter Subdivision Project Draft EIR reads there is a pre-existing inoperable agricultural water well near the Hunter property. The Draft also reads the project is reliant on the reconstruction of that "inoperable agricultural water well". There are sections in the Draft that make it unclear where the exact location of this inoperable water well is located? In one section, the Draft reads the existing well is "near" the Hunter Subdivision property. In another section, the Draft refers to the water well's location being adjacent to proposed Lot 19. The exact location of the existing agricultural well needs better disclosure because if the existing well does not exist on the Hunter Property, it would be in noncompliance with the city's municipal code to drill a new water well for residential or commercial purposes when the existing inoperable agricultural well was originally intended for agricultural use. (S.H. Municipal Code Section 13.16.080 B.)

9-7

Section 13.16.080(A) of the city's municipal code reads: "Wells shall not be drilled, nor the water produced therefrom used for residential, commercial or industrial land use activities except that replacement well(s) for residential, commercial and/or industrial land uses may be established for well(s) which existed and were in active use prior to the effective date of this chapter; *provided that no net increase in water production results from the replacement well(s)*". It should be noted St. Helena does not maintain historical records of water production from past water wells. Consequently, this provision of the city's municipal code cannot be complied with.

9-8

The Hunter Subdivision Project Draft EIR reads that it is reliant on sharing St. Helena's municipal Stone Bridge water wells. Currently, St. Helena is being sued by Water Audit California contending the city is over-drawing water from its wells and contributing to the seasonal loss of surface flows that adversely impact Napa River's endangered fisheries and aquatic life. The Stone Bridge water wells are located very close to the Napa River and the proposed redevelopment of the Hunter Subdivision's "inoperable" agricultural water well is also very close to the Napa River. If the inoperable well is reactivated, it could potentially add to the further loss of surface flows in the Napa River.

9-9

Additionally, the outcome of the Water Audit Lawsuit may very well limit or even terminate the amount of water St. Helena can pump from its Stone Bridge wells. The presumption of sharing St. Helena municipal water in the Draft Hunter EIR may not be possible after the conclusion of the lawsuit primarily because of the well's impact on California's Public Trust Doctrine and endangered species.

9-10

The Draft EIR for the Hunter Subdivision Project significantly underestimates the amount of municipal water the subdivision will require. This is because the writers of EIRs employ California's Green Building Guidelines (CGBG) to project interior water use. As an example, California's Green Building Guidelines were used to project St. Helena's recent Hunt Street Affordable Housing Project. The guidelines projected the five dwelling units with four occupants per dwelling would require 25 gallons per day per occupant. Currently, under Phase 2 water rationing, St. Helena is being challenged to achieve compliance with residential water customers limiting their water use to 65

9-11

gallons per day per occupant. What is more important, when St. Helena approves new construction using CGMG, there is no routine follow-up by the city to ensure the occupants remain in compliance with the amount of water initially approved for the project. In the long run, this can lead to a greater demand for the city's water than what was originally approved for the development. This issue is further exacerbated because St. Helena's policy treats individual water consumption as proprietary and thereby conceals the information from the public. 9-11 Cont. 9-12

To comply with St. Helena's water neutrality agreement, the developers of the Hunter Project propose to contribute $596,808 in in-lieu fees to retrofit 333 existing households with water saving toilets, shower heads and faucets. The developer claims this will make up for the additional municipal water the Hunter Project will require. The City of St. Helena has experienced several critically dry rainfall years during the last decade at a time when most households have already installed low flow appliances. This leads one to question: *How long it will take to retrofit 333 existing homes in St. Helena? Or, if there are even 333 existing households left in St. Helena needing retrofitting?* 9-13

The bottom line is "Water Neutrality" is an example of bogus terminology. It implies a development will not use more water than was projected in the proposed permit application. Without routine municipal enforcement of the water neutral ordinance's, the term falls significantly short of accomplishing its intended purpose. 9-14

Lastly, the Hunter Subdivision Project is proposed to take place in a flood zone where water damage is possible during a higher-than-normal rainfall year. If the project is ultimately approved by St. Helena's City Council, a condition of the approval should include complete indemnification for the City of St. Helena for any future losses that may occur to the Hunter Subdivision Project due to future flooding. 9-15

Respectfully submitted,

Thomas and Margot Belt
1520 Hillview Place,
St. Helena CA 94574

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Response to Letter 9
Thomas and Margot Belt
October 28, 2021

9-1 The comment expresses opposition to the Project. The commenter asserts a lack of available water to serve the Project and existing water customers.

The commenter's opposition to the Project is noted and forwarded to the decision makers for their consideration. Regarding available water supplies to serve the Project, please see Master Response 2 that addresses the ability of the City to serve the Project as well as existing water customers.

9-2 The comment is referencing the City's Capital Improvement Projects specific to water projects to be undertaken by the City and states that absent these improvements the City will not be able to supply the Project's water needs.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, the comment is noted and forwarded to the decision makers for their consideration. No further response is required; however, please see Master Response 2 that addresses City water infrastructure projects.

9-3 The comment notes that the City has plans to build a new sewage treatment plant to provide tertiary treated water for landscaping, but completion of this project is "years away."

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, the comment is noted and forwarded to the decision makers for their consideration. No further response is required; however, please see Master Response 2 that addresses water supply.

9-4 The comment clarifies opposition to the Project is due to reliance on information from past general plans and expressed concern that the Draft EIR does not address climate change.

The Draft EIR explains on page 2-12 in Chapter 2, Project Description that the Project site was designated for residential development starting in the 1975 General Plan, as Medium Density Residential (MDR) in the 1993 General Plan and is designated MDR in the City's recently adopted General Plan Update 2040. Because the Project's Tentative Subdivision Map application was first submitted in September 2010 and deemed complete by the City in 2011, this EIR is required to reference the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project, since this version of the plan was in effect in 2011. This EIR also evaluates consistency with the City's current General Plan (adopted 2019) for informational and consistency purposes.

It is important to note that the EIR only references applicable goals and policies from the 1993 General Plan. The analysis of Project impacts is based on current technical reports, planning documents, and applicable federal, state and local requirements and laws aimed at addressing pre-and post-development impacts. In addition, changes to the existing environmental condition are also evaluated to determine potential Project impacts.

The effects of climate change are evaluated in Section 3.7, Greenhouse Gases and the analysis references current state and local plans and not the 1993 General Plan (which does not address climate change). As noted in the section, greenhouse gas (GHG) emissions are evaluated on a cumulative level because it is not possible to evaluate GHG impacts on an individual project basis. Global climate change is inherently a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. The Draft EIR addresses the Project's contribution to GHGs which is a leading factor contributing to global climate change.

9-5 The comment is referring to requirements the City imposed in 2020 to conserve water for residential uses and notes the City may impose even stricter water restrictions in the future.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 that addresses the City's ability to provide water to serve the Project as well as existing City residences.

9-6 The comment notes that the City of St. Helena is the only jurisdiction that has imposed mandatory water conservation within Napa County and infers this is because the City does not have adequate water supplies during critically dry years. The comment goes on to state the City does not have adequate water to serve its current residents or the Project.

Please see Master Response 2 that addresses the ability of the City to provide water to serve the Project as well as existing City residences.

9-7 The comment asks where the agricultural water well is located on the Project site, stating that if a well does not exist, a new well could not be drilled for residential or commercial use.

The location of the existing well is described on page 2-2 in Chapter 2, Project Description and also shown as Parcel B on the proposed Tentative Map. The location of the existing well is also noted on page 3.9-19 in Section 3.9, Hydrology and Water Quality and on page 3.13-1 in Section 3.13, Utilities and Service Systems. The Project does not include drilling a new well.

9-8 The comment is citing sections of the City's Municipal Code that address requirements for drilling a new well in the City.

The Project is not proposing to drill a new well to serve the water needs of new residential units. The Project is proposing to use the existing agricultural well to irrigate the Project's public and private landscaping. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

9-9 The comment notes water to serve the Project would come, in part, from the City's Stone Bridge Complex groundwater wells which is currently being litigated by Water Audit California. The comment goes on to state if the existing onsite well is reactivated to serve the Project it could add to further loss of water in the Napa River.

The Project's onsite well would draw from the deeper volcanic aquifer, below the Napa Valley alluvium, which is not considered hydraulically connected to the Napa River (see Appendix L of the Draft EIR). Therefore, the proposed pumping from this well is not likely to have any direct effect on surface flow in Napa River. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

9-10 The comment ssuggests that the outcome of the Water Audit litigation could limit the amount of water the City receives from the Stonebridge Complex wells because of potential impacts from the well's (assuming the commenter is referring the Stonebridge Complex wells) on protected species.

The comment is speculating what the outcome of the Water Audit litigation could be on the City and the Project. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

9-11 The comment expresses an opinion that the Project's water demand is significantly underestimated because the analysis relied on compliance with the State's Green Building Guidelines or CalGreen.

The City requires all new development projects to comply with its Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code that establishes the process to follow to quantify the amount of water a project would require and how this increase in demand would be offset. Because all new development in the state is required to comply with CalGreen water demand is reduced due to the installation of low flow fixtures and other water-conserving requirements. The City has worked with the Project applicant's engineers to ensure the Project's water demand is reasonable, accurate and supported by substantial evidence.

9-12 The comment indicates that there is no follow up by City staff to ensure ongoing compliance with California's Green Building Guidelines to ensure occupants comply with the requirements.

The California Green Building Guidelines or CalGreen (Title 24) includes mandatory requirements for new residential construction including allowable flow rate for faucets and showerheads. The City requires all new development to install water meters, which allows the City to track water usage. The City will ensure compliance with the CalGreen Building Code through inspections that occur throughout Project construction.

9-13 The comment addresses the requirement of the City's Water Neutral Policy (Chapter 13.12, Water Use and Efficiency of the Municipal Code) for an applicant to either pay a fee or retrofit existing residences to offset the increase in demand for water and asks how long it would take to retrofit homes or if there are even enough homes left that need water upgrades.

Please see Master Response 2, which describes options available to retrofit existing residences or facilities to achieve water neutrality.

9-14 The comment questions if the City's Water Neutral Policy (Chapter 13.12, Water Use and Efficiency of the Municipal Code) requirements can work without the City's enforcement of the policy and goes on to say the "term falls significantly short of accomplishing its intended purpose."

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate; therefore, no further response is required. However, please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

9-15 The comment notes the Project is proposed within a flood zone where water damage is possible and requests that if the Project is approved the City require, as a condition of approval, that the City be indemnified for any future losses to the Project in the event of a flood event.

Flooding and flood hazards are addressed in detail in the Draft EIR in Section 3.9, Hydrology and Water Quality. As shown on Figure 3.9-2, the Project site is not within a Special Flood Hazard Areas but is mapped as being in an area with reduced flood risk due to a levee (FEMA 2012). By being within an area of reduced risk due to levee, the Project site is considered mapped within the 500-year flood zone (FEMA 2012).

Please see Master Response 3 that addresses concerns regarding the levee.

Comment Letter 10

From: Pierre Birebent <outlook_F3F0A884CA33A7B2@outlook.com>
Sent: Saturday, November 13, 2021 5:09 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project

Dear Madam

I am very concerned about the development of the open property at the end of Adams street, by the Napa river. 10-1

This is a major construction project. 10-2
Without mentioning traffic congestion I would surely mention the water shortage for our town.
I strongly oppose this insane project. 10-3
Sincerely yours.

Pierre Birebent.

Sent from Mail for Windows

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Response to Letter 10
Pierre Birebent
November 13, 2021

10-1 The comment states a general concern regarding potential development of the property.

The comment's concern is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

10-2 The commenter states that the Project will involve major construction and states general concerns related to traffic congestion and water shortage.

The comment raises a concern related to traffic congestion. Transportation impacts are analyzed in Section 3.14 of the Draft EIR. The operational aspects of the Proposed Project that contribute to delay and congestion on local roadways is no longer considered an environmental impact under CEQA. The Transportation section analyzes transportation impacts related to consistency with plans or policies addressing the City's circulation system, including transit, roadway, bicycle and pedestrian facilities, vehicle miles traveled (VMT), any potential hazardous design elements, and emergency access. Please see Master Response 1 that addresses emergency access.

The Draft EIR concludes that the Project would have less-than-significant impacts to these areas except for an increase in VMT. As described in Section 3.14, the Project would have a significant and unavoidable impact on VMT because the Project's VMT would be 15.2% higher than the Citywide VMT per capita rate and because there are no feasible mitigation measures available to substantially reduce or lessen the impact. As discussed in Chapter 2, Project Description, the Project is currently only requesting approval of a Tentative Subdivision Map at this time. Therefore, as noted on page 2-30, the applicant has not yet prepared a construction phasing plan. It is assumed once the applicant obtains all the remaining approvals site clearing, grading and installation of the backbone infrastructure would be the first phase. Absent specific construction phasing plans the Draft EIR analysis assumed buildout of the Project would occur over a 6-year period. However, buildout could take longer dependent on market conditions and a host of other factors.

The comment also raises concern related to water supply; please see Master Response 2 that addresses the City's ability to supply water.

10-3 The comment expresses general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 11

From: Trudy Bouligny <tbouligny@gmail.com>
Sent: Sunday, October 10, 2021 10:20 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project - Public Comment

To St Helena Planning Dept
Attn M De Rosa
Reference: The Hunter Project, St Helena CA

Please add our concerns to the file for the proposed Hunter Project which has come back to life after being soundly rejected 6 years ago. This project still has no grounds for approval. It is in an area of possible serious flooding, there is a dire lack of water in the town of St Helena, traffic issues will be exacerbated by dumping vehicles on Pope St to cross a totally inadequate bridge with a dangerous intersection at the Silverado Trail. The list of problems is lengthy and it doesn't take an expensive EIR consultancy fee to be realistic about the negative impacts to the community. Please reject the proposal when it comes before the Planning Commission. 11-1 11-2

Sincerely
Earl and Trudy Bouligny
497 Silverado Trail
St Helena CA 94574
Earl and Trudy Bouligny
497 Silverado Trail S
St Helena CA 94574
707-963-0814
707-738-1230 M

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Response to Letter 11
Earl and Trudy Bouligny
October 10, 2021

11-1 The comment claims that the Project was "soundly rejected six years ago," and that it should not be approved. The comment also notes general concerns related to potential flooding, water supply, and traffic.

The comment is noted and has also been forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code and Master Response 3 that addresses concerns associated with the levee and flooding. Traffic concerns are addressed in Responses to Comment 10-2.

Regarding the earlier public review of the Project, it is noted that the Project was considered by the St. Helena Planning Commission on September 17, 2013, at which time the hearing was continued to a date not certain. The Project was neither approved nor denied, and remains an active application.

11-2 The comment expresses general opposition to the Project and asks that the Project be denied.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 12

-----Original Message-----
From: Karen Bradley <bradleyhuskers@comcast.net>
Sent: Tuesday, November 30, 2021 1:48 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

If possible I would like to add our names to the Vineyard Valley response to the Hunter project. 12-1

Karen & Kevin Bradley
6 San Juan Ct.

Thank you,
Karen Bradley

Sent from my iPad

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Response to Letter 12
Karen and Kevin Bradley
November 30, 2021

12-1 The comment requests the commenters' names to be added to the Vineyard Valley comment letter for the Project.

It is not clear from the comment, but it is assumed the commenter is requesting their names be added to the letter submitted by the Vineyard Valley Managing Partners, see Letter 111. The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 13

-----Original Message-----
From: Greg Brown <gwbrown_2000@yahoo.com>
Sent: Tuesday, November 2, 2021 12:26 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Hunter Project

The DEIR quotes substantial impacts to traffic and water use with the Hunter Project. How can this Project be justified in light of the current water emergency and the current sorry state of our streets? 13-1

Greg Brown
1179 Starr Ave
St Helena

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Response to Letter 13
Greg Brown
November 2, 2021

13-1 The comment states that the Project could cause water use and traffic impacts; the comment also asserts that the Project should not be approved given the condition of the City's streets and water supply.

The commenter's general concerns regarding water and traffic is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

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Comment Letter 14

November 29, 2021

Maya DeRosa, Building and Planning Director
City of St. Helena
mderosa@cityofsthelena.org

Re: Hunter DEIR Public Comment

Ms. DeRosa:

Thank you for the opportunity to review and comment on the Draft EIR for the Hunter project. For the past 17 years, I have lived less than ¼-mile from the project site and have frequented the nature trail adjacent to the site at least weekly. Below please find my comments on four sections of the draft. 14-1

3.4-1 Wildlife Habitat

The EIR only provides commentary on "Special Status Wildlife," and only the white-tailed kite and pallid bat are considered potentially affected. I can't say that I've seen the kite or the pallid bat in that area, but over the past years I have seen bats and I have watched at least three different species of hawks hunt at the project site. Great blue heron and black-crowned night heron are commonly seen in the adjacent open space and trees. Perhaps none of these species have special status, but at what point is their occupation of the land worthy of consideration? At what point do we consider the cumulative effects of this and other projects that continue to take away large chunks of open space from birds and ground animals which depend on these foraging and hunting grounds? 14-2

3.4-3 Migratory Corridors

For the past 17 years, I have watched Canada Geese fly up and down the Valley, directly over my house, and routinely stopping to forage at the Project Site. This usage decreased when a large portion of the site was planted to grapes, but the geese continue to use the undeveloped area. Anyone who has lived on the floor of the Valley knows that it is a significant migratory corridor for Canada Geese. 14-3

The EIR states, "Lighting and increased usage of the site by humans may result in indirect effects to local wildlife using the riparian corridor for nursery sites or as a migratory corridor. Any site disturbance to these resources could result in a potentially significant impact." It goes on to state that the Project's Mitigation Measures such as reducing glare will mitigate impacts. This section of the EIR provides a myopic viewpoint by first stating that wildlife is not present and unaffected, then going on to state that mitigation measures will take care of everything. Reducing glare is meaningless when you have completely removed their habitat. What about the geese??? 14-4

The Project, with its measly one-half acre of remaining open space, will completely remove this historically valuable migratory stopping ground for Canada Geese. This significant impact is omitted in the Draft EIR. 14-5

The EIR authors will dismiss these wildlife and migratory corridor comments. They will tell you that all the impacts have been mitigated, that the Canada Geese and the hawks and the bats and the fox and skunks and coyotes and countless other species who have historically used the Project site have other places to forage and nest and hunt. They will say these species aren't "special." They will say there is no significant impact. But at the end of the day, what was once open space used by all these animals will be gone forever and replaced with homes and roads and cars and noise. The cumulative effect of project after project in this Valley will add up, the habitat will be gone, and with it the wildlife. 14-6

3.13 Infrastructure – Water

The analysis of water impacts is quite long and difficult to follow. The City should consider how a revised EIR and future EIR's could be required to provide impacts and conclusions which are easier to understand. Regardless, I have several issues with the EIR water analysis and its conclusions: 14-7

1. Table 3.13-8 shows projected supply and demand data from the 2010 Water Supply Plan, which concluded that "water supplies under both the Likely Buildout Scenario and Full Buildout Scenario would not be sufficient to meet demands during all scenarios." The 2010 Plan went on to conclude that "the long-term safe yield of the City's water supply is 1,950 acre-feet per year." The deficit between this safe yield and the projected demands on Table 3.13-8 was presumed to be made up by approximately 500 acre-feet of future conservation efforts. It claims that these efforts have been successful since usage has averaged 1,637 acre-feet from 2013-2020. Having provided these data points, the EIR then concludes, "Considering the current downward water usage trend due to water conservation measures and that future demands are required to offset their projected use, future water demand is not expected to exceed the existing policy limit of 1,950 acre-feet annual use set by the Safe Yield Committee..." 14-8

   I have two issues with this analysis. First, on the supply side, the EIR gives credence to the 1,950 acre-feet supply as though it is a sustainable value for the foreseeable future. This value was established in a 2010 study. Since then, 11 years later, our Valley has and continues to change significantly. It is hotter and it is drier. This change has been accelerating in the past five years, and yet the EIR is basing the City's sustainable water supply on 2010 data. The EIR should show a combination of historical rainfall through 2021 along with some projections of the accelerating effects of climate change to at least offer a scientifically based forecast of a truly sustainable water supply value for the next 30 years. It is likely that climate change will drive us towards a supply value more like those shown in Table 3.13-8 for "dry year" or "critical dry year." ***The supply values for these categories are 12% - 34% below the 1,950 acre-feet value which the EIR assumes is sustainable.*** In citing the 2010 Safe Yield value of 1,950 acre-feet, the EIR has made a wishful and risky assumption of the stability of the City's water supply which benefits the Applicant. 14-9

   Secondly, on the demand side, I have issue with the overly simplistic and optimistic conclusion that future water demand will not exceed the City's supply. As previously quoted, the EIR claims that the City is on a "current downward usage trend" based on data from 2013-2020 in Table 3.13-1. This is not true! The EIR takes as its starting point usage from 2013 (1,882 acre-feet), compares it to 2020 usage (1,629 acre-feet) and concludes a downward trend. In fact, if one 14-10

uses 2015 as the starting point, there is clearly a trend of *increasing* usage over the past six years, and *during a time in which the City has made a focused conservation effort*.

14-10 Cont.

Further issue on the demand side is the lack of credible evidence or any attempt to validate the notion that water offsets or in-lieu of payments will keep the growing demand (see previous paragraph) below the likely decreasing supply limit of 1,950 acre-feet. There is not an endless supply of old toilets in town to replace with new ones and there are limitations on what the City can do with in-lieu fees to curb demand. I find the conclusion that "future water demand is not expected to exceed the existing policy limit" to be another leap of faith to the benefit of the Applicant, as it poses an unrealistic baseline assumption that we need not concern ourselves with the actual water usage of the project (or other future projects for that matter).

14-11

2. On page 3.13-31, the EIR attempts to answer question 3.13-2 "Would sufficient water supplies be available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years?"

The EIR again takes shelter in the outdated 2010 Safe Yield value of 1,950 acre-feet, but fails to answer the question. As I noted earlier, we have good reason to question the integrity of the 1,950 value, but regardless, the question posed here asks about dry and multiple dry years. Again referring to Table 3.13-8, the City's supply for dry and critically dry years are 12% - 34% below the 1,950 acre-feet value. Given the trend of the past five years, how can this EIR ignore climate change and the increasing likelihood that 1,950 is not a sustainable value and that City supply could be significantly less for any given year or multiple years? Do not ignore the drought! Do not ignore the last five years!

14-12

Furthermore, the EIR again takes shelter in the notion that the City's water-neutrality policy will offset future use. So, what does water-neutrality mean for this project? Let's look at the Water Neutral Report in Appendix J. The proposed mitigation measures identified in the report include:

> "1. Assist the City in fixing the leaking transmission line between the City and Rutherford. It's our understanding there is a substantial amount of water lost as part of the old pipeline.
> 2. Place/replace water meters that are not in place or functioning improperly.
> 3. Paying the in-lieu fee to be used by the City for any of the options identified in the attached Report or otherwise selected by the City."

14-13

Fixing a transmission line leak is not offsetting future water demand. Fixing a leak simply maintains the supply—*it does not reduce usage* by this Project or anywhere else in town. Replacing water meters could influence use but it does not in and of itself reduce demand. Paying fees could reduce demand, but only if the City uses those fees to reduce demand. In the end, Appendix J proposes that the Applicant pay an in-lieu of fee of $596k—a nice sum, but when the increased demand of this Project's 76+ units hits the water system, what will have been done by the Applicant or the City to truly offset this demand? It looks like a lot of math without a true impact.

Developers are buying entitlement then burdening the system with increased demand. This lack of true offset is perhaps evidenced by the increase in usage from 2016 (1,465 acre-feet) to 2020

14-14

(1,629 acre-feet), an increase of over 11%. Usage should have been decreasing, but it has not because the offset program does not work, it just provides developers with another way to buy entitlement. 14-14 Cont.

Lastly, the EIR makes no attempt to address the question about "reasonably foreseeable future development." Given the conflicts between general plans, growth ordinances, and SB330, it is understandably difficult to forecast the actual number of housing units in the foreseeable future, but that is not a good reason to make overly simplistic assumptions which favor the Applicant. Development pressure is ever-increasing in St. Helena and one-by-one, the project EIRs make claims of "less than significant impact" while cumulatively making a very significant impact. The City must provide guidance to the EIR process which makes science-based forecasts of "reasonably foreseeable future development" so that assessments such as this EIR can properly consider cumulative impacts. Question 3.13-2 was not fully answered. 14-15

In summary, the entire water supply, demand, and impact analysis is thick with math but thin with science. It relies on dated values such as the 2010 Safe Yield without due consideration of climate change, and it assumes water offsets that are not defined and likely will not be realized.

For the past 10 years, the City's residents have dealt with the harsh reality of drought. Whereas in generations past there was always hope for droughts to end, climate change has made drought a likely standard rather than exception. It is incumbent upon the City to take a conservative approach to the supply data being used by developers and by EIR authors; otherwise, the cumulative effect of projects approved on old data will result in a water deficit we can't overcome. 14-16

The City must re-evaluate the Safe Yield based on current data and climate change forecasts. The City must have more certainty regarding its water supply. The City must get past its current water emergency restrictions. Then and only then should the City even consider a project of this size. To approve this project under the current conditions is risky and cavalier. The City's residents have worked hard to endure the effects of the drought. We shouldn't have to shoulder the risk this Project poses to our collective future. 14-17

3.14-2 CEQA 15064.3(b) VMT Criteria

Although the EIR seeks multiple ways to mitigate VMT for the Project, it ultimately concludes that "Because there are no feasible mitigation measures available to substantially reduce or lessen the impact of the Proposed Project to less than significant, the impact is a **significant and unavoidable impact**." Next to water, our City's primary struggle is with increasing traffic and congestion. The cumulative effect of unchecked regional development has created horrendous traffic challenges in St. Helena which increasingly detract from quality of life for residents and quality of experience for tourists. The inability of the Project to mitigate significant impact of traffic is important and another reason to delay consideration of a project this large until the City can conservatively absorb the impact. 14-18

Concluding Comments

Several years ago, the City decided to protect Vineyard Valley from future floods. The City had multiple engineering options to accomplish that objective. Ultimately, the City—on behalf of its taxpayers— 14-19

gifted Dennis Hunter with a levee that turned his floodplain into a valuable piece of developable land. The City—on behalf of its taxpayers—then wrote Dennis Hunter a big check to pay for a thin and otherwise useless strip of land to build a portion of the levee which in turn made his land so valuable. The City—on behalf of its taxpayers—then gave him all the dirt from the flood project to build up his site. If this project is approved, it will tax our water supply and traffic, and guess who will pay for that? The City's residents will pay for it in further water restrictions and increased traffic. Dennis Hunter will have paid some modest impact fees which will not come close to addressing the actual impacts and, once again, the City's taxpayers will be left to pick up the tab for this and all the other cumulative impacts of projects whose EIRs espoused similar "less than significant" impacts or showed lots of math to rationalize how our over-burdened infrastructure could—remarkably—handle yet another project!

14-19 Cont.

The City is not ready for this project. At the very least, it needs to scientifically assess climate change impact on future water supply. It needs to accurately assess future development impact, both residential and commercial, on water and traffic. It needs to assess water demand without making unrealistic assumptions about conservation. It needs to reconfigure its water neutrality requirements such that future projects must truly offset demand, not simply buy their way out.

14-20

The City cannot afford to continue a pattern of approval based on EIR's which make rosy assumptions based on old or incomplete data. It must start making hard decisions which favor its citizens and not out-of-town developers.

14-21

Thank you for considering my comments.

Regards,



Ethan Brown
Owner, 489 Fulton Lane

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Response to Letter 14
Ethan Brown
November 29, 2021

14-1 The commenter notes that they live near the Project site and frequently uses the trail adjacent to the site.

This comment is an introduction to comments that follow. The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

14-2 The comment notes that the Draft EIR focuses on impacts to special-status wildlife and describes their observations of common wildlife species using the Project site, notably bats, hawks, great blue heron, and black-crowned night heron. The comment requests analysis of cumulative effects of development on birds and other animals that use the Project site and vicinity.

The Draft EIR analyzes impacts to biological resources using the thresholds of significance listed on page 3.4-42. These thresholds, which are taken from the State CEQA Guidelines Appendix G, do focus the analysis on special-status species due to their sensitivity to impacts. However, the thresholds do include interference with movement of native resident wildlife species and migratory corridors, regardless of the species status. The Draft EIR identifies a significant impact to migratory corridors and potential nursery sites within the adjacent riparian corridor and provides mitigation (BIO-5 and AES-1) to reduce the impact to less than significant. The thresholds also consider any conflicts with any local policies; however, there are no local policies that provide protections for non-special-status wildlife.

The Draft EIR analyzes impacts to bat and bird species (DEIR pp. 3.4-46 through 3.4-47) and includes mitigation measures to reduce potential impacts to bat species (BIO-1) and bird species (BIO-2). These analyses and mitigation measures apply to both special-status and non-special-status species. The Draft EIR also analyzes cumulative impacts of the project (DEIR p. 3.4-51), finding that the Project's contribution to cumulative impacts would be less than significant due to the relatively low habitat value of the Project site and the availability of similar or better habitat in the vicinity.

14-3 The comment describes observations of Canada geese foraging on the Project site within the remnant grassland. The comment asserts that the Napa Valley is a significant migratory corridor for Canada geese.

Although Canada geese may periodically forage on the Project site, it is unlikely that the approximately 9.7 acres of mowed annual grassland without a nearby open water area represents critical foraging habitat for this highly adaptable species. This species is not a federal or state protected species but they are protected under the Migratory Bird Treaty Act, as are all migratory birds. Canadian geese are regionally abundant and have become resident in many areas (Mowbray et al. 2020)[8].

14-4 The comment asserts that the Project would remove habitat and that reducing glare would only be valid mitigation measure for areas that retain habitat value.

The comment is correct and mitigation measure BIO-3 requires wetland permits (e.g., 404 Nationwide Permit, 401 Water Quality Certification, and 1602 Streambed Alteration Agreement, respectively) be obtained prior to any grading work to ensure no net loss of wetlands or other protected waters. This mitigation focuses on reducing operational indirect impacts to the riparian corridor such that it will continue to provide habitat after Project development. Refer to Response to Comment 14-3 regarding impacts to Canada geese.

14-5 The comment notes again that the Project would adversely affect Canada geese that may stopover to forage on the Project site.

Please refer to Response to Comment 14-3.

14-6 The comment summarizes the points raised in Comments 14-2 through 14-4.

Please refer to Responses to Comments 14-2 through 14-4.

14-7 The comment states the analysis of water impacts is long and difficult to follow and requests the City consider how to make future EIRs easier to understand.

The commenter's request is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

14-8 The comment refers to data presented in Table 3.13-8 of Section 3.13, Utilities and Service Systems, of the Draft EIR that references the City's water supply and demand usage.

The comment provides an introduction to the following comments. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. Please refer to Response to Comment 14-9 that addresses water supply and demand.

[8] Mowbray, T. B., C. R. Ely, J. S. Sedinger, and R. E. Trost (2020). *Canada Goose* (Branta canadensis), version 1.0. In Birds of the World (P. G. Rodewald, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. *https://doi.org/10.2173/bow.cangoo.01*

14-9 The comment suggests that the City's 2010 Water Supply Plan is inadequate and that the referenced long-term safe yield of 1,950 acre-feet does not consider climate changes since that plan was completed.

The City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code requires that "new development" shall be contingent upon the ability of the City to provide water without exceeding safe yield. In December 2010, the City Council appointed the Safe Yield Committee to determine the annual safe yield of the City's potable water system. The ultimate goal of the Committee was to determine whether, at the present time, potable water usage was below, above, or equal to the safe yield of the potable water supply system. The Safe Yield Committee analyzed the reliability of the City's water supplies in a 2010 study and determined that providing a total supply of up to 1,950 acre-feet was sustainable and has been adopted by the City as a policy limit. While climate change can create drier years in which precipitation is below annual averages, it can also result in very wet years.

The purpose of establishing a safe yield considers that precipitation can and likely will vary considerable from year to year and periods of extended droughts will occur. Note that St. Helena Municipal Code (SHMC) Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 *Water Shortage Emergencies, Drought and Water Conservation* regulate the establishment of water emergency phases, water conservation, and regulations that can adapt to changing conditions and enact emergency requirements for users as appropriate. However, the main purpose for providing this information (i.e., the safe yield) is provided as part of establishing existing conditions and background for the City water supplies and policy limits adopted by the City. The Draft EIR analyzes the potential effects of the Proposed Project including its specific water demand and whether there would be a significant impact due to the effects of the Project. This analysis is included beginning on page 3.13-31 as well as on page 3.9-40 and compares the proposed demand by the Project against the past actual demand numbers for the City compared to the adopted policy limits. Please see also Master Response 2 that addresses water issues.

14-10 The comment challenges the conclusion made in the Draft EIR that water demands for the City are on a downward trend.

The commenter suggests that viewing data from between 2015 and 2020 instead of between 2013 and 2020, as presented in Table 3.13-1 in Section 3.13, Utilities and Service Systems, of the Draft EIR would change the conclusion of the recent trend. As shown in Table 3.13-1 of the Draft EIR, the City's water deliveries have varied from year to year but overall have decreased from 1,882 acre-feet in 2013 to 1,629 acre-feet in 2020. Looking at the longer trend from 2013 to 2020, instead of just from 2016 to 2020, reflects a downward trend in water deliveries. Please see also Master Response 2 that addresses water issues.

14-11 The comment suggests that there is insufficient evidence to support the conclusion that water offsets or in-lieu payments would help limit water demands below 1,950 acre-feet.

The analysis on page 3.13-24 of the Draft EIR shows how the Proposed Project's indoor water demands of 19.88 acre-feet would not combine with the highest City demand over the last 8 years (1,882 acre-feet) to be above the policy limit of 1,950 acre-feet. The 1,950 acre-feet figure represents what the City considers to be the safe yield for the water supply system and is not a "supply limit". Note that St. Helena Municipal Code Title 13 - Public Services, Chapter 13.04 Water Service System, Article 2 Water Shortage Emergencies, Drought and Water Conservation regulate the establishment of water emergency phases, water conservation, and regulations that can adapt to changing conditions and enact emergency requirements for users as appropriate.

14-12 The comment concerns the validity of the City's use of a safe yield of 1,950 acre-feet in the face of climate change.

As discussed in Response to Comment 14-9, the City is currently using the safe yield of 1,950 acre-feet developed by the Safe Yield Committee as a guideline policy but can also impose emergency measures (St. Helena Municipal Code Title 13, Chapter 13.04, Article 2) that can be used to emplace water conservation and regulations as necessary. The Project is also required to adhere to the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. As discussed in more detail on page 3.13-31 of the Draft EIR, a Water Neutral Report (Appendix J) was prepared for the Proposed Project (required by the City) to demonstrate compliance with the City's Water Neutral Policy by providing in-lieu fees to fund conservations measures that offset the water demands of the Project. Therefore, the City's safe yield value of 1,950 acre-feet is not the sole basis of the analysis as to whether the Proposed Project would have a significant effect on water supply during dry and critically dry years.

Please see also Master Response 2 that addresses water issues.

14-13 The comment takes issue with the effectiveness of the City's Water Neutral Policy and how it is used in the analysis of the Project's water demand.

Adherence to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code to fund such measures as fixing an existing leaking water conveyance pipe does offset demand by increasing water supplies compared to the existing conditions of water losses due to the leak. As a result, compliance with the Water Neutral Policy offsets new water demand with measures that reduce demand elsewhere or otherwise increase water supplies. Therefore, the City's Water Neutral Policy and Municipal Code requirements is an appropriate and effective measure to include in the analysis of the Draft EIR. Please see also Master Response 2 that addresses water issues.

14-14 The comment suggests that the offset program [Water Neutral Policy] does not work as evidenced by an increase in the water demands in 2016 (1,465 acre-feet) as compared to 2020 (1,629 acre-feet).

As shown in Table 3.13-1 of the Draft EIR, the City's water deliveries have varied from year to year but overall have decreased from 1,882 acre-feet in 2013 to 1,629 acre-feet in 2020. Looking at the longer trend from 2013 to 2020, instead of just from 2016 to 2020, indicates a downward trend in water deliveries. See also Master Response 2 that addresses concerns associated with available water supplies.

14-15 The comment suggests that "reasonably foreseeable future development" was not adequately considered in the analysis of Impact 3.13-2.

The analysis of Impact 3.13-2 beginning on page 3.13-31 of the Draft EIR, includes discussion of the long-term safe yield that was adopted by the City in 2011 that would apply to all future development. The analysis also discusses how future development is required to adhere to the state's CalGreen requirements, as well as the City's MWELO irrigation requirements for landscaping. In addition, all reasonably foreseeable future development would be required to adhere to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code and any emergency water conservation phases that may be enacted. In particular, the Water Neutral Policy requires that the Project, as well as reasonably foreseeable future development, must demonstrate a quantitative analysis of the Project's water demand. For offsite improvements, the required number of retrofits have to be completed prior to the issuance of a certificate of occupancy for the new development. Inclusion of these regulatory requirements demonstrates how the Project, along with reasonably foreseeable future development would not significantly impact water supplies during normal, dry, and multiple dry years.

14-16 The comment claims that the water supply and demand analysis is insufficient, does not consider climate change, and that the water offsets required for the Project to be water neutral will not be realized.

As referenced in Response to Comment 14-9, the City adopted the safe yield as policy but also included conservation measures that can be employed during drought periods. The safe yield considers that multiple dry years are likely due to climate change and the additional measures as well as the Water Neutral Policy and Municipal Code requirements can be effective tools to adapt to variances in precipitation that is expected under normal conditions as well as what can be anticipated with climate change. Data documenting the City's water deliveries since 2013, not long after adopting the Safe Yield Committee's report as policy, indicates that a downward trend has occurred despite covering some very dry years during that timeframe. See also Master Response 2 that addresses water supply.

14-17 The comment recommends that the City re-evaluate the safe yield policy and get past the current emergency restrictions prior to approval of the Project.

The comment does not directly address the adequacy of the Draft EIR, but rather makes suggestions for the City related to its policies regarding water supply management. As detailed in the Draft EIR on page 3.13-3 in Table 3.13-1, the City's water deliveries have been on a downward trend from 2013-2020. Through this period, the water deliveries have been below the safe yield and as noted on page 3.19-40 of the Draft EIR, the groundwater Subbasin, one of the sources of water supply, was recently found to be exhibit stable groundwater levels. The emergency restrictions have been enacted in order to continue effectively manage the water supply system during periods of low rainfall and combined with the Water Neutral Policy and Municipal Code requirements ensures that water supplies will meet demand.

14-18 The comment addresses cumulative traffic conditions in the City and notes that because the Project would result in a significant and unavoidable impact related to Vehicle Miles Traveled, the City should delay consideration of the Project until the underlying traffic and infrastructure issues are addressed.

The commenter's opinion that approval of the Project should be delayed is noted and forwarded to the decision makers for their review.

14-19 The comment provides the commenter's perspective on the City's decision to construct a levee and floodwall along a portion of the Napa River.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

Please see Master Response 3 that addresses the history of the levee and floodwall.

14-20 The comment states that a scientific analysis of the effects of climate change on water supply need to be addressed along with an assessment of future development on water supply and traffic and the City's Water Neutral Policy needs to ensure projects offset their water demand and not just pay a fee.

The comment does not identify any specific issues with the accuracy or adequacy of information provided in the Draft EIR. Regarding climate change, the Draft EIR evaluates the Project's increase in greenhouse gas emissions (GHG) which contribute to global climate change in Section 3.7, Greenhouse Gases. The analysis reflects what the California Environmental Quality Act or CEQA requires be evaluated which includes quantifying the Project's GHG emissions to determine if the Project exceeds adopted thresholds. The Project's increase in demand for water is evaluated in Section 3.13, Utilities and Service Systems and traffic is evaluated in Section 3.14, Transportation and Circulation. The commenter's opinion that the City's Water Neutral Policy including Chapter 13.12, Water Use and Efficiency of the

Municipal Code needs to be reconfigured is noted and forwarded to the decision makers for their consideration.

14-21 The comment expresses an opinion that EIRs should not rely on old or incomplete data and residents of the City versus out of town developers need to be considered when making land use decisions.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

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Comment Letter 15

From: Andree Bryan <andree@bryanconsulting.net>
Sent: Saturday, October 30, 2021 4:18 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] I AM OPPOSED TO THE HUNTER PROJECT

Hi Maya DeRosa,

I am writing to let you know that I am very opposed to the Hunter Subdivision Project.

My concerns are:

1. Availability of water
2. The plan calls for sharing water with Vineyard Valley --- I AM VERY OPPOSED TO THIS! 15-1
3. Impact on traffic. Our city has become unbearable when it comes to traffic and now you want to build 51 homes in a small, small area. 15-2
4. You will destroy the beauty of the walking trail that so many of us enjoy. Saint Helena does next to nothing for it's residents in terms of walking paths and accessibility to nature. This is probably our only walking path --- and you want to take that away. 15-3
5. I have yet to see an environmental impact study. 15-4

Thank you,

Andree Bryan
Resident of SH and Vineyard Valley

Andree Bryan
Board of Director
St. Helena Public Library – Friends and Family
andree@bryanconsulting.net
M: 707 332-9124

Have a magically wonderful day!

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Response to Letter 15
Andree Bryan
October 30, 2021

15-1 The comment states a concern related to water availability. The comment also states opposition against the Project's proposed water sharing component with Vineyard Valley.

Please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

15-2 The comment expresses concern over the Project's impact on traffic.

Please see Response to Comment 10-2 that addresses traffic concerns.

15-3 The comment expresses concern regarding the Project's impact on the adjacent walking trail.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Response to Comment 106-3. In addition, please see Chapter 3, Changes to the Draft EIR, for a new figure that shows the adjacent trails.

15-4 The comment states that the commenter has not obtained access to the Project's "environmental impact study."

The City sent notices to all residences within 300 feet of the Project site that an EIR was available for review, per City requirements and will also send notices for future public hearings.

The City also sent a Notice of Availability on September 23, 2021, to public agencies and interested parties that the City had released the Draft EIR for review and comment. Based on requests from the public, the City extended the public comment period from the required 45-days to 67-days to provide more time for review and comment. During this review period, the Draft EIR for the Project was available for review at (1) the St. Helena Public Library, 1492 Library Lane, St. Helena, CA 94574; (2) St. Helena Planning Department, 1572 Railroad Avenue, St. Helena, CA 94574; and (3) on the City's website at https://www.cityofsthelena.org/planning/page/ceqa-document-center.

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Comment Letter 16

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Tuesday, October 26, 2021 4:08 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>; Anna Chouteau <AChouteau@cityofsthelena.org>; Paul Dohring <PDohring@cityofsthelena.org>
Subject: [External] Hunter project

The proposed Hunter project will have 87 water consuming households. The project's consultants claim the project will be water neutral if 333 existing homes are retrofitted with new toilets, shower heads and faucets. The only way to know for sure is to install in all 333 homes and monitor the usage for at least a year's climate cycle. Under the extreme drought we going through, it's in the best interest of the people who currently live in Saint Helena that their water needs are met. We need to know for sure if the Hunter project is water neutral!!

16-1

Sent from my iPhone

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Response to Letter 16
Bernerd Buckley
October 26, 2021

16-1 The comment expresses concern over the Project's water neutrality and the City's water supply. The commenter requests that the Project be monitored for a year to ensure water neutrality is met.

Please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

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Comment Letter 17

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Tuesday, October 26, 2021 4:35 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>; Anna Chouteau <AChouteau@cityofsthelena.org>; Paul Dohring <PDohring@cityofsthelena.org>
Subject: [External] Hunter project

The levee that's supposed to protect the proposed development it is said to be sufficient to withstand the 200 year flood. In the DEIR it says that if the levee fails, the houses behind would only flood the first floor's by 5 feet. People could escape to the second floor. (Unless they have a disability and couldn't make it)? If the levee fails is the city of Saint Helena responsible? The cost of a failure could cost millions!! If the city is responsible for cost of damage shouldn't all current home owners be notified of potential liabilities? I have been told the City of Saint Helena is responsible for the maintenance of the levee does anyone working for the city have experience or training on levee maintenance? 17-1

Sent from my iPhone

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Response to Letter 17
Bernerd Buckley
October 26, 2021

17-1 The comment raises concerns related to potential levee failure. Specifically, the commenter is concerned with emergency evacuation in the event of levee failure for those with a disability and the cost of levee failure. The comment also states that future homeowners should be notified of potential liabilities related to the levee. is addressing concerns regarding the levee and raises FEMA certification of the levee.

Please see Master Response 3 that addresses concerns associated with the levee and Master Response 1 that addresses emergency evacuation.

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Comment Letter 18

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Tuesday, October 26, 2021 6:45 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>; Paul Dohring <PDohring@cityofsthelena.org>;
Anna Chouteau <AChouteau@cityofsthelena.org>
Subject: [External] Hunter project

Almost all affordable housing is located east of Main st. About 40% of that housing is located on Hunt st. to Starr ave. The Monte vista apartments and Hunts Grove being the largest. There also senior affordable housing at the Woodbridge property.
The families who live in these homes are forced to park blocks from their homes because the properties were built with inadequate parking. There will be 50 cars parked on the street, from the path Hunt st to Adams st, on Grove ct, Monte Vista, Hunt st, Starr ave and Meadowcreek Cir. The additional proposed 25 affordable homes will between the Monte Vista apartments and Hunts Grove. This will increase the number of affordable homes in that area to over 40%. and additional parking problems. This Hunter project has a real negative effect on these people of limited resources in the area. The Hunter development only benefit the developers not the current residents of Saint Helena.
Sent from my iPhone

18-1

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Response to Letter 18
Bernerd Buckley
October 26, 2021

18-1 The comment expresses a concern regarding Project's impact to parking availability.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

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Comment Letter 19

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Tuesday, November 2, 2021 2:36 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Paul Dohring <PDohring@cityofsthelena.org>; Anna Chouteau <AChouteau@cityofsthelena.org>; Paul Dohring <PDohring@cityofsthelena.org>; Geoff Ellsworth <GEllsworth@cityofsthelena.org>; Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter development

Looking at the location of affordable low income apartments in the Hunter proposed project, why are they directly behind the low income apartments on Monte Vista? Is it because all the low income apartments should be segregated from Market rate homes?

19-1

Sent from my iPhone

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Response to Letter 19
Bernerd Buckley
November 2, 2021

19-1 The comment expresses concern related to the proposed location of low-income housing. The commenter questions the appropriateness of the proposed location of these residential units.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate; therefore, no further response is required. As described in Chapter 2, Project Description, prior to any development on the site occurring, additional discretionary approvals including a requirement that the Project applicant have an Affordable Housing Agreement approved by the City Council prior to Final Map recordation.

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Comment Letter 20

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Tuesday, November 2, 2021 2:58 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Paul Dohring <PDohring@cityofsthelena.org>; Anna Chouteau <AChouteau@cityofsthelena.org>; Geoff Ellsworth <GEllsworth@cityofsthelena.org>
Subject: [External] Hunter project

The DEIR says that a breach of the levee is unlikely but if it happened properties behind it could have 5 feet of water damage. The top of the levee has many pot holes some have been repaired with gravel is this correct material? Do maintenance people have experience or training on levee's? 20-1

Sent from my iPhone

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Response to Letter 20
Bernerd Buckley
November 2, 2021

20-1 The comment letter expresses concerns related to the levee, including the event of a breach, water damage from a breach, the condition and material of the levee, and experience of levee maintenance professionals.

Please see Master Response 3 that addresses all concerns associated with the levee, including the event of a breach and the condition, material, and maintenance of the levee.

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Comment Letter 21

-----Original Message-----
From: Bernerd Buckley <bernerdbuckley@gmail.com>
Sent: Monday, November 29, 2021 1:42 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter

Can you explain the way DEIR says the 333 housing retrofits can off set 87 water consuming households. How many people do they assume will be in the new housing? Are there other communities the size of Saint Helena that have done this? Can you document the towns and results? 21-1

Sent from my iPhone

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Response to Letter 21
Bernerd Buckley
November 29, 2021

21-1 The comment expresses concern over the City's water supply and the effectiveness of the City's Water Neutral Policy. The commenter questions the number of new residents assumed for the Project and asks if there are other projects that have implemented similar water-saving measures.

Please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. As stated on page 3.13-24 of the Draft EIR, a Water Neutral Report was prepared for the Project that assumes a higher persons per household or PPH rate as compared to the City's PPH assumptions to conservatively estimate Project population to calculate water demand. See Responses to Comments 7-3 and 7-4 that address the PPH assumptions to evaluate Project impacts.

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Comment Letter 22

-----Original Message-----
From: Jeff Burton <jefftburton@yahoo.com>
Sent: Monday, November 8, 2021 8:50 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision

Maya DeRosa
St. Helena City Planning Department

We are writing you to express our opposition to the Hunter Subdivision Project. We are not opposed to more housing to relieve the general housing shortage in St. Helena, but if this project goes forward we ask why such an imbalance of "affordable" living is being bunched around the east side of our town? I'm sure the west side offers available space. In fact, I'm sure future residents who will live in these homes would appreciate living amongst general neighborhoods as opposed to being clustered and corralled into one confined "project" area in a flood zone. 22-1

I'd like to express our thoughts on a few key issues:

We are on the tipping point on water resources. If one adds up the water needed to be allocated to this project, I ask from where is this resource is going to come from? 22-2

We all know traffic is at a breaking point, just look at what the temporary closure of Silverado Trail did to the already crowded streets of St. Helena. Now, add in the additional cars which will compete for road space and the already inadequate parking situation. 22-3

What's more, there is a popular walking path that looks like it will be terminated without an alternate path. 22-4

Another consideration is the likelihood of another 100 year flood. Who is going to be held liable for damage and injury? 22-5

We fear that if the Hunter Subdivision is approved the Adam Street property will have developers lining up once again to make their proposals. We are concerned about the future of St. Helena if this project is approved. 22-6

We urge you to consider all these issues and vote down the proposal for this new housing project. 22-7

Respectfully,

Jeffrey Burton and Maureen Moulton

Sent from my iPad

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Response to Letter 22
Jeff Burton
November 8, 2021

22-1 The comment expresses opposition to the Project due to their opinion that affordable housing should not be confined to the east side of the City and in a flood zone.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

As noted elsewhere in these Responses, the Project site is not located in a flood zone which would preclude residential development.

22-2 The comment states that the City is limited on water resources and inquires about the source of water to serve the Project.

Please see Master Response 2 that addresses the issue of water supply.

22-3 The comment states that the Project would result in additional traffic congestion and that the parking situation in the City is inadequate.

The adequacy of parking supply and traffic congestion is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

22-4 The comment states that a popular walking path would be terminated by the Project without establishment of an alternate path.

The Project does not propose removing the existing trail or levee maintenance road, as explained in Section 3.12, Public Services and Recreation on page 3.12-17. The comment does not identify specific areas where the commentor believes the Draft EIR is inadequate; therefore, no further response is required. Please see Chapter 3, Changes to the Draft EIR for a copy of a trails map that shows the existing trails near the Project site.

22-5 The comment asks who would be held liable for damage and injury in the event of a 100- year flood.

Determining legal liability for a potential future event is not within the scope of CEQA review; therefore, no further response is necessary

22-6 The comment states that approval of the Project would attract other proposals to develop the Adams Street property and expresses concern about the future of the City.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

22-7 The comment urges the City to consider the issues raised in the comment letter and to reject the Project.

The comment's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 23

-----Original Message-----
From: Lynda Burton <burtonfamilylaw@gmail.com>
Sent: Sunday, October 31, 2021 1:08 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Cc: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

Dear Sir/Madam,

I write to register my grave concerns with and opposition to the proposed Hunter Project. 23-1

While there are many reasons to oppose the project, my primary concern is the project's impact on our extremely limited water supply. Their proposed mitigation measures seem laughably inadequate, especially given the project's long term impact on the city's water consumption. 23-2

Our need for affordable housing can be better met by smaller, specifically targeted projects for seniors and lower income families. 23-3

Sincerely,

Lynda M. Burton
Attorney at Law (Retired)
1501 Allyn Avenue
St. Helena, CA 94574

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Response to Letter 23
Lynda Burton
October 31, 2021

23-1 The comment states general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

23-2 The comment raises concerns related to the Project's impact on the City's water supply and generally challenges the Draft EIR's proposed mitigation measures.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the mitigation measures in the Draft EIR; therefore, no further response is required. However, please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

23-3 The comment acknowledges the need for affordable housing and calls for smaller-scale projects that are aimed to serve senior citizens and low-income families.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 24

-----Original Message-----
From: Calie Candia <caliesworld@aol.com>
Sent: Monday, November 1, 2021 2:27 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter subdivision.

To whom it may concern,

As a resident of Vineyard Valley, I am concerned about this property being developed. The fact that it's going on a flood plane could impact our whole park if a flood should take place. And it seems that nobody wants to take responsibility if it does flood. The army Corp of engineers have done their job building the levee and they are done. The builder won't and can't guarantee it won't flood, and what is the city guaranteeing? Not only that but we have a serious water problem in our county. Not to mention the traffic impact to Pope street, the trail, and Main Street. 24-2
I strongly oppose the proposed development. 24-3

24-1

Sincerely,
Calie Candia
Sent from my iPad

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Response to Letter 24
Calie Candia
November 1, 2021

24-1 The comment expresses general concern over the property being developed. More specifically, the commenter is concerned about potential impacts to the floodplain in the event of a flood and stability of the levee.

Please see Master Response 3 that addresses City liability in the event of a flood and concerns related to the levee.

24-2 The comment raises concerns regarding traffic along roadways within the City.

Please see Response to Comment 10-2 that address general traffic concerns.

24-3 The comment states general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 25

-----Original Message-----
From: BERT CASTEN <bertcasten@aol.com>
Sent: Saturday, October 30, 2021 2:37 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter st

I have been taking kids and adults to walk behind the library for years. Access to the river is so much fun. 25-1
Please do not let Hunter Subdivision Project take our open space/ access to river away.
Thank you
Bert Casten 1830 Adams st

Sent from my iPhone

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Response to Letter 25
Bret Casten
October 30, 2021

25-1 The comment states that the commenter frequently uses the adjacent trail and expresses concerns over trail and open space access.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Regarding the trail, as noted in the Draft EIR in Chapter 2, Project Description, there is an existing City trail located in the northside of the levee maintenance road. A small portion of the levee maintenance road would be paved to accommodate construction of the Adams Street extension, but sidewalks would be provided along the extension of Adams Street to provide a safe connection to the remainder of the maintenance road and the pedestrian trail, which would remain unaltered by the Proposed Project. Please see Chapter 3, Changes to the Draft EIR for a new figure showing the adjancent trails.

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Comment Letter 26

From: Deanna Caudill <dl.caudill10@gmail.com>
Sent: Saturday, November 6, 2021 8:22 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Project on Adam

Keep our city small and safe!!!
Deanna L Caudill

Sent from Mail for Windows

26-1

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Response to Letter 26
Deanna Caudill
November 6, 2021

26-1 The comment expresses a desire to keep the City safe and small.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 27

From: bobchilds@aol.com <bobchilds@aol.com>
Sent: Saturday, November 6, 2021 11:43 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

Good day!

We, too, are concerned about the proposed project. While we, more than many, appreciate the need for additional and affordable housing, we do not believe this project is the way. 27-1

Water is paramount, we are already short of the precious material, the addition of the number of proposed homes will severely be negative. The sewage addition, will also be a great negative to the Vineyard Valley neighborhood, where we live, which is already at the limit. The additional homes, will be a strain (at least) to the current levy (if altered) on the flood zone which this property has been protected by it and the "seawall" installed in the last few years. As well, the levy is an additional "escape route" for our neighbors, all of whom are over 55, in the event of fires, floods, etc. 27-2 27-3 27-4

Please add our names to the list of folks objecting to this project. 27-5

Thank you, in advance.

Bob Childs
Nancy Carlson
2 La Canada Ct
SH 94574
707.968.5294

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Response to Letter 27
Bob Childs and Nancy Carlson
November 6, 2021

27-1 This comment expresses general opposition over the Project, while acknowledging the need for additional affordable housing.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

27-2 The comment states a concern over Project's water usage and impact on water availability.

The commenter's concern is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

27-3 The comment expresses concern over the Project's impact on the City's sewer capacity.

The commenter's concern is noted and forwarded to the decision makers for their consideration. As described in Section 3.13 of the Draft EIR, the Proposed Project would not exceed the City's current permitted wastewater treatment plant capacity; also, pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to sewer projects. The Project applicant would be required to pay these fees, which would help fund upgrades and improvement to the City's sewer system.

See also Master Response 4 that addresses concerns regarding the City's sewer system.

27-4 The comment expresses a concern regarding the current condition of the levee and the impact the Project would have on it related to the floodplain and emergency evacuation.

Please see Master Response 3 that addresses City liability in the event of a flood and concerns related to the levee and Master Response 1 for further information on emergency evacuation.

27-5 The comment requests that the commenter be added to the list of public members opposed to the Project.

The commenter has been added to a list of interested public members to receive notices regarding the Project; however, this list does not distinguish those who support or oppose the Project.

Comment Letter 28

From: Robb Cohen <cohen.robb@gmail.com>
Sent: Monday, November 1, 2021 3:45 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: Re: [External] Proposed Hunter Street Subdivision

To Whom it may concern:
I am a resident of Vineyard Valley and hereby join with over 200 park residents in registering my opposition to the above-referenced subdivision. 28-1
As a former attorney and builder/developer with over 35 years experience with large-scale residential developments, I believe the proposed project is ill-advised and fraught with a host of potential developmental and legal problems. I am particularly concerned that the city of St Helena would even consider such a large-scale development in light of the persistent drought and the resultant water restrictions that have already been imposed on the residents of St Helena in response to the water shortage. This project, should it be approved, will only exacerbate the existing water restrictions/ shortages and concomitant penalty provisions that have already been imposed on drought-weary city residents. Furthermore, should the subdivision be approved, the risk of building on a flood plain will subject the city to numerous and costly lawsuits, which will inevitably ensue. Given the well- publicized financial difficulties the city has experienced in recent years, the idea that the city would even consider approving this project strikes me as being extremely ill-advised. Additionally, I would expect that should the project be approved, it will expose city officials to legal challenges for claims of misfeasance and malfeasance, which will undoubtedly be costly to defend. 28-2 28-3 28-4
I have purposely omitted any references to the many other allegations and concerns that have already been articulated by the hundreds of St Helenians who have already written in opposition to this project.
I pray that the city council will reject the proposed Hunter subdivision.
Sincerely,
Robb A. Cohen
P: 703.405.1307
cohen.robb@gmail.com
--
Robb A. Cohen
P: 703.405.1307
cohen.robb@gmail.com

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Response to Letter 28
Robb Cohen
November 1, 2021

28-1 The comment expresses general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

28-2 The comment states that the Project would exacerbate existing water supply problems in the City.

Please see Master Response 2 that addresses concerns associated with the adequacy of water supplies.

28-3 The comment states that the risk of building on a flood plain will subject the City to numerous lawsuits.

Determining legal liability for a potential future event is beyond the scope of CEQA and is not required to be evaluated in an EIR; therefore, no further response is necessary.

28-4 The comment states that the Project should not be approved and suggests that approval of the Project would subject the City to legal challenges.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 29

From: Joseph Cole <josecole134@gmail.com>
Sent: Saturday, October 30, 2021 2:49 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

Looking southwest from Carpenter Ranch. across the wide open expanse, Vineyard Valley mobile home park was there. Hunt street Apts. nope! Starr ave (didn't exist) Hunt Ave. dead ended a little past Monte Vista. I am a newby, here. Been transplanted desde Socal (1983). Married born and raised home grown Saint Helena girl: Misty Sagadin. Our two sons are grown men. (oh, yeah. They, too, born/ raised here. I left southern California and have experienced this incredible upper valley. Hunter Project is going to serve only a few. the reality of what it's fruition will harvest a self- inflicted disregard for the wonder a rural community experiences. Don't do that.

29-1

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Response to Letter 29
Joseph Cole
October 30, 2021

29-1 The comment letter expresses general opposition to the project and provides anecdotes about the commenter's experience as a resident of St. Helena.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 30

City of St Helena, City Hall
Received
OCT 26

October 25, 2021

1480 Main St.
St Helena, CA 94574

Members of Planning Commission and City Council

Re: Hunter Project

I am enclosing one of the best articles written on the St Helena dilemma of the Hunter Project. I could wax eloquently on all the issues with this project, but a review of the article written in 2016 by Nicholas Pinter, Professor of Watershed Sciences at UC Davis really encapsulates the flood and water issues with this project. Nothing has changed since 2016. Yesterday's rains should highlight these issues. The river rose from a dry creek bed to 14 ft in a matter of hours. 30-1

We talk of about 100 year flood plains without really understanding the mathematics and probability of this number. You can at least understand that this does not mean we cannot have a catastrophic flood tomorrow. Houston is in a 500 year flood plain and they have had 3 catastrophic floods 3 years in a row.

We also have the issues of not putting another bridge across the Napa River, the high traffic problem and the proposal for water mitigation by providing better flush toilets which is seemingly idiotic. 30-2

The Hunter project is a no go for the citizens of the St Helena. They made that perfectly clear 6 years ago. The council and commission must: 30-3

1. Review this article and articulate why these issues are still not real
2. Get a written letter from FEMA that they would cover another flood on this land
3. Guarantee that the City would not be liable for further flood issues if housing is built here
4. Have a legitimate proposal for traffic control without building another bridge 30-4
5. Come up with a better water mitigation plan. We have been on Stage 2 water conservation. We cannot ask the citizens to save more to build this ill conceived project. 30-5

The Hunter project is too big a risk to leave it to a brief meeting and the votes of a few commissioners and the city council. This is a huge risk to the city which needs greater in person debate. Zoom doesn't do it. 30-6

Arlene and Richard Corsetti

1401 Spring Street

St Helena, CA 94574

California WaterBlog
A biologist, economist, engineer and geologist walk onto a bar...

St. Helena, California: Dealing with a Field-of-Dreams Levee, Residual Risk, and a Flood of Controversy

Posted on July 17, 2016 by UC Davis Center for Watershed Sciences

by Nicholas Pinter

A new $37.2[1] million levee in the town of St. Helena, on the floodplain of the Napa River, has a colorful history and has been stirring local acrimony since its inception. This project illustrates both the attraction of levee protection, in this case protecting a low-income neighborhood ("low income" by Napa standards) hit by disastrous flooding in 1986 and again in 1995, as well as pitfalls of this strategy for long-term risk management. There are clearly positive elements of the St. Helena levee project, but also numerous missteps that have mired the project in dissent and even, opponents argue, threaten to bankrupt the town. With important planning and zoning decisions now pending, the St. Helena levee is a case study for other communities to examine before they consider all of the options for flood-risk management.

After the release of a recent journal article on levee protection, one reporter tried to wake me up with the following opening question – "Prof. Pinter, why do you hate levees?" I laughed in appreciation of a good icebreaker, and then explained how levees, floodwalls, and other structural protections are valuable tools in a diverse toolkit used to manage flood risk. But levees also come with adverse consequences that need to be rigorously evaluated and balanced against their potential benefits. Those negative impacts and the need for careful evaluation are often lost in the rush to build new levees or enlarge existing structures, typically in the aftermath of a damaging flood.

St. Helena is a town of about 6,000 people along the Napa River about 20 miles upstream of the City of Napa. The river there is small, averaging just 46.7 cubic feet per second (cfs) of flow over the duration of record, but subject to flash flooding after intense local rainstorms. Since 1862, 28 major floods have struck the Napa Valley[2], including 1955, 1963, 1967, 1973, 1978, 1981, 1983, 1986, 1993, 1995, 2002, and 2006. Most of St. Helena is located a safe distance from the river, but starting in the 1970s, the Vineyard Valley area was developed, including 468 homes, apartments, and mobile homes at risk of flooding[3]. Most of these are in what is now mapped by FEMA as the so-called 100-year floodplain. During the five-year review process for development of the mobile home park, local residents report that the issue of flood risk was never raised.



Figure 1 – The Vineyard Valley neighborhood of St. Helena under water during the 1986 flood.

Intense rain events hit the upper Napa Valley in February of 1986 and again in March of 1995, sending the Napa River over its banks and into the new Vineyard Valley development. Damages in each event were estimated at over $50 million in St. Helena alone. During the 1995 flood, over 400 residents of St. Helena were evacuated, and 200 mobile homes in Vineyard Valley were declared a total loss. In both 1986 and 1995, other communities such as Calistoga and Yountville also were hard-hit, including inundation of much of downtown Napa. As described by the Napa Valley Register, *"Overnight, the Napa River*

swelled from a modest tributary of San Francisco Bay to a wrathful Amazon." The 1986 flood killed three people, forced the evacuation of over 2,500, and caused total damages estimated at $100 million[2].

A typical pattern in flood response is that it takes a one-two punch to motivate any large-scale action to address flood risk. The 1995 flood in Napa was that second punch. Surveying the damage, Napa County officials dusted off a flood-control plan initially drafted by the Corps of Engineers but defeated by a voter referendum in the 1970s. The original Corps flood control plan was considerably reworked and, particularly in the City of Napa, many forward-thinking elements were added, including channel habitat preservation and reconnection of the historic floodplain. Flood control was now put to the voters again, in the form of Measure A, a half-percent county sales tax, which was passed in March of 1998 with a two-thirds voter majority. With local cost-share funding secured through the referendum, Napa County began moving forward with the large-scale flood plan in Napa, with smaller portions of the funding apportioned to other communities along the river.

In St. Helena, plans were drawn up that focused on a large levee and floodwall to protect the Vineyard Valley area, as well as several other elements. These other elements of the project included bank stabilization, removal of a channel constriction, internal stormwater management, and excavation of a storage area outside the levee (a "terrace," the project calls it) planted in native vegetation. The channel restriction, for example, involved the removal of 17 mobile homes and the associated land closest to the river, which opened that area to better pass flood flows. This bend in the river channel represented a chokepoint during floods, significantly obstructing flow and raising water levels in that area and upstream. Removal of these homesites and augmenting the conveyance capacity of the channel at this chokepoint certainly lowered flood danger by both reducing at-risk infrastructure and by lowering water levels during future floods.

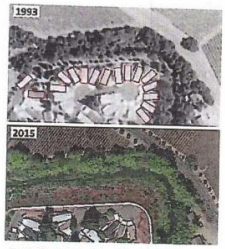

Figure 2 – The positive side of flood control. As part of the St. Helena project, a total of 17 mobile homes were permanently and the flood wall set back from the river.

Although the St. Helena project included several forward-thinking elements, it remained much more of an "old school" structural flood-control plan than what was implemented in Napa. The St. Helena plan centered on approximately 2,000 ft of floodwall surrounding the Vineyard Valley mobile home park and another ~2,000 ft of levee that extends from the floodwall to the north and west. As now required of urban levees in California, the system protects to the "200-year" level – that is, designers of the levee and floodwall have affirmed that they will keep out floods up to those with a 0.5% chance of occurring in any year.

On a map the St. Helena levee is relatively small, a tiny fraction of the length of the systems that protect the Central Valley or great alluvial floodplains of the Midwest. But its height is impressive. Standing on the new levee crest above the Napa River, one can almost imagine looking out on the Sacramento or Mississippi River. The levee is also proportionally wide, with a crest 15-20+ feet across, wide enough to meet requirements for much larger rivers and floodplains. Wide enough, in fact, to carry two full lanes of traffic. Indeed, the initial St. Helena planning documents[4] called for a multi-function levee that would also serve as a new roadway. This new road would have crossed the floodplain and the river across a new bridge, connecting St. Helena to the Silverado "wine trail" on the northeast bank. Currently that connection is across the Pope Street bridge, a historic stone structure built in 1894 and so narrow that it is terrifying to cross even when the driver coming the other way hasn't spent

the afternoon sampling the latest vintages. Using flood-control funding to simultaneously serve another goal might not be illegal, but it raises questions about priorities in design details. In this case, the proposed bridge link was rejected after litigation focused on its environmental impacts, but before levee construction. Nevertheless, the width of the St. Helena levee retained the width of a road to nowhere, as well as – importantly – a path that took the levee far wide of the housing it was funded to protect, enclosing a broad swath of floodplain undeveloped and empty except for rows of grapevines. More on this in a moment.

Another interesting aspect of the St. Helena levee is the funding to plan and design the project. The city obtained an $8 million grant from FEMA's Hazard Mitigation Grant Program (HMGP). HMGP uses a slice of FEMA's total disaster-related funds to promote "mitigation," meaning actions taken by communities to lower their overall exposure to future disasters. Flood-mitigation strategies favored by FEMA nationwide include buyouts and relocation of repeatedly flooded homes or elevation of floodplain structures up beyond the reach of future floods.

FEMA carefully monitors HMGP projects to make sure that taxpayer funds are used for their intended purpose. In 2013, when FEMA audited St. Helena, the city was unable to account for a large block of HMGP money. Among project expenditures, the city had spent $1.64 million on lobbying expenses, reportedly including lavish entertainment expenses in Washington aimed at securing Army Corps of Engineers and other federal funding for levee construction. When FEMA reviewed the city's books, it disallowed $1.9 million in expenses, requiring St. Helena to withdraw this amount from its operational accounts. Further local acrimony ensued because the city repaid the FEMA money without adequately, some argue, disclosing the financial missteps and the resulting impacts on city finances. This repayment resulted in a $1.5 million budget deficit and significant cuts to city services.

The details above are a selection of the complaints voiced by local levee opponents in St. Helena. This dissent contrasts with the broad consensus surrounding the much larger flood-control measures implemented in the City of Napa. Large public projects never reach perfect consensus, but the Napa Project solicited input from a broad range of stakeholders and integrated these opinions in final project designs. In contrast, the St. Helena project continues to roil that community even now that the levee is complete and a done-deal.

The final shoe – probably the most problematic element of the St. Helena flood-control debate – is now dropping, five years after the levee's completion. The current issue results from the unusual pathway of the levee, which sweeps well north and west of the neighborhoods previously flooded and includes 16.9 acres of undeveloped vineyard land. Undeveloped until now, that is. Just 17 days before the passage of Measure A, the mechanism that funded large-scale flood engineering throughout Napa County, much of the empty floodplain land behind the St. Helena levee was purchased by a private developer. On Sept. 8, 2010 the developer submitted plans to convert the empty agricultural land behind the levee into high-density residential development, including 87 new residential units[5]. This despite an explicit provision in Measure A that "none of these projects are intended or designed to encourage population growth."

My research group has worked hand-in-hand with floodplain residents to provide them planning guidance and technical expertise. We've also studied levee projects that would increase flood heights for neighbors, increase long-term flood risk, or degrade habitats, sometimes in exchange for very limited local flood-protection benefits. After struggling with this balancing act time and again, we've proposed a **three-step "levee sniff test" to preliminarily judge any proposal**. New or enlarged levees and floodwalls may be an appropriate solution if the system is designed to protect floodplain infrastructure that is:

1. *concentrated,*
2. *high in value, and*
3. *pre-existing.*



Figure 3 – The Levee Sniff Test

The most crucial – and often the most politically fraught – of these criteria is the third. The worst case is construction of "field of dreams" levees – new, expensive, often muscular levees surrounding undeveloped or sparsely occupied floodplain land. "Build it and they will come" – field-of-dreams levees are meant to attract new construction and development on the floodplain. Political leaders see expansion of their local tax base, and developers salivate over the prospect of transforming low-cost floodplain land into urban real estate as soon as the new levee "solves the problem of flooding forever."

By intent or by accident, the St. Helena project created a "field of dreams" levee. The original position of the levee was set by the desire of the city to piggyback a long-sought transportation project onto available flood-control funding. A private developer saw an opportunity for windfall profits and snapped up this floodplain acreage. What remains unclear is why, when plans for the roadway were scrapped, did St. Helena not downsize its levee? Local levee opponents see nefarious motives here, and the optics are not good. In 2008-2009, local residents had proposed several possible levee alignments that hugged the edges of existing neighborhoods that needed protection. These alternatives would have eliminated the "field of dreams" issues, cut construction costs, and would have significantly reduced future flood levels for neighboring properties outside the levee. But these alternatives were rejected at the April 14, 2009 meeting of the City Council. Why? Perhaps simply a result of frustration at the grassroots opposition and the desire to move forward with the existing blueprint, however much conditions had changed since those plans were drawn up.

> *"Residual Risk – the small but real possibility that a levee may fail or be overtopped during future floods."*

So past mistakes aside, why not fill in every square inch of land behind a levee once you've got one? The problem with levees, and with field-of-dreams levees above all, is that no type of structural flood protection can ever reduce the flood risk to zero. Even the strongest levee or floodwall carries a "residual risk" of failure or overtopping during large floods. Furthermore, having flood waters pour over or burst through a tall barrier turns the gradual process of floodplain inundation into a much more violent, dangerous, and damaging event. The history of occupation of U.S. floodplains is a history of levee failures, with headlines almost every year bringing footage of disastrous levee failures somewhere in the country. One levee system on the Mississippi River, not an atypical one, was breached 14 times through its history, only to be patched and raised each time, in the process driving up flood levels for the next event and contributing to the next failure. Expert after expert, blue ribbon panel after panel, has implored engineers, local leaders, and floodplain residents to not forget about residual risk. Brig. Gen. (Ret.) Gerald Galloway, former commander of the US Army Corps of Engineers puts it this way, "Let no one believe that because you are behind a levee, you are safe" (Galloway, 2005). The point has also been made more bluntly, "There are two kinds of levees ... [t]hose that have failed and those that will fail" (Martindale and Osman, 2010).

"Developers and home builders may be gone, but residents of Natomas will be there and are the ones who are rolling the residual-risk dice year after year."

Neglecting residual risk of flooding behind levees creates a false sense of security for residents and a lunatic calculus in which the local community can find itself with far greater long-term flood risk than before the levee was built.

California has made these mistakes before. In fact, the leading example of a "field of dreams" levee, discussed in floodplain management circles around the world, is Natomas on the northwest side of Sacramento. The Natomas Basin is ringed by 42 miles of levees, encompassing approximately 53,000 acres of the floodplains of the Sacramento and American Rivers. This land was sparsely populated until roughly 1990. Despite a tangled history, the Natomas system was built and they did come. On-going levee construction, particularly improvements initiated in 1992, ushered in a wave of development. As of 2010, Natomas was home to over 22,800 structures, the large majority of them residential units and home to more than 90,000 people[6]. The City of Sacramento currently plans to permit up to 1,000 additional single-family homes per year, 500 multifamily residential units per year, and unlimited industrial, commercial, and retail construction behind this levee[7]. Today, total property in Natomas at risk of flood damage, should the levee fail or be overtopped, exceeds $8.5 billion, with flood depths that could reach 25 feet[8]. Heroic efforts are now underway by the Sacramento Area Flood Control Agency, the California Central Valley Flood Protection Board, and the Corps of Engineers to patch deficiencies in the Natomas levee and raise the overall protection provided by the system. When that huge – and hugely expensive – effort is complete, the State of California, the Corps, and FEMA will sign off that they have reduced the statistical chance of catastrophic flooding in Natomas to 0.5% per year (less than once every 200 years, on average). That is a high level of protection by US standards, and engineers and leaders who are implementing the project will be justifiably proud of their accomplishment.

But ... our country's 400+ year history with levees also tells us that such claims of almost complete flood protection have often been repeated, and almost always were over-stated. Lots of reasons why this has happened in the past, and many of those reasons hold true for the future. But even at face value, a 0.5% exceedance probability for a system now protecting $8.5 billion in property translates – crudely – into up to $42.5 million in risk each year. If those 22,000+ homes and other structures had already been there before the levee (concentrated, high-value, and preexisting), then this annual $42.5 million in residual risk would have been a necessary tradeoff. But because Natomas was a field-of-dreams levee built intentionally to create new floodplain infrastructure, the large majority of this $42.5 million/year is all-new and added risk.

Who bears this residual risk if (some would say "when") California's drought turns to flood and hands us a ">200-year flood?" Or a lesser flood that finds a chink somewhere in the 42-mile long, gopher-prone armor that surrounds Natomas? Developers and home builders may be gone, but residents of Natomas will be there and are the ones who are rolling the residual-risk dice year after year. So too are all US taxpayers, since we bankroll disaster relief. Federal expenditures for disaster relief have averaged ~$35 billion per year in recent years[9], equivalent to about $400 per year per US household.

Residual risk also can be borne by the governmental agencies that facilitate "field of dreams" levees. Legal liability came to roost in California in 2003, when the Court of Appeals found the state liable for $500 million in damages resulting from a levee break on the Yuba River in February of 1986, the same storms that flooded St. Helena. The case was Paterno v. State of California, and although the state neither built nor maintained the levee that gave

way, the court found that it was responsible for inadequate maintenance and management of the system. And liability extends to counties and towns as well; for example, California Assembly Bill 80 made local jurisdictions liable for "property damage caused by a flood [if they] ... unreasonably approv[e] new development in a previously undeveloped area[10]." In the Paterno case, the financial hit of that $500 million decision shook the financial structure of the entire state, such that California was forced to borrow funds from Merrill Lynch in order to pay the claims against it[11].

So where does St. Helena and its levee fit into this broader picture? This levee and the new construction proposed behind it are tiny compared to what has gone onto Sacramento area floodplains, St. Louis floodplains, Houston floodplains, and others. But the principles are the same, and the potential consequences for a small community like St. Helena are proportionally even more threatening than for a large city. The St. Helena Vineyard Valley levee was built to protect residents who had the misfortune of living in a neighborhood built on the edge of the Napa River and far into the floodplain, a neighborhood that should not have built in the first place. That was certainly mistake number one. But after repeated and devastating floods, those residents were justified in seeking a mitigation solution. The second crucial misstep occurred in 2009, when the city approved a levee map that enclosed a large area of floodplain empty except for rows of grapevines. Whether by nefarious purpose or just fatigue, St. Helena opened the door to the crucial and difficult decision now in front of them – whether to bow to the pressure and temptation of approving development of that empty land behind their levee.

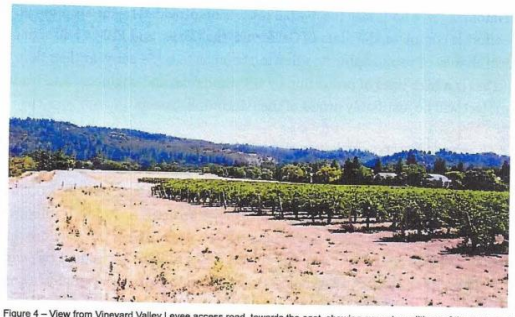

Figure 4 – View from Vineyard Valley Levee access road, towards the east, showing current conditions of the proposed development area. Figure IV.A-3a in Hunter Valley Subdivision Project, Draft EIR, Dates 5/29/2012.

One concern certainly on the minds of St. Helena city leaders is the threat of litigation if they deny the development plans in front of them. When such cases go to court, plaintiff lawyers typically cite the Fifth Amendment of the US Constitution, which states that "private property [shall not] be taken for public use, without just compensation." The legal claim is that refusal to allow development of the owner's land constitutes a "takings" of the value of that land. The St. Helena situation is typical of many examples where the legal threat of a takings claim is used to thwart zoning or planning to manage flood risk and other natural hazards. Developers and their lawyers argue that zoning to prevent development is unjustified, arbitrary, and an infringement of the rights of landowners. On the contrary. The St. Helena developer purchased agricultural land in a floodplain at a price consistent with those conditions. Despite the construction of a levee at taxpayer expense surrounding that

land, it remains a floodplain. The limitation on building expensive homes and apartments on that floodplain is imposed by nature, not the City of St. Helena.

Fear of lawsuits and potential liability is a tangible pressure on a town like St. Helena. But in considering development of floodplain land behind a field-of-dreams levee, these communities are perhaps looking at the lesser threat. Bowing to the will of the developer dodges a likely "takings" lawsuit, but loads St. Helena with new residual risk – risk that is small as an annual percentage, but large in total magnitude. The mean value of a detached home is St. Helena is $640,000 and an attached unit is $401,000[12]. Given current plans for 51 new single-family homes, 11 granny units, 24 multi-family units[5], and a typical value of 50% content damages for flood-loss estimates, these 87 new units could suffer $49 million in damages if that area were inundated. After the 1995 flood, residents of Vineyard Valley sued the City, and residents of the proposed new development could take the same action. The 2003 Paterno decision against California amounted to just 0.5% of the state's total budget that year. For comparison, the City of St. Helena, with revenue to its general fund of $10.5 million in FY 2015/16, could face a financial hit totaling 469% of its annual resources. In other words, the legal liability from the proposed new development could bankrupt the city nearly five times over.

> *"The legal liability from the proposed new development could bankrupt the city nearly five times over"*

St. Helena was founded in the mid-1800s, near enough the Napa River to gain the benefits of that proximity, but up and off the floodplain. However beginning in the 1970s, the town suffered the same magnetic pull as countless other communities across the US – succumbing to pressures for growth and the attraction of empty land ever closer to the river. Located deep in the Napa River floodplain, the Vineyard Valley neighborhood was reviewed and approved, reportedly without even discussing the possibility of flooding. This was an oversight for which residents paid dearly in 1986 and again in 1995. Mistake followed mistake: land that never should have been developed, an expensive levee that has already sent the town into financial distress and political discord, and a levee map that somehow enclosed much more floodplain land than the neighborhood it was designed to protect. St. Helena now has a last chance to bring this cascade to an end and avoid construction of 87 new homes behind their field-of-dreams levee. Floodplain managers, river scientists, and prudent leaders worldwide counsel that levee protection is never absolute, and that even the tallest and strongest wall comes with an inherent residual risk, a small but real possibility that it may fail or be overwhelmed during future floods. For concentrated and existing floodplain infrastructure, levees can be the right solution, and residual risk preferable to no action at all. But towns like St. Helena should understand that levee protection brings a range of consequences, including the possibility of multiplying, not diminishing, the long-term risk of damage and potentially even loss of life in their community.

Nicholas Pinter is a professor in the Department of Earth and Planetary Sciences and an affiliate of the Center for Watershed Sciences. This article was developed with assistance from Megan Nguyen, a junior researcher at the Center for Watershed Sciences.

Further Reading

[1] Report to the St. Helena City Council, Council Meeting of January 26, 2016

[2] City of Napa. 2009. Hazard Mitigation Plan, 2009 update.

Response to Letter 30
Arlene and Richard Corsetti
October 25, 2021

30-1 The comment references a 2016 article written about flooding and water issues in the City and flood-loss damages in the event of a catastrophic flood event.

The comment does not identify any specific issues with the accuracy or adequacy of information provided in the Draft EIR; therefore, no further response is required.

Please see Master Response 3 that addresses the levee and flood concerns.

30-2 The commenter states their opinion on current issues including the lack of a second bridge across the Napa River, traffic problems, and the Project's compliance with the City's Water Neutral Policy.

The commenter's opinion does not identify any specific issues with the accuracy or adequacy of information provided in the Draft EIR. The Project's increase in demand for water is evaluated in Section 3.13, Utilities and Service Systems and traffic is evaluated in Section 3.14, Transportation and Circulation. The commenter's opinion on the need for another bridge across the Napa River is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 that addresses the City's Water Neutral requirements.

30-3 The commenter states that the City Council and Planning Commission must review and refute the article referenced in Comment 30-1 (above), receive a letter from FEMA guaranteeing that another flood in the area would be covered, and guarantee that the City would not be liable for further flood issues if housing is built in the area.

The comment does not identify any specific issues with the accuracy or adequacy of information provided in the Draft EIR. Regarding the referenced article, please see Response to Comment 30-1 above. This comment is noted and forwarded to the decision makers for their consideration.

Determining legal liability for a potential future event is beyond the scope of CEQA and is not required to be evaluated in an EIR.

30-4 The comment raises general concerns for the City to consider specific to traffic congestion absent another bridge across the Napa River.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

30-5 The comment opines that the Project should have a better water mitigation plan because current City residents should not be asked to save more water than they currently are.

Please see Master Response 2 regarding City water supply and requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

30-6 The comment states an opinion that the Project is too risky to be left to the vote of Planning Commission and City Council. The commenter opines that the Project needs in-person debate rather than using the Zoom platform.

The City has recently returned to in-person Planning Commission and City Council meetings. During the COVID-19 pandemic, holding meetings virtually was consistent with Government Code Section 54953, as amended by AB 361, which authorizes teleconference meetings under the Brown Act during proclaimed states of emergency. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

Comment Letter 31

Response to Hunter Project Draft EIR Report

Hazards and Hydrology:

The Draft EIR does not adequately address the potential danger of a flood in this area due to climate change dynamics.
Replacing the currently available absorbing soil with homes and concrete augments flood danger.
When it floods, personal safety of Hunts Grove, Vineyard Valley, and Hunter Project residents would be hazardous. 31-1

Regarding the water neutrality issue in the DEIR, we are currently restricted in our use of water with no anticipated increase in our water supply. Paying into a fund to retrofit toilets does not provide more water and does not adequately mitigate estimated water usage by the Hunter Project. 31-2

Public Utilities:

Increased sewer flow from the Hunter Project would inevitably impact the currently inadequate sewer structure in Vineyard Valley. The DEIR does not adequately address this impact. 31-3

Transportation:

We believe the Hunter Project would negatively impact our Vineyard Valley evacuation plan. This has not been adequately addressed in the DEIR. 31-4

We are concerned the sizeable increase of vehicles on our Saint Helena roads will exacerbate traffic congestion, especially on Pope Street and the Pope Street Bridge. We believe this impact is sufficient to deny the Hunter Project. 31-5

Carroll and Ellen Cotten
1 Del Rio Court
Saint Helena

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Response to Letter 31
Carroll and Ellen Cotten

31-1 Without providing specific examples, the comment challenges the Draft EIR analysis of potential flood impacts due to climate change dynamics.

Because this comment does not provides specific criticism of the analysis, no response is possible. Please see Master Response 3 which provides a general response to concerns related to flooding and the levee near the Project site.

31-2 The comment takes issue with the effectiveness of the City's Water Neutral Policy and how it is used in the analysis of the proposed Project's water demand.

Adherence to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code to fund such measures as fixing an existing leaking water conveyance pipe does offset demand by increasing water supplies compared to the existing conditions of water losses due to the leak. As a result, the Water Neutral Policy does offset new demands with measures that reduce demand elsewhere or otherwise increase water supplies. Therefore, compliance with the City requirements is an appropriate and effective measure to include in the analysis of the Draft EIR. See also Master Response 2.

31-3 The comment generally asserts that the Project would negatively impact the City's sewer system.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no response is required. Please see also Master Response 4 that addresses concerns regarding the City's wastewater system.

31-4 The comment expresses concern that the Project would negatively impact the emergency evacuation plans within the area.

Please see Master Response 1 that addresses concerns associated with emergency evacuation.

31-5 The comment expresses general concerns regarding traffic congestion in the City and along the Pope Street Bridge.

The comment does not identify any specific issues with the accuracy or adequacy of information provided in the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. The operational aspects of the Proposed Project that contribute to

delay and congestion on local roadways is no longer considered an environmental impact under CEQA. Please also see Response to Comment 10-2.

Comment Letter 32

Richard Crebs
10 San Juan Court
Saint Helena, CA. 94574
(707) 580-0418

November 2, 2021

Ms. Maya DeRosa, Planning & Building Director
City of Saint Helena
1572 Railroad Avenue
Saint Helena, CA 94574

Delivered via email to:mderosa@cityofsthelena.org

Dear Ms. DeRosa:

Generally, this is a fatefully flawed project projected upon a majority of fill generated from the construction of the flood control levee, subject to probable seismic events and/or flooding, exasperating demands on water we do not have and adding to almost daily traffic gridlock at commute time on the Eastside roads. This town would be better served leaving the land as open space for all to enjoy. 32-1

The following are my specific objections to the Hunter EIR.

3.9 HYDROLOGY AND WATER QUALITY Commencing on page 367)
The document sets forth in the Section **Flooding Due to Levee Failure or 200-Year Flood Event** (Page 374) propose mitigating the potential risk by suggesting that resident "will have the option of purchasing flood insurance (i.e., FEMA policy").

> (Since the levee project was not certified by the Army Corp of Engineers it is my understanding that if it should fail the city would ultimately be responsible for all ensuing damages.)

Instead require the developer to Hold the City harmless in the case of any future flooding if the project is completed and require the developer to post an evergreen Fifty Million ($50,000,000) Surety Bond to support the "Hold Harmless" Agreement. 32-2

Anything less puts the city, and there for its citizens, at the risk of massive litigation of the Hunter Project should flood in the future. It is not the Cities or its citizens responsibility to be put at significant financial risk just so a developer can profit by develop an extremely questionable parcel with other multiple challenges such as water, sewer, and traffic concerns.

3.13 -Utilities and Service Systems
3.13.4 Impacts
Table3.13-9 Proposed Project Water Demands 32-3

The Hunter EIR reports calculates that this project will consume 19.88- acre feet of municipal water and 17.16- acre feet of groundwater.

This EIR ignores the very factual issues surrounding both municipal and groundwater available. This project should not be allowed to draw any groundwater as indicted for landscaping purposes. Instead, there are commercially available systems to capture all bath water, treated and used for flushing toilets and landscaping. Similar projects have demonstrated a net savings of up to 33% in potable water. A greywater system for *each* housing unit should be mandated.

32-3 Cont.

Wastewater Treatment

The Hunter EIR ignores whether the existing sewer lines situated North to South dissecting VVMHP. If this project is approved then Hunter should be required, under bond, to pay for not just the physical wastewater upgrades necessary but also due payment and consideration afforded to the VVMHP residents during any construction necessary to an increase in wastewater capacity to accommodate the wastewater demands determined necessary.

32-4

Appendix J
Water Neutral Report

This water neutral report vacuously concludes that rather than undertaking and paying for a portion of the cities Capital Improvement Program (CIP) need that they opt to offer a fop in the form of $596,809.19 in retrofit fees. Currently, the CIP five-year projected cost approximate $60,000,000. If the City should choose to approve the Hunter Project, then an a more equitable requirement would be to require Hunter to pay ten (10%) of that amount or the sum of $6,000,000 to assuage the required in lieu fees.

32-5

3.14-1.Traffic

All of this report's conclusions are either erroneous, misleading, or incorrect. It does not matter what theoretical studies the reference all of the surface roads on the Eastside of town are already at maximum capacity. There is a solution which the Hunter study studiously avoids. If they wish to have the city approve this project, then let them significantly help ameliorate the Eastside traffic problem by paying for a new bridge connecting Adams Street to the Silverado Trail.

32-6

Respectfully submitted:

Richard Crebs
(This letter off comments regarding the Hunter Project are submitted by me as an individual and not on behalf of any organization)

Response to Letter 32
Richard Crebs
November 2, 2021

32-1 The commenter states the Project is flawed because it is proposed on fill placed on the site as part of the City's Flood Protection Project; would be subject to seismic events and flooding; would increase demand for water; and would increase traffic congestion. The comment recommends the site be left as open space.

Consistent with the recommendations in the Geotechnical Report, the existing fill/soils on the site would be removed, re-compacted and returned to the site along with additional fill. The site would be graded and leveled to ensure a stable base for new development (DEIR p. 2-31).

Potential hazards associated with seismic events is addressed in Section 3.6, Geology and Soils. As noted on page 3.6-12, the Project site is not crossed by an active earthquake fault zone, nor is it crossed by any potentially active faults. The closest earthquake fault zones are the Rodgers Creek Fault, located about 15 miles to the southwest of the Project site and the southern part of the West Napa Fault, located approximately 17 miles southeast of the Project site. Development would be required to comply with the California Building Code which sets forth structural design requirements associated with seismic loads. As part of this process, a design-level geotechnical investigation would be completed (in addition to the existing geotechnical investigation already completed) to assess site conditions at a greater level of detail and make geotechnical recommendations to be incorporated into the site development plan, grading plan and building plan. The City requires that such geotechnical recommendations be verified at time of grading and building construction prior to issuance of a certificate of occupancy. In addition, mitigation measure GEO-1 is imposed to ensure preparation of a design-level geotechnical report that includes specific design criteria to ensure the Project is designed to meet all current seismic safety standards (DEIR pp. 3.6-22 and 3.6-23).

Please see Master Response 3 that addresses flooding concerns and Master Response 2 that addresses water supply concerns and Response to Comment 10-2 regarding traffic.

The Project site is not owned by the City and is not public open space but designated by the General Plan and zoned for Medium Density Residential development. The commenter's desire to see the site left undeveloped is noted and forwarded to the decision makers for their consideration.

32-2 The comment references the analysis of potential flooding due to a levee failure and suggests residents should purchase flood insurance in the event of a flood event and

the City should require the Project applicant post a bond to "hold the City harmless" in the event of a flood.

The Draft EIR evaluates flood risks due to a 200-year flood event as well as due to failure of the levee starting on page 3.9-8 in Section 3.9, Hydrology and Water Quality. As noted on page 3.9-8, The City's Flood Protection Project, specifically the levee and floodwall along the Napa River and Sulphur Creek, was constructed to provide protection from a 200-year flood event. The levee was designed and constructed in accordance with all applicable U.S. Army Corps of Engineers Engineering Manuals and has been reviewed by the Federal Emergency Management Agency or FEMA. The flood control system was also evaluated for stability during a seismic event and was found to be stable by two engineering firms. The Project site is outside of a FEMA special flood hazard area; therefore, purchase of flood insurance would be required. However, because there remains residual risk of flooding from catastrophically large floods (such as a 500-year flood) or levee failures, residents in flood-prone areas, even if outside of a regulatory flood zone, have the option to purchase optional flood insurance. Regarding the applicant's liability in the event of a flood and purchase of a bond to absolve the City of any responsibility to residents in the event of a catastrophic flood event, please see Master Response 3.

32-3 The comment opines that the EIR ignores issues associated with availability of water and believes the Project should not use groundwater for landscape irrigation in lieu of capturing and treating all domestic wastewater or "grey water" for irrigation and goes on to state a grey water system should be mandated for every residence.

The Project is required to off-set its water demand, per the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. In compliance with these requirements the Project applicant prepared a Water Neutral Report (see Appendix J). The City requires all new projects to be water neutral and not consume water without offsetting the demand. Please see Master Response 2 that addresses the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code requirements.

32-4 The comment is referring to the City's wastewater system and whether the Project would increase wastewater conveyance in the same infrastructure that also serve the Vineyard Valley Mobile Home Park and states if the Project is approved the applicant should be required to fund any improvements to the City's wastewater system.

The Project's connection to the City's wastewater (or sewer) system is described on page 2-29 in Chapter 2, Project Description. Wastewater flows from the western end of the Project site are proposed to drain into an existing public manhole at the corner of Starr and Hunt Avenue via new 8-inch sewer pipes. The area east of Starr Avenue is proposed to drain east through the Project site via new 8-inch sewer pipes into an existing public manhole on the adjacent parcel in the Vineyard Valley Mobile Home Park. The City's system is sized to accommodate wastewater flows from the Project and there is adequate conveyance capacity within the existing lines. The Project

would not require any modifications to the City's system and impacts were determined to be less than significant (DEIR p. 3.13-29). Please see Master Response 4 that provides additional details regarding the City's sewer system and ability to serve the Project.

32-5 The comment questions if the Project's estimated in-lieu fee is adequate based on the City's current Capital Improvement Projects (CIP) budget.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Response to Comment 2 that addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

32-6 The comment expresses general concerns regarding traffic congestion in the City and would like the Project to pay for a new bridge to connect Adams Street to the Silverado Trail.

The Proposed Project does not include the construction of a new bridge and does not involve any further extension of Adams Street, east of Starr Avenue. Any extension of Adams Street connecting to Silverado Trail would require further study and approval by the City and the City's Public Works Department has determined is not required for this Project.

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Comment Letter 33

From: Nicole Dale <nicole.garriott@gmail.com>
Sent: Thursday, October 28, 2021 9:47 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Public Comment - Hunter Subdivision

Dear Maya,

We share a property line with the proposed Hunter Project and are in opposition of the development. In addition to our concerns over traffic, water, flooding, etc. another top concern is the loss of open trail space that we see so many St. Helena residents use daily. There are no other open walking or hiking paths in St. Helena and it would be a huge loss to both locals and tourists who all enjoy the space. 33-1

A separate concern- we understand that one of the biggest benefits to this project is affordable housing. The fact that the developer is proposing ADU's on the single-family home lots to fulfill the affordable housing requirement is offensive to the law. 33-2

Best Regards,
Nicole and Scott Dale
1326 Monte Vista Ave

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Response to Letter 33
Nicole Dale
October 28, 2021

33-1 The comment states general opposition to the Project and explains that the commenter shares a property line with the Project. The commenter expresses general concerns over traffic, water, flooding, and the adjacent walking trail.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, to address the commenters' general concerns regarding water and flooding, please see Master Responses 2 and 3.

33-2 The commenter opposes the Project's proposed ADUs and claims the ADUs should not be used to fulfill the affordable housing requirement.

The City's Inclusionary Housing Ordinance requires a minimum level of affordability in the housing which is ultimately developed on the Project site. The Project applicant will submit a detailed proposal regarding how the Project will meet this requirement which will be part of a subsequent discretionary approval (Affordable Housing Agreement) at or prior to the recordation of the Final Map. This must be approved by the City Council before development of homes can take place. Staff will review the applicant's proposal before making a recommendation to the City Council on the Affordable Housing Agreement. A determination of consistency will be made at the time that subsequent application is submitted and reviewed (DEIR pp. 2-18 and 2-32).

The commenter's opinion is noted and forwarded to the decision makers for their consideration.

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Comment Letter 34

From: Gayle Davies <gayleddavies@gmail.com>
Sent: Monday, November 29, 2021 9:15 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>; Paul Dohring <PDohring@cityofsthelena.org>; Anna Chouteau <AChouteau@cityofsthelena.org>
Subject: [External] Hunter Project

Dear Maya,

I respectfully submit these comments in response to what I see as a deficiency in the DEIR process for the Hunter Project, specifically, violations of AB 52.

It is known that this area was a burial and artifact site of Native Americans who resided here before us. AB 52 has requirements applicable for this project, including consultation with Native American tribal representative(s) affiliated with this geographic region.

California law defines consultation as the "meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement." Gov. Code § 65352.4 (emphasis added).

Respectful, effective consultation consists of in-person meetings between appropriate representatives of the parties, which the tribe may wish to host at its reservation or rancheria. During consultation meetings, the parties should make a point to identify any significant impacts the proposed project would have on tribal cultural resources and discuss potential avoidance or mitigation measures; the tribe may identify additional consultation topics in its response to the lead agency's notice letter. Agencies should also be aware that tribes may take a broad view of cultural resources and extend this characterization to entire landscapes, as contemplated under AB 52's tribal cultural resources definition. *See* Pub. Res. Code § 21074(a)(1)(A). AB 52 also requires agencies to recognize that tribes may attach cultural or spiritual value to these resources, apart from their scientific or archaeological merit. *Id.*

34-1

This DEIR does not indicate such consultation occurred and in fact seems to state the opposite, that the Tribal Chairman, Scott Gabaldan, was not only not in consultation, but not contacted.

This is law.

Beyond law, is nothing sacred?

Please consider.

Gayle Davies

St Helena resident

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Response to Letter 34
Gayle Davies
November 29, 2021

34-1 The comment suggests that the Project did not comply with AB 52 requirements for consultation with Native American tribal representatives affiliated with the area including Scott Gabaldan, tribal chairman of the Mishewal Wappo Tribe of Alexander Valley.

Section 3.5, Cultural and Tribal Cultural Resources of the Draft EIR describes the Project's compliance with AB 52 requirements. Pursuant to AB 52, the City sent letters to all tribes (who have requested notification) who are traditionally or culturally affiliated with the geographic area of the Project site. A letter was sent to Vincent Salsedo with the Mishewal-Wappo Tribe of Alexander Valley on April 23, 2018. No response was received from the Mishewal Wappo Indian Tribe in response to the AB 52 letter. All records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City.

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Comment Letter 35

November15, 2021

To: MAYA DEROSA, AICP

City of St. St. Helena Planning and Community Development Department

My comments focus on the section of the EIR defined as HYDRLOGY AND WATER QUALITY, Section 3.9. and my focus is on the potential effects of the proposed Hunter
Subdivision on the Vineyard Mobile Home Park, a community of over 55 age group. We strongly believe that mitigation is necessary in several areas. The EIR for the proposed Hunter subdivision states that no mitigation is necessary. The following areas need mitigation or further research.

1. Section 3.9.1 looks at Regional Climate. This section studies only up to 2016. We have had 2-4 years of drought since 2016 and this needs to be factored into the decision-making process. Climate change could cause a continuation of drought. 35-1
2. There are several references to Engineering studies done to design, finance and construct the St. Helena Comprehensive Flood Control and River Restoration Project. The owners of the Hunter property need to do their own Engineering studies and the City needs to more clearly direct the public how to find these studies if in fact there are some current studies available. 35-2
3. Page 3.9.8 of the EIR states "The Proposed Project does not include any element that exacerbates existing flood hazards for off-site properties or the general public (i.e.). through flood plain encroachment that blocks or redirects flood decision-making flows or by placing habitable structures within areas with reasonable risk of flooding). 35-3
4. Where is the proof of this assertion? The engineering studies if available should be reasonably easy to obtain and read.
5. The Hunter property is at a higher elevation that Vineyard Valley. When there are rainstorms, excessive drainage would flow toward Vineyard Valley Mobile Home Park. We are all aware that the sewer systems in the City of St. Helena as well as VV Mobile Home Park are inadequate. The Proposed Hunter Development must design additional sewer systems and not use already inadequate drainage. The new sewer system must include blue or purple pipe to direct water to the Water Treatment Plant where it will be treated to use as non-potable water for landscape and other non-potable uses. 35-4
6. One of their intentions is to direct overflow to the Flood Project Detention Basin. The Detention Basin was designed to retain overflow and direct overflow through a water cleaning process and back into the Nap River. This was designed when the property consisted of 16.9 acres of permeable soil. The Proposed Project once again is using studies done while designing the Flood Project. They determined that the Proposed Hunter Project would consist of up to 70% of the impervious surface area. The Proposed Hunter Project is *estimated* to be developed at *approximately* 58% of impervious surface. Words like estimated and assumed are not scientific. That language is repeated throughout this EIR. 35-5
7. Page 3.9.45 states that the entire project was paid for by Measure A sales tax and other government bonds and loans. I think the Proposed Project should design and build their own Detention Basin. Why should they be able to take advantage of money coming from a sales tax and intended to protect housing already constructed. This as well as River Restoration was the purpose of the Measure A Ordinance. On page 1 of the Measure A Ordinance under Section 2 Findings, Letter G states "None of the projects in the Plan are intended or designed to 35-6

encourage population growth in Napa County." This is repeated on pages 7 and 8. This reference to "The Plan," refers to the plan put forth in the Measure A Ordinance. 35-6

8. In summary this Proposed Project would endanger Vineyard Valley because of their inadequate plan for directing runoff. Cont. 35-7

9. They intend to use the Detention Basin designed for very different circumstances, tagging on to the 33 million dollar Flood Project. This could endanger residents of Vineyard Valley Mobile Home Park. 35-8

10. The dust and dirt will affect the quality of life for as many years as it takes to build. I am guessing two to three years. 35-9

11. It is in direct conflict with the Measure A Ordinance. This alone should stop the Proposed Project. 35-10

12. The added traffic will make Vineyard Valley residents as well as our neighbors suffer the difficulties created by this added traffic. This is not only an inconvenience but also creates a safety hazard. Emergency evacuations would be impossible. 35-11

13. As I read the EIR a few times it became evident that a wealthy Developer has proposed building a project using Engineering and Geomorphic data from the St. Helena Comprehensive Flood Control and River Restoration Project. They want to use the Detention Basin designed when the 16.9 acres was permeable surfaces. Words like estimate and assumed do not show adequate studies to go forward with the project. 35-12

Priscilla (Pa) Dell St. Helena

Response to Letter 35
Priscilla Dell
November 15, 2021

35-1 The comment discusses how climate change is addressed in Section 3.9, Hydrology and Water Quality and questions why current rainfall conditions post 2016 were not included in the Environmental Setting section, as the City has been experiencing drought conditions since 2016. The comment goes on to note that climate change is contributing factor to drought.

Information from the Western Regional Climate Center, which provides rainfall data dating from 2016 was the most current rainfall information available at the time the Draft EIR was being compiled in 2019. The information in Section 3.3, Air Quality has been updated based on more recent data from the National Oceanic and Atmospheric Administration and the revised text is provided in Chapter 3, Changes to the Draft EIR. Climate change is recognized to be a contributing factor to drought conditions and the commenter's request that this be factored into the City's decision making process is noted and forwarded to the decision makers for their consideration.

35-2 The comment suggests that the Project proponent should do their own engineering studies related to the City's Comprehensive Flood Control Project. In addition, the comment suggests that the City should more clearly direct the public to current studies.

The Project applicant is not required to conduct independent engineering studies to evaluate the City's Flood Control Project. The City of St. Helena along with a team of consultants designed, permitted, and constructed the multi-objective flood control and habitat restoration project which was constructed in 2009 and 2010, and provides 200-year flood protection for residential properties along the Napa River as well as restores important floodplain and aquatic habitat. See also Master Response 3 for further information regarding the levee and flood protection.

Regarding recent documents related to the City's Comprehensive Flood Control Project, recent inspection reports and summary reports can be found on the City's website here: Flood Control and River Restoration Project | City of St Helena.

35-3 The comment questions the conclusion of the Draft EIR that the Proposed Project will not exacerbate flood hazards.

As stated in Section 3.9 of the Draft EIR on pages 3.9-7 and 3.9-8, the Project site is not located within a FEMA special flood hazard area based on mapping that is provided by FEMA. The Project site is protected by the recently constructed levee that is designed to provide 200-year flood protection with additional freeboard protection. As a result, by definition, using the most recent mapping provided by

FEMA in 2012, the Project would not encroach upon a flood zone, redirect flood flows, or place habitable structures in an area with reasonable risk of flooding.

See Master Response 3 for further discussion of the levee system.

35-4 The comment claims that excessive storm drainage from the site would flow toward Vineyard Valley Mobile Home Park. In addition, the comment suggests that the Project applicant include blue or purple (recycled water) pipes to direct water to the Water Treatment Plant for use as non-potable water after treatment.

As stated in the Draft EIR on pages 3.9-44 and 3.9-45, the additional stormwater runoff created by the Proposed Project would be directed to the City-owned off-site detention basin, adjacent to the Project site, which has been designed to store the increase in storm water runoff from the Project site during a 100-year storm event. In fact, the detention basin was designed assuming that the Project site would be developed with 70% impervious surfaces; however, the Project would develop less of the site (58%) with impervious surfaces. In addition, the Project would require compliance with the City's Municipal Code and improvement standards associated with approval of tentative subdivision maps, which currently do not require recycled water infrastructure be provided. Therefore, since the off-site detention basin was designed with adequate capacity to accommodate stormwater flows from the Proposed Project there would be a low likelihood of excess flows draining from the Project site into the adjacent Vineyard Valley Mobile Home Park.

Please see Master Response 4 for further information on the City's wastewater system.

35-5 The comment suggests that the City's detention basin was not designed appropriately and did not correctly factor in the Project's contribution of stormwater runoff. The comment goes on to note using words like "estimated" and "assumed" are not scientific.

As stated in the Draft EIR on page 3.9-45, the City's detention basin was designed to accommodate future development of the Project site assuming the City would be developed with up to 70% impervious surfaces. However, the Proposed Project would develop less of the site with impervious surfaces (58%) which would produce lower runoff volumes, and therefore the detention basin would have more than sufficient capacity to accommodate stormwater flows from the Project site.

Regarding the terminology used to describe development of the site it is virtually impossible to determine with 100% certainty the exact outcome of various engineering studies. For example, development of the Project site with impervious surfaces could fall between 57.38% to 58.23%; therefore, it is proper to estimate or assume approximately 58% of the site would be developed with impervious surfaces. This is an accepted approach in scientific and engineering studies.

35-6 The comment suggests that the Project build its own detention basin and contends that the Project is not consistent with the language in Napa County's Measure A Ordinance, which states that flood control projects in the County should not be designed to encourage population growth.

The City's detention basin, as noted on page 3.9-45 of the Draft EIR, was designed with the knowledge that the Project site could be developed and introduce as much as 70% impervious surface coverage due to development of the site. The Project, as designed, would introduce 58% impervious surface coverage. Therefore, as proposed, there is adequate capacity in the City's existing detention to accommodate the Project and there is no need to construct an additional basin. Measure A, as described on page 3.9-6 of the Draft EIR, was passed in 1998 by Napa County and provided the basis for a number of flood improvement projects, whereas the Project site has been designated and zoned for future residential development dating as far back as the City's 1975 General Plan, as stated on page 2-12 of the Draft EIR. The Project is not funded in any part with Measure A funds and the City's Flood Control Project, which did receive Measure A funds, was designed to provide flood protection for both developed areas within the City as well as areas already planned for future development, including the Project site.

35-7 The comment claims that the Project would not adequately direct stormwater runoff and would 'endanger' Valley Vineyard Mobile Home Park.

Please see Response to Comment 35-4.

35-8 The comment suggests that the City's detention basin was designed under different circumstances and the Project could endanger Vineyard Valley Mobile Home Park residents.

As stated in Responses to Comments 35-4 and 35-6, the detention basin was designed assuming that the Project site would be developed with 70% impervious surfaces. The Proposed Project would develop only 58% impervious surfaces, and therefore the City's detention basin, which was planned to accommodate development of the Project site, would have more than enough capacity to handle runoff volumes from the Project site.

35-9 The comment refers to dust and dirt affecting the quality of life over a two to three-year period of development.

There is no evidence that dust attributed to construction activities would measurably affect the quality of life. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

35-10 The comment alleges the Project is in direct conflict with Measure A and this should prohibit the Project from moving forward.

Please see Response to Comment 35-6 and Master Response 3.

35-11 The comment is referring to an increase in traffic associated with the Project that would create a safety hazard and would make emergency evacuation impossible.

The comment does not elaborate on what safety hazards the Project would create nor does the comment indicate where the analysis in the Draft EIR may be deficient or inadequate regarding safety. Therefore, a response is not required.

Master Response 1 provides further information on concerns regarding emergency evacuation.

35-12 The comment refers to prior concerns raised specific to the use of information from the City's Flood Control Project; adequacy of the detention basin to accommodate the Project's stormwater; and terminology describing information from technical studies.

Please see Responses to Comments 35-3 through 35-6.

Comment Letter 36

October 23, 2021

Dear City of St. Helena Planning Department and City Council,

I submit the following Comments on the Draft Environmental Impact Report for the Hunter Subdivision Project:

1. There is currently an unmanaged traffic problem at the east side of the intersection of Adams Street and Railroad Avenue. Specifically, egress and ingress on Adams Street at the north side of the parking lot for Smiths Pharmacy, Safeway, and a few other businesses is already unsafe. How will the Hunter Subdivision be built without severely exacerbating this already dangerous traffic problem? 36-1

2. There is currently an unmanaged traffic problem on Adams Street between Main Street and Railroad Avenue. Specifically, traffic already backs up on Adams Street on the east side of Main Street impeding access to the service station on the north east corner of the intersection as well as Chase Bank on the south side of Adams Street. During tourist seasons the traffic on this block of Adams Street backs up to the four way stop sign/ Intersection at Adams Street and Railroad Avenue causing dangerous and time consuming traffic jams. It is gridlock until the traffic signal changes. How will the Hunter Subdivision be built without severely exacerbating this already dangerous traffic problem? 36-2

3. There is a conservation easement intended to preserve the land, protect wildlife habitat, And provide for public access consistent with the purposes of the Flood Protection Corridor Program in direct proximity to the proposed Hunter Subdivision project. How would the Hunter Subdivision project be able to proceed without having a negative impact on the flora, fauna, and Napa River adjacent to the proposed project? 36-3

4. We recently underwent emergency evacuations due to wild fires surrounding St. Helena. Evacuation for the residents of Vineyard Valley Mobile Home Park (VV), occupied mostly by senior citizens, was difficult and scary. Had the fire come .25 miles closer there would surely have been significant loss of life. Currently there is Pope Street or the levee road as exit routes for VV. How is it possible for the developer to build and populate the Hunter Subdivision without significantly endangering the lives of VV residents the next time an emergency evacuation is ordered? 36-4

5. There is already a severe parking problem on Star and Hunt Avenues and other nearby streets due to insufficient parking at Hunts Grove, Woodbridge Village, the recently acquired fourplex on Adams Street, and the numerous multifamily apartment buildings on Grove Court. With a proposed 87 homes, and possibly more, how will the Hunter Subdivision provide the minimum 174 parking spaces that would be required in order to not exacerbate our current parking problems? 36-5

6. How have the developers actually *proven* the Hunter Project would be water neutral and have no negative impact on the Napa River at the very outset of the project and remain water neutral in perpetuity? 36-6

I look forward to reading the results of the studies that will be conducted to address my, and and all the other peoples' numerous concerns about the foreseeable negative impacts the Hunter Subdivision Project would have on St. Helena.

Sincerely,
Nancy Dervin

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Response to Letter 36
Nancy Dervin
October 23, 2021

36-1 The comment expresses concern regarding traffic congestion at the intersection of Adams Street and Railroad Avenue, and potential traffic safety issues due to egress and ingress for the parking lot currently used by businesses near the intersection.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. The intersection of Adams Street and Railroad Avenue was thoroughly analyzed in Section 3.14, Transportation and Circulation of the Draft EIR and Project impacts at this intersection were found to be less than significant. Additionally, vehicular collisions within the City were also analyzed on page 3.14-47 of the Draft EIR and again Project impacts were determined to be less than significant.

36-2 The comment expresses general concern regarding traffic congestion along the Adams Street corridor, specifically near the east side of Main Street near the intersection of Adams Street and Main Street.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, as explained on page 3.14-1 in Section 3.14, Transportation and Circulation, "the California Environmental Quality Act (CEQA) Guidelines were updated to remove evaluation of the delay that vehicles experience at intersections and on roadway segments, which is often measured using a level of service (LOS) metric. Therefore, the operational aspects of the Proposed Project that contribute to delay and congestion on local roadways is no longer considered an environmental impact under CEQA. These concerns are discussed in the Proposed Project's Traffic Impact Study (TIS) in relation to consistency with General Plan policies (see Appendix K)." The analysis of vehicular queuing and congestion were addressed in Appendix K and also in Section 3.14. Project impacts were concluded to be less than significant for this section of Adams Street and Main Street.

36-3 The comment refers to a conservation easement designed to preserve land and protect habitat and provide public access consistent with the City's Flood Protection Project and questions how the Project would not affect the land, habitat and access provided for under the conservation easement.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no response is required. The City has confirmed that the easement noted by the commenter does not include any part of the Project site. Please see Chapter 3, Changes to the Draft EIR for a trails map showing adjacent trails near the Project site.

36-4 The comment states a concern related to emergency evacuation due to wildfires, specifically for Vineyard Valley residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, emergency evacuation was analyzed in Section 3.14 of the Draft EIR and Project impacts were determined to be less than significant. Please also see Master Response 1, that provides more details specific to emergency evacuation for both Vineyard Valley residents and Project residents.

36-5 The comment expresses concern over the Project's parking supply and the parking supply of the surrounding neighborhood.

The CEQA Guidelines do not require that parking be evaluated in an EIR; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested City staff shall confirm the Project complies with the residential parking requirements in the St. Helena Zoning Code.

36-6 The comment expresses concern related to the effectiveness of the City's Water Neutral Policy.

Please see Master Response 2 that addresses the City's ability to supply water to the Project and also address concerns regarding the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

Comment Letter 37

From: jdicksong@gmail.com <jdicksong@gmail.com>
Sent: Friday, October 15, 2021 2:08 PM
To: Mderosa@cityofsthelea.org
Subject: HUNTER PROJECT

To: St. Helena Planning Department
Our community faces serious challenges which would be compounded by the proposed Hunter Project. Its proximity to Vineyard Valley recalls to us the heroic measures necessitated there during flood and fire emergencies over recent years. Traffic issues are also profound, particularly as regards the Pope Street Bridge. Local practical and safety considerations must weigh more heavily than the profit motive for development. Please reject this Hunter Project. 37-1 37-2 37-3

Julie Dickson, 1817 Spring Street, St. Helena

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Response to Letter 37
Julie Dickson
October 15, 2021

37-1 The comment generally states that the Proposed Project would compound existing community challenges and recalls a previous flooding event.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

37-2 The comment refers to 'profound' existing traffic issues, especially related to the Pope Street Bridge.

The comment does not address the accuracy or adequacy of the Draft EIR, and the assertion of "profound" issues is the commentor's unsupported opinion; therefore, no further response is required. Potential Project impacts, as well as impacts related to the Pope Street Bridge are analyzed in detail in Section 3.14 Transportation of the Draft EIR and within Appendix K, Traffic Impact Study. The comment is noted and forwarded to the decision makers for their consideration.

37-3 The commenter opines that practical and safety considerations of developing the Project should be weighted more than profits and that the Project should not be approved.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 38

From: C. Echols <cechols47@gmail.com>
Sent: Sunday, October 17, 2021 8:50 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision Project

I live at the back of VV MHP. One advantage of living back here is the quiet and views. I am greatly concerned about potential noise, traffic, water and sewage availability, and possible property devaluation. 38-1

What steps are being taken to lessen the negative impact on the VV MHP residents?

Thank you,
Chris Echols
11 Del Rio Court

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Response to Letter 38
Chris Echols
October 17, 2021

38-1 The comment states his general concerns related to noise, traffic, water, sewer capacity, and property devaluation.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, the Project's impact on noise, transportation, water, and sewer capacity are analyzed in Sections 3.11, Noise and Vibration; 3.14, Transportation and Circulation; and 3.13, Utilities and Service Systems in the Draft EIR. The commenter's concern related to property devaluation is an economic concern that is not required to be evaluated in an EIR. As described in Section 3.13, the Proposed Project would not exceed the City's current permitted wastewater treatment plant capacity; also, pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to sewer projects. The Project applicant would be required to pay these fees, which would help fund upgrades and improvements to the City's sewer system. Please see Master Response 2, related to water concerns and Master Response 4 that addresses sewer issues.

The analysis of noise associated with Project construction and operation is included in Section 3.11, Noise. Noise associated with construction activities is often the most annoying to nearby residents. As discussed on page 3.11-16, the City exempts construction activity noise if conducted during specific limited daytime hours. The City's Health and Safety Code (Chapter 8.24 of Title 8, the Health and Safety Code) requires noise generating construction activities (including demolition, excavation, and building construction), be restricted to the hours between 8:00 a.m. and 5:00 p.m., Monday through Saturday, and prohibited on Sunday and holidays (City of St. Helena Chapter 8.24). This ensures that sensitive receptors are not disturbed by early morning or late night activities. However, the City's 1993 General Plan includes Implementing Policy 8.3.11, which states "Require construction operations to use noise suppression devices and techniques and limit noisy construction activities to the least noise sensitive times (8 a.m. to 5 p.m., Monday through Friday)." Note, the City's 2019 General Plan does not include this requirement. Due to the proximity of residences to the Project site and the potential for construction noise to be an annoyance, the impact is considered potentially significant and mitigation measure NOI-1 is required. This mitigation requires administrative controls, engineering controls, and/or installation of sound abatement. Installation of an effectively placed storage container or a temporary plywood or blanket barrier on a portion of the site boundary that blocks line-of-sight between the source(s) of noise emission and the receptor of concern (e.g., residence) would be expected to provide a minimum of 3-5 dBA of noise reduction. Compliance with the City's Health and Safety Code and mitigation measure NOI-1 would address construction noise (p. 3.11-16). Noise

associated with Project operation which primarily is related to an increase in traffic was modeled to determine if the City's noise standards would be exceeded. Project-related traffic noise increases along roadways where the Project would contribute trips would in all cases be less than 1 dBA, as shown in Table 3.11-8. Such increases would be well below the 3 dB perceptible increase threshold and below the City's noise standards (p. 3.11-20). Thus, impacts are less than significant.

Comment Letter 39

From: Cindy Ford <cford327@gmail.com>
Sent: Monday, November 1, 2021 4:23 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] COMMENT TO PLANNING COMMISSION and the AGENDA ITEM

We are writing to register our strong objections to the proposed Hunter Subdivision on the east side of St. Helena. While we recognize the need for more housing in the Napa Valley, and low cost housing in particular, we find the Draft EIR for this project inadequate in several ways. 39-1

The DEIR seems particularly short sighted in its assessment of water supply to the proposed 80+ households. Because St. Helena's current water shortage has put all residents and businesses in the city under strict water rationing, the idea of adding a significant number of homes to our already inadequately supplied town simply does not make good sense. Yes, droughts come and go, and we might hope for relief at some point in the future, but climate change is real, it is here now, and using past water supply and usage figures to predict future needs is foolhardy. More to the point, the idea that retrofitting 333 households with more efficient fixtures will result in an adequate supply of water to this development is dubious to say the least. We would assert that, given our history of droughts, most St. Helena residents have already upgraded to water efficient toilets and showerheads in recent years; how will the city or the developer identify households to be retrofitted? What data shows that sufficient water would be the result of this retrofit? How can the developer claim the existing well proposed as the source of landscaping irrigation can supply sufficient water in future years? How can the DEIR claim that this proposed subdivision does not significantly impact St. Helena's water supply? 39-2

Another area of concern is the health and safety of households built behind the levee in the event of flooding. The plan and DEIR are based on a two hundred year flood plain projection which strikes us as overly optimistic in the extreme. Again, climate change makes such assumptions risky; better to plan for the worst and hope for the best. To make matters worse in this regard, we understand neither the Army Corps of Engineers nor FEMA have inspected and certified that the levee meets required standards. What if the levee fails because of shoddy construction or inadequate maintenance? The idea that households in the proposed project could shelter upstairs in the event of a flood is both cold hearted and cynicall Who pays for the property damage in that case? The developer? The city? What would that do to the city's finances and the city taxpayers? 39-3

Traffic impacts are another major concern. Hunt and Starr Avenues are already full of cars going too fast and trying to circumvent Hwy 29 traffic. Adding more houses along an extended Adams Street and Starr Avenue will only make matters worse since the only points of entry and exit are Adams or Hunt connecting to Hwy 29, or Starr connecting to Pope Street. We fail to see how the proposed development meets its goal of "minimizing traffic related impacts" as stated in the Project Objectives. What happens if we have a major earthquake or fire or flood? Residents in our neighborhood already have few options given the traffic on Hwy 29 and the very limited capacity of the Historic Pope Street bridge. The DEIR states that, "given the project is so flat, the proximity to hilly terrain or landslides due to post-fire conditions would not be a concern." That is laughable since the Silverado trail is closed just north of Pope Street right now because of a landslide caused by rain! How can the DEIR claim to have found "no significant impact with regard to wildfire" given the present conditions? Adding more households to this residential neighborhood as proposed will result in more dangerous conditions in an emergency and should not be approved by the Planning Commission. 39-4 39-5

As residents of St. Helena we are grateful for the opportunity to express our concerns about this proposed subdivision. We hope the Planning Commission and the City Council will think carefully about all proposed developments, who benefits from them along with who does not, how the city can accommodate them fairly and support them with adequate city services, and what is the right thing to do for the whole community.

39-6

Sincerely,
Cindy and John Ford
cford327@gmail.com

Response to Letter 39
Cindy and John Ford
November 1, 2021

39-1 The commenters express their general opposition to the Project and Draft EIR.

The commenters' opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

39-2 The comment raises concerns about the City's water supply and Draft EIR's assessment of water supply impacts. The commenter takes issue with the effectiveness of the City's Water Neutral Policy and how it is used in the analysis of the proposed Project's water demand. The comment also questions whether existing groundwater resources could sufficiently serve the Project.

The City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code requires new development to "completely offset its water requirement" by identifying residential or non-residential properties eligible for retrofitting with water efficient hardware and verifying that the required number of retrofits have been completed prior to the issuance of a certificate of occupancy (DEIR p. 3.13-21). To accomplish this the City requires all applicants to prepare a Water Neutral Report identifying compliance. Adherence to the City's Water Neutral Policy and Municipal Code to fund such measures as fixing an existing leaking water conveyance pipe would offset demand by increasing water supplies compared to the existing conditions of water losses due to the leak. As a result, compliance with these requirements offsets new water demands with measures that reduce demand elsewhere or otherwise increase water supplies. Therefore, compliance with the City requirements is an appropriate and effective measure to include in the analysis of the Draft EIR. See also Master Response 2.

As discussed on page 3.9-43 of the Draft EIR, the aquifer where the Project is located on is known to be a productive alluvial aquifer, and therefore, there would be sufficient yield available from the on-site well to supply the Project's landscape irrigation demand as also demonstrated by the findings of the site-specific well pump test conducted on the existing agricultural well on the Project site. The proposed rate of pumping is relatively low and the resulting radius of influence would be highly localized, and greatly overshadowed by the radius of influence associated with the much higher producing agricultural and municipal supply wells in the surrounding vicinity.

39-3 The comment expresses concerns related to the Project's proximity to the levee and the event of potential flooding. The comment specifically expresses concerns related to the current condition of the levee in terms of its inspections and certifications by

FEMA or the Army Corps of Engineers. The comment also questions who would be responsible for costs in the event of a major flood and subsequent potential property damage.

Please see Master Response 3 that addresses concerns associated with the levee and flooding.

39-4 The comment expresses general concerns regarding traffic congestion along Hunt Avenue and Starr Avenue, as well as traffic connecting to Highway 29.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, the comment is noted and forwarded to the decision makers for their consideration and no further response is required.

39-5 The comment expresses concern regarding landslides as well as the potential for emergency evacuation routes to be congested. The comment states that the sentence within the Executive Summary of the Draft EIR that states the "Project site is flat so fire hazards due to proximity to hilly terrain or landslides due to post-fire conditions would not be a concern" is false since there are presumably closures to Silverado Trail currently due to landslides caused by rain.

In 2018 the CEQA Guidelines, Appendix G, were updated to include a separate evaluation of wildfires. Appendix G focuses on those areas located "in or near state responsibility areas or lands classified as very high fire hazard severity zones." On page E-3 of the Executive Summary, it explains the Project site is not located within a state responsibility area and not designated as being within a very high fire hazard severity zone. Because the Project site is flat potential fire hazards associated with spread of wildfire due to sloped or hilly terrain would not be a factor. The closure of Silverado Trail due to mudslides associated with loss of vegetation is not applicable to this Project. Because the Project site is flat there would not be any hazards associated with mudslides. Please see Master Response 1 which addresses concerns regarding emergency access and evacuation routes.

39-6 The comment thanks the City for the opportunity to comment on the Proposed Project and asks the City to review the Project's impact on the whole of the community.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

Comment Letter 40

From: Chris Fowler <chris@alanssainthelena.com>
Sent: Saturday, October 30, 2021 6:55 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Public Comment November 2 PC Meeting

Dear Planning Commission,

I am commenting on Agenda Item 5.1. I will try and keep this rather brief. Other commenters have discussed some very large elephants that are in the DEIR room, and I would like to point out the Option 4 elephant that is standing in the corner. Option 4 seems conveniently buried at the bottom DEIR, but maybe they were saving the best for last. 40-1

St. Helena is running out of available space and time to even make a dent in the next RHNA cycle. Water and potential site flooding issues aside, maybe now is a good time for some discussion and consideration of low and affordable housing alternatives. Adams Street dead-ends at this parcel, is this where the can-kicking can finally stop? 40-2

Thank you,
Chris Fowler

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Response to Letter 40
Chris Fowler
October 30, 2021

40-1 The comment expresses interest in exploring "Option 4."

It is assumed that "Option 4" is a reference to Alternative 4, which is described beginning on page 5-14 of the Draft EIR. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. The comment does not identify any components of Alternative 4. Therefore, no further response is required. However, the commenter's interest in Alternative 4 is noted and forwarded to the decision makers for their consideration.

40-2 The comment expresses interest in providing low and affordable housing in the City.

The Project proposes affordable housing as described in Chapter 2, Project Description. The Project applicant is also required to prepare an Affordable Housing Agreement for City review and approval. The comment does not identify any specific areas where the commenter believes the Draft EIR analysis is inadequate. Therefore, no further response is required. However, the commenter's interest in providing affordable housing is noted and forwarded to the decision makers for their consideration.

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Comment Letter 41

From: Pat Friday <patfriday@comcast.net>
Sent: Monday, November 8, 2021 9:56 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project comment

Hello Planning Department folks,
I am writing to encourage you to proceed with the Hunter Project, but only with the affordable housing aspect. We need worker housing so badly here. Please do not accept a monetary offset, but insist that housing is provided for those who work here. 41-1

I'm sure you can find a way to offset water use, and other objections being raised. We need this new housing to give our town a boost too. 41-2

Thank you for considering my view,
Pat Friday

From: Pat Friday <patfriday@comcast.net>
Sent: Monday, November 8, 2021 1:27 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: Re: [External] Hunter project comment

Hello Maya,

Ack, in my email below, while trying to edit, it came out wrong!
The first sentence should read:
I am writing to encourage you to proceed with the Hunter Project, especially with the affordable housing aspect. 41-3

Please correct this, for the record.
Thank you,
Pat

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Response to Letter 41
Pat Friday
November 8, 2021

41-1 The comment expresses support only for the affordable housing component of the Project.

The commenter's support of the affordable housing component is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

41-2 The comment acknowledges water use considerations and general opposition to the Project; but indicates additional housing is needed and would support the City.

The commenter's opposition to the Project but support for additional housing is noted and forwarded to the decision-makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

41-3 The comment includes a correction to Comment 41-1. The comment is requesting an edit to Comment 41-1 to clarify that the commenter is encouraging the City to proceed with the Project, specifically the affordable housing component.

The commenter's support of the Project, including the affordable housing component is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

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Comment Letter 42

From: Pat Friday <patfriday@comcast.net>
Sent: Monday, November 8, 2021 1:40 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project comment

Hello Planning Department folks,
I am writing to encourage you to proceed with the Hunter Project, especially with the affordable housing aspect. We need worker housing so badly here in St. Helena. Please do not accept a monetary offset, but insist that worker housing be built and provided for those who work here. 42-1

I am sure you can find a way to offset water use, and other objections being raised. 42-2

We need this new housing to give our town a boost too.

Thank you for considering my view,
Pat Friday

Pat Friday
1430 Wallis Court
St. Helena CA 94574
707.484.4579

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Response to Letter 42
Pat Friday
November 8, 2021

42-1 The comment expresses support for the Project and the affordable housing component of it. The commenter states that worker housing is needed in the City.

The commenter's support for the Project and desire for affordable housing is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

42-2 The comment acknowledges water use considerations and general opposition to the Project; the commenter states that the additional housing would support the City.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

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Comment Letter 43

Tuesday, January 4, 22

Public Comment on Draft EIR for the Hunter Subdivision Project (Water Supply Discussion Only)

Undersigned's comments are confined to the water supply discussion in the Draft Environmental Impact Report ("EIR"). They address factual matters and also comment on the applicant's "water neutrality" presentation. 43-1

1. Draft EIR page 3.13-3: the statement is made that "Average historical yield from the [Bell Canyon] reservoir is approximately 1,800 acre-feet per year." Yet, Table 3.13-1 shows potable water deliveries ranging in water years' 2013-20 from a high of 927 AFY (2013) to a low of 643 AFY (2016). In short, the "average historical yield," assuming "historical yield" means historical deliveries, is less than one-half of the 1,800 AFY asserted textually on page 3.13-3. 43-2

As a matter of historical interest, deliveries from Bell Canyon reservoir were much higher in the twenty-year period ending in 2007. But the City was not meeting its State permit-imposed bypass obligations in those years. As documented in the Baseline Report of the Water & Sewer Infrastructure Subcommittee ("Subcommittee Report") of the General Plan Update Steering Committee (June 24, 2010), page 5, the City overdrew the reservoir by on average 525 AF yearly in the period 1988-2007. (The Subcommittee's Report was thoroughly vetted by City Staff and was presented to the Council with no disagreement as to its factual statements.) 43-3

The subsequent steep drop in annual deliveries from the reservoir is largely attributable to the City's coming into compliance with its State permit-imposed bypass obligations. The EIR statement at page 3.13-4 is euphemistic: "In recent years, the annual yield from Bell Canyon Reservoir has declined significantly due to required water releases into the Napa River to support fish habitat and also from drought conditions." Rather, as stated in the 2010 Subcommittee Report, the releases came about in and since 2008 (not "recent") and came about due to a City policy change to abide by State bypass obligations. As the Draft EIR on page 3.13-6 indicates, Napa purchased water that was 43-4 43-5

1

expected to augment overall potable water supply basically did no more than replace water previously misappropriated from Bell Canyon.

In fact, the historical yield of Bell Canyon varies greatly with rainfall in any given water year. This is documented on page 4 of the Subcommittee's Report. "Averages" conceal wide fluctuations in Bell Canyon productivity. The issue, long recognized, is the City's difficult water supply situation in successive (especially more than two) dry or very dry years. *See* discussion of Safe Yield Report, point 5 below.

2. Draft EIR page 3.13-3: the statement is made that "the City is authorized to divert and store 3,800 acre-feet from Bell Canyon Reservoir each year." This is incorrect. Correctly stated, the City's storage right is 1,800 AF – and NOT 3,800 AF.

The City's storage "right" was the subject of significant discussion among the undersigned, City Staff, and the Napa Local Agency Formation Commission ("Napa LAFCO") in fall 2020. Napa LAFCO, with the City's concurrence, in its Napa County Water and Wastewater Municipal Service Review Final ("Napa MSR Final" (November 2, 2021)), correctly states (in revision of the prior draft), on page 215: "Bell Canyon Reservoir is owned and operated by the City and has a storage capacity of 2,350 af, of which the City has a storage right of 1,800 af."

The 2010 Subcommittee Report, page 4, also correctly states the City's storage right. "The maximum amount that the City is allowed to **divert to storage** in any one year is 1,800 acre-feet." (Bolding in original) Again, the City approved this statement, after thorough discussion including with the undersigned, in spring 2010 prior to publication of the Subcommittee Report on June 24, 2010.

The 3,800 AF comes about by combining the storage right in State Permit 9157 (1,800 AF) and the forecasted additional storage right in State Permit 14810 (2,000 AF). Permit 14810 authorized the raising of the dam at Bell Canyon from 75 feet to 105 feet, which would have added 2,000 AF of new storage, but the dam was not raised, and the additional storage right was not earned. In consequence the City's storage right has remained at 1,800 AF, as set forth in Permit 9157.

43-5 Cont.

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3. Draft EIR pages 3.13-5 to 3.13-7 discuses Napa City's sources of water. This discussion is not relevant. As noted on EIR page 3.13-4, the City of St. Helena has a "take-or-pay" contract with the City of Napa. This means that our City in indifferent to Napa City's sources of water. Napa must supply the City's contracted-for water no matter what supply difficulties it may be experiencing with its own sources of water (including curtailed deliveries from the State Water Project). 43-11

4. Draft EIR page 3.13-7: the statement is made: "The City currently restricts the use of groundwater from [the Stonebridge Well Complex] with goal of limiting extraction to 450 AF per year for long term sustainability." The source of this statement is page two of the March 2011 Safe Yield Report. In general, the City's sourcing strategy has been to take the 600 AF from Napa, produce what it can from Bell Canyon consistently with satisfying its bypass obligations, and meet the remainder of potable water demand from its two production wells at the Stonebridge Well Complex. Table 3-13-1 shows annual well production in water years 2013-2020. It has on average been significantly less than 450 AFY, ranging from a high of 400 AFY (2013) to a low of 240 AFY (2019). To undersigned's understanding, the reasoning behind this strategy is to limit groundwater production as much as possible due to environmental concerns for the Napa River, which is a gaining river in our area (which means that groundwater helps to sustain flows in the river). In short, the City since 2011 has achieved a long-term average significantly below 450 AFY. 43-12 43-13

Having said that, the City delivered 576 AF from the Stonebridge Well Complex in the water year ending June 30, 2021, per monthly Water Report for June 30, 2021, posted in the Public Works section of the City's website under "Water." This represents 34.6% of total water year deliveries. This is significantly more on an absolute basis and also on a percentage basis than the City has produced at the Stonebridge Well Complex in any past water year going back to 1992, when the first of the Stonebridge production wells was completed. Undersigned's personal view is that production in this substantial amount will prove to be not sustainable. 43-14

5. Draft EIR page 3.13-8: the EIR presents Table 3.13-7, entitled "City of St. Helena Safe Yields." The Table in column 2 presents a total 43-15

3

normal water year safe yield of 1950 AF. The Safe Yield Committee presented this number in the Report of the Safe Yield Committee (March 17, 2011). As stated in its Report, page 3, the Committee calculated the *net* safe yield, after taking into account "unavailable water," at 1658 AF. ("Unavailable water" is the volumetric difference between metered water deliveries at delivery sources – Bell Canyon, City Wells, Napa Water Delivery Point in Rutherford -- and metered water deliveries to customers. There are a number of factors that account for lesser metered sales' volumes than metered input volumes from the City's three sources of water, with system distribution leaks likely playing a significant part in accounting for the difference.)

43-15 Cont.

The "net safe yield" represents the Safe Yield Committee's assessment (in 2011) as to the water quantity available for sale while meeting the definition of "safe yield" as defined by the Safe Yield Committee (and subsequently adopted by the Council.) As defined by the Committee, the "safe yield" is the quantity of water needed to supply the City through most rainfall years, including a dry year, without water shortage restrictions. The Committee's definition continued: "It is recognized that the safe yield, as so defined, could place significant hardship on water customers in a Critically Dry Year (rainfall at 21.9 or less) or in periods of two or more Dry Years."

43-16

As important, there have been supply changes since the Safe Yield Committee did its work more than ten years ago that could affect the "safe yield" calculation. In particular, Bell Canyon may have been less productive than the Committee modeled. The Safe Yield Committee assumed that the Water Enterprise would purchase 200 AF (over the 600 AF) of option water when available; in the last decade there has been no purchase of Napa contract option water. At the same time, the City has benefitted from changes in the Napa contract, especially the yearend 2011 contract amendment. The City also appears to be under environmental and legal pressure to reduce pumping from the Stonebridge Well Complex. The basic point here is that the City should undertake a re-assessment of the "safe yield' and "net safe yield" of its potable water delivery system.

43-17

43-18

Indeed, the Safe Yield Report concludes: "the City should re-determine the usage/supply balance at the end of each fiscal year in the

43-19

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ordinary course of business at the Water Enterprise. This will require recalculation each year of the forward-rolling, five-year average total potable water usage. It should also take into account any changes in supply conditions." The EIR does not cite to work subsequent to 2011 along these lines by the City.

43-19 Cont.

6. Draft EIR page 3.13-8: the statement is made that "the Louis Stralla Treatment Plant (WTP) is "located on Crystal Springs Road in the northeastern part of the City [citations omitted]." The WTP is located on Crystal Springs Road, but it is not within contiguous City limits in what would generally be understood as "the northeastern part of the City," namely City limits near Deer Park Road and Silverado Trail. Rather, the WTP, while in City limits, is northeast of contiguous City limits and is surrounded on all sides by Napa County lands. See Figure 1.3, NAPA MSR Final. (Following a convincing documentary showing by LAFCO in the final phases of the draft MSR in the fall of 2020, the City advised undersigned that it would revise City maps to show that the City-owned land at Bell Canyon reservoir is within City limits.) Succinctly, Bell Canyon sits on City land, within City limits, which is an island surrounded by County lands.

43-20

7. On page 3.13.10 the EIR, in the last bullet point on that page, notes that the 2010 Water Supply Plan recommended, among other recommendations, "a water rate structure that will ensure adequate program funding while encouraging water conservation by accounting for reduced water consumption in the base water rate and increasing high-tier rates." Unfortunately, this recommendation was not consistent with the subsequently decided decision in *Capistrano Taxpayers Assn. v. City of San Juan Capistrano*, 235 Cal.App.4th 1493, modified (with no change in judgment), 236 Cal.App.4 th1123a (2015). The California Supreme Court denied review, and the *Capistrano* case became the accepted law in California. In accordance with the *Capistrano* case, the City (like many California cities) abandoned tiered rates in its last (2016) rate increase, bringing its rate structures into compliance with State Proposition 218 as interpreted and implemented by the *Capistrano* case. In consequence, it is not possible to incentivize conservation through tiered rates whereby higher volume customers pay more per unit of consumption.

43-21

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8. A comment on the Municipal Code Section 13.12.030, discussed at Draft EIR pages 3.13-21/22 & 3.13-24/25 ("water neutrality" issue). As the applicant states, City policy requires that new development offset completely its potable water use. The applicant estimates annual indoor water demand at 20 AFY (rounded). This is not a small amount to offset through off-site water efficiency improvements.

The Municipal Code (section 13.12.030D) places the burden on the applicant-developer to identify properties eligible for retrofitting. Ideally, the developer should not be able to shift the burden of offsetting new water use through an in-lieu fee from itself to the City. Rather, certificates of occupancy should not issue unless and until the developer shows that it has effectively offset the potable water usage of new housing units at the time it seeks occupancy permits. 43-22

In EIR Appendix J, applicant's "Water Neutral Report," prepared by RSA+, a civil engineering firm, RSA+ calculates that 333 off-site residences would need to be retrofitted with water-saving fixtures to achieve an annual off-set savings of 20 AF, calculating the total cost (labor and materials) at $600,000 (rounded). In its conclusion RSA+ seems to recognize the impracticality of locating and retrofitting such a large number of residences on the City's potable water system. 43-23

The RSA+'s conclusion states: "The offset of the water project demands may *best* be met through assisting the City of Sr. Helena with existing water system improvements via in-lieu fees. The project will pay $596,808 as an in lieu fee equal to the cost of retrofitting enough residences with low flow fixtures to achieve savings equal to the proposed use." Italics added.

In short, the applicant appears to be proceeding on the premise that the Council, as it has discretion to do under the Municipal Code (section 13.12.030B), will accept an in-lieu fee, equal to the cost of residential water efficiency upgrades, in place of the upgrades themselves. 43-24

In my opinion it is reasonable to conclude that retrofitting 333 off-site residences is "impractical," which is a basis for Council acceptance of an in-lieu fee under the Municipal Code (section 13.12.030B). At this

juncture, with the water efficiency program in place for many years, it would appear to be both difficult not just to locate a sufficient number (333) of residences in need of water efficiency upgrades and also to persuade eligible residents to undertake paid-for water efficiency improvements. There are no doubt administrative issues for both the developer and the City that would make such a large retrofit program difficult to accomplish successfully. Based on my own experience with our (thinly) staffed City Government, I am skeptical, to put the matter mildly.

43-24 Cont.

But there also appears to be a disconnect between the $600,000 in-lieu fee proffered by the applicant, calculated by the applicant in Appendix J as the total cost (labor and materials) of retrofitting 333 residences, and the in-lieu fee necessary to accomplish a reduction of 20 AFY through improvements in the City's water distribution system. It does not equate to say that if the City spends $600,000 on water distribution improvements, it will in fact achieve 20 AF in annual potable water savings. The goal of the water neutrality policy is to ensure neutrality is achieved, and indeed achieved commensurate with the time that the water system must respond to the new demand. Hence the City needs to identify a specific system improvement or improvements that will in fact offset the 20 AFY in new development usage. This statutory requirement is not achieved by allowing an in-lieu fee with no shovel-ready, offsetting improvements ready to go.

43-25

Then there is the further question of the amount of the in-lieu fee, if the Council decides to accept an in-lieu fee. The Municipal Code (section 13.12.030B) reads: "If the city council determines that retrofitting existing residential or nonresidential buildings is impractical or constitutes an unusual hardship on an applicant, it may authorize the payment of to the city of an in-lieu retrofit fee in lieu of complying with the requirements of subsection A of this section." Subsection A deals with the calculation of the number of retrofits. It is silent on the calculation of the in-lieu fee. The Council appears to have unfettered authority in fixing the amount of the fee. Assuming this is correct, the fee should be in an amount sufficient to pay for system improvements that in fact accomplish an offsetting 20 AFY reduction.

43-26

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For example, if a system improvement to achieve a 20 AFY offset costs $1,250,000, then that should be the amount of the fee. Conversely, if a system improvement to achieve a 20 AFY offset costs $250,000, then that should be the amount of the fee. If a system improvement results in more than a 20 AFY reduction, then it may be appropriate for the Water Enterprise (ratepayers) to share in the cost, such that the applicant is paying a ratable amount equal to the cost of achieving a 20 AFY reduction. Now, it may be difficult, perhaps impossible, to quantify water savings associated with a specific system improvement, especially improvements designed to reduce unmetered losses in the distribution system ("unavailable water"). Still, the objective in accepting an in-lieu fee is ensuring that the new usage (20 AF) is completely offset, and the applicant should bear the burden of that cost, whatever it is.

43-27

9. The applicant assumes that it can lawfully satisfy landscaping water demand through a well on the applicant's property. This may well be correct, but it may not be a complete given. The County's Groundwater Sustainability Agency ("GSA") is addressing the issue of groundwater withdrawals (diversions), with GSA approval of the Groundwater Sustainability Plan ("GSP") due by January 31. 2022. (That is not the end; the State Department of Water Resources ("DWR")) will then be review and approved/disapproved the GSP within the following two years.) The City, Planning Commission, and/or City Council should review the applicant's proposed groundwater usage for conformity with the GSP following GSA approval of the GSP in early 2022.

43-28

Respectfully submitted,

Alan Galbraith

Member, GSPUC Water & Sewer Infrastructure Subcommittee, 2009-10
Member, Safe Yield Committee, 2010-11
Member, Groundwater Resources Advisory Committee, 2011-14
St. Helena Mayor, 2014-18

Member, Groundwater Sustainability Plan Advisory Committee, 2020- to date

Response to Letter 43
Alan Galbraith
December 9, 2021

43-1 The comment notes that the points raised in the letter are specific to the water supply discussion and address factual issues as well as the Project applicant's water neutrality proposal.

Please see Master Response 2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required.

43-2 The comment refers to information specific to the average historical yield from the Bell Canyon reservoir and potable water deliveries available to the City and questions the accuracy of the information provided.

The reported average historical yield of 1,800 acre-feet per year is the accurate figure that was used in the Draft EIR for the 2040 St. Helena General Plan Update and was based on reporting by Luhdorff and Scalmanini in their Groundwater Sustainability Report in 2016 (found here: https://www.napawatersheds.org/managed_files/Document/8266/Napa%20Valley%20Subbasin%20Basin%20Analysis%20Report_2016_sm.pdf). This reported historical average is not be confused with the more recent numbers that are listed in Table 3.13-1 of the Draft EIR. The more recent average is indeed much less than the historical average as reported by Luhdorff and Scalmanini in 2016.

43-3 The comment cites to a technical document prepared by the city's Water and Sewer Infrastructure Committee that address deliveries to Bell Canyon reservoir prior to 2007.

Please see Master Response 2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required.

43-4 The comment is referring to why there was a decline in water deliveries to Bell Canyon (after 2007) due to compliance with state permit requirements.

Please see Master Response 2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required.

43-5 The comment refers to information in the Draft EIR noting that Napa County purchased water that was expected to add to the overall water supply but ended up only replacing water that had been misappropriated.

Please see Master Response 2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required.

43-6 The comment is noting that the historical yield of Bell Canyon reservoir fluctuates annually depending on rainfall amounts and cites to a report prepared by the city's Water and Sewer Infrastructure Committee. This challenges the City to supply water during successive dray water years.

Please see Master Response 2. The comment does not identify any specific areas where the EIR or analysis is inadequate. Therefore, no further response is required

43-7 The comment states information in the Draft EIR addressing the amount of water the City is authorized to divert and store is incorrect.

The commenter correctly notes that the amount of water the City is authorized to divert and store from Bell Canyon Reservoir is 1,800 acre-feet or AF. The Draft EIR text on page 3.13-3 will be corrected to read 1,800 AF and is included in Chapter 3, Changes to the Draft EIR. Note that the water supply analysis (see Impact 3.13-2 on p. 3.13-31), does not rely on either the 3,800 AF number or 1,800 AF. The analysis uses the more conservative "safe yield" of 1,000 AF for a normal dry year (see Table 3.13-7). Therefore, this comment does not result in any change to the impact analysis and significance finding.

43-8 The comment is providing background on the storage capacity of Bell Canyon reservoir and the amount the City's storage rights.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. See Response to Comment 43-7. No further response is required.

43-9 The comment is referring to a 2010 Subcommittee Report which notes the City's storage right of 1,800 AF.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. See Response to Comment 43-7. No further response is required.

43-10 The comment describes where the 3,800 AF amount was derived from and references Permit 14810 that authorized raising the dam at Bell Canyon reservoir to 105 feet to permit more water storage.

Please see Response to Comment 43-7. The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required.

43-11 The comment dismisses the need to discuss the City of Napa's water sources and states it is not relevant because the City has a "take or pay" contract with the City of

Napa so the source of the City of Napa's water is of no consequence to the City of St. Helena.

The commenter's opinion regarding the information contained in the environmental setting for water supply source in Section 3.13, Utilities and Service Systems is noted. The information provided in the Draft EIR regarding the City of Napa's water sources is provided because the City of St. Helena has a contract with the City of Napa for water and this is part of the environmental baseline.

43-12 The comment refers to the amount of groundwater the City obtains from the Stonebridge Well Complex.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required. Please see Master Response 2 for additional information.

43-13 The comment explains why the City limits extracting groundwater from the Stonebridge Well Complex to minimize impacting the Napa River

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required. Please see Master Response 2 for additional information.

43-14 The comment indicates that based on information provided on the City's website, the City has increased its allotment of groundwater from the Stonebridge Well Complex by approximately 35% in 2021, which the commenter opines is not sustainable.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, no further response is required. Please see Master Response 2 for additional information.

43-15 The comment references Table 3.13-7 in the Draft EIR and compares the information in this table to information provided by the Safe Yield Committee.

The comment does not draw any conclusions or question the data provided in Table 3.13-7 (DEIR p. 3.13-8). Therefore, because the comment does not identify any specific areas where the Draft EIR is inadequate, no further response is required. Please see Master Response 2 that addresses water supply.

43-16 The comment discusses the 'net safe yield' as defined by the Safe Yield Committee and notes that this net safe yield could affect the availability of water during critical dry years.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. Please see Master Response 2 for additional information.

43-17 The comment addresses changes that could affect the 'safe yield' calculation due to changes in water availability.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. Please see Master Response 2 for more information on water availability.

43-18 The comment suggests that the City is under "environmental and legal pressure" to reduce groundwater pumping from the Stonebridge Well Complex and suggests that the City should reassess the 'safe yield' and 'net safe yield' water assumptions.

The comment does not identify any specific areas where the EIR or analysis is inadequate; therefore, no further response is required. Please see Master Response 2 for additional information.

43-19 The comment references conclusions of the Safe Yield Report which requires annually recalculating the average total water usage and account for changes in water supply. The comment notes the Draft EIR does not cite work prior to 2011 that speaks to these conclusions.

Water supply deliveries for the years 2013 through 2020 are included in Table 3.13-1 on page 3.13-3 of the Draft EIR.

43-20 The comment states the Draft EIR incorrectly characterizes the location of the Louis Stralla Treatment Plant as being within the City limits.

See Chapter 3, Changes to the Draft EIR for a text change to page 3.13-8 of the Draft EIR to more accurately describe the location of the water treatment plant. This text change does not affect the analysis of this issue in the Draft EIR.

43-21 The comment opines that a recommendation from the City's 2010 Water Supply Plan is not consistent with a 2015 court case that eliminated the ability to use tiered rates to incentivize water conservation.

The referenced bullet point in the Draft EIR on page 3.13-10 is merely providing background information related to the 2010 Water Supply Plan and recommendations that were contained within that document. The analysis within the Draft EIR does not rely on whether the referenced recommendations have legal viability. However, the comment is noted and forwarded to the decision makers for their consideration.

43-22 The comment opines that the Project's water demand of 20 AFY (rounded up) is not a small amount to be offset through water efficiency improvements.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2

addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-23 The comment is referencing the Project applicant's Water Neutral Report, included as Appendix J and notes that retrofitting 333 off-site residences or paying an in-lieu fee would meet the requirements of the City's policy.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2 addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-24 The comment opines that payment of the in-lieu fee would be more practical than trying to find 333 residences to retrofit.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2 addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-25 The comment states a concern that payment of an in-lieu fee without identifying where that money would be spent to off-set the Project's increase in water demand is needed for the City to meet the intent of the policy.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2 addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-26 The comment addresses how the City calculates the in-lieu fee and notes the fee should be in an amount that is sufficient to off-set a 20 AFY increase in water demand.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2 addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-27 The comment states an opinion that the in-lieu fee be sufficient to off-set the Project's increase in water demand to meet the intent of the City's Water Neutral Policy.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. However, Master Response 2 addresses the Project's compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

43-28 The commenter notes the Project intends to use the existing well for landscaping but states that the County's Groundwater Sustainability Plan (GSP) has not yet been adopted by the County, Department of Water Resources, or the City.

The Project is proposing to use the on-site agricultural well for all public and private landscape irrigation. As discussed in the Draft EIR on page 3.9-42, the total water demand of the Proposed project that would likely be sourced from groundwater including both the onsite well and water that would be supplied from the Stonebridge Complex would only represent 0.9% increase in demand. Of that, the water from the onsite well would be less than half that amount. Otherwise, the GSP for the Subbasin which has not yet been completed, as the comment notes, and suggesting that there could be a potential conflict with that document would be considered conjecture which is outside the scope of CEQA. However, as stated on page 3.9-40 of the Draft EIR, in a recent assessment of the groundwater conditions, Napa County and its technical consultant have determined that the Subbasin is not exhibiting significant and unreasonable impacts with regard to the applicable sustainability indicators defined by the Sustainable Groundwater Management Act (SGMA). As a result, there is sufficient evidence to support a conclusion of a less-than-significant impact related to use of the onsite groundwater well.

Comment Letter 44

-----Original Message-----
From: Dottie Gingerelli <dgingerelli@comcast.net>
Sent: Saturday, October 30, 2021 2:50 PM
To: Xinia Gamero <XGamero@cityofsthelena.org>
Subject: [External] Hunter Project

Hello Ms. Gamero,

Along with all the arguments against the Hunter Project such as severe water scarcity, increased global warming with more gas vehicle emissions, destroying an established in-place bike/walkability access to grocery stores, the pharmacy and downtown shopping, essential to cities for their citizens and businesses. 44-1

I'd like to submit the issue of safety for seniors at Vineyard Valley and all local First Responders.
Presently, half the senior residents of VV Park evacuate to the main drive to the South exit of the park onto Pope St., while all First Responders enter into VV on the right side of the entrance driveway, off of Pope St. safely passing each other.
The other half of VV residents exit to the trail at the north end of the park, where the Hunter Project is under consideration.
Without that North access, all senior residents of VV Park will be forced to get onto the main drive at the same time, going the same way. Time is of the essence! 44-2
If an evacuation order were in effect again, the senior residents could possibly be stranded in a fire evacuation and First Responders would be hindered in their ability to evacuate the park and start protective measures. A life and death situation is very possible for both the senior residents and the First Responders. Delays could prove deadly!

I also have a question. If a loss of life should occur because of the passing of this project, would the city be prepared for probable lawsuits for their actions limiting access to safety for senior residents and First Responders? 44-3

Thank you,
Dottie Gingerelli
50 Laguna Seca Ct.
St. Helena, CA 94574
dgingerelli@comcast.net

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Response to Letter 44
Dottie Gingerelli
October 30, 2021

44-1 The comment generally mentions the Project's potential impact to water supply, vehicle emissions, and bicycle and pedestrian facilities.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

44-2 The comment expresses concern related to emergency evacuation for Vineyard Valley residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please also see Master Response 1, for more details related to emergency evacuation for both Vineyard Valley residents and Project residents.

44-3 The comment poses a question related to the potential loss of life due to the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 45

Honorable Planning Commission Chair and Commissioners,

As you review the Hunter Project, it is important to note the long and complicated history of this project and the behaviors of this Santa Rosa Casino Development Applicant. During the decade long history, the applicant has sued the city multiple times, forced the city to construct the levee around his property (by refusing to allow access for the flood protection of the senior community of Vineyard Valley), refused to supply documentation on numerous items requested by city staff such as movement of tons of soil, updated soil testing and maps, affordable housing plans that comply with the St Helena Housing Ordinance, Density bonus plans and any specific information regarding the size, bedrooms, bathrooms, etc. for each housing unit which is necessary to calculate traffic, water use, etc. 45-1

The project violates the HCD approved St Helena Housing Element in numerous ways including the continued segregation of low income housing, the requirement that the affordable housing must be spread throughout the project., and must be "for sale" as well as apartments. St Helena has illustrated distinct and repeated actions that segregate low income housing from market rate neighborhoods – as evidenced by 98% of ALL affordable and multi-family housing being placed on the East side of St Helena. 45-2

It has created an undeniable "other side of the tracks" situation, and despite the claim that the land is more affordable on the East Side, the State of California does not accept that as a waiver of the law. In fact, that exact argument serves to aggravate the segregation of neighborhoods by conveniently ruling out the possibility for any diverse housing or socioeconomic and racial diversity in those neighborhoods. 45-3

Not only does this project propose 25 new units of affordable restricted housing on the East Side, it is designed specifically to place the affordable apartments immediately adjacent to the existing multi-family housing along Adams rather than distributing it through the rest of the market rate housing as is required by other St Helena Housing Element and laws. 45-4

Attached is a professional perspective from a housing segregation expert describing the situation in St Helena. 45-5

The city and you personally, stand to face discrimination claims, and lawsuits if you continue to make decisions in violation of the St Helena ordinances as well as the State's laws by perpetuating the long pattern of housing and racial segregation in St Helena. To date, realtors in St Helena list housing on the West Side of town as "preferred side of town" or "the desirable West Side". Even realtors know exactly what has been done and use it to realty sales advantage. 45-6

You are now informed, and with a full read of the St Helena ordinances, zoning codes 17.144 and 17.146, the Housing Element and General Plan as well as new California laws to prevent housing discrimination and segregation, citizens should be assured that you will do what is required by law, and not put the city or yourselves at risk for litigation and embarrassment of being an ongoing segregated city. Do not give this Santa Rosa developer who has no interest in following our laws put us in an embarrassing and legal situation for his own personal financial gain. 45-7

You will certainly hear from the applicant that he is "helping St Helena housing", when in fact this project will provide a mere 5 units of very low income housing and the previously proposed affordable housing second units (ADU's) will be above moderate - which is simply market rate. So in what sense does this enormous subdivision, that is wholly reliant on our levee where we have full liability, causes unmitigable traffic at one of the ONLY exits out of the city, eliminated the proposed Adams St extension 45-8

to the Trail, further segregates our city, and exacerbates our ongoing severe water shortages helpful to us? Please do not play his game. Please stand up to protect this city, its resources, its liability and its integrity. If not you, then who? 45-8 Cont.

Thank you.

Sincerely,
Diane Green
Daniel Wheaton
Mark Arnett
Carl Barnes
Gary Oncina
James Pelligri

Response to Letter 45
Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri

45-1 The comment states that it is important to note the history of the Project and actions by the Project applicant, including litigation and refusal to supply documentation requested by City staff.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

Please see Responses to Comments 45-2 and 45-4 regarding compliance with the City's Inclusionary Housing Ordinance and Response to Comment 84-3 regarding the density bonus.

45-2 The comment states that the Project violates the "HCD-approved" St. Helena Housing Element through the segregation of low-income housing from market rate housing and not spreading the units throughout the Project site and including units for sale.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the project. However, as part of the applicant's future Affordable Housing Agreement proposal, as required under the City's Inclusionary Housing Ordinance, there must be demonstration that the Project be consistent with the City's Affordable Housing Ordinance and be "spread throughout the Project" (Municipal Code 17.146.050 (I)). Housing Element Implementing Action HE4.A would require that affordability levels of inclusionary units in a project be "further distribut[ed] … within the various income categories." Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. Such an Agreement will need to be approved by the City Council following the Tentative Subdivision Map approval but prior to the Final Map being recorded and before any development of homes can take place.

45-3 The comment suggests that the segregation of low-income housing from market rate neighborhoods only within the eastern area of the City limits the possibility for diverse housing and socioeconomic and racial diversity in those neighborhoods (in the western area of the city).

Please see Response to Comment 45-2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

45-4 The comment opines that the Project strategically places the affordable units adjacent to the existing multi-family housing along Adams Street rather than distributing units throughout the rest of the market rate housing, as required by the St. Helena Housing Element.

Please see Response to Comment 45-2.

45-5 The comment references an article about housing segregation in St. Helena.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

45-6 The comment alleges that the City and Planning Commissioners may face discrimination claims and lawsuits due to housing and racial segregation by not requiring affordable housing in the western area of the City in violation of City ordinances and state law.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

45-7 The comment refers to Zoning Code sections 17.144 and 17.146, the Housing Element and General Plan as well as new California laws to prevent housing discrimination and segregation.

Please see Response to Comment 45-2. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

45-8 The comment suggests that the Project does not propose enough affordable housing relative to the impacts on traffic, water supply, housing segregation, and liability due to flooding. The comment also references that the Project eliminates the proposed Adams Street extension connecting to Silverado Trail.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 regarding water to serve the Project and Master Response 3 that addresses concerns regarding the levee. The Proposed Project does not eliminate the future extension of Adam's Street connecting to Silverado Trail. The Project does not require Adam's Street be extended any farther east of Starr Avenue. Any extension of Adams Street connecting to Silverado Trail would require further study and approval by the City and is not required for this Project.

An attachment to this letter can be found in Appendix B

Comment Letter 46

From: Diane Green <dgreenhagg@gmail.com>
Date: Tue, Nov 2, 2021 at 2:04 PM
To: <planningcommission@cityofsthelena.org>, <cityclerk@cityofsthelena.org>

Honorable Planning Commission Chair and Commissioners,

As you review the Hunter Project, it is important to note the long and complicated history of this project and the undesirable behaviors of this Santa Rosa Casino Development Applicant. During the decade long history, the applicant has sued the city multiple times, forced the city to construct the levee around his property (by refusing to allow access for the flood protection of the senior community of Vineyard Valley), refused to supply documentation on numerous items requested by city staff such as movement of tens of tons of soil, updated soil testing and maps, affordable housing plans that comply with the St Helena Housing Ordinance, Density bonus plans and any specific information regarding the size, bedrooms, bathrooms, etc. for each housing unit which is necessary to calculate traffic, water use, etc. The EIR is insufficient because as stated by a Dudek Rep at the last Public meeting on this topic - "We cannot do an EIR without size of homes, bathrooms, etc. or any density bonus information." This is on tape. 46-1

The inadequacy of the EIR is also that the project violates the HCD approved St Helena Housing Element and our own housing laws 17.144 and 17.146. For example, the continued segregation of low income housing, the requirement that the affordable housing must be spread throughout the project, and must have some "for sale" units that are below market rate. 46-2

St Helena has illustrated distinct and repeated actions that segregate low income housing from market rate neighborhoods, as evidenced by 98% of ALL affordable and multi-family housing being placed on the East side of St Helena., and often in separate apartment projects.

It has created an undeniable "other side of the tracks" situation, and despite the claim that the land is more affordable on the East Side, the State of California does not accept that as a waiver of the law. In fact, that exact argument serves to aggravate the segregation of neighborhoods by conveniently ruling out the possibility for any diverse housing or socioeconomic and racial diversity ever in those neighborhoods because "it's too expensive for that. over here" Without City intervention and enforcement of our own anti-segregation requirements of projects like this to ensure a mix of housing types for variable income families, you contribute to maintaining a "put them in groups over there" kind of St Helena. 46-3

You can see that hte 25 new units of affordable restricted housing on the East Side is designed specifically to place the affordable apartments in a "project" immediately adjacent to the existing lower income multi-family housing along Adams rather than distributing it through the rest of the market rate housing AS IS REQUIRED by St Helena Housing Element, St Helena laws, ordinances as well as CA Statelaws against discrimination. And NONE are for sale which is also required. 46-4

Attached is a professional perspective from a housing segregation expert describing the situation in St Helena. 46-5

The city and you personally, stand to face discrimination claims and lawsuits if you continue the trend of decisions that violate of the St Helena stated goals and ordinances as well as the State's laws by 46-6

perpetuating the long pattern of housing and racial segregation in St Helena. We all know and see that realtors in St Helena list housing on the West Side of town as "preferred side of town" or "the desirable West Side". Even realtors know exactly what has been done, and use it to realty sales advantage. 46-6 Cont.

With a full read of the St Helena ordinances, zoning codes 17.144 and 17.146, the Housing Element and General Plan as well as new California laws to prevent housing discrimination and segregation, citizens should be assured that you will do what is required by law, and not put the city or yourselves at risk for litigation and embarrassment of being an ongoing segregated city. Do not give this Santa Rosa developer who has no interest in following our laws and actually does not want to work within our city's own clearly stated goals of changing from "the other side of the tracks" city where we put our diverse and lower income population into segregated projects. It's not who we are, so don't let this uber wealthy and questionable casino developer put us and you in an embarrassing and legal situation for his own personal financial gain. 46-7

You will no doubt hear from the applicant that he is "helping St Helena housing", when in fact this project will provide a mere 5 units of very low income housing. On top of that, the previously proposed 11 affordable housing ADU's (ADU's) will now be "above moderate" - which is simply a clever way to say market rate. 46-8

So in what sense does this enormous subdivision, that further segregates our city, is wholly reliant on our levee where we have full liability, causes unmitigable traffic at one of the ONLY exits out of the city, eliminated the proposed Adams St extension to the Trail in his plans, and exacerbates our ongoing severe water shortages helpful to us? Please do not play his game. Please stand up to protect this city, its resources, its liability and its integrity as a welcoming and diverse place to live. If not you, then who? 46-9

Thank you.

Sincerely,
Diane Green
Daniel Wheaton
Mark Arnett
Carl Barnes
Gary Oncina
James Pelligri

Response to Letter 46
Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri
November 2, 2021

46-1 The comment states that it is important to note the history of the Project and actions by the Project applicant, including litigation and refusal to supply documentation requested by City staff. The comment further states the EIR is insufficient because it is not possible to do an EIR without knowing the size of homes and without any density bonus information.

The comment regarding the history of the Project and Project applicant is noted and forwarded to the decision makers for their consideration. Regarding the Draft EIR, the analysis used the assumption that single-family lots would range in size between 7,000 and 12,000 square feet with most lots in the 7,000 to 8,000 square foot range, and the attached multifamily housing units would comprise 30,000 to 45,000 total square feet of building area. The construction of these units would require approval by the planning commission and attached residential units would also require a conditional use permit. The Medium Residential (MR) zoning district also contains a density bonus that may be given for affordable housing projects; however, the applicant has not requested consideration of a density bonus as part of the Proposed Project application. This information is included within the Draft EIR. Therefore, no further response is required; and the comment is noted and forwarded to the decision makers for their consideration.

46-2 The comment opines that the Project violates the St. Helena Housing Element and housing laws 17.144 and 17.146 through the segregation of low-income housing from market rate housing and the lack of availability of “for sale” units listed below market rate.

Please refer to Response to Comment 45-2. Any determination of compliance with the City’s requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. Such an Agreement will need to be approved by the City Council following the Tentative Subdivision Map approval but prior to the Final Map being recorded and before any development of homes can take place. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-3 The comment suggests that the segregation of low-income housing from market rate neighborhoods outside of the eastern area of St. Helena limits the possibility for diverse housing, socioeconomic and racial diversity in those neighborhoods. The comment also suggests that City intervention and enforcement of anti-segregation

requirements is necessary in order to ensure a mix of housing types for varying family incomes.

Please see Response to Comment 45-2. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-4 The comment opines that the 25 new affordable housing are specifically placed adjacent to the existing lower income, multi-family housing on Adams Street rather than placed among market rate housing, as required by City and state laws. The comment also states that none of these units are for sale which is also required by law.

Please refer to Response to Comment 45-2. Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-5 The comment references an article about housing segregation in St. Helena.

The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-6 The comment suggests that the City and Planning Commissioners may face discrimination claims and lawsuits if violations to City ordinances and state law continue. The comment also suggests that realtors benefit from advertising the west side of St. Helena as preferred or more desirable.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-7 The comment states that the City should comply with its ordinances, the Zoning Code, the Housing Element and General Plan as well as new state laws to prevent housing discrimination and segregation. The comment further states that the Project Applicant has no intention to follow laws or contribute to the City's goal of minimizing housing segregation.

Please refer to Response to Comment 45-2. Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. The comment does not identify any specific areas where the Draft EIR

analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-8 The comment states that the Project Applicant will claim he is helping the housing situation in the City when he is only providing five units of very low income housing and the ADUs will be at market rate.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

46-9 The comment opines that the Project would not help the City because it would further segregate the City and result in impacts related to traffic, water supply, and liability to flooding. The commenter asks the Planning Commissioners to protect the City.

The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

An attachment to this letter can be found in Appendix B.

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Comment Letter 47

From: Diane Green <dgreenhagg@gmail.com>
Sent: Tuesday, November 2, 2021 2:05 PM
To: Planning Commission <PlanningCommission@cityofsthelena.org>; cityclerk <cityclerk@cityofsthelena.org>
Subject: [External] Hunter Project Public Comments and DEIR input

Honorable Planning Commission Chair and Commissioners,

As you review the Hunter Project, it is important to note the long and complicated history of this project and the behaviors of this Santa Rosa Casino Development Applicant. During the decade long history, the applicant has sued the city multiple times, forced the city to construct the levee around his property (by refusing to allow access for the flood protection of the senior community of Vineyard Valley), refused to supply documentation on numerous items requested by city staff such as movement of tons of soil, updated soil testing and maps, affordable housing plans that comply with the St Helena Housing Ordinance, Density bonus plans and any specific information regarding the size, bedrooms, bathrooms, etc. for each housing unit which is necessary to calculate traffic, water use, etc. 47-1

The project violates the HCD approved St Helena Housing Element in numerous ways including the continued segregation of low income housing, the requirement that the affordable housing must be spread throughout the project., and must be "for sale" as well as apartments. St Helena has illustrated distinct and repeated actions that segregate low income housing from market rate neighborhoods – as evidenced by 98% of ALL affordable and multi-family housing being placed on the East side of St Helena. It has created an undeniable "other side of the tracks" situation, and despite the claim that the land is more affordable on the East Side, the State of California does not accept that as a waiver of the law. In fact, that exact argument serves to aggravate the segregation of neighborhoods by conveniently ruling out the possibility for any diverse housing or socioeconomic and racial diversity in those neighborhoods. 47-2

Not only does this project propose 25 new units of affordable restricted housing on the East Side, it is designed specifically to place the affordable apartments immediately adjacent to the existing multi-family housing along Adams rather than distributing it through the rest of the market rate housing as is required by other St Helena Housing Element and laws. 47-3

Attached is a professional perspective from a housing segregation expert describing the situation in St Helena. 47-4

The city and you personally, stand to face discrimination claims, and lawsuits if you continue to make decisions in violation of the St Helena ordinances as well as the State's laws by perpetuating the long pattern of housing and racial segregation in St Helena. To date, realtors in St Helena list housing on the West Side of town as "preferred side of town" or "the desirable 47-5

West Side". Even realtors know exactly what has been done and use it to realty sales advantage.

47-5 Cont.

You are now informed, and with a full read of the St Helena ordinances, zoning codes 17.144 and 17.146, the Housing Element and General Plan as well as new California laws to prevent housing discrimination and segregation, citizens should be assured that you will do what is required by law, and not put the city or yourselves at risk for litigation and embarrassment of being an ongoing segregated city. Do not give this Santa Rosa developer who has no interest in following our laws put us in an embarrassing and legal situation for his own personal financial gain.

47-6

You will certainly hear from the applicant that he is "helping St Helena housing", when in fact this project will provide a mere 5 units of very low income housing and the previously proposed affordable housing second units (ADU's) will be above moderate - which is simply market rate. So in what sense does this enormous subdivision, that is wholly reliant on our levee where we have full liability, causes unmitigable traffic at one of the ONLY exits out of the city, eliminated the proposed Adams St extension to the Trail, further segregates our city, and exacerbates our ongoing severe water shortages helpful to us? Please do not play his game. Please stand up to protect this city, its resources, its liability and its integrity. If not you, then who?

47-7

Thank you.

Sincerely,
Diane Green
Daniel Wheaton
Mark Arnett
Carl Barnes
Gary Oncina
James Pelligri

Response to Letter 47
Diane Green, Daniel Wheaton, Mark Arnett, Carl Barnes, Gary Oncina, James Pelligri
November 2, 2021

47-1 The comment states that it is important to note the history of the Project and actions by the Project applicant, including litigation and refusal to supply documentation requested by City staff.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-2 The comment opines that the Project violates the City's Housing Element through the segregation of low-income housing from market rate housing and the lack of availability of "for sale" units listed below market rate. The comment suggests that the segregation of low-income housing from market rate neighborhoods outside of the eastern area of the City limits the possibility for diverse housing, socioeconomic and racial diversity in those neighborhoods.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the Project. Please refer to Response to Comment 45-2. Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. Such an Agreement will need to be approved by the City Council following the Tentative Subdivision Map approval but prior to the Final Map being recorded and before any development of homes can take place. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-3 The comment opines that the 25 new affordable housing are placed adjacent to the existing lower income, multi-family housing on Adams Street rather than placed among market rate housing, as required by City and state laws.

Please refer to Response to Comment 45-2. Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-4 The comment references an article about housing segregation in St. Helena.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-5 The comment opines that the City and Planning Commissioners may face discrimination claims and lawsuits if violations to City ordinances and state law continue. The comment also suggests that realtors benefit from advertising the west side of St. Helena as preferred or more desirable.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-6 The comment states that the City should comply with its ordinances, the Zoning Code, the Housing Element and General Plan as well as new California laws to prevent housing discrimination and segregation.

Please refer to Response to Comment 45-2. Any determination of compliance with the City's requirements for affordable or inclusionary housing will be made at the time that the applicant submits a formal application for an Affordable Housing Agreement. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

47-7 The comment opines only five units of very low income housing are provided and the ADUs will be at market rate. The comment suggests that the Project would not help the City because it would further segregate the City and result in impacts related to traffic, water supply, and liability to flooding. The commenter asks Planning Commissioners to protect the City.

As noted elsewhere in these Responses, any future Affordable Housing Agreement specifying the type and number of affordable housing units will be reviewed and approved at a future date. It is not correct that a specific number of very low income units has been proposed or approved. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

Comment Letter 48

From: Elizabeth Green <green05@sbcglobal.net>
Sent: Wednesday, November 3, 2021 2:56 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: Fw: [External] Picture of electric panel and diesel pump sitting in water at the back gate in Vineyard Valley

Ms. DeRosa,

This is at the back of Vineyard Valley, where the emergency exit exists that we used for our fire drill this summer. There is a gate at the end of Del Rio and we exited thru that gate and up onto the access road during the drill (fire and police were present). The electric panel and diesel pump are right there by the gate. This is a picture taken after the heavy rains we just had. Imagine an entire season with heavy rains. Very concerning. 48-1

Elizabeth Green
Resident, Vineyard Valley

Subject: Re: Picture of electric panel and diesel pump sitting in water at the back gate



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Response to Letter 48
Elizabeth Green
November 3, 2021

48-1 The comment provides a picture of the Vineyard Valley property after a rain and shows an electric panel and diesel pump and expresses concern about flooding.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please also refer to Master Response 4.

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Comment Letter 49

From: Elizabeth Green <green05@sbcglobal.net>
Sent: Friday, November 5, 2021 9:34 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Cindy Tzafopoulos <ctzafopoulos@cityofsthelena.org>
Subject: [External] Levee

Dear Ms. DeRosa,

It has been brought to my attention that the levee has not been maintained for several years. There are gopher holes and visible proof of other animals digging in the dirt which certainly must undermine the integrity of the foundation of the levee over the years and would not be a safe place for a housing project. Please provide documents or where I might access them which show the levee has been properly maintained since being built. 49-1

Thank you.

Elizabeth Green
Resident, Vineyard Valley

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Response to Letter 49
Elizabeth Green
November 5, 2021

49-1 The comment expresses concern over the condition of the levee and suggests that the project site is not a safe place for residences. The commenter requests maintenance records for the levee.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 which addresses concerns associated with the levee and flooding.

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Comment Letter 50

November 1, 2021

Dear Ms. DeRosa,

My husband and I are writing to oppose the Hunter Project. We live in Vineyard Valley. We are very concerned about this project being built literally in our back yard. The obvious concerns are WATER: where is it going to come from to accommodate 81 new dwellings and the amount of people living in them. We don't have enough right now with 3 years of draught. 50-1 50-2

Our next concern is emergency evacuations. With only two ways out of Saint Helena, the additional residents occupying these dwellings will create a mass exodus (along with all the residents of Calistoga) during an emergency evacuation. More than likely, the Trail will be closed in various areas in the event of another fire or flooding, which has been the case with the recent fires and the recent heavy rains, so really, that leaves *one way out* for everyone. Two lanes, possibly at night with no power? A very dangerous scenario. 50-3

Then there is the endless stream of construction trucks, i.e., dump trucks carrying dirt, lumber trucks, tractors, etc., going up and down 29 and our Main Street, 5 days a week, 8 hrs. a day, for a projected time of at least **6 years!!!** Imagine the traffic that it would create to the already stressed Hwy 29 and our small town of Saint Helena. We are experiencing this right now with part of the Trail closed. The traffic on Pope St. from Starr would create horrendous congestion especially going over the Pope Bridge. 50-4

Parking would be another nightmare with all the additional cars this project would create. It is already a problem, especially during tourist season. 50-5

Vineyard Valley would be directly impacted if they were to try to use our sewer system which runs down the middle of our park on Paseo. This was discussed at the meetings at the fire house three years ago. Our sewer system would not be able to handle the additional waste and water, and it was discussed that it would have to be replaced, meaning we would have major construction going on in the middle of our park as a result of that. 50-6

The residents on Del Campo and Del Rio who bought their homes for the tranquility and view on the other side of the wall from their homes at the back of our park, would be obliterated. This small section of nature and beauty back there which so many of the residents in SH enjoy on a daily basis would be gone. 50-7

Of another major concern: I worked with Chief Hartley all this year on fire preparedness for VV, and one of the things we initiated was the use of the back gate on Del Rio which goes up on the access road for a second emergency evacuation exit. We had our first fire drill using that road this summer. What would happen to our second emergency exit? Would residents of the 81 new dwellings be using that road too? We would never make it out of here if that were the case. 50-8

We hope you and whomever else is responsible for these decisions will very seriously consider these extremely important issues that will affect all of us who live in Saint Helena for years to come if this project is allowed to go forward. 50-9

Sincerely,

Elizabeth & Rodney Green
Vineyard Valley

Response to Letter 50
Elizabeth and Rodney Green
November 1, 2021

50-1 The comment states general opposition to the Proposed Project and notes that the commenters reside in close proximity to the Project, in Vineyard Valley.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

50-2 The comment expresses a general concern related to the Project's water supply; that the current supply is not adequate to serve the proposed residential development.

Please see Master Response 2 that addresses water availability to serve the Project in addition to existing City residences and businesses.

50-3 The comment expresses concern over the Project's impact on emergency evacuations, specifically in the event of fire or flooding.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please see Master Response 1, that provides more details specific for emergency evacuation for both Vineyard Valley residents and Project residents.

50-4 The comment raises concerns related to construction traffic; specifically, the commenter is concerned with potential impacts to Highway 29, Pope Street, and the Pope Street Bridge and also notes the temporary closure of Silverado Trail.

Potential Project impacts, as well as impacts related to the construction of the Project, along Highway 29, Pope Street, and the Pope Street Bridge are analyzed in detail within Section 3.14 Transportation of the Draft EIR and within Appendix K, Traffic Impact Study. The comment describes portions of the Silverado Trail that were temporarily closed creating additional congestion along the Pope Bridge; however, the exact location and reason for the closure is not stated. Since the closure is not expected to be permanent, no further response is required.

50-5 The comment expresses a general concern with the Project's potential impact to parking.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with

Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

50-6 The comment expresses a concern related to the sewer system that would serve the Project. The commenter believes that the current sewer system does not have capacity to serve the Project and that additional construction would be required to meet the needs of the Project.

The comment does not identify any specific areas where the Draft EIR analysis is Inadequate; therefore, no response is required. Please see Master Response 4 that addresses capacity concerns with the existing wastewater system and Chapter 3, Changes to the Draft EIR for revised language regarding the results of a sewer capacity study.

50-7 The comment expresses a concern that certain City residents would have views that would be negatively impacted by the proposed development.

The Draft EIR analyzes potential changes in views associated with development of the Project under Impact 3.1-2. The Proposed Project is within the City's Urban Limit Line and would be consistent with the type and character of residential development adjacent to the site. The design of the subdivision maintains the existing street pattern and maintains existing street views of the surrounding area, consistent with the 1993 and 2019 General Plan Policies. The Project would modify long-range views of existing vineyards located to the west and on the Project site as well as views of rolling hillsides which would be partially blocked by development of new residences. However, although long-range views of hillsides and views of the on-site vineyard and open space are available in the vicinity of the Project site, and these views are not unique in that views of these features are available throughout the City.

To illustrate how development of the site could look and how it could affect public views and the existing visual character, visual simulations were prepared (see DEIR pp. 3.1-29, 3.1-30, 3.1-35, 3.1-37, 3.1-39). It was determined that because the Proposed Project would not conflict with applicable regulations governing scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings and impacts would be less than significant.

50-8 The comment raises a concern about the Project's effect on a secondary emergency access gate for Vineyard Valley residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Please also see Master Response 1, that provides more details specific for emergency evacuation for both Vineyard Valley residents and Project residents.

50-9 The comment requests the City “very seriously consider” the issues raised in this comment letter.

The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. The comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 51

City of St Helena, City Hall
Received
NOV 08

November 3, 2021

1480 Main St.
St Helena, CA 94574

Dear Ms. DeRosa,

My husband and I live in Vineyard Valley. A major concern is that the access road along the levee that Vineyard Valley used for the first time ever fire drill this summer, would be used for all the construction trucks, i.e., lumber trucks, dump trucks, bull dozers, etc., and to bring in materials; coming up 29, going thru Main St., and turning right on Adams and then to that access road. Has anyone given any thought as to where all these construction related trucks and vehicles are going to park for **6 years**??? It would seem logical that at the very least, the access road would become part of the construction zone and would not be available for an emergency exit if we had another dire circumstance such as the Glass fire over the next ***six*** years that the project is proposed to take. With that thought in mind, if the project goes forward, what happens if VV needs to use that road in the event of an emergency? 51-1

If Adams St. is extended to create a way to the Silverado Trail, then picturing that, it only seems logical that the access road would become part of that route. Then the question becomes, can VV still exit the gate at the end of our park like we did for the fire drill up onto the access road, and would we become part of the mass exodus of all the new residents from 81 new dwellings trying to get out in an emergency? It would be a disaster, as we have over 200 homes here. 51-2

Also, if that access road becomes part of the construction zone, it could be greatly compromised from all the wear and tear, and the city would need to repair it before it might be used in another emergency. We discovered a large pothole during the fire drill which Chief Hartley had repaired after the drill. 51-3

Along with this concern are emergency resources in the event of another major fire or possible flood. I know for a fact that there are only two patrol cars on duty at any given time. It seems like an additional 80+ dwellings and all the people that would be living there would greatly tax our emergency services, and I'm sure you're aware that our fire department is severely taxed right now. 51-4

Another concern: Has the levee been maintained since the flood project? We have heard that it has not and we are working to find out the answer to that. 51-5

Another concern: Who's responsibility is it financially if there is loss of property or life if there is another flood on the proposed project, Saint Helena or Hunter? This is not at all clear. 51-6

This project is a very bad idea to the detriment of all of Saint Helena, and we have only named a few of the issues it will impact. We sincerely hope the issues that all of the residents have brought up are very carefully weighed as so much is at stake. 51-7

Thank you.

Rodney & Elizabeth Green
Vineyard Valley

Response to Letter 51
Rodney and Elizabeth Green
November 3, 2021

51-1 The comment raises concerns related to the access road along the levee and the Project's impact on emergency access for Vineyard Valley residents. Specifically, the comment is concerned with access and construction zone for construction trucks and vehicles and how construction might impact emergency evacuation.

Construction activities are not permitted to block access to the levee maintenance road and in the event of an emergency access to the levee would be available. All construction vehicles and equipment would access the site from either Starr Avenue or Adams Street. No truck access would be permitted on the levee maintenance road. Please see Master Response 1 that addresses emergency evacuation concerns for Vineyard Valley residents.

51-2 The comment expresses a concern related to the possible extension of Adams Street to access the Silverado Trail. The comment questions whether Vineyard Valley residents, along with new residents from the Project, could use the access road for emergency evacuation under this scenario.

The Project does not include the future expansion of Adams Street connecting to Silverado Trail. This is a separate City project and is not required for the Project.

51-3 The comment states a concern related to the maintenance and condition of emergency access roads. The commenter is concerned that construction would negatively impact the condition of emergency access roads.

The City is responsible for maintaining roads within the City's jurisdiction. Please see Response to Comment 51-1 regarding the levee maintenance road and also Master Response 1 that addresses emergency evacuation concerns.

51-4 The comment expresses a concern related to the Project's impact on emergency response services and the ability of the Fire Department to serve the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, the Draft EIR evaluates the ability of the City's police and fire departments to accommodate the increase in demand for service in Section 3.12, Public Services and Recreation. As noted on page 3.12-1, the closest police and fire station to the Project site is located 0.2 miles to the southwest. Development of the site was assumed in the City's 1993 General Plan as well as the recently adopted 2019 General Plan. The addition of new residences would not adversely affect the ability of the City's police and fire personnel to serve the site. The City's police and fire departments have adequate staff to accommodate the increase in demand for

services and do not anticipate a decline in response times to the site. Please see Master Response 1.

51-5 The comment questions whether the Napa River levee has been maintained since it was constructed.

Please see Master Response 3 that addresses concerns associated with the levee maintenance and flooding.

51-6 The comment asks who would be held liable for damage and injury in the event of a flood.

Please see Master Response 3 that addresses issues related to the levee and flooding. Determination of legal liability for a potential future event is outside the scope of CEQA. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required.

51-7 The comment expresses general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

Comment Letter 52

From: Gale Greisen <gale@ggreisen.com>
Sent: Tuesday, November 2, 2021 3:51 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Hunter Project Questions

Questions for Planning Commission Meeting 11-2-2021 re: Hunter Project

#1 Will the sewer plant upgrade of 16.2 million as per our agreement be completed before construction would begin and will it effect the $57,000 fine. 52-1

#2 The existing sewers were constructed many years ago with the size predicated on the houses they served at that time. Will the existing system be reengineered to handle the increased load 52-2

#3 The Water Audit suit calls for the decommissioning of existing wells that are not in use will this have any effect on the project. Will a new permit be required for the now out of use well. 52-3

#4 The Water Audit suit also cites meeting sustainability goals from our existing wells providing domestic water will the addition of all of the residential units drawing from these what will the impact be and what effect will this have on the suit by Water Audit. 52-4

#5 Do we know if both the new well and the current one in use by the City of St Helena are serviced by the same aquifer? 52-5

#6 Given that the proposal will be to retrofit 300 plus homes with water saving devices to augment the additional users, would it be more prudent to have this done and accomplished prior to the additional use of water for the development. My concern is that very few residents, certainly not 300, will embrace the idea and agree to have water saving devices installed in their homes. Many of us had this done in prior years and are not in need of such an endeavor. So the fear is that the money will sit in a slush fund and the actual use for water saving devices never take place and the development will still start using the water which we have so little. Will the 300 plus homes be just on the east side as the well is our main supplier of water. 52-6

Gale Greisen
1181 Starr Ave
St Helena
415 729 6039

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Response to Letter 52
Gale Greisen
November 2, 2021

52-1 The comment asks whether the sewer plant upgrade of 16.2 million would be completed before Project construction, and whether it would affect the $57,000 fine.

The comment references a separate sewer plant upgrade project and does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The new wastewater treatment plant will have the same dry-weather treatment capacity at the existing plant. The comment is noted and forwarded to the decision makers for their consideration.

52-2 The comment states that the City's sewer infrastructure was constructed based on housing to be served at that time. The comment asks whether the existing sewer system would be re-engineered to handle the increased load from the Project.

Please see Master Response 4 that provides more details regarding the Project's wastewater infrastructure and the ability of the City to convey and treat the Project's wastewater. See also revisions to the text of the Draft EIR in Chapter 3, Changes to the Draft EIR.

52-3 The comment asks whether the Water Audit lawsuit, which calls for the decommissioning of existing water wells not in use would have any effect on the Project. The comment asks whether a new permit would be required for the out-of-use well.

The comment is speculating what the outcome of the Water Audit litigation could be on the City and the Project. Please see Master Response 2 that addresses concerns regarding water including the ongoing Water Audit lawsuit. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

52-4 The comment asks what effect the increase of residential units by the Project would have on the Water Audit lawsuit, which cites sustainability goals for existing wells providing domestic water.

Please see Master Response 2 that addresses concerns regarding water including the ongoing Water Audit lawsuit. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

52-5 The comment asks whether the "new well and the current one in use by the City of St. Helena" are serviced by the same aquifer.

It is not clear what the “new well” is that is referred to in this comment. As discussed in the Draft EIR, the Project is not proposing to drill a new well to serve the water needs of new residential units. The Project is proposing to use an existing onsite agricultural well to irrigate the Project’s public and private landscaping. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

52-6 The comment asks whether it would be more appropriate to retrofit homes with water-saving devices prior to adding the Project’s increase in demand. The commenter is concerned that few residents would agree to have water-saving devices installed in their homes and that the Project would be constructed and occupied prior to offsetting the Project’s increase in demand. The comment asks whether the homes to be retrofitted with water-saving devices would only be on the east side of the City.

The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. Please see Master Response 2 that addresses water supply concerns.

Comment Letter 53

From: Henry Gundling <henry.gundling@gmail.com>
Sent: Tuesday, October 12, 2021 10:11 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>
Subject: [External] Hunter Project DEIR Water Comment

Re: Hunter Project DEIR

October 12, 2021

Water

The Hunter Project DEIR's claim that the Hunter Project is "water neutral" is downright laughable. The report doesn't even calculate the acre feet of water that will be taken from the city's aquifer directly upstream from its own municipal wells. Unless the developer is proposing zero landscaping, how could there be no impact on Saint Helena's groundwater, one of the city's three critical water sources?! As for indoor water usage, the proposed $596,808 for water efficiency improvements in 333 existing homes to offset the daily 17,752 gallons from city water (also coming in part from the aquifer) is nice in theory, but the city should insist that this investment, and its proven results, be implemented before development. Saint Helena's current residents will be harmed if the promised benefits fail to materialize, and they should be understandably suspicious of developers' proposed offsets. Remember the roughly $800,000 "offset" provided by the developer of the Las Alcobas hotel to mitigate the loss of 20 on site low income housing units? Really? Where are the twenty replacement low income housing units purchased by that $800,000? 53-1 53-2 53-3 53-4

The DEIR is wholly inadequate in defining the Hunter Project's potential impact on Saint Helena's water supply, both for residents, as well as wildlife. The city should insist on the DEIR fully disclosing groundwater impacts, and as well, insist on bona fide, rigorously verifiable conservation benefits as a prerequisite to development. 53-5

Saint Helena resident's are already under Phase II water restrictions due to drought and water supply shortage, and will face the likely prospect of draconian Phase III water restrictions with one more below normal rainy season. It would be irresponsible, reckless and potentially harmful for existing citizens for the city to approve a large, new development, with its huge additional water demand, without securing a truly neutral water supply . 53-6

Yours truly,

Henry Gundling
1185 MEADOWCREEK CIRCLE
Saint Helena, CA

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Response to Letter 53
Henry Gundling
October 12, 2021

53-1 The comment finds fault with the claim that the Project would be "water neutral" and that the Draft EIR does not calculate the amount of water supplied from the City's aquifer upstream of the municipal wells.

The Proposed Project is required to be in compliance with the City's Water Neutral Policy. Appendix J of the Draft EIR provides the required Water Neutral Report for the Project as the first step in compliance. The Draft EIR provides an analysis of the sources of water to supply the Project's water demand beginning on page 3.9-40 and also on pages 3.13-35 and 3.13-36. See also Master Response 2 for further details on the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

53-2 The commenter claims any water used for landscaping would have an impact on the City's groundwater supplies.

The Draft EIR analyzes the potential impact of the Project's water demand sourced from groundwater on pages 3.9-40 through 3.9-43 and also on pages 3.13-35 and 3.13-36. The Draft EIR concludes that the Project's demand on groundwater supplies is relatively small and, in part, would be addressed via adherence to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. See also Master Response 2.

53-3 The comment questions the ability of the Project to be able to meet the Water Neutral Policy requirements to offset the proposed water supply demand for the indoor water usage.

The Proposed Project is required to adhere to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the City's Municipal Code. See further discussion of the City's Water Neutral Policy and Municipal Code requirements in Master Response 2.

53-4 The commenter cites an example project (Las Alcobas Hotel) as one where funds from the developer may not have resulted in the intended outcome.

The comment is referring to a different project and does not identify any specific areas where the Draft EIR analysis is inadequate. See also Master Response 2.

53-5 The comment states that the Draft EIR is inadequate because it does not disclose groundwater impacts for residents and wildlife and that the City should insist on verifiable conservation benefits.

The Draft EIR analyzes the potential impact of the Project's water demand sourced from groundwater on pages 3.9-40 through 3.9-43 and also on pages 3.13-35 and 3.13-36. The potential impacts to wildlife are analyzed in Section 3.4 Biological Resources. The reference to conservation benefits likely refers to the efficacy of the Water Neutral Policy and Municipal Code which is beyond the scope of CEQA in relation to the Proposed Project. See Master Response 2 for additional information specific to water supply.

53-6 The comment expresses a concern related to the City's current and future water restrictions and states the Project should not be approved due to its impact on water supply.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Please see Master Response 2 that addresses water availability to serve the Project in addition to existing City residences and businesses.

Comment Letter 54

From: Henry Gundling <henry.gundling@gmail.com>
Sent: Tuesday, October 12, 2021 10:11 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>
Subject: [External] Hunter Project DEIR Water Comment
Re: Hunter Project DEIR

October 12, 2021

Water

The Hunter Project DEIR's claim that the Hunter Project is "water neutral" is downright laughable. The report doesn't even calculate the acre feet of water that will be taken from the city's aquifer directly upstream from its own municipal wells. Unless the developer is proposing zero landscaping, how could there be no impact on Saint Helena's groundwater, one of the city's three critical water sources?! As for indoor water usage, the proposed $596,808 for water efficiency improvements in 333 existing homes to offset the daily 17,752 gallons from city water (also coming in part from the aquifer) is nice in theory, but the city should insist that this investment, and its proven results, be implemented before development. Saint Helena's current residents will be harmed if the promised benefits fail to materialize, and they should be understandably suspicious of developers' proposed offsets. Remember the roughly $800,000 "offset" provided by the developer of the Las Alcobas hotel to mitigate the loss of 20 on site low income housing units? Really? Where are the twenty replacement low income housing units purchased by that $800,000? 54-1

The DEIR is wholly inadequate in defining the Hunter Project's potential impact on Saint Helena's water supply, both for residents, as well as wildlife. The city should insist on the DEIR fully disclosing groundwater impacts, and as well, insist on bona fide, rigorously verifiable conservation benefits as a prerequisite to development. 54-2

Saint Helena resident's are already under Phase II water restrictions due to drought and water supply shortage, and will face the likely prospect of draconian Phase III water restrictions with one more below normal rainy season. It would be irresponsible, reckless and potentially harmful for existing citizens for the city to approve a large, new development, with its huge additional water demand, without securing a truly neutral water supply . 54-3

Yours truly,
Henry Gundling
1185 MEADOWCREEK CIRCLE
Saint Helena, CA

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Response to Letter 54
Henry Gundling
October 12, 2021

54-1 The commenter does not believe the project would be "water neutral" and the Draft EIR does not calculate the amount of water that supplied from the City's aquifer upstream of the municipal wells. The commenter claims any water used for landscaping would have to have an impact on the City's groundwater supplies. The comment further questions the ability of the Project to meet the Water Neutral Policy requirements and cites an example project (Las Alcobas Hotel) as one where funds from the developer may not have resulted in the intended outcome.

See Response to Comment 53-4 and Master Response 2 for further details on the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

54-2 The comment claims that the Draft EIR is inadequate because the Draft EIR does not disclose groundwater impacts for residents and wildlife and that the City should insist on verifiable conservation benefits.

See Response to Comment 53-5 and Responses to Comment 14-4 regarding impacts to wildlife.

54-3 The comment expresses a concern related to the City's current and future water restrictions and states that the Project should not be approved due to its impact on water supply.

See Response to Comment 53-6.

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Comment Letter 55

From: Kathleen Guneratne <kathleen.guneratne@gmail.com>
Sent: Monday, November 29, 2021 11:21 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Cc: Liz Guneratne <GUNERATNE@gmail.com>
Subject: [External] Opposition to Hunter Subdivision

Hello:
I am a homeowner at 1370 Grove Court in St Helena, CA. I live several hundred feet from the planned Hunter Division. While I support affordable housing, I do not see this plan as an affordable housing plan. It appears to be a wolf in sheep's clothing--designed to make developers wealthy and deleteriously alter the landscape of St Helena. I am not satisfied with the environmental impact report (EIR) that has been filed and I am deeply concerned about the negative environmental impacts this huge development will have on our neighborhood. Given how precariously we sit perched on flood plains, and how limited water resources and other land resources are, I do not believe we can accommodate the additional population density contemplated by the report. We cannot support the additional traffic. I oppose this development. 55-1

55-2

I also am concerned that sufficient concern has not been given to preservation of protected wildlife and whether this would affect any sacred burial sites of the Wappo Indian tribe. Flood project dig unearths Wappo artifacts, bones | The Weekly Calistogan | napavalleyregister.com 55-3

55-4

Please feel free to contact me with any questions.
Kathleen Guneratne
1370 Grove Court
St Helena, CA 94574

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Response to Letter 55
Kathleen Guneratne
November 29, 2021

55-1 The commenter indicates her support of affordable housing but does not consider this to be an affordable housing project.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please refer to Chapter 2, Project Description of the Draft EIR, which describes the Project. See page 2-18 that addresses affordable housing. At this time the only request by the Project applicant is to subdivide the lots consistent with the General Plan and Zoning. The Project will need to fulfill the code required inclusionary housing requirements which will be specified in a future affordable housing agreement.

55-2 The comment opines that the Project will result in negative impacts to the neighborhood due to being within a flood plain, limited water resources, increase in population and traffic, and opposes the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

Please see Master Response 3 that addresses concerns associated with the levee and flooding; and Master Response 2 that addresses the adequacy of water supplies.

55-3 The comment notes concern for adequate preservation of protected wildlife.

Direct and indirect impacts to federal and state protected wildlife are addressed in Section 3.4, Biological Resources of the Draft EIR. Mitigation is included to conduct pre-construction surveys to ensure these species are not disturbed if present. The Draft EIR provides for adequate protection of protected wildlife species.

55-4 The comment asks if the Project would affect any sacred burial sites of the Wappo Indian Tribe and references an article in a local newspaper.

Pursuant to AB 52, the City sent letters to all tribes requesting notification and received responses from the Federated Indians of Graton Rancheria and the Yocha Dehe Wintun Nation. No response was received from the Wappo Indian Tribe. Neither the Federated Indians of Graton Rancheria nor the Yocha Dehe Wintun Nation tribe requested formal consultation with the City. The analysis of potential impacts to cultural resources is included in Section 3.5, Cultural and Tribal Cultural Resources.

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Comment Letter 56

From: Mariam Hansen <wartuhi@comcast.net>
Sent: Monday, October 18, 2021 9:38 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter EIR

Hello Maya,
Here are my comments on the Hunter Project EIR:

The project has to be water neutral, though using 18,000 gallons per day. One of the mitigations is installing water meters at each home in Vineyard Valley—247 of them. There used to be water meters—there is a remnant of one in my driveway. The city deemed it too expensive to read them all, so now we have only two—one for north of the creek and one for south. The water neutrality also plans to remove 5 acres of lawn in town and retrofit toilets. 56-1

Many other projects had to retrofit toilets in town. We had to retrofit some in the 1990s when we built a commercial building on Vintage Avenue. How many toilets are left to be retrofitted? 56-2

The fire department wants an emergency exit from the dead end cul de sac at the far eastern end of the project. The main exit route in VV is private property. The owners of Vineyard Valley will certainly object to this.

This would have to connect with the main exit route for over 200 homes in Vineyard Valley. Experience has shown that in a dire emergency VV has so much trouble getting everyone out they decided to have them drive out the levee road! In future they would have to drive past the new Hunter homes! 56-3

If there is a choice between building a freeway off ramp style bridge next to the existing Pope Street Bridge over Napa River and a new bridge for Adams St, I support extending Adams Street to the Silverado Trail. If Hunter is built that would handle the increased traffic in a much better way. Besides, as a historian, I don't want to see the setting of the 1894 Pope Street Bridge denigrated by a monstrous new structure. The bridge is on the National Register of Historic Places. 56-4

Is Nov 2 the last time comments on the EIR will be accepted? If so this has been awfully hush hush. Where is the public outreach??? 56-5
Best,
Mariam Hansen

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Response to Letter 56
Mariam Hansen
October 18, 2021

56-1 The comment suggests methods to achieve water neutrality, including installing water meters, but also states that this approach did not work in Vineyard Valley.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 2 that addresses compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

56-2 The comment notes that other projects were required to retrofit toilets in the City and questions how many are still needed to be retrofitted.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 2 that addresses compliance with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

56-3 The comment suggests that Vineyard Valley residents will object to building an emergency exit from the Project's proposed cul-de-sac. The commenter has concerns related to emergency evacuation.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please also see Master Response 1, that provides more details specific for emergency evacuation for both Vineyard Valley residents and the Proposed Project.

56-4 The comment states opposition to a "freeway off-ramp style bridge" at the existing Pope Street bridge over the Napa River and a preference to extend Adams Street to Silverado Trail.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

56-5 The comment raises a general concern about the public comment period and outreach efforts.

The Draft EIR was released for the required 45-day public review period on September 23, 2021 through November 8, 2021. In response to numerous requests, the City extended the comment period through November 30, 2021 for a total of 67 days.

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Comment Letter 57

From: Donna Hardy <mhardysh@att.net>
Sent: Monday, November 1, 2021 10:16 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Draft EIR

Good Morning Maya,
Attached are my questions and concerns about the proposed Hunter Project that will be discussed at Tuesday's Planning Commission Meeting. Please distribute it to the members and make it a part of public record.

Thank you,
Donna Hardy
620 Harvest Lane
Saint Helena, CA 94574

After reviewing the Hunter Project Draft EIR, I find the items listed below of concern:

1) Does the City of St. Helena have enough water in drought years to permit 87 new homes to be built? Can Water Neutrality be achieved by water conservation and retrofitting old fixtures in town? Should an agricultural well be used for landscape watering to help a proposed housing development achieve Water Neutrality? 57-1
2) The 1993 General Plan, which is the document being used for this Subdivision request, stipulates that Adams St. be extended to the Silverado Trail; why is this not being required as a condition for the project? 57-2
3) The Hunter property was in the flood plain before the Measure A Levee was built. After its completion. FEMA then changed the zoning to Firm X, which no longer requires homeowners to purchase Flood Insurance. If the project is approved and homes are built behind a levee the City of Saint Helena created and is required to maintain, the city could be held responsible for the losses if the levee ever failed. Could the city be held in non-compliance of the terms of the Measure A agreement if homes were built as proposed? Did the Measure A Project change the buildability of the Hunter Land? 57-3
4) It is a requirement that the project be Water Neutral by retrofitting old toilets in town and other water savings measures to offset the interior water use of the 87 new homes. The city is presently in a Phase II water emergency, and homes have been allocated water usage based on the number of people living in them. If usage is over the limit, fines are given, and no new water hookups are allowed during this time. With these restrictions why are we currently considering a subdivision of 87 new homes and how much more can be done to save water if the dry years continue? 57-4

All exterior watering for the Project is proposed to be an on-site, inactive, groundwater well that was inoperable at the time of the site visit for the Draft EIR. The Subbasin monitoring well may be within the pumping influence zone of the Stonebridge Complex wells which supplies the entire city with up to 20% of its water demand in normal years, and up to 30% in dry years. Currently the City of Saint Helena is being sued by Water Audit, CA which is critical of its use of the Stonebridge wells for municipal use and a pattern of no discretion in issuing permits for new wells. The City Council is having a Closed Special Meeting on Nov. 1 to discuss the matter. Is the Planning Commission not concerned that approving the use of a groundwater well for outside irrigation of new homes in the city will potentially further open them to another suit from Water Audit, CA or another agency? 57-5 57-6

On page 490 of the EIR there is a chart that shows water supplies would not be sufficient to meet demands under all scenarios. It is then suggested if supply were low, amount could be increased by

1) conservation
2) modifying rates to encourage conservation
3) increasing ground water production.

With the current drought the city has tried conservation with some level of success, but did not get the results they expected. Stiff fines were implemented modifying the rates to further encourage conservation and the first month over a million dollars in fines were dolled out. Presently the City is, out of necessity, using more groundwater from the Stonebridge Wells to supply the city's needs. Given our small number of water resources it will only get worse with more housing, and using a presently inoperable well for all outdoor irrigation on the project could open us up to further suit.

57-7

In the Transportation and Circulation portion of the EIR,, 3.14, pg 522, the streets impacted by the project are defined.

Saint Helena residents know that Starr Ave. is a short route for cars traveling from the Silverado Trail to Safeway, Railroad Ave., or other parts of the city. Pope Street serves most people that come from the Silverado Trail to destinations in Saint Helena, it is the first access street off of the trail if coming from Napa, and an easier street to navigate at Main St. because there is a traffic signal. Pratt Ave. or Deer Park Road, both further North on the trail both have stop signs at Main St. or Hwy 29 and are not always as easy to cross. Early in the morning or after work the stop sign at Pope and Starr can be busy with cars waiting for a break in the Pope St. traffic to complete a left-hand turn. Starr is not a street for mainly the residential neighborhood as defined in the Draft EIR, but a cut through street to get to the center of town or out to the Silverado Trail. If the Hunter Project is put through this will only get worse.

57-8

Railroad Ave. is another cut through street that locals use to avoid driving on Main St., and does not mainly serve the industrial and commercial uses in the downtown area as defined in the EIR. There is more vehicle traffic on Railroad Ave. than industrial or commercial traffic.

57-9

Adams Street is a main downtown street with three areas where traffic can bunch up, at the Railroad Ave. intersection, a four way stop, the railroad tracks when the Wine Train is coming into the station or leaving, and at the Main St. signal. I question the defined use of some streets in the EIR, either the person writing the descriptions does not know how locals use the streets, or the descriptions were used to make the streets look less busy.

57-10

The Hunter project with the extension of Adams and Starr Ave. will increase traffic tremendously for present residents in the area, but one way to help alleviate some of this increase is to extend Adams Street to the Silverado Trail. The 1993 General Plan states "The city desires that the Adams Street extension to the Silverado Trail be completed in an expeditious manner:" and "The city will work with potential developers to acquire the needed combination of public and private financing required to implement this project."

57-11

The Hunter Project has used items in the 1993 General Plan which are agreeable to their project i.e., zoning of the land from agriculture to Medium Density Residential, and the extension of Starr Ave. to Adams St. and Adams St. to Starr. They have chosen to overlook the one thing in the General Plan that would help mitigate some of the traffic and circulation problems the development would create for existing, nearby residents. If the Hunter Project is approved the city should require that Adams St. be extended to the Silverado Trail before the first house is built for the safety of new residents and to preserve quality of life for existing neighbors. This would provide a direct route to the center of Saint

57-12

Helena, relieve traffic on the historic Pope St. Bridge and reduce traffic using Pope St. and Starr Ave. as a by-pass route.

57-12 Cont.

The Hunter Land was originally a part of the Flood Plain until the City of Saint Helena built a Levee as a part of the Measure A Flood Protection Project. After this project was completed, FEMA re-evaluated the land's danger of flooding and revised the FIRM rating to Zone X, alleviating the need to buy Flood Insurance for homes built on the land. Could the Hunter Project put the city in violation of the terms of the Measure A project by allowing homes to be built on land that was previously a part of the Flood Plain? The Measure A agreement states that money from the fund cannot be used to create projects that promote growth, increase population and allow land to be developed that was not previously so. Did the Measure A change the buildability of the Hunter Land taking it out of the flood plain? With the change of FIRM rating, it appears it did. If so the city, by allowing homes to be built without raised foundations, could be in violation of the Measure A requirements.

57-13

The Hunter Draft EIR states that chance of flooding is low and if it were to occur it would be with warning and slow. There would be little chance of loss of life as people would have time to evacuate the area or go the second stories of their homes to avoid the water. Why should homes be built in an area where there would even be such a possibility? With the danger of property loss if there were a breach in the levee, threat of the city being held responsibly, putting additional strain on the city's already minimal water supply, and all the other concerns I have raised, this sub-division should not be approved.

57-14

Respectfully submitted by,

Donna Hardy

620 Harvest Lane

Saint Helena, CA 94574

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Response to Letter 57
Donna Hardy
November 1, 2021

57-1 The comment asks whether the City has enough water in drought years to serve the Project and whether water neutrality could be achieved by water conservation and retrofitting old fixtures. The comment goes on to ask whether an agricultural well should be used for landscape watering to help the Project achieve water neutrality.

The Project is proposing to use the existing on-site well to supply water for landscaping, as explained on page 2-26 in Chapter 2, Project Description. Please see Master Response 2 that addresses water supply.

57-2 The commenter interprets the City's 1993 General Plan as requiring that Adams Street be extended to the Silverado Trail and questions why this extension is not required by the Project as a condition of approval.

The Project does not include the future expansion of Adams Street connecting to Silverado Trail. The City's Public Works Department reviewed the tentative subdivision map and determined the extension of Adams beyond the new intersection with Starr Avenue is not required. This is a separate City project and is not required for the Project. The comment is noted and forwarded to the decision makers for their consideration.

57-3 The comment states that the project site was within a flood plain before the Napa River levee was built and that after levee construction, the flood zone designation was changed. The comment states the City could be held responsible in the event of a levee failure. The comment goes on to ask whether the City would be held in non-compliance of the Measure A agreement if the Project is developed and if the levee changed the buildability of the site.

Measure A, as described on page 3.9-6 of the Draft EIR, was passed in 1998 by Napa County and provided the basis for a number of flood improvement projects. The Project site has been designated and zoned for residential development dating as far back as the City's 1975 General Plan, as stated on page 2-12 of the Draft EIR. The Project is not funded in any part with Measure A funds. The City's Flood Control Project, which did receive Measure A funds, was designed to provide flood protection for both developed areas within the City, as well as areas already planned for future development, including the Project site. For further detail, please see Master Response 3 for more information concerning the levee.

57-4 The comment asks whether the Project would be required to retrofit fixtures in the City and implement other water saving features, in compliance with the Water Neutral Policy. The comment also expresses concern given the City's current water supply and water saving requirements.

As stated in the Draft EIR on page 3.9-41, the Proposed Project is required to comply with the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. See also Master Response 2 for more information on water supply.

57-5 The comment opines that the Project would use groundwater from an on-site well for exterior (landscaping) uses and that the well is within a subbasin that may include the pumping influence zone of the Stonebridge Complex, which supplies some City water.

The on-site well was evaluated in the referenced well capacity and sustainability assessment (Appendix L of the Draft EIR) and was determined to have sufficient capacity to meet the proposed demand. The assessment conducted a 24-hour pumping test at a rate (40 gallons per minute [gpm]) of approximately four times the proposed rate (10.6 gpm) which only produced one foot of drawdown in the pumping well. The proposed average pumping rate of 10.6 gpm is relatively small compared with existing agricultural wells (DEIR p. 3.9-43). Therefore, the Draft EIR correctly identifies that the proposed use of the well would have a less-than-significant impact on the subbasin and as a result also on the City's Stone Bridge wells.

57-6 The comment states that the City is currently under litigation by a corporation, Water Audit California, for its use of wells in the Stonebridge Complex and pattern of issuing new permits for wells. The commenter raises a concern that the Project would further raise issues given the ongoing litigation.

See Master Response 2 for details related to the litigation involving the Water Audit.

57-7 The comment opines that there is insufficient groundwater supply to meet the Project's demand and that use of the on-site well could result in further litigation.

See Master Response 2 for further details regarding the City's water supplies and ability to meet future demands. As noted in the Draft EIR on page 3.9-41, the Proposed Project would be required to adhere to the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code which requires conservation measures or fees to fund the City's conservation measures commensurate with the Project's demand. Otherwise, whether use of the existing onsite well could be the subject of litigation is outside the scope of CEQA and does raise any issue as to the adequacy of the analysis in the Draft EIR.

57-8 The comment raises concerns regarding peak hour traffic at the intersection of Pope Street and Starr Avenue and states that Starr Avenue serves more than residential users because many motorists use it as a shortcut and further claims the EIR does not represent this street correctly in terms of the types of its users.

Starr Avenue is classified as a "residential street" per the Circulation Element of the City's 2019 General Plan, which is defined predominantly as a roadway that provides

residential access and support for local trips. The Proposed Project would not alter the existing or General Plan classification of Starr Avenue or alter the way the road is used. Section 3.14 of the Draft EIR, as well as Appendix K, Traffic Impact Study, analyzes the intersection of Pope Street and Starr Avenue, both in terms of potential level of service (LOS) impacts and vehicular queuing. The analysis concludes that the impact to this intersection, with or without Project traffic, in every analysis scenario, would be less than significant and would not require improvements to the intersection. An analysis of LOS or traffic congestion and queuing is no longer required to be evaluated in an EIR as by law, an increase in LOS can no longer be considered an environmental impact under CEQA.

57-9 The comment states her personal observation that Railroad Avenue is used by motorists as a shortcut street to avoid Main Street and claims the EIR does not represent this street correctly because it does not mainly serve industrial and commercial uses.

Railroad Avenue is classified as a “downtown/mixed-use street” per the Circulation Element of the City’s 2019 General Plan, which is defined predominantly as a roadway that supports all travel modes and promotes multimodal access. The Proposed Project would not alter the existing or General Plan classification of Railroad Avenue or alter the way the road is used. Further, Section 3.14 of the Draft EIR, as well as Appendix K, Traffic Impact Study, thoroughly analyzes several intersections along Railroad Avenue (intersections with Fulton Lane, Adams Street, and Hunt Avenue), both in terms of potential LOS impacts and vehicular queuing. The analysis concludes that the impact to these intersections, with or without Project traffic, in every analysis scenario, would be less than significant and would not require improvements to the intersection. An analysis of LOS and queuing is no longer required to be evaluated in an EIR as. by law, an increase in LOS can no longer be considered an environmental impact under CEQA.

57-10 The commenter offers an observation that Adams Street is a busy downtown street and raises a concern related to the Draft EIR’s description of the users of this street and others in the area.

Adams Street is classified as a “downtown/mixed-use street” per the Circulation Element of the City’s 2019 General Plan, which is defined predominantly as a roadway that supports all travel modes and promotes multimodal access. The Proposed Project would not alter the existing or General Plan classification of Adams Street or alter the way the road is used. Further, Section 3.14 of the Draft EIR, as well as Appendix K, Traffic Impact Study, thoroughly analyzes several intersections along Adams Street (intersections with Main Street, Railroad Avenue, and Library Lane), both in terms of potential LOS impacts and vehicular queuing. The analysis concludes that the impact to these intersections, with or without Project traffic, in every analysis scenario, would be less than significant and would not require improvements to the intersection. An analysis of LOS and queuing is no longer required to be evaluated in an EIR, as. by law, an increase in LOS can no longer be considered an environmental impact under CEQA .

All roadways analyzed within Section 3.14 of the Draft EIR, as well as Appendix K, Traffic Impact Study, utilized descriptions and characterizations as described in the Circulation Element of the City's 2019 General Plan.

57-11 The comment opines an extension of Adams Street to the Silverado Trail would alleviate traffic created by the Project and provides excerpts from the 1993 General Plan that stipulates this extension.

The City acknowledges that the extension of Adams Street to Silverado Trail is included in the adopted Circulation Element of the General Plan. See Response to Comment 57-2. The comment is noted and forwarded to the decision makers for their consideration.

57-12 The comment offers an opinion that the Project should be conditioned to extend Adams Street to the Silverado Trail to reduce traffic on the Pope Street Bridge, Pope Street, and Starr Avenue. The commenter believes the Project uses objectives from the General Plan that support the Project but overlooks the Adams Street extension.

Please see Response to Comment 57-11. The comment is noted and forwarded to the decision makers for their consideration and no further response is required.

57-13 The comment states that the project site was originally within a floodplain until the City constructed the Napa River levee. The commenter questions whether the Project would result in the City violating the terms of the Measure A agreement by allowing homes to be built on land that was previously within a floodplain. The comment also asks if Measure A changed the buildability of the Project site.

Measure A, as described on page 3.9-6 of the Draft EIR, was passed in 1998 by Napa County and provided the basis for a number of flood improvement projects. The Project site has been designated and zoned for future residential development dating as far back as the City's 1975 General Plan, as stated on page 2-12 of the Draft EIR. The Project is not funded in any part with Measure A funds. The City's Flood Control Project, which did receive Measure A funds, was designed to provide flood protection for both developed areas within the City as well as areas already planned for future development, including the Project site. For further detail, please see Master Response 3 for more information on Measure A.

57-14 The commenter states an opinion that homes should not be built in areas that have a "low ... possibility" of flooding. The comment also raises a concern regarding the City's responsibilities and liabilities in the event of major flood event and states the Project should not be approved.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 3 that addresses the City's liability in the event of a major flood event.

Comment Letter 58

-----Original Message-----
From: Carla Holm <holmhouse@yahoo.com>
Sent: Wednesday, November 3, 2021 1:43 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

Planning commission & city of St. Helena:

I have lived in Vinyard Valley for over 10 years and was so relieved that the 33 million dollar taxpayer money the funded the flood project was finished. No more erosion of soil under the wall,no flooding over the wall and no more high priced flood insurance for Vineyard Valley. 58-1

The 81 new homes will cause more erosion because the only place it will go is into Vinyard Valley. 58-2

Also, the flood of new waste in our sewer system on Paseo Grande. 58-3

We are also cutting are water use and the new homes will be using 18,000 gallons a day!!! Low flow toilets is less than minimal help. 58-4

Add the stress of our understaffed police and fire departments, so that Vinyard Valley and the new homes can get help before death and disaster strike!!! 58-5

So much more can be said, but isn't this enough to stop this land grab to make one person wealthy?! PLEASE, STOP HUNTER PROJECT FOR THE LIFE OF OUR COMMUNITY!! Thank You, Carla Holm 58-6

Sent from my iPhone

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Response to Letter 58
Carla Holm
November 3, 2021

58-1 The commenter shares personal history and her relief that the City completed the levee along the Napa River.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

58-2 The comment expresses a general concern that the Project will cause significant erosion.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, erosion impacts were analyzed in Section 3.9 of the Draft EIR; and impacts were determined to be less than significant because the Project would be required to comply with existing state and city permitting requirements and conditions of approval that regulate erosion.

58-3 The comment expresses a general concern regarding the City's sewer system capacity.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Section 3.13 of the Draft EIR discusses sewer system capacity in the City. Additionally, pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to sewer projects. The Project applicant would be required to pay these fees, which would help fund future improvement projects. Please see Master Response 4 that addresses sewer concerns.

58-4 The comment expresses a general concern regarding the Project's water usage.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, Master Response 2 addresses water supply concerns.

58-5 The comment expresses a general concern that the Project would create a negative impact on police and fire protection services.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, the Draft EIR evaluates the ability of the City's police and fire departments to accommodate the increase in demand for service in Section 3.12, Public Services and Recreation. Development of the site was assumed in the City's 1993 General Plan as well as the recently adopted 2019 General Plan. As discussed

in the Draft EIR, the City's police and fire departments have adequate personnel to serve the Project and expansion of existing stations would not be required.

58-6 The comment states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 59

From: Suzanne Day James <sdayjames@earthlink.net>
Sent: Sunday, November 21, 2021 7:11 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Objections to Hunter Project

November 22, 2021

Dear Ms. Derosa,

I am writing to express my serious concern related to the proposed 87-Unit Hunter project between Vineyard Valley and the levee which poses numerous significant problems. 59-1

Others have spoken and written on the impact traffic issues will have on our small city's limited roadways. Main Street is already congested and a bottleneck during a major portion of the day. How will it handle the additional cars and trucks from 87 new units? It makes me shudder to think about the congestion, to say nothing of the additional pollution, noise, and safety issues for pedestrians. 59-2 59-3

The same is true for substantial water issues. We are currently under a Phase 2 water shortage emergency program which limits non landscaping use to 65 gallons per resident daily. The Draft EIR dramatically underestimates water usage of the 87 new units. Further, the proposal is to use the Vineyard Valley sewer system which is already compromised and inadequate, would likely result in even more backups of rainwater and waste products than has already occurred from a city manhole located on Paseo during heavy rains. Vineyard Valley has more than enough responsibility providing water and sewer for its own residents. Adding 87 more units is untenable and dangerous. 59-4 59-5

However, my main concern is the lack of <u>any</u> emergency evacuation plan for our approximately 350 residents, a major omission for a retirement community such as ours. A couple of years ago I did a survey of our Park on safety issues, and discovered more than twenty percent of residents used assistive devices for mobility, e.g., walkers, electric carts, wheelchairs, crutches, canes. These people would need extra assistance in case of an emergency evacuation as well as two safe and dependable exits, one on each end of the Park. Will there be access to the levee as there is now that we can use to get to town? Are there evacuation plans for the proposed project that will not interfere with Vineyard Valley 59-6

resident's exodus? There is no way of knowing as this critical issue is not addressed in the EIR. 59-6 Cont.

Finally, I am horrified at the idea of six years to complete this project! Six years of construction noise, diesel trucks, dust, pollution, traffic congestion, etc., in the center of town will significantly reduce our quality of life and likely reduce property values. 59-7

Little financial gain to the city as the expenses for providing infrastructure and first responders will likely equal or exceed any income. Major issues with transportation, water and sewer. Omission of emergency evacuation considerations and plans. 59-8

I fail to see any positive value in the proposed project for our city and its quality of life. Therefore, I strongly urge the Planning Commission and Council, if it gets that far, to say NO and refuse to support any further consideration of the Hunter Project. 59-9

Sincerely,

Suzanne James

Resident of Vineyard Valley

Response to Letter 59
Suzanne James
November 22, 2021

59-1 The comment states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

59-2 The comment expresses a general concern over the Project's impact to traffic congestion.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. Please also see Response to Comments 10-2 and 36-2 for additional information.

59-3 The comment expresses general concerns over pollution, noise, and safety for pedestrians.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Therefore, a general overview of impacts addressed in the Draft EIR specific to air quality, noise, and pedestrian traffic safety is provided. The Draft EIR addresses direct and indirect impacts associated with construction and operation of the Project. Section 3.3, Air Quality, identifies sensitive receptors and notes close proximity to residences. The Bay Area Air Quality Management District (BAAQMD) establishes thresholds for the evaluation of potential impacts, which are established to be protective of human health. The EIR concluded that construction and operation of the Proposed Project would not result in emissions that exceed the BAAQMD emission thresholds for any criteria air pollutants, including reactive organic gases (ROG), nitrogen dioxide and nitric oxide (NO_x), particulate matter (PM_{10}, or $PM_{2.5}$). ROG emissions would be associated with motor vehicles, construction equipment, and architectural coatings (paint). The analysis also addresses if the Project would expose sensitive receptors to substantial pollutant concentrations. The BAAQMD has adopted project and cumulative thresholds for three risk-related air quality indicators to sensitive receptors: cancer risks, noncancer health effects, and increases in ambient air concentrations of $PM_{2.5}$. This includes exposure to $PM_{2.5}$ and other toxic air contaminants (TAC) which would occur during construction activities. The primary TAC is diesel particulate matter (DPM) which is emitted from emissions associated with construction equipment operations and heavy-duty trucks during construction activities, and the associated health impacts to sensitive receptors. Based on the modeling conducted for the Project construction activities would not exceed the BAAQMD thresholds resulting in exposure of sensitive receptors in the vicinity of the Project site to substantial TAC concentrations (see DEIR Tables 3.3-8 and 3.3-9, p. 3.3-33).

Please see Response to Comment 38-1 for more information on noise impacts.

Pedestrian safety along with transportation impacts are analyzed in Section 3.14 of the Draft EIR. This section analyzes Project impacts related to consistency with plans or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. As noted on page 3.14-40, the Project includes the extension of Adams Street and Starr Avenue to provide vehicle, bicycle and pedestrian access to the site, consistent with the 1993 General Plan Policy 5.8.1 and Policy CR1.1 from the City's 2019 General Plan. Sidewalks would be provided along both sides of the street allowing safe pedestrian access to the site from adjacent areas. Sidewalks are also available connecting the Project site to downtown St. Helena, including neighborhood services along Main Street, retail and grocery stores, and the City's Public Library. The Proposed Project would provide adequate sidewalks and would not conflict with any plans or policies supporting either the development of these facilities or the use of these facilities; therefore, impacts are less than significant.

59-4 The comment expresses concern over the Project's impact to the City's water supply and their belief that the Draft EIR underestimates the Project's water demand.

Please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code. As stated on page 3.13-24 of the Draft EIR, a Water Neutral Report was prepared for the Project that assumes a higher and more conservative persons per household (PPH) rate as compared to the City's PPH to determine population to calculate water demand.

59-5 The comment states the Project would tie into the City's existing stormwater infrastructure and sewer lines that also serve Vineyard Valley Mobile Home Park and opines that adequate capacity is not available in the existing stormwater and sewer infrastructure to serve the Project.

The ability of the City's existing stormwater and wastewater infrastructure to serve the Project is addressed in the Draft EIR in Section 3.13, Utilities and Service Systems. As indicated in this section, the City's detention basin was designed to accommodate stormwater runoff assuming 70% of the Project site would be developed with impervious surfaces (i.e., roads, sidewalks, homes), which is more than the amount of impervious surface area to be developed under the Project.

Pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to stormwater drainage projects. The Proposed Project applicant would pay these fees, which would help offset any increased demands on the City's stormwater drainage system. Therefore, the Proposed Project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities and the impact would be less than significant.

Wastewater flows from the western portion of the Project site are proposed to drain into an existing public manhole at the corner of Starr Avenue and Hunt Avenue via new 8-inch sewer pipes. The area east of Starr Avenue, lower in elevation, is proposed to drain east through the Project site via new 8-inch sewer pipes within a public easement and into an existing public manhole in the Vineyard Valley Mobile Home Park. All new sewer mains and lines are sized to accommodate Project flows, per City standards. Please see also Master Response 4 that provides more details regarding the Project's wastewater infrastructure and the ability of the City to convey and treat the Project's wastewater.

59-6 The comment raises a concern related to emergency evacuation for Vineyard Valley residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please also see Master Response 1, that provides more details related to emergency evacuation for both Vineyard Valley residents and the Proposed Project

59-7 The commenter is concerned about the construction timeline and devaluation of properties.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The commenter's concern related to property devaluation is not required to be evaluated in an EIR.

59-8 The comment raises general concerns related to the cost of the Project for the City and re-iterates issues raised in Comments 59-2 through 59-7.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not introduce new issues related the accuracy or adequacy of the Draft EIR; therefore, no response is required. Please see Responses to Comments 59-2 through 59-7.

59-9 The commenter is opposed to the Project and urges the City to reject the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

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Comment Letter 60

From: fj <frank.jonelis@gmail.com>
Sent: Monday, November 1, 2021 9:46 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Geoff Ellsworth <GEllsworth@cityofsthelena.org>
Subject: [External] Opposing Hunter Subdivision Project

To Saint Helena Planning Dept
Attn M De Rosa
Reference: The Hunter Project, Saint Helena CA

Hello Maya

The Hunter Project does not pass the common sense smell test, regardless of what Hunter's fancy consultants and lawyers tell you. It is a massive, dense project, inappropriate for the small city of Saint Helena. 60-1

It will use a lot of water, more than we have, regardless of what the developer claims. Just look at how many units there are. Whatever amount of water Hunter claims they will use, anyone with eyes and a brain can see it will use more water than that. 60-2

It will generate an unacceptable amount of traffic, and an unacceptable number of cars parking all over the surrounding streets. All of those extra cars will generate pollution, noise, and congestion. What was formerly a quiet, healthy, peaceful open space will be crammed with a ridiculous number of cars and structures. 60-3

Water that used to soak into the soil will be blocked by roofs, sidewalks, and streets. 60-4

Despite having built a personal levee around his personal property at taxpayer expense, the entire development is on a flood plain. The recent rains raised the water level from nothing to 16 feet in a few hours, even considering that the ground was so dry that it soaked up much of the water before it could even get to the river. 16 feet is only 2 feet below the flood stage of 18 feet. The recent storm was not nearly as severe as many historical storms. And past history is no longer representative of what is happening with climate change, worsening droughts, and more extreme weather. 60-5

There is not enough consistent water supply to serve Saint Helena as it is now, even without adding this massive development which will use more water than the developer claims it will. 60-6

There is no way to guarantee that future, extreme weather events will be contained by Hunter's personal levee that taxpayers paid for. Saint Helena, not Hunter, will be liable for the damage. Hunter and his money will be long gone. 60-7

The size of the project, its water use, its traffic, its noise and its flood risk simply do not pass the smell test. It stinks, and everybody knows it. 60-8

The project should not be built.

We urge the committee to reject the Hunter Project. 60-9

Frank and Tracy Jonelis
708 Hunt Ave, Saint Helena

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Response to Letter 60
Frank and Tracy Jonelis
November 1, 2021

60-1 The comment states opposition to the Project due to its proposed size and density.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

60-2 The comment raises concerns regarding the Project's increase in water demand and believes that the Draft EIR underestimates the Project's water usage.

Please see Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

60-3 The comment raises general concerns related to the Project's generation of traffic, stating that Project traffic will generate pollution, noise, and congestion.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Please also see Response to Comment 59-3 for information on pollution and noise impacts.

60-4 The comment states a general concern regarding the Project's increase in impervious surfaces.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, as stated in the Draft EIR on pages 3.9-44 and 3.9-45, the additional stormwater runoff created by the Proposed Project would be directed to the City-owned off-site detention basin, adjacent to the Project site, which has been designed to store the increase in storm water runoff from the Project site during a 100-year storm event. The detention basin was designed assuming that the Project site would be developed with 70% impervious surfaces; however, the Project would develop less of the site (58%) with impervious surfaces. Therefore, the stormwater runoff from the proposed Project would be adequately served by the off-site detention basin.

60-5 The comment states that the Project is proposed on a flood plain and could be subject to historical storms, which could be even more severe due to climate change.

Flooding and flood hazards as a result of storms are addressed in the Draft EIR starting on page 3.9-5 of Section 3.9, Hydrology and Water Quality. As shown in Figure 3.9-2, the Project site is not within a Special Flood Hazard Areas but is mapped as being in an area with reduced flood risk due to a levee (FEMA 2012). By being within an area of reduced risk due to levee, the Project site is considered

mapped within the 500-year flood zone (FEMA 2012). Based on the levee design, the Project site would be subject to a flood exceeding a 200-year recurrence interval, equivalent to less than a 0.5% annual chance. FEMA has established the Project site is not subject to any floodplain development restrictions such as the requirement to purchase flood insurance (FEMA 2012). The likelihood of a serious flood affecting the Project site (as well as those areas also protected by the levee/flood wall) is very low. In addition, the levee provides greater than the often standard 100-year flood with a 200-year flood design to account for other factors such as climate change. Please see Master Response 3.

60-6 The comment opines that the City does not have consistent water supply to serve its residents and that the Project would use more water than what is assessed in the Draft EIR.

Please see Response to Comment 60-2 and Master Response 2 that addresses the City's ability to supply water and the requirements of the Water Neutral Policy.

60-7 The comment opines that there is no way to guarantee future extreme weather events would be contained by the Napa River levee and that the City would be liable for any damage.

Please see Response to Comment 60-5 and Master Response 3 that addresses City liability in a flood event.

60-8 The comment raises general concerns related to the Project's impact on water supply, traffic, noise, and flood risk.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Responses 2 and 3 regarding water supply and levee concerns and Response to Comment 38-1.

60-9 The commenter states their opposition to the Project and urges the City to reject the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

Comment Letter 61

October 27, 2021

To members of the St. Helena City Council
and members of the St. Helena Planning Commission,

I have lived on Meadowcreek Circle in St. Helena since 2003.

Many of my concerns regarding the proposed Hunter project echo those previously voiced, as listed on page ES-3 of the Draft Environmental Impact Report for the Hunter Subdivision Project (DEIR): "Concerns raised from public agencies and the public include impacts to the property from potential flooding, traffic and circulation impacts, increased water demand, and impacts to cultural resources." I have chosen to focus my comments on specific threats to the health and safety of current and future St. Helena residents, should the Hunter project be built. 61-1

Environmental/Air Quality Issues

According to page 3.0-3 of the DEIR, "The Proposed Project application does not include a formal phasing plan. Therefore, for the purposes of this EIR buildout of the Project would occur based on market conditions and the timeliness of obtaining building permits. Therefore, it is assumed that the Project could take anywhere from 6 years or longer for full buildout, based on market and growth management factors."

Page 3.3-23 of the DEIR: "For the analysis, it was generally assumed that heavy construction equipment would be operating for approximately 8 hours per day, 5 days per week (22 days per month) during Proposed Project construction." As a local resident, I will verify there are currently existing conditions of substantial dust and noise from agricultural and grass control activities affecting residences in the vicinity of the proposed Hunter project, and the proposed 6 years of construction will certainly exacerbate those existing air quality issues. 61-2

Page 3.3-26 of the DEIR: "Notably, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly ***exacerbate*** an existing environmental condition.

On page 3.3-26 the DEIR verifies that the probable worsening of existing air quality issues in the vicinity of the proposed Hunter project would rise to the level of a significant impact under California Environmental Quality Act (CEQA) Guidelines: "Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people." 61-3

I question which entity, the City of St.Helena or the Hunter project developers, will be legally and financially responsible for any loss of health, life or property by adjacent property residents resulting from environmental and air quality degradation caused by a protracted 6 year Hunter construction project? 61-4

Water Quality and Availability

According to the St. Helena City government, we are in a serious water emergency. Expensive upgrades will be necessary to provide adequate water service to existing customers of the St. Helena City water enterprise moving forward. In addition, past City of St. Helena leadership has made binding water supply decisions which have worsened our current water shortage. During the summer of 2021, many City water customers incurred unaffordable fines for excessive water use as a consequence of St. Helena water rationing regulations. I'm sure any future residents of the Hunter Subdivision would not enjoy sharing in this experience! 61-5

There are also ongoing issues with the quality of St. Helena City water and malfunctions at the City sewage treatment plant, as documented by City correspondence and local news media. Here is a recent example: below is a photo of water from the kitchen faucet of my St. Helena residence this week, from 10/25/21 to 10/26/21. I was assured by staff at St. Helena Public Works on the morning of 10/25/21 that this water was safe to drink, but to my knowledge, no water testing had been undertaken by the City, in spite of admission by City staff that a water main had been ruptured and infiltrated with pollutants. I was told that the Vice Mayor and the City Manager were aware of the situation. The City's difficulties in ensuring a quality water supply must be overwhelming, judging by the lack of timely communication on this issue. Finally, on the afternoon of 10/25/21, there was a single press release from the City mentioning a ruptured water main, but no mention of the visibly poor water quality, or any apparent attempt to determine if the water was fit for consumption. In addition, I can attest that my students at Robert Louis Stevenson Middle School were drinking this questionable water with no warning or word of caution from St. Helena City leadership to the school district. 61-6



In reference to the St. Helena 2010 Water Supply Plan, the DEIR (page 3.13-10) clearly states "...water supplies under both the Likely Buildout Scenario and the Full Buildout Scenario would not be sufficient to meet demands during all [water supply] scenarios."

Given these circumstances, how can the City or the developer warrant to any future Hunter Project residents that there will be a sufficient supply of good quality water to supply their residences? What if the water supply and quality continues to be inadequate? The current lack of an adequate supply of quality water in the City of St. Helena indicates that the addition of any further housing units must wait until the water delivery infrastructure is upgraded. Which entity, the City or the Hunter project developers, will be legally and financially responsible for any future injury to health, life or property resulting from the worsening of City of St. Helena water supply/quality issues, exacerbated by addition of 80+ households in the proposed Hunter project?

61-7

61-8

There are mitigating actions listed in the DEIR, such as page ES-3 "Minimize City water use by continuing the use of an existing on-site water well for irrigation of Proposed Project landscaped areas" and page 3.13-28 "The Proposed Project would be designed not to exceed 0.4 acre-feet/year/dwelling unit of water based on the installation of increasingly efficient and lower- water-using fixtures and appliances and irrigation systems." However well intentioned, these mitigating actions don't come close to solving the difficult issues facing the City of St.Helena's water enterprise.

61-9

Danger from Earthquake/Flooding

The DEIR states "The following policies from the City of St. Helena 2019 General Plan, Public Health and Safety element are relevant to geology, soils, and seismicity issues in the Project site. Policy PS3.1: ***Minimize risk of injury, loss of life and property damage from seismically induced and other known geologic hazards*** (page 3.6-18)."

Page 3.6-22 of the DEIR points out a substantial problem: "It is not acceptable to place compacted, engineered fill (designed to support future development) on the Hunter Parcel without first over excavating and recompacting the existing weak surface layer, due to the anticipated settlement of the weak soil layer as a result of the loads imposed by the new fill, as well as future building loads. Settlement of the weak soil layer, if left in place beneath the recently placed compacted fill, could lead to damage to new residential structures, streets, utilities, and concrete flatwork supported over the weak soil layer."

61-10

Due to the potential for liquefaction and/or settlement of weak soils, the Proposed Project could potentially expose residences to significant impacts from a major earthquake. The DEIR clearly states this is considered a significant impact.

Another safety issue is levee surrounding the Hunter property. It is well known that local news media has reported past correspondence between the City of St. Helena and the Army Corps of Engineers questioning whether the levee was constructed according to accepted engineering and safety standards. As one citizen brought up during public comments at the City Council meeting of 9/14/21, no one -- City of St. Helena staff or the Hunter developer--will answer simple questions in a public meeting regarding which entity, the City or the developer, will take responsibility for possible future damage to health, life or property if the levee protecting the Hunter property should be damaged. Was

61-11

the levee built to current engineering and safety standards? No one seems to want to answer that question affirmatively, with supporting documentation. 61-11 Cont.

Fortunately, page 3.9-12 of the DEIR provides us with a response on this issue: "Where the levee may be overtopped or in a 200+ year flood event, Proposed Project residents would have ample warning to evacuate prior to flooding. Based on a comparison of the base flood elevation to proposed lot pad elevations, flooding of Proposed Project lots would range between 0 and 5 feet in depth, with the deepest flooding occurring on the northern part of the Project site. ***This level of flooding would leave upper floors of residences available for refuge. Because of this, the risks from a 200+ year flood and/or levee failure are limited to property damage rather than risk of life. As previously indicated, this would be an impact of the pre-existing environment on the Proposed Project rather than the Proposed Project's impact on the environment."*** 61-12

Where is the mitigation or measures to protect public safety in this strategy? I remind the reader how readily disease vectors are spread via flood waters, and how toxic mold can grow for years in a structure damaged by a flood. In section 3.9-12, the Hunter project developers are clearly stating "The danger from the levee is just a pre-existing condition of this property, we won't take any responsibility for the outcome, we're going to move forward with this project no matter who is endangered, and the City of St. Helena will be left to deal with the legal and financial consequences." How about not building the proposed project in such an unsafe location? I wouldn't buy any residence under the unsafe circumstances proposed for the Hunter project, but that's just my personal perspective. I'm simply not interested in being trapped in my home's second story while unsanitary flood waters circulate through the lower story. 61-13

I'm wondering which entity, the City or the Hunter project developers, will be legally and financially responsible for any future loss of health, life or property resulting from a levee break or earthquake damage at the location of the proposed Hunter project? 61-14

Traffic and Lack of Emergency Access/Egress

Page 3.14-4 of the DEIR states "Would the proposed project result in inadequate emergency access? This is a less than-significant impact." I do not agree. Based on my 18+ year residence in the area immediately adjacent to the proposed Hunter project, I would like to elaborate on the negative traffic impacts of further residential development in the area. 61-15

Page 3.14-5 of the DEIR states "Under Cumulative conditions, would the proposed project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)? This is considered a significant impact. No mitigation measures available." My understanding is that CEQA section 15064.3(b) pertains to potential negative traffic impacts. On page 3.15-5 the authors of the DEIR thus acknowledge the project will exacerbate traffic problems in the immediate vicinity and there are no mitigating actions possible. 61-16

According to the DEIR page 2-23, "Development of the Project site would require the extension of Adams Street and Starr Avenue onto the Project site to provide two points of ingress and egress…." 61-17
The developed areas adjacent to the proposed Hunter project -- Hunt Avenue/Hunt's Grove/Meadowcreek Circle/Starr Avenue -- have had a crowded street parking situation that has increased over the last decade. In addition to aggravating the impacted neighborhood parking situation, further increasing the density of the adjacent neighborhood housing will directly endanger 61-18

current residents, well as any future residents of the proposed Hunter project, if a sudden emergency evacuation is necessary, given the few points of exit (Pope Street bridge, Main Street) from the area. Responsible addition of 80+ households to this area must require development of *several* additional entry and exit points; the two cited in the DEIR are not sufficient to safely evacuate the planned Hunter development. In addition, due to prior land use agreements made by the City of St. Helena, it is highly questionable whether there will ever be a bridge built crossing the river at the intersection of Adams Street and Silverado Trail.

61-18 Cont.

61-19

The DEIR cites the historic frequency of local natural disasters in the form of floods "...1973, 1978, 1982, 1983, 1986, 1995, 1997, 1998 and 2005 (page 3.9-5)" and wildfires "August 2020 there were a number of wildfires including the LNU Lightning Complex Fire and the Glass Fire that burned large areas of Napa County including a small portion of the Project site (page ES-4)." This week, CHP and St. Helena Police Department reported "Early Monday morning (October 25), a section of Silverado Trail was damaged in a storm-related washout, resulting in a closure at Madrone Knoll Way to Meadowood Lane near St. Helena. Efforts are underway to reopen this section of Silverado Trail as soon as possible. The County expects repair work will begin as early as Friday and anticipates that ***Silverado Trail will be reopened within the next three weeks***." The fragile and limited points of egress on the east side of St. Helena have had a history of creating crisis situations as a result of our frequent natural disasters. Why is increased housing density being considered in an area of St. Helena with so few points of safe entry/exit? Why are the construction of multiple new points of entry/exit not integral to the Hunter Subdivision proposal? Why are the recommendations of the California State Department of Transportation on the development of safe evacuation routes (Evacuation Route Guidance, Design Information Bulletin 93, dated 12/23/20) not being followed in the plans for the Hunter project?

61-20

61-21

In the aftermath of the 2020 Glass Fire, the St. Helena Police Department and Napa County Sheriff launched a media campaign promoting the ZoneHaven evacuation management platform. Why is the City considering endangering the safety of residents by crowding 80+ more households into an evacuation zone with an existing high density housing complex and very few evacuation routes? This seems contradictory to any sort of safe and responsible evacuation plan. Which entity, the City or the Hunter project developers, will be legally and financially responsible for any future loss of health, life or property resulting from a faulty evacuation from the area surrounding the proposed Hunter Project?

61-22

61-23

Right to Fair Housing

Over the last three decades, the vast majority of St. Helena's high density housing units, as well as the majority of St. Helena's low income housing, has been constructed east of Main Street. These cumulative actions are well documented in the past minutes of St. Helena City Council and St. Helena Planning Commission meetings. As a result of actions by past St. Helena City leadership over many years, civil rights violations have emerged over the systematic practice of concentrating high residential density and low income housing in the area east of Main Street in an unbalanced manner. This sustained conduct on the part of past City of St. Helena leadership appears to qualify as discrimination in the conditions of housing under the jurisdiction of the United States Office of Fair Housing and Equal Opportunity. This discrimination has been inflicted on the entire class of St. Helena residents living east of Main Street.

61-24

When and where will a comparative number of high density or low income housing units be built west of Main Street, in order to mitigate actions that together constitute discrimination in the conditions of housing by past City of St. Helena leadership against the class of residents living east of Main Street? When will a project similar in scope and size to the proposed Hunter project be built west of Main Street?

61-25

These and other protracted local problems will be exacerbated if the proposed Hunter Subdivision project becomes a reality. While the DEIR repeatedly states (pages 2-33, 3.0-1, 3.10-13, 3.10-15, 3.10-17, 3.13-9, 4-5) that the California Housing Crisis Act of 2019 (SB 330) prohibits public agencies such as the City of St. Helena from imposing a moratorium or similar restriction on housing development, the SB 330 legislation provides for an exception which specifically protects citizens and municipalities against development that poses an imminent threat to public health and safety. The Hunter project poses numerous specific threats to the health and safety of current and future St. Helena residents, should the project be built, by compromising:

- environmental/air quality,
- water quality and availability,
- safety from earthquake/flooding
- emergency access/egress,
- the right to fair housing.

61-26

It seems to me that the answer regarding whether or not to move forward with the Hunter Subdivision Project as proposed can be found on page ES-17 of the DEIR: "Of the alternatives evaluated above, Alternative 2, the Park Preserve alternative [eg. maintaining the land as a nature preserve] is the environmentally superior alternative." Taken as a whole, this solution also sounds like the highest and best use of the parcel known as the Hunter Property, in order to responsibly ensure sustained health and safety for current and future residents of St. Helena.

61-27

Best regards,

Sherri Kelly
1192 Meadowcreek Circle

Response to Letter 61
Sherri Kelly
October 27, 2021

61-1 The comment is an introduction to the concerns presented in the comment letter.

The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

61-2 The commenter states their concerns related to Project construction exacerbating existing noise and air quality conditions within the area including generation of fugitive dust.

As discussed in the Draft EIR in Section 3.3, Air Quality, in developing thresholds of significance for air pollutants, the Bay Area Air Quality Management District (BAAQMD) considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. Construction and operation of the Project would not result in an exceedance of the BAAQMD significance thresholds as presented in Tables 3.3-8 and 3.3-9. Furthermore, the Project would implement the BAAQMD's Best Management Practices (BMPs) for fugitive dust control during construction.

Please also see Response to Comment 38-1 regarding noise impacts.

61-3 The commenter opines that the Draft EIR verifies that the Project would result in the probable worsening of existing air quality issues resulting in significant impacts.

Please see Response to Comment 61-2. The Draft EIR concluded that the Project would not result in exacerbating existing air quality conditions and would not result in the exceedance of the BAAQMD thresholds of significance for both construction and operations. Furthermore, heavy-duty equipment on the Project site during construction would emit odors. However, construction activity would be short-term and would cease to occur after construction is completed. Regarding operations, the Project would develop residential uses which is not a typical land use associated with the generation of a source of odors.

61-4 The comment asks whether the City or the Project applicant would be legally and financially responsible for the loss of health, life, or property resulting from the degradation of air quality and the environment under the 6-year Project construction period.

Legal and financial concerns regarding a project are not environmental impacts under CEQA and are not evaluated in an EIR. The comment does not identify

specific areas where the Draft EIR is inadequate; therefore, no further response is required.

61-5 The comment suggests that the City is in a water emergency and upgrades would be necessary to ensure water service is provided to existing residents. The comment also states that the City has contributed to the worsening of the water shortage and many residents incurred fines for excessive water use as a result of City water rationing regulations.

Please see Master Response 2 for information on adequate water supplies.

61-6 The comment describes their personal experiences that suggest ongoing issues with the quality of water provided by the City, and malfunctions at the City sewage treatment plant and goes on to describe their experience with possible water contamination.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

61-7 The comment asks how the City or Project applicant can approve the Project due to the City's water concerns.

Please see Master Response 2 for information on water availability in the City.

61-8 The comment asks whether the City or Project applicant would be held legally and financially responsible for future injury to health, life, or property resulting from the exacerbation of the City's water supply and water quality issues from the Project.

The comment is noted and forwarded to the decision makers for their consideration. Legal liability for a potential future event is not within the scope of CEQA.

61-9 The comment opines that the Project does not adequately address the City's water issues.

Please see Master Response 2 for further information on water supply and availability to serve the Project.

61-10 The comment opines that, due to potential liquefaction/settlement issues of weak soils, the Project could expose residences to significant impacts.

The impact analysis of potential liquefaction hazards at the site is addressed in the Draft EIR beginning on page 3.6-21. The analysis concludes that this hazard is potentially significant. However, Mitigation Measure GEO-1 ensures that a design-level geotechnical report be completed prior to issuance of a grading or building permit. Adherence to this mitigation measure and City Building requirements would

reduce the potential impact to less than significant by incorporating design measures that can reduce potential impacts from liquefaction/settlement to less-than-significant levels.

61-11 The comment asks whether the Napa River levee was constructed according to accepted engineering and safety standards, and whether the City or Project applicant would be responsible for future damage to life, health or property if the levee were to fail.

Legal liability for a potential future event is not within the scope of CEQA. Please see Master Response 3 for more information on the levee.

61-12 The comment asks for a mitigation measure to address the potential impact of the levee overtopping or flooding from a 200-year flood event.

As discussed on page 3.0-1 of the Draft EIR, the purpose of the CEQA analysis is to identify the potential impacts of a project on the environment and not the effects of the environment on the project. However, as noted on page 3.9-12 of the Draft EIR, the potential for failure of the levee has less than a 0.5% chance of occurring in any given year and there would be no substantive risk to human health. Nonetheless, CEQA does not require mitigation for a potential impact of the environment on the Project. Please see Master Response 3 for more information specific to the levee and the Project's Conditions of Approval.

61-13 The comment opines that the Project has legal and financial consequences to the City, and possible public safety consequences. The comment suggests that the Project should not be built in the proposed location because it would be unsafe for future residents.

See Master Response 3 for further information on City liability and Response to Comment 61-4 regarding legal and financial concerns. The comment is noted and forwarded to the decision makers for their consideration.

61-14 The comment asks whether the City or the Project applicant would be legally and financially responsible for any future loss of health, life, or property resulting from a levee break or earthquake damage to the Project.

Determinations of legal liability for a potential future event is outside the scope of CEQA. Please see Master Response 3 for information regarding the levee. Additionally, please see Response to Comment 61-10 regarding how any potential earthquake hazards would be mitigated.

61-15 The comment opines that the Proposed Project would result in inadequate emergency access.

Please see Master Response 1 that addresses emergency access concerns.

61-16 The comment notes the conclusion in the Draft EIR that the Project would be in conflict with CEQA Guidelines Section 15064.3(b).

Traffic is evaluated in Section 3.14 of the Draft EIR, which analyzes the Project's increase in vehicle miles traveled (VMT), consistent with CEQA Guidelines Section 15064.3(b). The analysis concludes that the Project would have a significant and unavoidable impact due to an increase in VMT. Since the comment does not elaborate, or provide any substantial evidence to support the claim that the Draft EIR is inadequate, no further response is required.

61-17 The comment re-states the text on page 2-23 of the Draft EIR regarding the extension of Adams Street and Starr Avenue onto the Project site to provide two points of ingress and egress.

The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

61-18 The comment states an opinion that parking is congested in the neighborhood and that overall traffic congestion will hinder emergency evacuation in the area.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements. Please see Master Response 1 for information regarding emergency vehicle access.

61-19 The comment opines that the addition of more than 80 new households must require several additional entry and exit points, in addition to the two cited in the Draft EIR. The comment also questions whether there will be a bridge built crossing the river at the intersection of Adams Street and Silverado Trail.

The Project provides two points of access along with emergency evacuation access, consistent with City requirements for this type of development. The commenter's opinion that additional points of access area required is noted and forwarded to the decision makers for their consideration. Additionally, please see Master Response 1 regarding emergency evacuation. The Proposed Project does not include the construction of a new bridge and does not involve any further extension of Adams Street, east of Starr Avenue. Any extension of Adams Street connecting to Silverado Trail would require further study and approval by the City and is not required for this Project.

61-20 The comment notes that the Draft EIR acknowledges the historic frequency of floods and wildfires in the Project vicinity and states the commenter's opinion that the limited points of egress on the east side of the City have a history of creating crisis situations.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. However, please see Master Response 1 for additional information regarding emergency evacuation.

61-21 The comment asks why increased housing density is being considered in an area of the City with few points of safe entry and exit and why the recommendations of the California Department of Transportation regarding development of safe evacuation routes have not been followed.

Please see Master Response 1 for information regarding emergency evacuation.

61-22 The comment references a past media campaign promoting the ZoneHaven evacuation management platform and asks why the City is considering endangering the safety of residents by introducing new households to an area with few evacuation routes.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. However, please see Master Response 1 for additional information regarding emergency evacuation.

61-23 The comment asks whether the City or the Project applicant would be legally and financially responsible for any future loss of health, life, or property resulting from evacuation failures around the Proposed Project.

Legal liability for a potential future event is outside the scope of CEQA. Please see Master Response 1 regarding emergency evacuation and Master Response 3 regarding City liability and Response to Comment 61-4.

61-24 The comment states an opinion that most high-density and low-income housing in the City has been constructed east of Main Street and that these actions qualify as discrimination under the jurisdiction of the U.S. Office of Fair Housing and Equal Opportunity.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the Project. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

61-25 The comment asks when a comparative number of high-density or low-income housing units, or a project similar in size and scope to the Proposed Project would be built west of Main Street in order to mitigate for past "discrimination."

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

61-26 The comment states an opinion that the Project would pose an imminent threat to public health and safety and therefore qualifies as an exception to the California Housing Crisis Act of 2019 (SB 330), which prohibits the City from restricting housing development.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the Project. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

61-27 The comment supports Alternative 2, the Park Preserve alternative, as the best use of the Project site.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

C

Comment Letter 62

From: Sherri Kelly <sherrikelly1192@gmail.com>
Date: November 3, 2021 at 12:48:17 PM PDT
To: Mark Prestwich <MPrestwich@cityofsthelena.org>, Geoff Ellsworth <GEllsworth@cityofsthelena.org>, Paul Dohring <PDohring@cityofsthelena.org>, Anna Chouteau <AChouteau@cityofsthelena.org>, Lester Hardy <LHardy@cityofsthelena.org>, Eric Hall <ehall@cityofsthelena.org>
Subject: [External] citizen request

Dear Mr. Prestwich, Mr. Ellsworth and City Council members,

I have been the owner and resident of 1192 Meadowcreek Circle since 2003. I have been employed since 1991 as a teacher at St. Helena Unified School District. As both a long time resident and local educator, I believe the complex issues surrounding the proposed Hunter Subdivision project warrant adequate time and attention, in order to gain complete understanding of the project plan and all foreseeable consequences that this project will bring to the residents of St. Helena. 62-1

I'm a single parent who is employed full time. The Hunter DEIR is 638 pages long and the appendices total an additional 1940 pages. I am not an expert on the topics of property development, hydrology and soils, effective emergency evacuation strategies or flood control engineering. During the last 40 days, I have spent hours reading and studying the DEIR, and I'm nowhere close to being able to describe myself as an adequately informed citizen on the Hunter Subdivision proposal. 62-2

If I'm having trouble gaining full access the important information in the DEIR during the limited 45-day statutory timeline, I can only imagine that there are many other St. Helena residents who are unable to access or begin to understand the important information in the DEIR due to the document language, complexity and lack of sufficient time.

At last night's Planning Commision meeting, Commissioner Daniel Hale stated that only senior City staff had the authority to extend the statutory 45-day DEIR review deadline. He was not specific in identifying who those City staff were, so I'm writing to all of you. I am requesting the 45-day statutory DEIR review period be extended, so that all local residents have their rightful access and the opportunity to completely understand the contents of the DEIR document. 62-3

Sincerely,
Sherri Kelly

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Response to Letter 62
Sherri Kelly
November 3, 2021

62-1 The comment provides the commenter's personal history as a resident of the City and requests that the Project be studied in order to gain complete understanding of its consequences.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

62-2 The commenter states they have not been able to review and understand the Draft EIR in the public review timeframe provided.

The public was provided a 67-day period ending on November 30, 2021, exceeding the required 45-day period. The commenter's request for additional time to review the EIR is noted.

62-3 The commenter requests that the 45-day public review timeframe be extended.

Please see Response to Comment 62-2.

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Comment Letter 63

From: Pat Kenealy <pkenealy1@yahoo.com>
Sent: Tuesday, November 2, 2021 10:22 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Opposing Hunter Subdivision

Please do NOT approve the Hunter subdivision. 63-1

The water needs of the project and the traffic it will produce are bad for our dry and traffic-jammed City. The sewer and flood prevention costs and risks are too great for the City's strained infrastructure and financial situation. 63-2

Saint Helena needs to get better, not bigger.

Thank you for soliciting public input on this ill-advised project which threatens the quality of life of all Saint Helenans 63-3

Patrick Kenealy
2995 Spring Street

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Response to Letter 63
Pat Kenealy
November 2, 2021

63-1 The comment states general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

63-2 The comment expresses general concern regarding the Project's impact on traffic, the City's sewer system, and flood protection.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. Master Response 3 addresses concerns related to flooding and flood protection and Master Response 4 addresses wastewater.

63-3 The comment states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

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Comment Letter 64

City of St. Helena

I am writing to comment on the DERI for the Hunter project. There are so many reasons to object to this project. There is no water neutrality, loss of conservation easements, the proposed affordable housing does not conform to the Municipal Code, traffic over a railroad track which has a F rating from Caltrans and cannot be mitigated without opening Starr Avenue and building a new bridge over the Napa River and on and on. 64-1

However, an important reason is overlooked in this report and one that is an albatross for the city and stirred heated discussion since its beginning: The St. Helena Levee on the Napa River. There is positive to the levee project, but also many mistakes not the least of which is the missing monies never accounted for and continuing worries of no current comprehensive flood-risk management.

The width of the St. Helena levee was built wider than it was intended or needed to be, a size that took the levee wide of the Vineyard Valley property it was made to protect, resulting in a large 16.9-acre agriculture floodplain undeveloped and empty. On Sept. 8, 2010, a developer saw an opportunity and purchased this floodplain acreage. Then submitted plans to convert agricultural land into high density housing including 87 new residential units, this despite an explicit provision in Measure A that "none of these projects (levees) are intended or designed to encourage population growth." 64-2

The limitation on building expensive homes and apartments on this floodplain are many, not the least of which is how will the homeowners be able to purchase insurance for homes built in a flood plain? Will the city be responsible for damages if the levee fails? 64-3

St. Helena now has a chance to bring this to an end and avoid construction of 87 new homes behind the levee. "Floodplain managers, river scientists, and prudent leaders worldwide counsel that levee protection is never absolute, and that even the tallest and strongest wall comes with an inherent residual risk, a small but real possibility that it may fail or be overwhelmed during future floods....St. Helena should understand that levee protection brings a range of consequences, including the possibility of multiplying, not diminishing, the long-term risk of damage and potentially even loss of life in their community." 64-4

I sincerely assume good intent when I ask the Planning Commission and then the City Council to thoroughly understand and preform due diligence into these issues. Best regards, Susan Kenward. St. Helena. 64-5

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Response to Letter 64
Susan Kenward

64-1 The commenter states their opposition to the Project. In particular, the commenter raises concerns related to water neutrality, conservation easements, traffic and the Project's compliance with the City's Municipal Code.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, please refer to Master Response 2 regarding water neutrality, Response to Comment 45-2 regarding affordable housing and the City's Municipal Code, and Responses to Comments 32-6, 57-9 and 61-10 regarding traffic on Railroad Avenue and building a new bridge over the Napa River. Please see Response to Comment 36-3 regarding the easement.

64-2 The comment expresses concern related to the Napa River levee. In particular, the comment claims that the levee project was financially mismanaged and that there are ongoing concerns related to flood-risk management. The comment claims the levee was built wider than intended or needed and that the Project conflicts with a provision in the City's Measure A agreement.

The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required. Please see Master Response 3 for more information regarding the levee and Measure A.

64-3 The comment expresses concern related to future homeowner's ability to purchase flood insurance and also questions who would be liable for damages associated potential levee failure.

The Project site is outside of a FEMA special flood hazard area; therefore, purchase of flood insurance would not be required. However, because there remains residual risk of flooding from catastrophically large floods (such as a 500-year flood) or levee failures, property owners would have the option to purchase flood insurance. Regarding the liability for damage in the event of a catastrophic flood event, please see Master Response 3.

64-4 The comment provides an unreferenced quote that states levee failure is a possibility and urges the City to assess long term risks associated with levee protection.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, please refer to Master Response 3 for more information specific to the levee and potential flood risks.

64-5 The commenter requests the City's Planning Commission and City Council perform due diligence when reviewing the Project.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

Comment Letter 65

From: Grace Kistner <gdkistner@comcast.net>
Sent: Tuesday, November 23, 2021 3:02 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Proposed Hunter Project EIR Comments

Hi Maya,

My comments regarding the Proposed Hunter Development begin with Napa Counties Measure A Ordinance that was passed with over two thirds of Napa County Voters in March 1998. 65-1

I am attaching a copy of the Measure A Ordinance in its entirety. However the part of this Ordinance that is pertinent to the proposed Hunter Development is in:
Section 2 Findings, Paragraph G which states:

"None of the projects in the Plan are intended or designed to encourage population growth in Napa County. All of the projects are for flood protection, preserving ground water integrity, reducing sediment in the Napa River system, and for maintaining the reliability of the water supply for existing Napa County population of the date of this Ordinance." 65-2

The proposed Hunter has 51 Single Family Homes, 11 ADUs and 25 Multi-Family units which when sold or rented would increase the population significantly in St. Helena a City of about 6000 residents. 65-3

Flood protection to the existing residents would be greatly decreased and possibly put existing St. Helena residents in jeopardy due to the increase in concrete and asphalt required to build roads and driveways that would be necessary for the proposed project. This increase in hard surfaces in case of heavy rains would cause water to run off to the lower areas south of the project. In addition these hard surfaces would produce more sediment flowing to the Napa River. 65-4

Additionally the use of the well water for landscaping would not be helpful in preserving ground water integrity. Also the use of City water for this project would not maintain the reliability of the water supply for existing residents. 65-5

Measure A in itself should be grounds for denying the Proposed Hunter Project. 65-6

Grace D. Kistner
25 San Juan Court
St. Helena, Ca

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Response to Letter 65
Grace Kistner
November 23, 2021

65-1 The comment states a concern related to the Project's compliance with Measure A.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, please refer to Master Response 3 and Response to Comments 35-6 and 57-3 regarding Measure A.

65-2 The comment provides an excerpt from Measure A stating that projects funded under this Measure are not intended to encourage population growth.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, please refer to Master Response 3 and Response to Comments 35-6 and 57-3 regarding Measure A.

65-3 The comment states there would "significantly" increase the population of St. Helena.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. The Draft EIR projects that the Project would add 213 residents to the existing population (6,049 as of 2020), an increase of 3.5% that is within the population growth estimates in the adopted 2040 General Plan.

65-4 The comment claims that flood protection to existing residents would decrease due to the Project because of an increase in impervious surfaces. The comment also states that an increase in impervious surfaces would also produce more sediment flowing into the Napa River.

Please see Response to Comment 35-4. Regarding increased sediments flowing into the Napa River, the Draft EIR addresses this concern in Chapter 3.9, Hydrology and Water Quality. Specifically, on page 3.9-45 the Draft EIR concludes the impact water quality would be less than significant, because compliance with existing permitting requirements and conditions of approval (i.e., MS4 Permit and the City's Stormwater and Runoff Pollution Control Ordinance) are sufficient to avoid water quality degradation (including erosion and siltation).

65-5 The comment raises a concern related to the Project's proposed use of well water and its impact on groundwater supply.

Please refer to Response to Comment 57-5 and Master Response 2 regarding the use of well water and the reliability of water supply.

65-6 The comment states that Measure A should be grounds for denying the Project.

Please refer to Master Response 3 regarding Measure A.

An attachment to this letter can be found in Attachment B.

Comment Letter 66

From: Grace Kistner <gdkistner@comcast.net>
Sent: Monday, November 29, 2021 7:18 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter EIR

The Proposed Hunter Project is definitely a residential development project and therefore falls the St. Helena zoning code 17.146. Residential Development Project Inclusionary which states that "A least twenty (20%) of all new dwelling units in a residential development project shall be affordable units, which shall be constructed and completed no later than the related market rate units." 66-1

Section I Basic Requirements for Owner-Occupied and Rental Affordable Units

Section I states: Affordable units shall be comparable in number of bedrooms, exterior appearance and overall quality of construction to market rate units
in the same residential project. Subject to approval of the planning commission, square footage of affordable units and interior features
in affordable units need not be the same or equivalent to those in market rate units in the same residential project so long as they are of
good quality and are consistent with contemporary standards for new housing.
Affordable units shall be dispersed throughout the
project, or subject to the approval of the planning commission may be clustered within the residential project when thus furthers
affordable housing opportunities." 66-2

In looking at the Project Description In The City Of St. Helena Notice Of Availability, Hunter Sub Division Project it appears that 16.9-acre parcel is proposed to contain fifty one (51) Single Family Market Homes and Eleven (11) ADU's.
Chapter 17.146 of the ST. Helena Zoning would require twenty (20) percent of the homes to be affordable in the 16.9 acre. This project should be denied as it is now proposed. 66-3

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Response to Letter 66
Grace Kistner
November 29, 2021

66-1 The comment states an opinion that the Project is not compliant with Chapter 17.146 of the City's Municipal Code, which requires a percentage of new dwelling units to be affordable units.

The comment does not address the adequacy of the Draft EIR and is referencing requirements of the City's Inclusionary Housing Ordinance. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. Please see Response to Comment 2-3 that addresses the Project's affordable housing requirement.

66-2 The comment provides an excerpt of Chapter 17.146 of the City's Municipal Code which describes requirements for owner-occupied and rental affordable units under the City's Inclusionary Housing Ordinance.

The comment does not address the adequacy of the Draft EIR and is referencing requirements of the City's Inclusionary Housing Ordinance. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no further response is required. See Response to Comment 66-1.

66-3 The comment summarizes the Project's proposed residence types and expresses that the Project should be denied because, in the commentor's opinion, it is not compliant with Chapter 17.146 of the City's Municipal Code.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the Project. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. Please see Response to Comment 2-3.

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Comment Letter 67

-----Original Message-----
From: Pamela Koussa <blueglow702@gmail.com>
Sent: Saturday, November 6, 2021 6:34 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project

To whom it may concern, I do NOT want the Hunter project to happen, mostly because all (51) homes will be 2-story. Not everyone wants stairs in their homes. This project is a very awful thing if it does get approved. Please have the developer include single story homes also or else deny their application. Pamela. 67-1

Sent from my iPhone

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Response to Letter 67
Pamela Koussa
November 6, 2021

67-1 The comment states opposition to the Project because two-story residences are proposed.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

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Comment Letter 68

From: Laurel Krsek <laurel.krsek@gmail.com>
Sent: Tuesday, November 2, 2021 8:16 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Draft EIR # 2108032014 (The Hunter Project)

Maya DeRosa,
Planning & Building Director
City of St. Helena Planning Department
1572 Railroad Avenue, St. Helena, California 94574

Dear Ms DeRosa,

In regard to the Draft EIR # 2108032014 (The Hunter Project), Transportation and Circulation, I'm strongly opposed to the development of this project. In my opinion the proposed project is completely inadvisable until our community-wide traffic and emergency access issues are addressed. 68-1

I've lived in St. Helena for 32 years and have experienced the greatly increased volume of traffic on Pope Street, Starr and Hunt and the frequent difficulty accessing the Silverado Trail via the Pope Street bridge. The addition of the Hunter projects' 100+ households with their associated vehicles makes no sense without an outlet from Highway 29 to the Silverado Trail other than the Pope Street bridge. We already experience serious daily traffic congestion. During emergencies on the Silverado Trail or Highway 29 and in the event of an evacuation we have few existing routes out of the area. Until suitable roads and city infrastructure are in place, the addition of more housing units in this proposed isolated neighborhood is irresponsible. 68-2 68-3

Laurel Krsek
1125 Peppertree Circle
St. Helena

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Response to Letter 68
Laurel Krsek
November 2, 2021

68-1 The comment states opposition to the Project and requests community-wide issues related to traffic and emergency access should be addressed

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles traveled (VMT), and potential impacts to transit, bicycle, and pedestrians. Please also see Master Response 1, that provides more details specific to the maintenance road for emergency evacuation for both Vineyard Valley residents and Project residents.

68-2 The comment states a concern that the Project will negatively impact traffic conditions.

Potential Project traffic impacts are analyzed in detail within Section 3.14 Transportation of the Draft EIR and within Appendix K, Traffic Impact Study. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no additional response is required.

68-3 The comment states the commentor's concern related to emergency evacuation and states the Project should not be approved.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. Please see Master Response 1 that addresses emergency access concerns.

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Comment Letter 69

From: gail lane <gail@winestates.com>
Sent: Saturday, October 30, 2021 5:50 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project

I would like to share my serious concerns regarding this project.

69-1

My family settled in St. Helena 7 generations ago. I've lived in St. Helena most of my 68 yrs. I've founded several businesses, always looking out for the best interest of our small community.

This project is drastically going to impact traffic on Pope, Starr, Hunt & Adams streets. I understand the owner has a well but our water situation will still be impacted.

69-2

Our water table has already been depleted irrigating vineyards. But we are an agricultural county and growing grapes is a priority.

69-3

The Glass Fire damaged our city's water supply. We're still in a serious draught. How can our city's resources properly manage all these new homes and homeowners?

69-4

We need affordable housing. But there must be a better solution than filling an open space in town with over 51 new homes.

69-5

Starr Ave is littered with cars before/after work and on weekends right now. The residents in the apartment complex at the end of Hunt have never had enough parking. They are forced to park and walk several blocks just to get to their apartment. Starr Ave residents have cars lined up in front of their own homes, leaving no room for guests.

69-6

I oppose this project due the size of it, the impact on water resources, city sewer & traffic.

69-7

Thank you.

Gail Morgan Lane
Broker/Owner
BRE# 01026604

St. Helena Real Estate
1346 Main Street
St. Helena, CA 94574
T 707.967.9570
C 707.291.0156
F 707.968.0885
gail0634@gmail.com
gail@winestates.com
www.winestates.com

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Response to Letter 69
Gail Lane
October 30, 2021

69-1 The commenter states their history as residents of the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

69-2 The comment raises general concerns related to the Project's impact on traffic and the City's water supply.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 related to water supply. The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. Please see Responses to Comments 57-8, 57-9, and 57-10 regarding traffic concerns.

69-3 The comment states agriculture should be a priority for the area.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

69-4 The comment raises a general concern related to the Project's impact on the City's water supply.

Please see Master Response 2.

69-5 The comment acknowledges the need for affordable housing but indicates another project could meet this need.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

69-6 The comment raises a concern related to the Project's impact on local parking.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the

Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

69-7 The comment states opposition to the Project due to its impact on water, the City's sewer system, and traffic.

Please see Response to Comment 69-2 and Master Responses 1 for water supply and 4 for concerns regarding wastewater. Traffic impacts are evauated in Section 3.14 of the Draft EIR.

Comment Letter 70

Marina Lavagnino
Jenna Lavagnino
15 Del Rio Ct.
Saint Helena, Ca 94574

November 29, 2021

Ms. Maya DeRosa, Planning & Building Director
City of Saint Helena
1572 Railroad Avenue
Saint Helena, CA 94574

Re: **Hunter Project Draft Environmental Impact Report**

First, we want to thank you for extending the comment period. We only learned of this project midway through October, even though we moved to a home less than 100 feet from the proposed development in July. Neither my sister and I, nor the previous owners, received a notice regarding the DEIR. It took some time to get up-to-speed. We appreciated the opportunity to participate in the first public comment discussion of the DEIR, and look forward to the second. 70-1

About us: we live on Del Rio Ct. Our grandparents moved to Vineyard Valley in 1975 and went through two floods. Our mother moved here in 1993 and stayed through one flood. One of us moved here in 2017, and the other moved 'home' to Saint Helena this summer. We walk or ride a bicycle along the berm almost every day. One of us works from home, where our office looks directly out onto the beautiful land that is affected by this project. We talk to the people who walk, run and ride through this area of St. Helena, watch the wildlife, observe the colors of the sky, fog and vineyards, hear the birds, crickets and frogs.

We realize that we do not have the time or resources to adequately make sense of the details found in this report. We see that in most instances the writers of the report come to the conclusion that the issues raised can be resolved and will ultimately not have a substantial impact on our town. In a perfect world, that might be true, but our world is far from perfect.

In this letter we address three of the 15 areas of consideration in the DEIR: 10) Land Use, 12) Public Service and Recreation, and 13) Utilities and Service Systems (in reverse order.)

Utilities and Service Systems

Water. St. Helena does not currently have enough water to meet the needs of the current residents. It is one thing to let grass go brown in the summer, but another to outlaw watering trees and ask residents to severely curtail water usage. We either have a big problem and no solution, or the warnings of water shortages are over-hyped. Drought years will happen. Until 70-2

we have a more reliable way to meet the needs of the current citizens of St. Helena, we should stop inviting people to move here. We have read through the details of the 2010 plan, and the 2019 plan. The projected water deficit, in every scenario, is troubling. You seem to be balancing the water problem by anticipating that the current extreme water conservation will continue, while threatening people who live here now that things could be much worse before they get better.

70-2 Cont.

Wastewater and stormwater drainage are also serious concerns. Living immediately adjacent and 4 - 20 feet closer to sea-level than the anticipated homes is a real concern. We suggest that St. Helena take a close look at previous wastewater problems in this location and find a way to avoid future problems.

70-3

Public Service and Recreation

There is so much to review within this section. 2.45 persons per household for the purpose of calculating park and recreation facility demands is very different from the 8 persons per 4 bedroom home estimate used in the Utilities section. 12 elementary students among 87 residential units seems low. We would be interested in seeing what the numbers are at Hunt Street.

70-4

We will focus on recreation here. In section 3.12-16 it is stated that the City would have a ratio of 4.48 acres per 1,000 residents, which falls below the goal of 5 acres per 1,000 residents. So we would be short almost 5 acres of this goal, and about **40 acres short of the nationally recommended standard mentioned**. Don't we in St. Helena desire and deserve the higher standard?

70-5

What this section woefully ignores is the recreation usage that will be taken away by this development. Yes, there are parks in St. Helena. Table 3.12-2 lists 11 parks, 8 of these are mini parks. None of these parks provide a connection to the grandeur of St. Helena's position in the Napa Valley. There is a reason why so many St. Helenan's flock to the maintenance path, and it is not to look at the gravel beneath our feet. Walking along the berm provides a view of Mt. Saint Helena, both sides of the valley, beautiful vineyards, unique architecture with water towers and barns, a meadow, a habitat restoration area and a river, all of which are home to numerous wildlife, and a tremendous view of the sky. From glorious sunrise to inspiring sunset people come to this area to experience nature. It is convenient to the center of town and the library. It is free and currently available to all. It is a natural resource that provides space that we need, that isn't available in any of our 11 parks. This resource should be better understood if we are trying to document St. Helena's recreational facilities. It will be drastically diminished if homes are built up to the edge of the maintenance road.

70-6

Land Use

We need to have our utility needs met, and we need adequate access to outdoor recreation. We also need affordable housing. The people who work in St. Helena and the surrounding Napa Valley need safe places to live that do not require a 1 hour plus commute each way. It would be wonderful to build such housing in St. Helena, perhaps some of it on a portion of this parcel.

70-7

But what is shown on the drawings is so far from what seems acceptable or even legal that others will surely point out the numerous faults. There are two sections of affordable housing near us in St. Helena: the apartments next to Napa Valley College, and those on Hunt Street. Both of these are beautiful developments that feature something the Hunter Project seems to be lacking - common space. Where is the playground, the soccer field, the community garden, the dog park, the lawn? We know what works and what is meaningful for our community. When we propose affordable housing, let's do it like we value the people who will live in it.

70-7 Cont.

In Conclusion

We have a Planning Department for a reason - to make sure that future development meets the needs and goals of St. Helena. A lot of time has gone into preparing this document. It is inspiring to see how many thoughtful policies have been developed over the years to help guide us to a happy future. Now we have an opportunity to think about what will serve us - and what will not.

70-8

Thank you for your consideration-

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Response to Letter 70
Marina and Jenna Lavagnino
November 29, 2021

70-1 The commenter thanks the City for extending the Draft EIR comment period and states the commenters did not receive prior noticing.

Please see Response to Comment 15-4 regarding noticing. The comment does not identify any specific areas where the Draft EIR or analysis is inadequate, therefore, no response is required.

70-2 The comment raises concerns regarding the City's water supply and states that the City should not allow for new residential development.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 that addresses water supply and the City's Water Neutrality Policy.

70-3 The comment raises concern related to the Project's impact on wastewater and stormwater drainage.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 4 that addresses wastewater concerns and Response to Comment 35-4 which addresses general stormwater drainage concerns.

70-4 The comment notes that the 2.45 persons per household used to calculate park and recreation facility demands is different from the eight persons per 4-bedroom home estimate used to calculate demand for utilities. Additionally, the comment states an opinion that the Project's estimate of 12 elementary school students seems to be low. The commenter is interested to know the number of elementary students at Hunt Street residences.

See Response to Comment 7-3, regarding household size calculations.

Student generation rates were derived from the St. Helena Unified School District (SHUSD) Facility Master Plan, which outlines expected growth in demand for school facilities associated with projected development and plans how to fund and respond to such growth. Each school district develops their own student generation rates. Residences at Hunt Street are not a part of this Project; thus, no response is needed.

70-5 The comment states an opinion that the City's parkland ratio would fall short of the City's goal of 5 acres of parkland per 1,000 residents and the nationally recommended standard of 10.5 acres of parkland per 1,000 residents. The comment states that City residents desire and deserve to have the nationally recommended parkland ratio standard.

As stated on page 3.12-16 of the Draft EIR, based on the City's 2018 population of 6,196 residents and park acreage of 27.43, the City's parkland to resident ratio is 4.43 acres per 1,000 residents. This parkland to resident ratio is lower than the City's goal and lower than the nationally recommended standard, even without development of the Proposed Project. Assuming the addition of 213 new residents to the City, the City would have a ratio of 4.28 acres of parkland per 1,000 residents. Park and recreational impact fees would be imposed on the Project and these impact fees would be used to cover the cost of parkland acquisition and park improvements. The Project applicant would pay these impact fees as stipulated in the City's Municipal Code Chapter 3.32, consistent with the Quimby Act. These park fees would be used by the City to purchase land to construct new parks or upgrade existing recreation facilities. The comment is noted and forwarded to the decision makers for their consideration.

70-6 The comment states an opinion that the Public Services and Recreation section of the Draft EIR does not acknowledge the recreational land that will be removed by the Proposed Project. The commenter suggests that the levee maintenance road could be considered a recreational facility.

As stated on page 3.12-5 of the Draft EIR, the levee maintenance road is not a City recreational trail but is used informally as a trail by local residents. Additionally, the maintenance road is not a part of the Proposed Project. There is an existing City trail located on the northside of the levee maintenance road that would not be affected by the Project. A small portion of the maintenance road would be paved to accommodate construction of the Adams Street extension, but sidewalks would be provided along the extension of Adams Street to provide a safe connection to the remainder of the maintenance road and the trail, which would remain unaltered by the Proposed Project. Please see Chapter 3, Changes to the Draft EIR for a figure that shows the adjancent trails.

70-7 The comment states an opinion that the Project would not add any recreational or common space areas, and asserts that nearby existing affordable housing developments provide these areas.

The commenter is correct that the Project does not include any on-site parks or -recreational facilities. However, as stated in Response to Comment 70-5, the Project applicant would pay park fees which would be used by the City to purchase land to construct new parks or upgrade existing recreation facilities. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is

required. However, the comment is noted and forwarded to the decision makers for their consideration.

70-8 The commenter reflects on the purpose of the City's Planning Department and states that the Project gives the community an opportunity to evaluate what will best serve the community.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 71

From: Lou Lavigne & Nancy Rothman
Fulton Lane
St. Helena

Subject:Hunter Project EIR

Dear Planning Commission:

We built our home on Fulton Lane (on the former Napa Valley Oriental Nursery site) after investigating the prior history of rejection of development on the Hunter site and the resultant preservation of the levee. We also explored the flood risk in this immediate area and concluded that the levee and existing drainage ditches/swales on Fulton Lane provided a reasonable level of protection. This new Hunter project proposal (which is literally in our backyard) is a significant concern to us for a number of reasons enumerated below and we strongly recommend its permanent rejection. 71-1

-Flood risk-it is difficult to see how building inside the levee on the floor of the basin is a safe proposition…who is going to assume the liability..the City or FEMA? Then there is the question of flood risk to the surrounding area starting in particular with Vineyard Valley ….? 71-2
We are also concerned that if the levee is compromised the two major drainage ditches from Fulton Lane will be overwhelmed and flood water will back up toward Fulton Lane as well. This already occurs in heavy rains to some extent near the outside base of the levee due to the congested connection of the Fulton drainage ditches and poor maintenance of the ditches which apparently is a City responsibility. 71-3

-Water Supply & Sewage -how any proposal to add 20 acre feet of water use (or 6.5 million gallons…more graphic) to St. Helena's already constrained water supply could be justified based on the ludicrous idea of retrofitting 333 offsite homes or paying ~$597,000 in lieu fees just doesn't compute without an identified plan.. Where is the water going to come from? St. Helena already has constraints on obtaining more water supply? Then there is the proposed use of abandoned wells being activated for the landscaping..where are these wells and is that practical without jeopardizing the other wells of vineyards and residents in this area. 71-4 71-5
Then there is the other side of the new water usage….Sewage..how the City's sewage system and plant could be made to handle even an additional 6.5 million gallons of waste water is a major challenge considering current City finances and sewage needs. 71-6

-Traffic-St Helena recently had a good taste of incremental traffic on Pope Street and surrounding streets with the rain caused closure of Silverado Trail; not a pleasant experience.
The proposed project adds traffic issues on at least two fronts
If as the developer proposes Starr Ave. were extended to an extended Adams Street the resultant short-cut speedway from Pope Street to Main street via Starr and Adams will further the traffic jam at Railroad and ultimately Main Street. Any proposal to add stop lights on this route would risk increasing speeds in a residential area with drivers attempting to make the light/s. Then there is the added traffic resulting from the residents and their visitors and vendors of the proposed development which will also feed into the extensions of Adams and Starr….plus the incremental intersections added by the proposed project would further add traffic hazards and congestion potential. 71-7
The intersections of Pope and Starr, the extended Starr and Hunt, Starr and the new street in the proposed development and the intersection of the extended Adams and Starr plus a new proposed street in the development linking with Adams at that same proposed intersection are all going to add congestion and pollution in a residential and agricultural neighborhood. 71-8

-Parking-while the project allows for parking it is hard to see based on other areas of the City where development has occurred that the proposed project doesn't add additional cars parking on-street further adding to congestion and adding more hazards for traffic, pedestrians and bicyclists. 71-9

-Hiking Trail—everyday we see many people hiking on the City Trail alongside and the one on top of the levee literally all the way to the Napa River…a beautiful walk in surrounded by vineyards and much nature as it is also a natural habitat in places. To systematically destroy the rural charm of St. Helena including this hiking trail plus replacing vineyards with houses and streets is short sighted in our view. 71-10

-Affordable Housing-we recognize and support the need for additional affordable housing, however, to build it in a flood risk area and to add a major residential development with all the issues raised here and by others seems like an inefficient way to get there. The City should fully explore other more development efficient alternatives. 71-11

-Financial strength of the developer—while this isn't a topic for the EIR per se it becomes one that needs to be carefully evaluated and monitored due the disruptive nature of the proposed project to the current site and neighboring areas and the estimated long six year duration of the project. Were this ill advised project to be attempted without the City having financial assurance from the developer (perhaps in the form of a bond) that it would be completed would add an additional risk as an interruption in construction, drainage etc. could result in incremental flood and other risks…plus an eyesore of a partially completed project. 71-12

In conclusion we have been unable to find the benefit to St. Helena and its residents of this proposed development. It all seems like a major step toward impairing the character of St. Helena which makes it a wonderful place to live and turning it into another congested suburb with strained municipal resources. We are totally against the proposed Hunter project. 71-13

Thank you, Lou Lavigne and Nancy Rothman
11/29/21

Response to Letter 71
Lou Lavigne and Nancy Rothman
November 29, 2021

71-1 The comment provides personal history of the commenters, stating they built their home on Fulton Lane after considering the history of the Project site. The commenter recommends the Project not be approved.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

71-2 The comment raises a concern related to the Project's location due to its proximity to the levee and asks who would assume liability in the event of a flood.

Please see Master Response 3 regarding the levee and liability in the event of a flood. Determinations of legal liabiloity for a potential future event is not within the scope of CEQA.

71-3 The commenters expresses their concern that the Napa River levee could be compromised. The commenter is specifically concerned about two drainage ditches along Fulton Lane, stating that they could be overwhelmed and flood water could back up to Fulton Lane. The commenters assert that these drainage ditches are currently overwhelmed during heavy rain events due to congested connection and poor maintenance.

Please see Master Response 3 regarding the levee. As stated on page 3.9-12 of the Draft EIR, the modern design and construction of the levee (along with the City's ongoing inspection and maintenance of the levee) substantially reduces its potential to fail in a 200-year flood or in the event of an earthquake. The Proposed Project would not result in any changes to the drainage ditches along Fulton Lane or exacerbate existing flood risk, as explained in Section 3.9, Hydrology and Water Quality. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

71-4 The comment expresses a concern with the Project's impact on the City's water supply and states that retrofitting of plumbing fixtures and/or payment of in lieu fees is not adequate (per the City's Water Neutral Policy).

Please see Master Response 2 regarding the City's water supply and Water Neutral Policy.

71-5 The comment opines that the City has limitations on obtaining more water supply and mentions the Project's proposed use of groundwater for landscaping. The comment questions the location of the proposed well and whether use of the well would jeopardize other wells in the area.

Please see Master Response 2 regarding the City's water supply and Response to Comment 57-5 regarding use of the existing well for landscaping.

71-6 The comment raises concern related to the City's sewer system, specifically the commenter's opinion that the City does not have capacity to treat additional sewage generated by the Project.

Please see Response to Comment 38-1 and Master Response 4 regarding City wastewater conveyance and system capacity.

71-7 The comment opines that the extension of Adams Street to the Project site may increase cut-through traffic along Starr Avenue and Adams Street and asserts that stop lights along this route would not be feasible.

Section 3.14, Transportation and Circulation of the Draft EIR analyzes traffic congestion and vehicular queuing along Starr Avenue and Adams Street, and concludes that impacts would be less than significant. This includes future year analysis scenarios with and without the traffic of the proposed project. Further, the Draft EIR does not recommend stop lights along any stretch of Starr Avenue or Adams Street.

71-8 The comment states an opinion that the Proposed Project would result in traffic congestion and pollution within the neighborhood.

Please see Response to Comment 71-7. The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

71-9 The comment opines that the Project would create additional parking capacity issues.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

71-10 The comment states an opinion that the Project would replace the view of vineyards from the adjacent trail with houses and streets, which would destroy the rural charm of the City.

The commenter is correct that the Proposed Project would remove a majority of the existing vineyard and open space that characterize the site. However, views of agricultural features in the City are not unique to the Project site such that the Proposed Project would substantially impact publicly available views. As stated on page 3.1-26 of the Draft EIR, the Project applicant is required to comply with the City's Design Review Ordinance (Chapter 17.164 of the City's Zoning Ordinance) and undergo design review to ensure the proposed development is visually consistent and compatible with the applicable General Plan and with adjacent areas as well as the existing environment. The comment is noted and forwarded to the decision makers for their consideration.

71-11 The comment suggests that the City should explore other alternatives for affordable housing.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

71-12 The comment questions the financial stability of the applicant to complete the Project and is concerned what would happen if only a portion of the Project was constructed.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The finances and economic viability of a project are not within the scope of CEQA and not subject to analysis in an EIR. The commenter's concern is noted and forwarded to the decision makers for their consideration.

71-13 The comment states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 72

November 4th, 2021 Response to Hunter DEIR

My name is Sandra Lowry. I have lived on Starr Avenue since 1997. My husband and I moved to St. Helena from the Peninsula to get away from crowded neighborhoods, constant traffic, packed freeways and noise from SFO and two freeways. So we came to St. Helena; a decision we have never regretted. Our past experience taught us how big development can transform neighborhoods and towns, but not in a good way.

St. Helena is once again threatened by the possible approval of a flawed plan: I am speaking, of course, about the Proposed Hunter Development.

There is a callousness in the DEIR that I have never before seen: i.e., in case of flooding, residents can go to the second story of their homes. Really? Let's talk about the street I live on: Starr Ave. I believe I can speak plainly about the subject.

72-1

Please see Section 3:14.2 Roadway System: "Starr Avenue is a two-lane, undivided/mixed use street oriented north-south within the study area....."parking is available along most sections of the road." I disagree. Actually, Starr Avenue is parked up every afternoon, through the night and on weekends. Many parked vehicles (trucks, work trucks, cars) come from Hunts Grove (they need more parking onsite) and other areas, sometimes being parked for weeks unless neighbors call police. Good luck finding a parking place in front of your home on Starr. Your future residents better plan on parking at home. There is nowhere else.

72-2

And Starr Avenue has an important speeding problem; the crosswalk on the south end of Starr is a joke. There is a safety issue here. Drivers seldom stop for pedestrians and often drive around people in the middle of that crosswalk. They come speeding up Starr, headed for Pope Street and pedestrians have had narrow escapes to avoid being hit by vehicles. Last week I was pulling into my driveway in the middle of the day. Another driver was tail gating me and decided to speed up and pass instead of waiting for me to complete the turn. This is no country road, folks! I was driving at the speed limit – 25 mph. To continue:

72-3

Another quote and an important one from the DEIR: "Thresholds of Significance: Consistent with Appendix of the CEQA Guidelines, a significant impact would occur

72-4

if development of the proposed project would RESULT IN INADEQUATE EMERGENCY ACCESS."

3:14-4 "Mitigations Measures NONE REQUIRED". I disagree. Starr Avenue, one of the more popular routes in town, is already overcrowded with parked cars and traffic, and in an emergency such as fire or flood, many residents of the proposed development will decide to take Starr Avenue as their escape route. Meadow creek residents, Hunt's Grove residents, and Harvest Court residents would naturally choose Starr as their best escape route as well. Pure chaos.

72-4 Cont.

No matter which route the proposed Hunter development residents choose , they will be backed up on Hunt Ave., Starr Ave., Pope St., Adams, and Main as everyone on the East and West sides of town will be headed for the two- lane road exits out of town via the Silverado Trail and Highway 29, providing these exits are available.

72-5

According to the DEIR, exits from the proposed development, in case of emergency are Starr, Adams and a third exit that is unclear to me. Where is the location exactly? Please clarify.

72-6

If it is the levee, isn't that also the second exit for the 250 elderly people from Vineyard Valley? A problematic idea indeed. All emergency evacuation routes considered would be a driving nightmare and questionable. Picture the backup. Please clarify.

72-7

The DEIR admits there will be an increase in traffic on streets connected with the proposed project. And their Table 3:14-1 shows projections:

"Weekday Proposed Project Trips Generation"

"Proposed project estimates 798 trips daily and on Saturdays the project expects to generate 815 daily trips and 80 peak hour trips." Figure in a 24 hour period 800+ more vehicles on your streets. How do you plan to mitigate increased traffic through neighborhoods full of children and the elderly? Will there be speed bumps? (Actually, we need them now!) Traffic lights? More lighted crosswalks? (All current crosswalks should be lighted and flashing when in use). Closer

72-8

monitoring of speed limits? Is Starr Avenue intended to become a bypass? Please clarify.

72-8 Cont.

Please do not overlook these facts: The building of this project will be extremely stressful and harmful to the peace, health and quality of life for the entire East side of town, but especially to residents of Starr Avenue, Meadowcreek Circle, Harvest Court, Vineyard Valley, and Hunt's Grove. Are we being asked to endure trucks, cement mixers, etc., and breathe 6+ years of dust, debris and put up with noise from the pounding of building equipment and hammers? These would be impossible living conditions for me. Please clarify.

72-9

If this development is approved, we are selling the soul of our town and misunderstanding why St. Helena is a destination, unlike anywhere else in the country.

The document uses the term "less than significant" many times throughout. I have something to say about that: We the People who oppose this plan are not "less than significant". Our friends and neighbors are not "less than significant" - I am not "less than significant."

72-10

Thank you for your kind consideration and the opportunity to express some of my concerns. Sincerely, Sandra Lowry, 1175 Starr Avenue

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Response to Letter 72
Sandra Lowry
November 4, 2021

72-1 The comment explains the commenter's personal history and general opposition to the Project.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

72-2 The comment states an opinion that Starr Avenue is "parked up every afternoon, through the night an on weekends" and suggests that future residents of the Proposed Project would not be able to find parking along Starr Avenue.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements. .

72-3 The comment states an opinion that Starr Avenue has several safety issues including speeding, aggressive drivers, and a lack of pedestrian amenities.

As stated in Section 3.14 of the Draft EIR, Starr Avenue was analyzed in regard to vehicular collisions and overall safety along the roadway. The conclusion of the Draft EIR were that the Proposed Project would not increase hazards due to a geometric design feature or incompatible use that would contribute to an increase in collisions or create visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site. An EIR is not required to evaluate aggressive drivers.

72-4 The commenter disagrees with the Draft EIR conclusion that the Proposed Project would not result in inadequate emergency access and states that Starr Avenue is already very congested.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. For additional information regarding emergency access, please refer to Master Response 1.

72-5 The comment states that there is a lack of roadway connections to Highway 29 and Silverado Trail, and roadways would be backed up during an emergency.

The commenter's opinion regarding the lack of roadway connections to Highway 29 is noted for the decision makers. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. For additional information regarding emergency access, please refer to Master Response 1.

72-6 The commenter asks for the location of the third emergency exit stated in the Draft EIR.

As described on page 2-24 in Chapter 2, Project Description, "[e]mergency vehicle access would be provided via the extension of Adams Street, Starr Avenue, and an emergency vehicle access (EVA) to the existing gravel maintenance road that borders the north/northwest boundary of the Project site." For additional information regarding emergency access, please refer to Master Response 1.

72-7 The comment expresses the commenter's opinion regarding congestion of the levee access (maintenance) road for purposes of emergency evacuation.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. For additional information regarding emergency access, please refer to Master Response 1.

72-8 The comment addresses the Proposed Project's trip generation and its effect on roadway congestion and asks for additional mitigation measures.

Section 3.14, Transportation and Circulation of the Draft EIR analyzes all transportation impacts as mandated by CEQA. All mitigation measures and potential mitigation measure that would be needed, are discussed in detail within Section 3.14. Further, Appendix K, Transportation Impact Study, identifies several recommended roadway improvements. However, as explained on page 3.14-1 in Section 3.14, Transportation and Circulation, the CEQA Guidelines were updated (December 2018) to remove evaluation of the delay that vehicles experience at intersections and on roadway segments, which is often measured using a level of service (LOS) metric. Therefore, the operational aspects of the Proposed Project that contribute to delay and congestion on local roadways is no longer considered an environmental impact under CEQA. Therefore, the recommended roadway improvements are not identified as mitigation measures. The recommended roadway improvements are for informational purposes as to how the project could address LOS deficiencies.

72-9 The commenter expresses concern about with Project traffic and potential fugitive dust emissions associated with construction activities.

The Project would not result in exacerbating existing air quality conditions and would not result in the exceedance of the Bay Area Air Quality Management District (BAAQMD) thresholds of significance for both construction and operations. Furthermore, the BAAQMD's CEQA Guidelines contain feasible control measures to reduce fugitive dust emissions from construction activity. The measures in the CEQA Guidelines are divided into three categories: (1) basic control measures, (2)

enhanced control measures, and (3) optional control measures. The BAAQMD recommends that all construction incorporate basic control measures, regardless of the size of the site. Therefore, the Project would implement necessary precautions to reduce fugitive dust emissions such as implementing the BAAQMD's Best Management Practices (BMPs) for fugitive dust control during construction. Please see Response to Comment 72-8 regarding traffic.

72-10 The comment states opposition to the Project and the impact conclusions in the Draft EIR.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not specify where the Draft EIR is inadequate; therefore, no further response is required.

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Comment Letter 73

PUBLIC COMMNENT – HUNTER PROJECT DEIR – LEVEE FAILURE/FLOODING
FROM: Isobel Luria – 1173 Starr Avenue
DATE: November 2, 2021

The Hunter Project's DEIR in its section on Hydrology, Water and Drainage completely ignores the potentially adverse effects of Climate Change. It displays a callous and cavalier attitude when discussing the possibility of a catastrophic flood and the serious consequences that would be faced by future residents of the proposed subdivision. 73-1

The Hunter Project has been controversial from its inception and has met with much opposition. While the current city administration cannot be held responsible for the questionable decisions of its predecessors; it will be held responsible from now on. 73-2

Briefly, Dennis Hunter purchased the "raw" land for the project in 1997. In 1998, Measure A was passed. Mr. Hunter filed to start development planning in 2005. In 2008, he agreed to a lot line adjustment to facilitate the City's Flood Protection Project. In 2009, the City began work to construct a levee. "... the standard design level of protection (afforded by the levee) is for the 100-year flood event; however, the 200 year design basis was implemented to provide an additional factor of safety and to account for potential settlement..."(DEIR 3.9-8) Meanwhile in 2010, the Applicant filed for a Temporary Subdivision Map, which was accepted in March of 2011. The levee was completed in the same year. In 2012, FEMA revised its flood map, categorizing the area as a Zone X – an area protected by a levy with a moderate to low chance of flooding and an optional Flood Insurance program. It should be noted that this levee and its adjacent floodwall also protects much of East St. Helena, including Vineyard Valley Mobil Home Park, the Hunt's Grove Apartments and the Meadowcreek subdivision, all of which have sizable populations. 73-3

It is interesting that this DEIR makes no mention of any "due diligence" on its part of conducting an examination of the levee to ascertain its current condition. I can only assume the Project is leaving that up to the City of St. Helena, the entity responsible for maintaining it. Furthermore, no mention is made of any attempt by the applicant to contact FEMA to ascertain whether, again in view of Climate Change, residents will be able to obtain flood insurance and low interest flood mitigation loans, since this will be needed for new housing built in very close proximity to a **pre- existing** levee. Usually, FEMA supports areas where levees were built as a flood mitigation ie. the housing was already in place and subject to flooding! It should be noted that I could find no discussion about this on the FEMA website. 73-4

Now, as a result of Climate Change, the country is experiencing unpredictable and unprecedented weather events with increasing frequency. (We just had one – the "bomb' cyclone and accompanying atmospheric river.) FEMA is faced with an increasing burden of claims. It is not inconceivable that St. Helena could experience a catastrophic flood in the not too distant future and the levee could fail. The DEIR states that in the event of a catastrophic flood or earthquake, residents would have ample warning to evacuate. Furthermore, "flooding on the Proposed Project lots would range between 0-5 feet in depth, with the deepest flooding occurring on the northern part of the Project site. This level of flooding would leave upper floors of residences available for refuge....the risks from a 200 year 73-5 73-6 73-7 73-8

1

flood and/or levee failure are limited to property damage rather than risk of life." (DEIR 11-2) On the other hand, FEMA states that while levees reduce the risk of flooding, they don't eliminate it. They..."**deteriorate overtime and must be maintained. When levees fail, or are overtopped, the results can be catastrophic. In fact, the flood damage can be greater than if the levee had not been built." (FEMA website "Living with Levees")** I emphasize that as result of its "Zone X" classification, where flood insurance is **optional**, much of the property might not be covered.

The aftermath of this sort of catastrophic flood is awful. I disagree with the DEIR conclusion that residents would have ample time to evacuate. One can imagine that a levee failure would produce a "tidal-like" wave of debris filled water gushing through the subdivision. Unlike a regular flood where water levels rise more slowly, people would be lucky if they **reached** the second floor. Houses would be severely damaged and residents, if not injured or worse, badly traumatized. In any case, they would need to relocate, file insurance claims with FEMA, if they actually had purchased the optional insurance, possibly secure low interest FEMA loans to finance their flood repair, and, of course, find contractors, not to mention deal with their day-to-day existence – kids, school, work, and so forth. Additionally, there would be the continuing stress of wondering if claims or loans will even be granted because FEMA does its homework: they investigate every claim. In the case of this Applicant's Project, FEMA might refuse to pay for the flood damage and repair because the houses were built close to a pre-existing levee. They might argue, if they look at the time sequence, that levees should not be erected to protect future subdivisions and that locating new structures near existing levees creates a preventable and needless risk.

Should FEMA withhold its aid, the residents would probably sue the developer and the City, it being the entity who granted permission for the subdivision to be built. These lawsuits could be prohibitively expensive. This scenario would be disastrous for St. Helena. But why should the city even allow itself this level of exposure when a valid reason exits for denying the project: a reason that even the state of California must support. In reality, the city lacks the infrastructure on the East side of St. Helena to safely and expeditiously evacuate even existing residents in a catastrophic emergency. In the case of a severe flood and levee failure, roads in the Hunter Project would probably be impassable, Starr might be affected, and use of the Pope Street bridge to access the Silverado trail, questionable at best.

If the city turns down the applicant on these grounds, and there are additional reasons that are almost as compelling, the applicant will most likely sue. But this exposure is far less than the multiple suits that would derive from not only a badly damaged subdivision, but also one in which lives could have been lost: the city could be found to have been derelict in its obligation to protect its residents.

Finally, it should be noted that I am not an attorney, simply a concerned resident. I am basing my opinion on common sense and logic. It is my belief that the city should not give this applicant the green light.

73-8 Cont.

73-9

73-10

73-11

73-12

73-13

Response to Letter 73
Isobel Luria
November 2, 2021

73-1 The comment states an opinion that the Hydrology, Water Quality, and Drainage section of the Draft EIR ignores the potentially adverse effects of climate change and dismisses the consequences of a catastrophic flood.

Please see Response to Comment 31-1.

73-2 The comment states the commenter's personal observation that the Proposed Project has been controversial and that the current City administration will be held responsible for their decisions.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

73-3 The comment explains the commenter's understanding of the history of acquisition of the Project site and construction of the levee.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 that provides information specific to the levee.

73-4 The comment states that the levee and adjacent floodwall protects much of the eastern side of the City.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 that provides information specific to the levee.

73-5 The comment states an opinion that the Draft EIR does not include a due diligence examination of the current condition of the levee.

The Project does not have an impact on the levee's effectiveness or on flood hazards for surrounding communities, either directly or indirectly. California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369* held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents" but they must analyze hazards the project

might risk exacerbating. Accordingly, comments regarding the levee, that will not be directly or indirectly impacted the Project, are outside the scope of CEQA review for this Project.

73-6 The comment asserts that the Draft EIR does not mention any contact to FEMA to ascertain whether residents will be able to obtain flood insurance and low interest flood mitigation loans.

As stated on page 3.9-8 of the Draft EIR, because the Project site is outside of a FEMA Special Flood Hazard Area (SFHA), no flood insurance would be required. However, because there remains residual risk of flooding from catastrophically large floods (such as a 500-year flood) or levee failures, residents in flood-prone areas, even if outside of a regulatory flood zone, have the option to purchase optional flood insurance. Additionally, please see Master Response 3 for more information about flood insurance.

73-7 The comment states an opinion that the country is experiencing more frequent extreme weather events resulting in a burden of claims to FEMA.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 3 for information about the role of FEMA.

73-8 The comment references a statement from FEMA which states that levees deteriorate over time and if failure or overtopping occurs, flood damage can be greater than if the levee had not been built. The comment goes on to suggest that since flood insurance is optional, the Project would not be fully insured against flood damage.

Please see Response to Comment 73-5 and also Master Response 3 regarding the levee and the need for flood insurance.

73-9 The comment disagrees with the Draft EIR conclusion that Project residents would have ample time to evacuate in the event of a flood. The comment also states that FEMA may refuse to pay for flood damage and repair because the Project was built close to an existing levee.

Please see Response to Comment 73-5. However, the Draft EIR states on page 3.9-12 that in the unlikely situation the levee is overtopped, Project residents would have ample warning to evacuate prior to flooding. The same existing measures implemented to respond to flood emergencies within the region would continue to be used and would serve to provide residents with the means to avoid personal harm in the event of a catastrophic flood. This includes flood watches, advisories, and warnings from the National Weather Service, reporting by local news outlets, announcements and communications via Integrated Public Alert and Warning System, text alerts, and other means of communication that would be increasingly

used in the event of a severe flood threat. Please see Master Response 3 for more information regarding flood protection and potential for levee failure.

73-10 The comment states an opinion that if FEMA withholds aid in the event of a flood event, Project residents would likely sue the Project applicant and the City.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 3 for more information regarding flood protection and the potential for levee failure.

73-11 The comment opines that the east side of the City lacks the infrastructure to evacuate residents in the event of an emergency.

Please refer to Master Response 1 regarding emergency evacuation plans.

73-12 The comment states an opinion that a lawsuit from the Project applicant in the event the City rejects the Project would cause less bad publicity than if the City were to be sued by residents.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

73-13 The comment states the commenter's opinion that the City should not approve the Proposed Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 74

HUNTER PROJECT – COMMENTS ON DEIR (11/3/21)
Isobel Luria – 1173 Starr Avenue

With the effects of "climate change" becoming more and more severe, the Hunter Project couldn't have come up at a worse time. The fires of 2017 and 2020 have made people all too aware that our lovely city, as well much of the Napa Valley, can suddenly turn into an inferno. Furthermore, the residents of Saint Helena are struggling with the effects of one of the most severe droughts on record. Additionally, while things are really dry now, at some point in the future, we will experience some really wet winters with even more severe storms and the Napa River will flood. If in the past, the "100 year" flood was the marker to which all floods were compared, we should accept the fact that a "200 year" flood is not unimaginable and prepare for such an event. It is in the light of this new reality that the Hunter Project DEIR should be scrutinized by our community. 74-1

The DEIR relies on vague, untested figures that when examined often seem ludicrous. While it is useful to quantify data, the methods employed must be able to withstand examination. It is difficult to comprehend why St. Helena is in such a hurry to approve this project. I do not have the technical expertise to comment on all the possible health and safety issues that could potentially arise because of this project, but this DEIR underestimates the Project's many negative impacts and offers few ways to mitigate them. I would simply urge the city to do its own due diligence and question the conclusions reached in this DEIR. 74-2

TRAFFIC AND CIRCULATION

The DEIR allows that there will be increased traffic caused by the additional cars the new residents of the HP will use. After a lengthy discussion of the local roadways, a description of the proposed extension of Starr Avenue and Adams Street, a rather low estimate of the number of cars that new residents will bring into our city, and a forecast of where the worst areas of congestion might be, the Report admits that, yes, there will be increased traffic as a result of this subdivision and that there is really no way to mitigate the effects this will have. 74-3

The DEIR arrives at an estimate of the number of individuals, who will live in the subdivision, and the number of cars they will use. It is always difficult to accurately predict the size of a new population and it is in the interest of developers to underestimate this to some extent. The DEIR fails to take into consideration of what happens to families as time goes by: they can increase in size: baby by baby. When children reach a certain age, especially in a valley such as ours, they want and need cars and parking. Those of us who live in the Meadowcreek subdivision are well aware of this phenomenon: parking in our neighborhood, especially overnight and early in the morning, can be so dense that there is barely room to put out garbage bins on collection day. This congestion is partly the result of inadequate parking at the Hunt Grove apartments located at the east end of Hunt Street. In planning for new subdivision, additional land must be set aside to satisfy future parking needs, especially in the area that contains the Affordable Housing units. 74-4 74-5

1

SAFETY

The proposed subdivision will necessitate a four-way intersection where Starr Avenue and Hunt Street meet. This is already a very dangerous intersection as cars going south on Hunt often fail to come to a full STOP before turning right on Starr. There are already a fair number of children in this neighborhood and residents have experienced some "close calls." The addition of more cars and more people exacerbate the potential for accidents. I disagree with the DEIR when they fail to even try to suggest a "mitigation." Clearly, one comes to my mind: don't permit the Applicant to build the subdivision in this location. 74-6

EMERGENCY EVACUATION

In the event of an emergency evacuation, it is clear from the location of the proposed subdivision that most vehicles will access Starr Avenue to reach Pope Street and thereby head either north or south as the situation dictates via either the Silverado Trail (hereafter called the Trail) or 29. Granted there is the possibility of following a circuitous route by driving west on Adams but that would not be the route of choice. In addition, the narrow Pope Street bridge is a very poor structure to handle evacuations. In the last two fires, the northern exits from the valley were blocked by the fire and everyone had to exit to the south. Last week, as a result, of the recent heavy rains a portion of the Silverado Trail had to be shut down. 74-7

I question why the City of St. Helena would consider granting approval of a new subdivision in the area described in the DEIR until the infrastructure has been improved and a reliable evacuation route created. The safety of the residents is at stake and even the State of California cannot question that. 74-8

WATER

In its analysis of Hydrology and Water Quality, (see DEIR 3.9-40 – 3.9-43) I believe that the DEIR reaches faulty conclusions about the HP's impact on ground water in the area by relying on vague or untested figures. In addition, it bases conclusions on weather history without taking into consideration the probability that, because of Climate Change, we will experience weather of record-breaking severity. The report makes statements like the following (DEIR section 3.9-10) "The Subbasin was found to exhibit stable groundwater levels, even despite a very dry 2020 water year…The long-term (1988-2020) annual change in storage for the subbasin is a decrease of 8,0945 AF following the very dry conditions of 2020 but still with water ranges generally experienced over the long term. " 74-9

The DEIR goes on to discuss (see Table 3.13-9) that the proposed landscaping for the subdivision, its outdoor water needs, will be "water neutral" because of a currently inoperable well on the property. This well has been tested and shown produce 350 GPM. The DEIR states that this output is adequate to supply the subdivision, which is projected to require 17.16 acre feet per year. Again, this figure is a questionable as the DEIR states that 185 trees are going to be planted and that there will be drought tolerant plantings between the trees. Young trees and plants need ample water to establish themselves. Furthermore, no allowance is made for the landscaping homeowners will plant in their private gardens. 74-10

2

The DEIR assumes that the annual draw down of water by the subdivision will not have much impact on the subbasin because future rainfall will recharge it. Unfortunately for the Hunter Project, St. Helena is experiencing the effects of a "mega drought" and has instituted Stage II water use restrictions." Furthermore, much of the area in the proposed subdivision will be covered by hardscape and buildings thus eliminating a big percentage of land currently available for direct recharging of ground water. While it is true that in very wet years ample run off from the hardscape will find its way into the storm drainage system, this is not the case in dry years. I disagree with the DEIR's conclusion that the construction of this development will not have a negative impact on ground water supplies. I doubt, given the reality of Climate Change, that its need for well water will not exceed the annual 0.9% it projects. (DEIR section 3.9.48)

74-11

The report, in its discussion on water (DEIR section 3.13-24.-.3.13-33), also underestimates the quantity of indoor water that future residents of the subdivision will purchase from the City of St. Helena: 17,752 gallons per day or 19.88 acre-feet per year. The figures on which the DEIR bases its conclusions are found in Table 3.13.10. While I understand that some "guesstimates" must be used for discussion purposes, these figures seem low and some sort of tests should be run to determine how to accurately measure water usage by individuals. For example, the DEIR states that the residents of the new subdivision will flush toilets 3 times per person per day. **Really?** Another understated usage concerns the future kitchen faucets. It is projected that each resident will briefly use this faucet 1 time daily. It would seem these people will neither drink nor prepare meals. But the biggest fallacy in logic is yet to come. To support its contention that the Hunter Project will achieve a Water Neutral status (a requirement of all new construction called for by the St. Helena 2019 General Plan EIR), the developers will be required to retrofit a certain percentage of existing homes and businesses with water saving devices. I assume that the water saved by this retrofitting is supposed to compensate for a portion of the future consumption of in-house water by the subdivision. Many homes and businesses in St. Helena have already had this sort of retrofit. Secondly, and more importantly, water usage in town has already been drastically reduced owing to stringent conservation regulations in place and backed up by penalties. Considering the conservation already taking place, it is difficult to imagine that retrofitting several hundred houses will result in much additional water being saved. Alternately, the developer offers to pay a fee to the city in lieu of the retrofit. In actuality, the HP will not be water-neutral, and the city lacks a stable enough water supply to allow this project to be built.

74-12

74-13

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Response to Letter 74
Isobel Luria

74-1 The comment states an opinion that due to climate change and extreme weather events, including a flood event, development of the Proposed Project is not recommended.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the Project. The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. However, please see also Master Response 3 regarding the protection provided by the Napa River levee in the event of a flood.

74-2 The comment states an opinion that the Draft EIR relies on untested data and underestimates the Project's potential impacts without providing adequate mitigation.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, the analysis in the Draft EIR relies on technical studies prepared for the Project as well as other substantial evidence required to determine any potential Project impacts. The comment is noted and forwarded to the decision makers for their consideration.

74-3 The commenter is concerned about traffic congestion increasing as a result of the Proposed Project.

The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles traveled (VMT), and potential impacts to transit, bicycle, and pedestrians. The comment does not identify any specific areas where the Draft EIR or analysis is inadequate; therefore, no further response is required. Please see also Response to Comment 36-2.

74-4 The comment states an opinion the Project's trip generation is inaccurate.

Trip generation estimates for the Project were provided in Section 3.14 of the Draft EIR. Estimates were calculated based upon trip rates provided in the Institute of Transportation Engineers' (ITE) Trip Generation, 10th Edition. In September 2021 the 11th Edition of the ITE manual was released. It does not change the Project's trip rates derived from the 10th Edition. Average trip generation rates represent weighted averages from studies conducted throughout the United States and Canada since 1980 that surveyed the identified use. Single-Family and multi-family land uses are based on surveys and weighted averages. Rates are not based on a specified

number of bedrooms or vehicles per household. The rates provided in the Draft EIR are based on accepted industry standards for this type of project.

74-5 The comment expresses the commenter's concern about lack of parking availability in the neighborhood.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements.

74-6 The comment expresses the commenter's concern regarding the effect the Proposed Project would have on pedestrian safety and vehicular collisions at the intersection of Starr Avenue and Hunt Avenue.

As stated in Section 3.14 of the Draft EIR, Starr Avenue and Hunt Avenue were analyzed in regard to vehicular collisions and overall safety along both roadways. The conclusion of the Draft EIR was that the Proposed Project would not increase hazards due to a geometric design feature or incompatible use that would contribute to an increase in collisions or create visual obstructions that would impede vehicles, bicyclists, and pedestrians from having safe access to and from the Project site. Additionally, vehicular collisions within the City were also analyzed within Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Therefore, no mitigation measures would be required.

74-7 The comment states the commenter's opposition to the Project and the effect on emergency access routes and evacuation in case of emergencies.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Section 3.14 of the Draft EIR analyzed emergency vehicle access in detail. For additional information regarding emergency vehicle access and evacuation, please see Master Response 1.

74-8 The commenter q asks why the City would approve the Project prior to improving the existing infrastructure and a reliable evacuation route is created.

Please see Master Response 1 regarding emergency evacuation.

74-9 The comment opines that the Hydrology and Water Quality section of the EIR is based on vague and untested information and does not consider extreme weather conditions caused by climate change. The commenter quotes a statement from page 3.9-10 of the EIR regarding groundwater levels.

Please see Response to Comments 14-9 through 14-17 and Master Response 2, regarding water supply.

74-10 The comment states an opinion outdoor water needs are not accurately portrayed in Table 3.13-9 of the Draft EIR because new trees and plants require a significant amount of water to get established, and homeowners will also require water for landscape irrigation.

Please see Responses to Comments14-9 through 14-17 and Master Response 2.

74-11 The comment states that the Draft EIR's conclusion on page 3.9-48 is inaccurate because climate change will likely cause the need for groundwater to exceed the projected figure of 0.9%.

Please see Responses to Comments 14-9 through 14-17 and Master Response 2.

74-12 The comment states an opinion that the discussion on pages 3.13-24 through 3.13-33 of the Draft EIR underestimates the quantity of indoor water that the Project will require and "tests" should be run to determine how to accurately measure water usage by Project residents.

Please see Responses to Comments14-9 through 14-17 and Master Response 2.

74-13 The comment states an opinion that retrofitting houses will not save enough water for the Project to be considered water neutral.

Please see Responses to Comments14-9 through 14-17 and Master Response 2.

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Comment Letter 75

From: Isobel Iuria <isobel.luria@gmail.com>
Sent: Monday, November 8, 2021 1:00 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Levee Maintenance

Hi Maya,

Still working away on the Hunter DEIR. Could I please get copies of the Levee Maintenance records. I haven't found them in any of the appendices. Thanks so much. 75-1

If the Planning Department doesn't have them, perhaps you could tell me whom I should contact.

Thanks so much.

Isobel
--
Isobel Luria
Isobel.luria@gmail.com
Mobile: 707-480-3983
Sent from my iPad

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Response to Letter 75
Isobel Luria
November 8, 2021

75-1 The commenter requests copies of the City's levee maintenance records.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The City posts levee maintenance records available to the public on the City's website here: https://www.cityofsthelena.org/publicworks/page/flood-control-and-river-restoration-project

Please refer to Master Response 3 for additional information specific to the levee.

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Comment Letter 76

HUNTER PROJECT – REVISED COMMENTS AND QUESTIONS ON DEIR (11/30/21)
Isobel Luria – 1173 Starr Avenue

With the effects of "climate change" becoming more and more severe, this is an inopportune time to consider approving the Hunter Project. The fires of 2017 and 2020 have made people all too aware that our lovely city, as well much of the Napa Valley, can suddenly turn into an inferno. Furthermore, the residents of Saint Helena are struggling with the effects of one of the most severe droughts on record. Additionally, while things are really dry now, in the future, we will experience some really wet winters with even more severe storms and the Napa River will flood. If in the past, the "100 year" flood was the marker to which all floods were compared, we should accept the fact that a "200 year" flood is not unimaginable and prepare for such an event. It is in the light of this new reality that the Hunter Project DEIR should be scrutinized by our community. 76-1

The DEIR relies on vague, untested figures that when examined often seem ludicrous. While it is useful to quantify data, the methods employed must be able to withstand examination. This is a very disappointing report that cavalierly dismisses impacts as insignificant when a mitigation is needed. 76-2

TRAFFIC AND CIRCULATION: PARKING

After describing local roadways including the proposed extension of Starr Avenue and Adams Street, discussing how to measure traffic impacts (DEIR 3.14-39) using Vehicle Miles Travelled (VMT), and identifying areas of future congestion, the DEIR concludes that, while the vehicles used by future residents of the Hunter Project will increase traffic, there is really no way to mitigate this situation. Even though the Project has good access to shopping, even though there will be bike routes and sidewalks, people living in a place like St. Helena tend to drive. 76-3

The DEIR estimates that 213 individuals will live in the subdivision. This number is based on the figure of 2.45 people per unit, which is the basis the City relies on for medium/high density zoning. Some people will own several cars. It is always difficult to accurately predict the size of a new population and it is in the interest of developers to underestimate this to some extent. The DEIR fails to take into consideration what happens to families as time goes by: they tend to increase in size, baby by baby. When children reach a certain age, especially in a valley such as ours, they want and need cars and parking. **While the number of parking spaces and garages described in the DEIR may be sufficient at first, it will not accommodate future needs.** Those of us who live in the neighboring Meadowcreek subdivision are well aware of this phenomenon. Parking in our neighborhood, especially overnight and early in the morning, can be so dense that there is barely room to put out garbage bins on collection day. This congestion is partly the result of inadequate parking at the Hunt Grove apartments located at the east end of Hunt Street. 76-4

-1-

Isobel Luria cont'd

Question 1. What can the Applicant do to insure that the new subdivision doesn't exacerbate in the future the parking problem we already have in our neighborhood? 76-5

TRAFFIC AND CIRCULATION: SAFETY

The proposed subdivision will necessitate a four-way intersection where Starr Avenue and Hunt Street meet. (DEIR 3.14-47). Currently, this is a somewhat hazardous intersection for residents of the neighborhood, particularly children, and a fair number of people have experienced "close calls." Additionally, the DEIR notes that an extended Starr to an extended Adams could be used by drivers as an alternate route bypassing Main Street. This will not only increase traffic at this location but also the potential for accidents. 76-6 76-7

Question 2. What could be done to mitigate this impact?

EMERGENCY EVACUATION

The DEIR doesn't address the fact that there is not an efficient means for evacuating the residents of St. Helena in an emergency even though adding more population impacts this situation. It is clear from the location of the proposed subdivision that most vehicles will travel south on Starr Avenue to reach Pope Street and then head north or south as the situation dictates via either the Silverado Trail or Route 29. Granted there is the possibility of following a circuitous route by driving west on Adams but that would not be the route of choice. The narrow Pope Street bridge is a very poor structure to handle evacuations. In the last two fires, the northern exits from the valley were blocked by fires and everyone had to exit to the south. Last week, as a result of the recent heavy rains, a portion of the Silverado Trail had to be shut down. I question why the City of St. Helena would consider granting approval to a new subdivision in the area described in the DEIR until infrastructure has been updated to allow for a more efficient evacuation. 76-8

Question 3. What can be done to improve the Emergency Evacuation Routes out of St. Helena?

WILDLAND FIRE HAZARDS

An example of the callous attitude found in this DEIR occurs in its brief discussion and dismissal of Wildland Fire Hazards. (DEIR 3.8-5) While speaking about the September 2020 Glass Fire the statement is made that "The hills visible from the Project site experienced fire damage." It makes no mention of the fact that part of the area where the subdivision will be constructed, also burned in that fire. The fact that the Project site is in a Non Very High fire Hazard Safety Zone did not seem to protect it! 76-9

-2-

Isobel Luria cont'd

Question 4. What mitigations are planned to protect the Project area from the dangers of Wildfires? 76-9 Cont.

HYDROLOGY AND WATER QUALITY

In its analysis of Hydrology and Water Quality, (see DEIR 3.9-40 – 3.9-43) the DEIR reaches faulty conclusions about the Hunter Project's impact on ground water in the area. In addition, it bases conclusions on weather history without taking into consideration the probability that, because of Climate Change, we will experience weather of record-breaking severity. The report makes statements like the following (DEIR section 3.9-10) "The Subbasin was found to exhibit stable groundwater levels, even despite a very dry 2020 water year...The long-term (1988-2020) annual change in storage for the subbasin is a decrease of 8,0945 AF following the very dry conditions of 2020 but still with water ranges generally experienced over the long term. " 76-10

The DEIR goes on to discuss (see Table 3.13-9) that the proposed landscaping for the subdivision, its **outdoor water needs**, will be "water neutral" because of a currently inoperable well on the property. The well was tested for one 24 hour period and produced 350 GPM. The DEIR states that this output is adequate to supply the landscaping water requirements for the subdivision, which is projected to use 17.16 acre feet per year, without noticeably affecting levels in the Napa River because it will draw water from deep in the aquifer. I take exception to this statement as the Applicant expects to plant 185 trees with drought tolerant plantings between the them. Young trees and plants need ample water to establish themselves. Furthermore, **no allowance is made for the outdoor water needs of the 51 privately owned lots.** The applicant assumes that future rainfall will recharge the subbasin as it has in the past when the area served as a vineyard. Unfortunately, St. Helena is experiencing the effects of a "megadrought'' of unknown duration. In addition, much of the proposed subdivision will be covered by buildings and "hardscape" thus eliminating a large percentage of land currently available for direct recharging of ground water. I question the DEIR's conclusion that the irrigation of this development will not have a negative impact on the local subbasin. 76-11

To assume, based on one 24 hour well test, that a subdivision the size of the Hunter Project will be "water neutral" as far as its landscape needs are concerned is questionable. To go even further and state that the project's irrigation will have no impact on the Subbasin or nearby Napa River without further testing is unconscionable. 76-12 76-13

Question 5. From what source will the landscaping on the privately owned lots be irrigated and how much additional water will that require? 76-14

Question 6. What additional testing should be required of the Applicant to determine more accurately the actual impact on the ground water subbasin that the well on the Project will draw from. 76-15

The report, in its discussion on water (DEIR section 3.13-24.-.3.13-33), also underestimates the quantity of **indoor water** future residents of the subdivision will purchase from the City of St. Helena: 17,752 gallons per day or 19.88 acre-feet per year. The figures on which the DEIR 76-16

-3-

Isobel Luria cont'd

bases its conclusions are found in Table 3.13.10. (**Again I point out that these figures do not include any water allowance for private yards.**)While I understand that some "guesstimates" must be used for discussion purposes, these figures seem low and some sort of tests should be run to determine how to accurately measure water usage by individuals. For example, the DEIR states that the residents of the new subdivision will flush toilets 3 times per person per day. Another understated usage concerns the future kitchen faucets. It is projected that each resident will briefly use this faucet 1 time daily. It would seem these people will neither drink nor prepare meals. But the biggest fallacy in logic is yet to come. To support its contention that the Hunter Project will achieve a Water Neutral status (a requirement of all new construction called for by the St. Helena 2019 General Plan EIR), the developers will be required to retrofit a certain percentage of existing homes and businesses with water saving devices. I assume that the water saved by this retrofitting is supposed to compensate for a portion of the future consumption of in-house water by the subdivision. Many homes and businesses in St. Helena have already had this sort of retrofit. Secondly, and more importantly, water usage in town has already been drastically reduced owing to stringent conservation regulations in place and backed up by penalties. Considering the conservation already taking place, it is difficult to imagine that retrofitting several hundred houses will result in much additional water being saved. Alternately, the developer offers to pay a fee to the city in lieu of the retrofit. How will paying a fee render the subdivision "water neutral?"

76-16 Cont.

76-17

Question 7. What is a better method to determine how much indoor water will actually be consumed by future residents?

76-18

Question 8. Once a reasonable projection is made, how will that level of usage impact the city and its residents, who are already under Stage II water restrictions?

76-19

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Response to Letter 76
Isobel Luria

76-1 The comment states an opinion the Project should not be approved due to the existing drought and potential for increased flooding as a result of climate change.

The comment does not raise does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 for information regarding climate change and the status of the Napa River levee.

76-2 The comment states an opinion that the Draft EIR relies on vague and untested data that dismisses Project impacts and the need for mitigation.

The comment does not raise does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. The comment is noted and forwarded to the decision makers for their consideration.

76-3 The comment states an opinion the Project's trip generation estimates are inaccurate and underestimated because families increase in size the number of cars can increase.

Please see Response to Comment 74-4.

76-4 The comment states an opinion that parking in the neighborhood is over capacity.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements. .

76-5 The comment asks what the Proposed Project would do to lessen parking capacity concerns.

Please see Response to Comment 76-4.

76-6 The comment expresses the commenter's concern about the safety of the Starr Avenue and Hunt Avenue intersection.

Please see Response to Comment 59-3.

76-7 The comment states an opinion that an extension of Starr Avenue to Adams Street could increase traffic and the potential for accidents and asks what can be done to mitigate this impact.

Please see Response to Comment 59-3.

76-8 The comment states an opinion that the Draft EIR does not consider that the City does not have efficient means for emergency evacuation, which would be further impacted by the Project and asks what can be done to improve emergency evacuation.

Section 3.14 of the Draft EIR analyzed emergency vehicle access in detail. For additional information regarding emergency vehicle access and evacuation, please see Master Response 1.

76-9 The comment states an opinion that the Draft EIR fails to note that a part of the Project site was burned in the September 2020 Glass Fire. The commenter asks what mitigation measures are planned to protect the Project area from wildfires.

The Draft EIR notes on page 3.8-5 that the hills visible from the Project site experienced fire damage. The Project site did not experience any fire damage from the 2020 Glass Fire. The discussion under Impact 3.8-4 on page 3.8- 21 describes how best management practices, BAAQMD regulations, and properly irrigated landscapes would reduce fire risk.

76-10 The comment states an opinion that the Hydrology and Water Quality analysis reaches faulty conclusions about the Project's impact on groundwater because it does not consider the effects of climate change.

Please see Response to Comments 35-4 through 35-6.

76-11 The comment states an opinion that outdoor water needs are not accurately portrayed in Table 3.13-9 of the Draft EIR because new trees and plants require significant amounts of water to get established and landscape irrigation for the new homes is not included.

Please see Responses to Comments14-9 through 14-17 and Master Response 2.

76-12 The comment states an opinion that because the City is experiencing a severe drought and the Project would increase impervious surface area, there may be a negative impact on the local groundwater subbasin.

Please see Master Response 2 and Responses to Comments 35-4 through 35-6.

76-13 The comment suggests that the Draft EIR should not assume the Project would be water neutral based on one 24-hour well test. The comment also states an opinion

that it is not reasonable to conclude that Project's irrigation would have no impact on the groundwater subbasin or Napa River without further testing.

Please see Responses to Comments 14-9 through 14-17, 57-5 and Master Response 2.

76-14 The commenter asks how much additional water would be required to irrigate privately owned lots and where the water will come from.

Please see Response to Comments 14-9 through 14-17 and Master Response 2.

76-15 The commenter asks what additional testing should be required of the Project applicant to determine a more accurate impact on the groundwater subbasin.

Please see Responses to Comments 35-4 through 35-6, 57-5 and Master Response 2.

76-16 The comment states an opinion the discussion on pages 3.13-24 through 3.13-33 of the Draft EIR underestimates the quantity of indoor water that future residents of the Project will use, including landscape irrigation. The comment goes on to state that tests should be done to determine how to accurately measure water usage by individuals.

Please see Responses to Comments 14-9 through 14-17 and Master Response 2.

76-17 The comment states an opinion that retrofitting houses will not save enough water for the Project to be considered water neutral. The commenter asks how the in-lieu fee would satisfy the water neutral condition.

Please see Responses to Comments 14-9 through 14-17 and Master Response 2.

76-18 The commenter asks if there is a better method to determine the indoor water usage of future residents.

Please see Responses to Comments 14-9 through 14-17 and Master Response 2.

76-19 The commenter asks how the Project's water demand would impact the City and its residents.

Please see Responses to Comments 14-9 through 14-17 and Master Response 2.

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Comment Letter 77

To: Maya DeRosa, St Helena City Planner November 7, 2021

Re: Hunter Project -- Citizen Comments

Dear Ms. DeRosa,

We have been St Helena residents for nearly 50 years now and have watched things happen that could never be predicted back those oh so many years ago. This proposed Hunter housing project is just one of those potential events that if approved will someday be looked back upon as "How could they have ever let something like that be built where it is?" 77-1

The Vineyard Valley Mobile Home Park is obviously sited in a location where homes or mobile homes should never have been allowed. The occurrence of two 100 Year Floods in that park within nine years of one another attest to the allowance of a project that would flood and cause such unfathomable harm and devastation.

Looking back to those early 1970s, fear of flooding was a valid concern. That low lying property adjacent to the Napa River and Sulphur Creek had been know to be under water many times in recorded history. Only because of the evolving engineering talent of that time and the presumed wisdom of those who can make such decisions, was the VVMHP allowed to be built. Yes, it was built in a flood plain, but Federal Flood Insurance was available to residents should something go wrong and the park go under in a flood. That one band-aid alone was deemed to be acceptable should a flood occur.

It was only because of the modern-day engineering talent of that time that a Flood Wall (I.e. heavy duty wooden fence) was designed and approved as a deterrent to the possibility of flooding to the park. The northern (actually western) edge of the park was required to have a dirt berm (levee) of about 24 inches above grade, and placed into that dirt levee were 4x6 wooden posts upon which the approximately 4x12 lateral boards were placed to become this "Flood Wall" that was supposed to keep a wall (actually a lake) of water from inundating the mobile homes on the inside of the park. Looking back, it seems preposterous that such a scheme could be created let alone approved for such a foreboding potential flood. But approved it was. 77-2

In 1986, at the time of the first 100 Year Flood at that location, I was on scene with other volunteers assisting the California Division of Forestry (precursor to Cal Fire) crew members as we filled sandbags and dropped them over the Flood Wall to rest on the opposite side of the so-called levee, two feet below the water level. It became obvious very soon that there was a very serious problem that had never been included into the original engineering plan for this levee and Flood Wall. This oversight was the failure to understand that gophers, moles and voles would permeate this dirt levee, and as the pressure from the flood waters on the other side began to penetrate their subterranean runs, those channels would burst through to our side of the levee and get larger and larger as they rapidly eroded. We even tried to sandbag "our side" of that Wall/levee, but that did not work. Soon the mobile home park streets were filling with water and our efforts shifted to evacuating the hundreds of older residents of VVMHP. The Water Wall had failed, and the park was submerged.

Once the flood waters had subsided and the flooded mobile homes were being removed and replaced with new ones, a solution to any possible future flooding had to be designed. Engineers immediately removed the berm/levee concept from the newly designed flood barrier. The new Flood Wall was to be a cinder block wall with cinder block support posts. The wall was to be higher than

before, and subject to FEMA and National Flood Insurance requirements. Once those requirements were determined as adequate for any future possibility of a similar or even larger flood, the owner of the VVMHP insisted upon paying for the height to be even one cinder block higher than engineers required as an added safety measure. And so, it was to be. Another cinder block was added to the height.

It seemed to be a win-win situation for most everyone. There were not only updated engineering regulations being adhered to, but the project was so convincing that many of the insurance companies who had paid millions of dollars to care for their VVMHP customers were even willing to continue insuring them as well as accepting new applicants.

And now we come to 1995 when yet another 100 Year Flood arose and put the newly designed and engineered Flood Wall to the test – a "test" that failed.

With flood waters having destroyed both of the prior "engineering marvels" designed to protect Vineyard Valley, a more grandiose project had to be created. Hence the multi-million-dollar flood control project currently in place with a levee to supposedly protect the VVMHP and adjacent homes.

77-2 Cont.

History reveals the eternal battle between technology and nature, especially where levees are concerned. While the 2005 drama of Hurricane Katrina in New Orleans and the collapse of earthen and concrete levees that were engineered to protect that area are still fresh in our minds, each year more and more levees of lesser fame have failed with catastrophic results as well.

77-3

Simply speaking, we (St Helena) cannot be lulled into complacency to think that our levee between the eastern end of Adams Street and the Napa River can be relied upon to protect property behind it. As such, it is folly to rely upon this levee to protect the proposed Hunter Project in the future. While there are many obvious reasons why levees fail, one of those causes is unwanted vegetation being allowed to grow upon or alongside a levee. Our St Helena levee is a good example of just such a problem with the large area of Coyote Brush that has been allowed to take root there.

77-4

Just as we were not able to rely upon the two prior flood control measures mentioned earlier, it is only logical and reasonable that we cannot rest assured that this new engineering creation of a levee will preclude yet another failure and subsequent damage to something like the Hunter Project.

While there is no justification for ignoring the inevitability of levee failure, there is only one of two solutions to this proposal. The first is to deny this project based upon the potential for failure, and the second would be to approve the project subject to the applicant assuming full responsibility and liability in the event of a levee breach or any other such inundation of that project area.

77-5

Sincerely,

Norm Manzer
103 Camino Vista
St Helena, CA 94574

Response to Letter 77
Norm Manzer
November 7, 2021

77-1 The commenter provides their history as City residents and states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

77-2 The comment provides their history of previous flood events in the City, particularly at the Vineyard Valley Mobile Home Park. The comment also describes their understanding of several previous engineering projects to control and manage flooding in the Project area.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 that addresses flooding concerns.

77-3 The comment provides a general statement about flood events and levee failure and provides Hurricane Katrina as an example.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 that addresses flooding concerns.

77-4 The comment states an opinion that the Napa River levee should not be relied on to protect Project residents and references previous flood events discussed in Comment 77-2.

Please see Response to Comment 73-5. Please also see Master Response 3 addresses issues associated with flooding and the levee.

77-5 The comment state opposition to the Project and requests the City not approve the Project based on the potential for levee failure and requests that the Project applicant be liable for potential levee failure should the Project be approved.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Response to Comment 73-5 and Master Response 3 that addresses concerns specific to the levee.

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Comment Letter 78

-----Original Message-----
From: marks.marybeth@gmail.com <marks.marybeth@gmail.com>
Sent: Saturday, October 30, 2021 6:30 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision Project

Hi Maya

I am writing to let you know that my husband and I are very much against the proposed Hunter subdivision going forward. 78-1

We plan on joining the meeting on Nov 2nd to learn more as we're certain there have been impact studies completed. 78-2

This high density housing will go towards accelerating the depletion of our already overtaxed resources, especially our water. 78-3

Thank you,

Beth and David Marks
945 Brown St
St Helena CA 94574

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Response to Letter 78
Beth and David Marks
October 30, 2021

78-1 The comment states opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

78-2 The comment states that it is the commenters' plan to attend future Project hearings.

The comment does not identify any specific areas where the EIR or analysis is inadequate. Therefore, no response is required; the comment is noted and forwarded to the decision-makers for their consideration.

78-3 The comment states an opinion that "high density housing" (the commenter's term) will further impact limited resources, including water.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. To clarify, the Project is proposing residential development consistent with the "medium density" designation of the St Helena General Plan. Please see also Master Response 2 regarding water supply.

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Comment Letter 79

From: Tracy McBride, email: tracymcbride22@gmail.com
To: City Planners/Staff

Subject: Hunter Project Draft EIR is Inadequate and Incomplete

11/28/21

I support more housing, more diversity in St. Helena, and property owner rights. But I strongly feel the proposal for 87 units DEIR is significantly lacking in information and proposes inaccurate information. 79-1

The question is, why does no one in town support this project? Or alternatively, why isn't the project so compelling, that it generates support? 79-2

Notably:

1. **SAFETY & Circulation**: The circulation via Starr Ave, Adams, to the Silverado Trail must be addressed. It is critical the Adams eastern entrance to St Helena is now planned and budgeted. Even without the Hunter project, the Adams St extension needs to connect to the Silverado Trail. We are at a tipping point: build the bridge. Pope and Pratt are not seismically sound bridges, nor can these historic bridges serve adequately for the next 100 years. Adams between Railroad and the eastern terminus was always intended to be a major artery street connecting to Silverado trail (as shown by the width of Adams near Railroad & Library Lane). It is time to bite the bullet and figure out how to get a MODERN, seismically safe, truck compliant bridge between Deer Park and Zinfandel Lane, crossing the Napa River. By adding "conservatively" 213 residents to St. Helena, using as example 160 cars (1.84 car/unit @ 14' per car) translates to a line of cars about ½ mile long. It is imperative this new neighborhood and all residents have a means of evacuation during a fire, seismic or other hazardous event. 79-3

   The Starr Ave extension (~60') appears to be narrower than the Adams St extension (~65') – these are important residential streets to accommodate larger than average traffic, and sound mitigation measures, visual enhancement measures (ie larger verges, bulb-out parking/cross walks, median strips), bike lanes, should be implemented. 79-4

   Underground wires to prevent fire hazards should be implemented; this is the bordering the urban wildland interface, and all fire mitigation measures should be detailed and modeled for the community. 79-5

   Per the St Helena General plan quoted in this report "Policy 4.7.3: The new eastern entry via the Adams extension" needs to be factored into the long-term planning for the Adams/Silverado Trail connection. 79-6

The DEIR does not address additional financial impacts to the residents of St. Helena by completing the Adams St extension to Silverado Trail.

The DEIR does not account for the cost of a traffic light at Adams and Silverado Trail.

79-6 Cont.

The City of St. Helena is already routing TRUCK traffic down residential streets: Pope to Edwards to Hunt for the 6-week closure of Hunt/Hwy 29. ADAMS Street is the logical and right location for **TRUCK and thoroughfare traffic**. Edwards is no wider than Adams at Adams/Hwy29, but nonetheless, the City of St. Helena is routing traffic on a narrow tree-lined street (with portions of low wires and low branches, and the sweet "oak tree" in the street block). It is past time to take responsibility for safe, planned, attractive thoroughfare traffic.

79-7

The extension of Adams St for this project does not adequately show how 18-wheeler trucks will navigate the "kink" in the road which is the western starting point of this project. This will be the main eastern entrance to St. Helena – it needs to be "beautified" with tree-lined verges and ideally a tree-lined median, bike lanes, and extra buffer between the street and the residences for separation of people and traffic. Now is the time to rectify and plan for this, not make due with 100-year old streets and retrofit them.

79-8

We need 2 WAYS OUT of this valley. To not act on this is irresponsible and a lawsuit waiting to happen when lives could be jeopardized in an emergency.

79-9

2. **The water mitigation measures are completely inadequate.** Providing the cost of 333 bathroom faucets, toilets, sink faucets, & shower heads to the city WILL NOT mitigate the water impact from this project. IF this was the case, the citizens of St. Helena would gladly have paid this ONE-TIME cost to mitigate our water woes by now.

79-10

In fact, does this mean that I can pay $7K/residence and not have water rationing anymore because I've paid an in-lieu fee to the city? This is absurd. **The project needs to pay the true cost of added water consumption, instead of a fake fee to pretend it generates more water. <u>The project must pay for new infrastructure to generate more water for this development.</u>**

79-11

Hunter Subdivision Water Neutrality Calculations, Appendix J, state the home and multi-units will use 17,752 gallons per day / 508 persons = 34.9 Gallons per person per day. 34.9 gallons PER PERSON DAY is completely inadequate to project for the water usage. Do they never wash the dog, wash the car, have a guest, fill a kiddie pool?

79-12

There is a disconnect in the DEIR stating in table 5-1 the need for **15,509,215** gallons per year (Gallons per year is a figure most citizens will understand vs acre feet/year) and the

79-13

17,752 gal/day or **6,479,480** gal/year in the Appendix J. This is a shortfall of 9M+ gallons/year. 79-13 Cont.

The Appendix J is a broad brush, inadequate analysis of the water impact. It is simply a calculation of the cost of water fixtures for an in-lieu fee, and proposing that the citizens of St Helena do MORE to save water so the developer can build out his property. **Many citizens of St Helena have been saving water since the 1970's drought! There is no more water to save in the households.** 79-14

The Appendix J does not account for the ADU usage; it only accounts for 51 homes @ 8 persons/ 4 bed home and 25 multi-unit homes at 4 persons/2 bedroom unit. 79-15

"The per capita water use for St. Helena in 2015 is approximately 220 gallons/day" per DEIR. Right now, the per capita is <65 gallons per person day. 79-16

There are few if any lawns in St Helena (certainly no green lawns now). Schools and parks have different water rules than residents, so water saving here is not going to benefit residents in my opinion. Lawns are completely inappropriate for the landscape design in this project as stated in the DEIR. 79-17

There is no data to support there still exists any non-conserving water fixtures in St Helena. 79-18

The City of St. Helena residents already pay very very high water rates. **This project DEIR does not address potential future additional costs to residents for water rate increases due to poor planning for new water resources, especially those on a fixed income.** 79-19

This project proposes an outdated schematic for single family homes and low-income apartments, when it should be proposing high-energy efficient housing, probably multi-story, with an elevator, to serve both elderly and persons with disabilities, with a native community garden/park with extremely low water needs, and compact private outdoor space, which will further reduce water needs. 79-20

3. **St. Helena does not need more segregated low-income housing.** The developer has a blank slate, and instead is using an outdated ideology for housing. Grouping multi-family units in one location perpetuates the history of segregated housing which is now recognized as having a huge impact on equity, perception of real estate value, and is not a forward-thinking design of inclusivity, integration of housing types.

   The site of the Hunter multi-housing units puts it adjacent to the existing multi-housing units on Monte Vista. The subtext is clear. Put the low-income housing next to the existing apartments—bunch the multi-units low/lower-income housing together because no one wants to look at them or treat them like equal citizens. **This is a stigma** 79-21

for this neighborhood and the City east of the railroad which bears by far, the burden of multi-family housing. This is not a design of inclusivity. The DEIR does not address the impact on neighborhood perceptions by building easily identifiable "low income housing." The low-income housing should look the same as all the other housing in the project, and make efforts to integrate with the adjoining existing housing. This has been successfully done in many communities, where the low-income housing looks just like all the other housing in the neighborhood. 79-21 Cont. 79-22

The low-income housing needs to include homes for purchase, not only rentals. This will be regulated housing and will not appreciate the same as market-rate, but it will allow owners the opportunity for pride of ownership, tax benefits, and further diversify St. Helena. 79-23

The DEIR does not account for the added cost of administering the low-income housing; a trust fund needs to be established. 79-24

The schematic housing plan has rigid housing types: Single family homes, likely 2-level, some with ADUs, and duplex or apartment attached multi-unit 2-bedroom low-income homes. If there were more attached homes, both conservation of land and energy is achieved. 3 stories need to be considered. Elevator access needs to be considered for a project of this size. 79-25

The ADU schematics are lacking in the site plan. Where are they going? To truly make the ADU affordable, there should be site condos constructed by the developer to increase the range of housing price, with supporting site-condo HOA docs provided at the outset. 79-26

There is no recognition of housing for persons with mobility impairments. Our land is too valuable to put all the ADA housing on the street level, and multi-level housing with elevator(s) need to be created. 79-27

The HOA information is lacking in the DEIR, and when there is a flood, or serious project impairment, what bond is placed by the developer? If the HOA does not have financial reserves/stability, how does this affect the low-income housing and the development? 79-28

There is no information in the DEIR explaining how the homes will be available for VA loans, FHA loans, or help to first time home-buyers. 79-29

The DEIR does not address how it will serve very low, low, moderate, and market rate homes specifically, and how many bedrooms/units will each have. There needs to be equity in distribution here, and the "low-income" housing can not only be 2-bedroom residences. 79-30

Additionally:

- There are no public parks affiliated with this project, and there should be both parks and improvement to the river trail. There is no analysis in the DEIR of park's needs. 79-31
- At the public meeting, a resident commented there are important artifacts of native people at this site. I can attest that I have personally seen native artifacts at this site when I walked this area for hours at a time as a child. There is no recognition or addressing of this in the DEIR. This is offensive and a huge oversight. 79-32
- The DEIR is labeled reduced and/or optimized, which degrades the quality of the file. The full file should be available for review. Case in point, Figure 2.1, Regional Location, should be able to zoom in 200%+ to clearly identify adjoining parcels. Zooming in shows a fuzzy image. Figure 2-2 & 2-3 project site photographs are faded, and poor resolution, do not adequately show interface with adjacent properties. 79-33
- On figure 2-4, Single family homeowners names are identified. However, the individuals who live at Hunt's Grove, are not identified on the map. There are human beings who live at Hunt's Grove and Monte Vista, and just because they are not property owners, their presence should not be overlooked. At a minimum, the number of units showing bed/bath count in the multi units should be displayed, to indicate the direct impact to Hunts Grove and other adjacent parcels. The Vineyard Valley owners are also not identified. Size and adjoining agricultural parcels should be identified to the north of the project. # Bedrooms and # of residences should be identified on the site maps. 79-34
- The concept to extend Starr Ave to Fulton should be noted here as years from now, this is a direct possibility, and part of safety/evacuation planning. 79-35
- The Adams Street at a minimum should have bioswales to receive water to replenish the ground water, vs dumping rain water to the sewer infrastructure. 79-36
- Page 2-11: Mt. St. Helena is a significant view. It is notable and similar to views of Mt. Tamalpais, Mt Diablo. Vineyards are a significant view in the City limits. If need be the CITY needs to designate views of Mt St Helena as significant. 79-37
- Even if "The Project site is now designated Zone X, which FEMA identifies as an area with a moderate to low risk of flooding due to a levee failure and is considered protected from a 100-year flood event," the project needs to address the impact during a 100 year flood event. Also, what foundations will be used on top of the added fill at this project site and will prospective home buyers be notified their homes are built on fill? What is the height of the foundations and first floors to absorb a 100 year flood? Surely these homes are built to last 100 years. **Will these owners be required to buy flood insurance? How will this impact the financing available to purchase these homes?** 79-38 79-39 79-40
- The 2019 General Plan designates this area a medium green, "agriculture." I'm not seeing on the 2019 General plan where this project site is designated medium density residential. The DEIR should show the General Plan designation, and it should be linked in the report for ease of location, not buried in an appendix that one has to sift through to find. 2019 General plan showing agriculture at this site: 79-41



- The DEIR states the HOA would oversee street lights and public landscaping. This is confusing and inadequate. There is minimal public landscaping, and there should be a park, verges with trees, a walking path to the Napa River. Why would the HOA service the streetlights on a city street? Is it a private street, and if so the HOA needs to pay for full street maintenance, the common sewer line and underground utilities. 79-42
- There is no % for the arts this project. A project of this size needs to contribute to the arts, culture and history of our community. Funds for a permanent City arts project must be considered. 79-43

I expect our city and each council member, each commission member to express their opinion on this project. 79-44

I am disappointed in the level of communications from the City to outreach to citizens for comments, and to make it easy for citizens to comment on this project. 79-45

Thank you for your serious consideration.

Tracy McBride, 510-517-6202, tracymcbride22@gmail.com

Response to Letter 79
Tracy McBride
November 28, 2021

79-1 The commenter states their support for more housing in the City but opines that the Draft EIR includes inaccurate information.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

79-2 The commenter asks, "... why does no one in town support this project?"

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

79-3 The commenter calls for the extension of Adams Street to connect to the Silverado Trail and for the extension to be suitable for trucks. The comment also states an opinion that emergency evacuation would be affected by the Proposed Project.

The Project does not include the future expansion of Adams Street connecting to Silverado Trail. This is a separate City project and is not required for this Project. The comment is noted and forwarded to the decision makers for their consideration. For additional information regarding emergency vehicle access and evacuation, please see Master Response 1.

79-4 The comment states an opinion that the size of the Starr Avenue extension is narrower than the Adams Street roadway extension and that these roadways are important to the neighborhood since they accommodate many uses.

Section 3.14 of the Draft EIR describes the extension of both Starr Avenue and Adams Street. Both roadways would be constructed consistent with City street standards and would accommodate emergency service vehicles, and maintain accessibility for pedestrians and bicyclists, according to the City's street design standards.

79-5 The comment states an opinion that overhead electrical lines should be undergrounded to prevent fire hazards.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. The City will require, per policy, that all utilities in the Project be placed underground.

79-6 The comment states an opinion that the Draft EIR does not address financial impacts to City residents in order to complete the Adams Street extension to Silverado Trail.

The extension of Adams Street to Silverado Trail would require further study and approval by the City and is not required for this Project. Additionally, CEQA does not require a discussion of financial impacts because they are not considered an impact to the environment.

79-7 The comment states the commenter's observation that truck traffic in the neighborhood is using residential streets currently and opines that the Project would worsen truck traffic.

The Proposed Project is not expected to generate any additional truck traffic other than the temporary truck traffic as a result of Project construction. The City's Municipal Code, Chapter 10.36, defines the City's truck traffic routes that apply to heavy trucks in general.

79-8 The comment states an opinion that the extension of Adams Street would not be suitable for large trucks and that both Starr Avenue and Adams Street should be redesigned.

Please see Responses to Comments 79-4 and 79-7.

79-9 The comment states an opinion that there needs to be an additional route into and out of the City.

The comment does not identify any specific areas where the EIR or analysis is inadequate. Therefore, no response is required; the comment is noted and forwarded to the decision-makers for their consideration. However, please see Master Response 1 regarding emergency evacuation routes.

79-10 The comment states an opinion that faucet, shower head, and toilet retrofits would not mitigate the water impact from the Project.

Please see Master Response 2.

79-11 The comment states an opinion that the Project needs to pay the true cost of added water consumption, including new infrastructure, instead of a "fake" in-lieu fee.

Please see Master Response 2.

79-12 The comment states an opinion that the calculations in Appendix J which state an estimate of 34.9 gallons of water per person per day is inadequate.

Please see Master Response 2.

79-13 The comment states an opinion that there is an inconsistency between Table 5-1 in the Draft EIR which states the need for 15,509,215 gallons of water per year, versus the 6,479,480 gallons per year stated in Appendix J.

Please see Master Response 2.

79-14 The comment states an opinion that Appendix J contains an inadequate analysis of Project water impacts and is only used to calculate the cost of water fixtures for an in-lieu fee. The commenter states that households are unable to save more water than they are currently.

Please see Master Response 2.

79-15 The comment states an opinion that Appendix J does not account for the ADUs included in the Project.

Please see Master Response 2.

79-16 The comment states, without providing support, that per capita water use in the City is around 65 gallons per person per day, which is inconsistent with the Draft EIR statement that water use in 2015 was approximately 220 gallons per day.

Please see Master Response 2. Without a source for the "<65 gallons per person per day" figure, no additional response can be provided.

79-17 The comment states an opinion that lawns are inappropriate for landscape design.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-18 The comment states an opinion there is no data to support that there are any non-conserving water fixtures still present in the City.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2.

79-19 The comment states an opinion that the Draft EIR does not address the additional costs to City residents for water rate increases.

CEQA does not require a discussion of financial impacts as they are not considered impacts to the environment; Therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

79-20 The comment states an opinion that the Project plans are outdated and should instead include multi-story, high-energy efficient housing with an elevator, native community garden, and compact private outdoor space.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-21 The comment states an opinion that the City should not segregate low-income housing from the rest of the neighborhood and that the Project would perpetuate housing segregation.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-22 The comment states an opinion that the Draft EIR does not address the impact on neighborhood perceptions on real estate value resulting from “low-income” housing. The commenter suggests that low-income housing should look the same as other housing in the neighborhood.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required However, the comment is noted and forwarded to the decision makers for their consideration.

79-23 The comment states an opinion that low-income housing should include homes for purchase.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-24 The comment states an opinion that the Draft EIR does not account for the added cost of administering low-income housing.

CEQA does not require a discussion of financial impacts; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-25 The comment states an opinion that the addition of more attached homes would conserve land and energy and suggests that buildings should be 3 stories tall with elevators.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-26 The comment asks where ADUs are proposed and suggests that condominiums should be constructed to increase the range of housing prices.

The Project applicant proposes to construct 11 ADUs on 11 of the 51 single family lots created by the proposed Tentative Subdivision Map. The specific lots have not been identified at this time. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

79-27 The comment states an opinion that housing for people with mobility impairments should be included and suggests that multi-level housing with elevators be provided.

At this time, Project applicant is only seeking approval of the Tentative Subdivision Map. The City will review proposed maps and building plans to ensure ADA compliance. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

79-28 The comment states an opinion that the Draft EIR lacks HOA information and requests information on the Project's financing. The commenter also questions if there is a flood how low-income housing would be affected if the HOA does not have financial reserves.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. CEQA does not require a discussion of financial impacts as they are not considered an impact on the environment. The comment is noted and forwarded to the decision makers for their consideration.

79-29 The comment states an opinion that the Draft EIR does not contain information explaining if the homes would be applicable for VA loans, FHA loans, or accessible for first time homebuyers.

CEQA does not require information regarding financing options available for future homebuyers be evaluated. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

79-30 The comment states an opinion that the Draft EIR does not address how the Project will provide affordable housing and how many bedrooms/units each home or building will have. The commenter suggests that low-income housing not be limited to two-bedroom residences.

On page 2-18 of the Draft EIR it is explained that the Project's affordable housing is still being discussed by the City and the Project applicant and is not proposed or required for review and approval with the Tentative Subdivision Map. A final Affordable Housing agreement, approved by the City Council, would be required prior to recordation of a final subdivision map. The commenter's opinion on low-income housing is noted and forwarded to the decision makers for their consideration and no further response is required.

79-31 The comment asserts that there is no analysis of parks in the Draft EIR and that the Project should include parks and improvements to the river trail as part of the Project.

The need for parks and recreation facilities is addressed and analyzed in Section 3.12 of the Draft EIR. Additionally, park and recreational impact fees are imposed upon all residential development within the City. These impact fees are used to cover the cost of land acquisition and park improvements. The commenter's opinion is noted and forwarded to the decision makers for their consideration and no further response is required.

79-32 The commenter states that they have personally seen native artifacts at the Project site and there is no recognition of these resources in the Draft EIR.

Cultural and tribal cultural resources are discussed in Section 3.5 of the Draft EIR. The potential for cultural (prehistoric or historic-era resources) including human remains and tribal cultural resources to be present on the site was thoroughly evaluated as part of the Draft EIR analysis. Please also see Response to Comment 55-4.

79-33 The comment asserts that the electronic copy of the Draft EIR was reduced and figures cannot be fully zoomed in or are of poor resolution.

The Draft EIR was posted for public review on the City's website and as noted on page 1-4 of the Draft EIR, a copy of the document was also available at the City offices during normal business hours (Monday through Friday, 8:30 a.m. to 5:00 p.m.).

79-34 The comment asserts that Hunt's Grove and Vineyard Valley projects are not identified on Figure 2-4 and goes on to state Figure 2-4 should show the bed/bath count for multi-family units to indicate the direct impacts to Hunt's Grove and other adjacent parcels. The commenter also states that the size of adjoining agricultural parcels to the north of the Project site should be identified as well as the number of bedrooms and residences.

Figure 2-3 identifies adjacent land uses, including the Hunt's Grove apartments and the Vineyard Valley Mobile Home Park. A more detailed discussion of adjacent or surrounding land uses is discussed starting on page 2-1 in Chapter 2, Project

Description. The surrounding agricultural lands are identified. Figure 2-4 shows the Project's proposed Tentative Map. The number of bedrooms/baths are not required to be provided or analyzed in an EIR. An EIR evaluates the "project footprint" or area of disturbance along with the demand for services and utilities new residents would create. The number of bedrooms/baths has no bearing on the analysis. There is no requirement that an EIR identify the number of bedrooms/baths in any adjacent or nearby residential uses, including any residences located in the County.

79-35 The commenter asserts that the Draft EIR should note the possible extension of Starr Avenue to Fulton.

The Project does not require the extension of Starr Avenue beyond connecting to Adams Street. Any future extension of Starr Avenue is a separate project and not required to analyzed in this EIR.

79-36 The commenter states an opinion that Adams Street should receive bioswales to replenish groundwater.

A discussion of the Project's stormwater features is discussed on page 2-29 in Chapter 2, Project Description and further evaluated in Section 3.9, Hydrology and Water Quality. The comment does not address the accuracy or adequacy of the Draft EIR. The commenter's opinion is noted and forwarded to the decision makers for their consideration and no further response is required.

79-37 The commenter states an opinion that the City should designate views of Mt. St. Helena as a significant view.

The comment does not address the accuracy or adequacy of the Draft EIR. The commenter's opinion is noted and forwarded to the decision makers for their consideration and no further response is required.

79-38 The comment states an opinion that the Project needs to address the impact of a 100-year flood event.

The Draft EIR evaluates flooding in Section 3.9, Hydrology and Water Quality. Please see Master Response 3 for additional information on flood risks.

79-39 The commenter asks what buildings foundations will be required and whether prospective homebuyers would be notified that their homes are built on fill and if the homes would be affected by a 100-year flood.

As explained on page 2-31 in Chapter 2, Project Description, "[t]o level the site and to ensure a stable base for new development, the existing fill/soils on the site would be removed, recompacted and returned to the site along with additional fill." Please see Master Response 3 regarding flooding concerns and Response to Comment 32-1 regarding the geology of the site.

79-40 The commenter asks if homeowners would be required to buy flood insurance and how this would impact the financing available to purchase the homes.

The comment does not identify any specific areas where the EIR or analysis is inadequate. Therefore, no response is required; the comment is noted and forwarded to the decision-makers for their consideration. However, please see Master Response 3 regarding flood concerns and Response to Comment 32-2 regarding flood insurance.

79-41 The comment asserts that the 2019 General Plan designates the site for agriculture rather than medium density residential and that this information should be included in the report rather than in an appendix.

The St. Helena General Plan Update 2040 designates the site for medium-density residential as shown in Figure 2.1 (https://www.cityofsthelena.org/sites/default/files/fileattachments/planning_resources/page/3505/final_plan_compiled.pdf). This information is also included in the Draft EIR Project Description (Chapter 2) and the Land Use section (section 3.1) of the Draft EIR. The commenter may be referring to Figure 1.3 of the General Plan Update, which shows existing land uses rather than those proposed under the General Plan Update. The comment is noted and forwarded to the decision makers for their consideration and no further response is required.

79-42 The comment opines that there should be a park with trees and a walking path to the Napa River. The commenter also questions why the HOA would service City streetlights and if the HOA needs to pay for full street maintenance and utilities.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration. At this time, Project approval only requires approval of the Tentative Subdivision Map. It is anticipated the Project's HOA would oversee public landscaping and other community owned facilities.

79-43 The comment states an opinion that the Project should contribute to the arts and that funds should be allocated to this purpose.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

79-44 The commenter states that they expect the City, including council members and commission members to express their opinions on the Project.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

79-45 The commenter states that they are disappointed in the lack of outreach and ability for the public to provide comments on the Project.

Please see Response to Comment 15-4. The comment does not address the accuracy or adequacy of the Draft EIR. The commenter's opinion is noted and forwarded to the decision makers for their consideration and no further response is required.

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Comment Letter 80

November 30, 2021

Sandra McCorkle
1178 Meadowcreek Circle
St. Helena, CA
Maya De Rosa, AICP
Planning Building Director
City of St. Helena, Planning and Community Improvements Department
1572 Railroad Ave.
St. Helena, CA 94574

Dear Maya

The following are my comments regarding the draft EIR for the Hunter Subdivision Project, Assessor's Parcel Number 009-030-057

Hunter Project DEIR Comments and Questions

Chapter 3 Project Description pages 3-5 to 3-7.

It is challenging to review the September 2021 Draft EIR Hunter Subdivision Project to determine whether it adequately identifies the significant environmental impacts as is required under CEQA. This EIR is to provide information to support the approval for a Tentative Map for a specific project-- the Hunter Project. According to the California Department of Real Estate, approval of a Tentative Map "is "a significant milestone in the development process and is a point at which much uncertainty regarding the project has been removed." The EIR should examine all phases of the project including planning, construction and operation. It should include a description of the project, a map and probable environmental effects. 80-1

I believe there is a great deal of remaining uncertainty regarding the project description and the map which makes it difficult to determine whether the DEIR provides sufficient information regarding substantial environmental impacts to approve the Tentative Map application. The September 9, 2010 Application (#2010-40) for a Tentative Parcel Map describes a project that included 53 lots with a total of 76 residential units including 51 single-family detached and 25 multi-family units with 5+ units. No accessory dwellings were listed in the Application. The 2010 Tentative Map Set showed the 51 single family lots and only a faint outline of the "future Workforce Housing" which were to be apartments. It is the 2010 Application and March 28, 2011 Completeness Letter that are still cited in the September 2021 DEIR as the relevant documents. Yet City Records-- (Project #: 10-40) Hunter Residential Subdivision (APN 009-030-057)-Historical Records-- show a Tentative Map Plan revision filed in August 2018 and another Tentative Map_2.01.19 which include the 11 ADUs and 87 units. There is a revised "Notice of 80-2 80-3

Completion document and Transmittal letter dated 9/23/21 which shows in the footer as a "revised 2010" document. This Completion Document states there are 87 units. The 2021 DEIR Chapter 3 Project Description describes the project as having 51 single-family lots with 11 having income restricted (Above Moderate-Income) units; and 25 attached two-story "duets" which are two-story two-bedroom units of 1,100 square feet each reserved for very low-income and moderate income. 80-3 Cont.

The question is, it reasonable to continue to rely on the 2010 Application for a Tentative Map and the 2011 Completion Letter from the City or have these been significantly revised to meet new conditions? If they have been revised to meet new conditions—e.g., City and State Policy regarding affordable housing and the City's 2015 Housing Element for example-- is the original application valid? If the changed conditions in some areas have been addressed with the revised Map and Project Descriptions should the 1993 General Plan or should the project be evaluated under the Current General Plan and conditions including up-dated Water Supply Availability? What rules allow an Application for a Tentative Subdivision Map to remain valid for a decade? Or to be revised on numerous occasions? If the Tentative Maps have been revised and resubmitted to meet or take advantage of new conditions, is it still valid to rely on guidance from the 1993 General Plan which is 28 years old? 80-4 80-5 80-6

Further uncertainty about the project under review was raised by the City with regard to whether or not the project as described is consistent with the City's Inclusionary Housing Ordinance. On February 27, 2020 the City wrote to the applicant concerning unresolved issues (Email to Ben vanZutphen re: NOTIFICATION OF FINAL UNRESOLVED ISSUES QUESTIONS-Hunter Residential Tentative Map Application Re-submittal (File no. PL 10-040) stating that the project does not meet the ordinance in several ways: the affordable units are all rental, the affordable units are not dispersed throughout the project, the affordable units are of a different size and do not have comparable numbers of square feet or bedrooms. Furthermore, there is insufficient information to determine if the affordable units are indistinguishable from the market rate units in terms of quality and exterior. The City staff concludes that it "does not believe this proposal is consistent with the City's inclusionary housing requirements." "Based on the information you have provided to this point, Staff cannot support your current proposal as compliant with the City's inclusionary housing requirements." 80-7 80-8

There are more questions related to the present project included in this memorandum. The applicant responded that they would make the 11 ADUs two bedrooms. What are the implications for the Tentative Map? The point is that if the present project does not meet the Inclusionary housing requirements what other changes in plans and the Tentative Map will be made to assure these requirements are met? Will it mean greater density with the potential for larger environmental impacts? At this point there is too much uncertainty about the project and the resulting project which is "blurry" and inadequate to assure that the DEIR adequately assesses the probable environmental impacts. 80-9 80-10

Response to Letter 80
Sandra McCorkle
November 30, 2021

80-1 The comment states an opinion that it is challenging to determine whether the EIR adequately identifies significant environmental effects and goes on to state that the EIR should examine all phases of the project including planning, construction, and operation.

As stated in Chapter 2, Project Description on page 2-32, the Project is only requesting approval of the Tentative Subdivision Map at this time. Subsequent approvals would involve review of discreet components of the Project. The Draft EIR evaluates the direct and indirect impacts associated with construction and operation of the Project with housing and the associated change in the underlying existing conditions present on the site. If it is determined there would be a change in the severity of a Project impact associated with any of the subsequent Project approvals sought by the applicant, additional CEQA review may be required. The public will have the opportunity to review and comment on these subsequent applications. The commenter's opinion is noted and forwarded to the decision makers for their consideration and no further response is required.

80-2 The comment states an opinion that there is uncertainty regarding the Project description and tentative map because the number and distribution of housing units is different in separate tentative map applications.

As stated in Chapter 2, Project Description, an application was filed with the City for a Tentative Subdivision Map to subdivide the property for residential development. The application was accepted as complete by the City on March 28, 2011. The Draft EIR incorporates changes to the tentative map requested by the City since the original submission. The Project applicant is proposing to subdivide the site into 51 lots (sized for single-family residences), a 3.4-acre parcel, and two lettered lots (for the existing well and undeveloped land). Homes on 11 of the 51 lots would be developed with an ADU as part of their initial construction. The Project applicant also intends to ultimately develop the 3.4-acre parcel with 25 attached multifamily residential units.

80-3 The comment states that the Notice of Completion indicates there would be 87 units as part of the Project and compares this to the information in the Draft EIR.

Please see Response to Comment 80-2. The Project applicant is proposing 51 single-family residences, 25 attached multifamily residential units, and 11 ADUs, which would total 87 units.

80-4 The comment asks whether it is reasonable to continue to rely on the 2010 application for the Tentative Subdivision Map and the 2011 Completion Letter from the City and whether the original application is still valid.

As explained starting on page 3.0-2 in the Draft EIR as well as on page 2-12, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR also evaluates consistency with the General Plan Update 2040 for informational purposes.

80-5 The comment asks whether the Project should be evaluated under the current General Plan update since the details of the tentative map have been revised to meet new conditions.

Please see Response to Comment 80-4.

80-6 The comment asks what rules allow the tentative map application to remain valid since 2011, and to be revised during its review.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The Project is being processed in accordance with all applicable City and state laws. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

80-7 The comment expresses the commenter's uncertainty about whether or not the Project is consistent with the City's Inclusionary Housing Ordinance.

The comment does not address the adequacy of the Draft EIR, but instead refers to the Project's consistency with the City's Inclusionary Housing Ordinance. However, as noted in the Draft EIR Chapter 2, Project Description, review and approval of an Affordable Housing Agreement by the City Council is a subsequent discretionary approval and not part of the Tentative Subdivision Map being considered by the City at this time. A determination of consistency will be made at the time that subsequent application is submitted and reviewed.

80-8 The comment states an opinion there is insufficient information to determine if the affordable housing units are comparable in quality to the market rate units.

See Response to Comment 80-7. Review and approval of an Affordable Housing Agreement by the City Council is a subsequent discretionary approval and not part of the Tentative Subdivision Map being considered by the City at this time. Consistency with the requirements of the Inclusionary Housing Ordinance will be determined at the time an application is filed.

80-9 The comment expresses the commenter's concern about potential changes to the Project and Tentative Subdivision map if the Proposed Project does not meet the Inclusionary Housing requirements.

The proposed Tentative Subdivision Map could be developed consistent with the Inclusionary Housing Ordinance. Compliance with the City's Inclusionary Housing Ordinance would be evaluated as a subsequent approval, as explained on page 2-32 of the Draft EIR.

80-10 The comment requests more information specific to the requirements of the Inclusionary Housing Ordinance and whether the Project would require an increase in units. Specifically, the commenter asks if there would be increased density with the potential to create greater environmental impacts. The comment questions the adequacy of the Draft EIR in light of these potential changes.

The current application is requesting approval of the Project's Tentative Subdivision map, as described in Chapter 2, Project Description. Compliance with the City's Inclusionary Housing Ordinance would be evaluated as a subsequent approval, explained on page 2-32. As noted on page 2-13, the Project applicant has not requested consideration of a density bonus as part of the Proposed Project application.

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Comment Letter 81

From: Kathleen McCreedy <kamccreedy@gmail.com>
Sent: Tuesday, November 2, 2021 9:39 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Vote "Against" Proposed Hunter Subdivision

Good morning Maya Derosa,

Firstly I want to thank you, and the city of St. Helena for caring for our wonderful small town and making your best efforts to maintain her facilitation of a safe, nurturing, city for it's residents and visitors.

I am writing today to have my voice heard "Against" the proposed Hunter subdivision. My husband and I have lived here in St. Helena for over 20 years and 5 years ago downsized to live in the Vineyard Valley Senior Park.

Briefly here are a few of my concerns:

I believe the challenges delivered by this project are many.

81-1

Traffic congestion, water supply, sewer connections and emergency evacuation pathways are currently top of mind.

81-2

Also on a more personal level, this is a wildlife corridor and an incredible open space that supports an area that is NOT fenced off to wildlife or humans. In world efforts to support wildlife, many conservationist are setting up tourist driven wildlife adventures all over the world to prevent additional clear cutting, agricultural impeachment, commercial and residential development. Let's find a way to share the space and look for ways that we can care for our city of St. Helena (gain taxes) in more creative sustainable ways.

81-3

Thank you for your time and for all that you do in caring for our beautiful city.

Best Regards,
Kathleen McCreedy
11 Los Robles Ct.
St. Helena, CA 94574
(707) 280-1278

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Response to Letter 81
Kathleen McCreedy
November 2, 2021

81-1 The comment states opposition to the Project and provides the commenter's history as a resident of the City.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

81-2 The commenter generally states their concerns related to traffic congestion, water supply, sewer capacity, and emergency evacuation.

The comment does not raise specific concerns related to these topics or any specific areas where the Draft EIR analysis is inadequate. However, please see Master Responses 1, 2 and related to emergency evacuation, water supply, and wastewater conveyance and Response to Comment 36-2 that addresses general traffic congestion concerns.

As described in Section 3.13 of the Draft EIR, the Proposed Project would not exceed the City's current permitted wastewater treatment plant capacity; also, pursuant to Municipal Code Section 3.32.020, the City collects development impact fees on new development to pay for public improvements related to sewer projects. The Project applicant would be required to pay these fees, which would help fund future improvements to the City's sewer system. Please also see Master Response 4.

81-3 The comment asserts that the Project site serves as a wildlife corridor and urges the City to explore ways to conserve the site and generate tax revenue for the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Please see Responses to Comments 14-2 through 14-6, 55-3, 121-28 and 121-32 for more information on impacts to wildlife and habitat.

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Comment Letter 82

From: Joe McGrath <joe.mcgrath65@gmail.com>
Sent: Thursday, November 4, 2021 2:22 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>; Joe Mcgrath <joe.mcgrath65@gmail.com>
Subject: [External] Comments on Hunter EIR

Maya:

As you know I am a developer and so it is not lightly that I enter comments on another project.

CEQ/EIR:

For almost my entire life California has been under CEQA regulation. As a planning commissioner for over six years I have also sat through many CEQA EIR reviews. And my conclusion is that other than air quality, and perhaps water quality improving in my lifetime, CEQA seems to be an abject failure with regard to respecting California's natural environment. Traffic is worse. Fires are worse. Water is more scarce. Snow is disappearing. No public transportation. Freeways are getting wider. Fish are disappearing. On and On. All under the watchful eye of CEQA. 82-1

Unfortunately I have not yet had the chance to read thoroughly the entire report, but have skimmed through it. I hope to provide more thoughtful comments in the future. Unfortunately these reports seem designed to be so large and exhaustive as to tire all but the most active citizen who has time to spare. But I will comment on a few items: 82-2

3.9. Hydrology 1.

LTS - Seriously?

First Law of Holes. When you find yourself in a hole, stop digging. The notion that we take a typical 1950's era suburban model and plant it in the middle of St. Helena, right next to a river w/ irrigated landscaping in today's environment is insanity.

The notion that significant utilization of an existing agricultural well upstream from the City's main will definitely have Less than Significant Impact is not professional. How about a Potential Impact at least, so it can be looked at? 82-3

I personally swapped toilets to meet Water Neutrality on McCorkle project. It is an arduous task to find them and get them to add up. I don't imagine that after months (and potentially years in the future) of being on a highly fee punitive 65 gallons/day water cap that there will be many more toilets to change over years from now. If you are going to ask the developer for water neutrality, ask for money instead and put the investment in infrastructure. As an owner of multi-family apartments, the punitive fees associated with exceeding a 65 gallons/day allocation keeps me up at night. The first thing I did was to place a Flume on the meter main with cellular wifi that signals me immediately of use beyond budget. The City's process is to routinely send me letters for my apartments saying they think I have a leak (because of continuous water flow) at my units. The letter is typically 30 days later from a meter read that stretches back another 30 days. Water under the bridge as they say. **Invest in real-time meter reading w/ statistical monitoring with alerts and event management so that excursions notify meter owner immediately.** Even a low-flow toilet can waste hundreds of gallons a day with a minor leak. 82-4

Do not allow any landscaping that requires irrigation (beyond what is necessary for plants to take hold). California and Napa Valley were beautiful before we started landscaping it. Our "beautiful" landscaping projects have not made it more beautiful. Oak trees seem to do well. As do Olives. And Lavender. And Manzanita. etc. Do not allow landscaping that takes the "place" out of the place. The presentation visuals could be Sacramento, or Phoenix for that matter.

82-5

Do not allow Pools or at minimum pools w/o covers.

82-6

3.9. Hydrology 2.

Have we assessed the load impact of runoff so close to the Napa River and upstream of VVMobile Home Park and Pope Street bridge. Had this development been built during our recent 12" rainstorm, would that additional load have been accommodated or would it have taken out the Pope Street bridge? **The site needs to fully accommodate all stormwater drainage and do it far from Napa River to allow sufficient dwell time before that water permeates into the River.**

82-7

3.10 Land Use:

LTS?? Hardly when looked at in context.

Land use is about making choices on how to best utilize land resources to serve the community. "Sub-urban" communities that are closer to San Francisco and the East Bay can be relatively homogenous socio-economically, and still kind of "work" because of the adjacency of jobs or housing in adjacent communities, St. Helena is more isolated and must for its survival and quality of life be a more socio-economically diverse community. That is how it used to be. And that is what is disappearing. As second home ownership rates increase and the likes of Pacaso further take primary homes off the market the system is getting more and more stressed. This in turn is causing the "workers" of the community to commute here - from Lake County, from American Canyon and Napa, and from Santa Rosa, and further - which has greatly exacerbated traffic and quality of life. If I had to guess, St. Helena is about 20-25% larger population than it was 40 years ago. And if I had to guess Traffic is 10X worse.

82-8

It is reasonable to expect that the purchase price of these homes will be well north of $1.5M and likely $2M plus. And it is reasonable to expect that more than 50% will be second homes. **More services required, more commuting required. More commuting traffic. Benefit?**

Segregation vs. integration of the multi-family from single-family actually exacerbates the parking problem.

82-9

Deed Restrict the SFH to <=200% AMI? so that they don't become second homes?

Land use is about making choices.

82-10

3.12 Public Services and Recreation

LTS - again. Seriously. How about at least PS.

Hundreds of people walk by this site everyday for their recreation. **This Project will de-facto take away recreation area, and not add back recreation area demand that it creates.**

82-11

3.14 Transportation and Circulation:

See Land Use. The Vehicle Miles Travelled approach is flawed. Most of the VMT will not come from resident's trips. **It will come from the added service requirements of landscapers, painters, handymen, restaurant employees etc, etc that serve this new community that commute from other communities.** Directing all of this traffic onto Main Street or across Pope Street is crazy. If we collectively did not comprehend what sort of traffic moves on the SIlverado Trail prior to its closure, I think we now have a pretty good idea. **This project should not be built without a viable connector/bridge to the Silverado Trail that does not require using main street, nor the existing Pope and Pratt Street heritage bridges.**

82-12

82-13

Exposure to Wildfires:

Again LTS?

A little over a year ago, on that Tuesday night, the Glass fire was searching for a way to jump into St. Helena and burn it down. We don't think that this community within rock throwing distance of Howell Mountain Road might one day be that bridge? Let's get firewise and figure out how not to make that happen. Roofing material, Eave design, Landscape Design, Defensible space, Cisterns for fighting fires (hey..maybe the same cistern that was used to dampen stormwater runoff?)

82-14

Net-Zero Energy:

Let's be part of the solution and be progressive. It is possible to make this project Net-Zero energy, so let's do that.

82-15

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Response to Letter 82
Joe McGrath
November 4, 2021

82-1 The commenter states an opinion that CEQA regulations have not improved California's natural environment.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

82-2 The commenter states that they have not read the Draft EIR thoroughly and that CEQA reports are too lengthy to be reviewed by most citizens.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

82-3 The comment states an opinion that the determination of a less-than-significant impact regarding use of the existing agricultural well upstream from the City is unprofessional and should instead be considered a potentially significant impact.

Please see Response to Comment 57-5 and Master Response 2.

82-4 The comment states an opinion that toilet retrofits would likely not be effective to meet water neutrality goals and suggests that the developer should invest in infrastructure to use recycled water. The comment also suggests that the Project incorporate real-time water meter reading and monitoring.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. See also Master Response 2.

82-5 The comment states an opinion that landscaping requiring irrigation should not be allowed and that new plants should be appropriate to California.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. As stated in Chapter 2, Project Description, all public landscaping and irrigation would be required to meet the Model Water Efficient Landscape Ordinance requirements in Title 23, Chapter 27 of the California Code of Regulations. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

82-6 The comment opines that pools, or pools without covers, should not be allowed.

The Proposed Project does not include any pools but it does not preclude future homeowners from installing a pool. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

82-7 The comment asks whether the impact of runoff close to the Napa River and upstream of the Vineyard Valley Mobile Home Park and Pope Street bridge has been assessed and that the Project site should fully accommodate stormwater drainage far from the Napa River.

Please see Master Response 4 and Responses to Comments 35-4 through 35-6.

82-8 The comment states an opinion that the land uses in the City are causing workers to commute from other areas thereby increasing traffic congestion in the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

82-9 The comment states an opinion that the Proposed Project would result in more commuting traffic congestion and more parking supply issues in the City.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. However, at the time building permits are requested, as required by the Municipal Code, the City will confirm the Project complies with Section 17.124.030.A.1 of the City's Zoning Code that addresses residential parking requirements. Please see Responses to Comments 10-2 and 36-2 that address general traffic concerns.

82-10 The commenter suggests income restrictions for the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

82-11 The comment asserts that the Project would take away a recreational area and therefore the impact should be considered potentially significant.

The Project site is privately-owned and is therefore not a public recreation area. Additionally, as discussed in Section 3.12, Public Services and Recreation, the Proposed Project applicant would pay required park fees to be used by the City to purchase land to construct new parks or upgrade existing recreation facilities. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft

EIR; therefore, no further response is required. Please see Chapter 3, Changes to the Draft for a trails map that shows trails adjacent to the Project site.

82-12 The comment states an opinion that the Project's VMT analysis approach is incorrect and that the VMT would not be from the residents of the Project but rather employees that serve various needs of the residents.

The VMT analysis for the Project has been conducted per guidance provided by the Governor's Office of Planning and Research in its Technical Advisory for Evaluating Transportation Impacts in CEQA. The metric for evaluation of VMT for residential projects is VMT per capita or resident and for most non-residential or office projects is VMT per employee. The Project proposes only residential use, therefore, the VMT of the Project would be assessed by estimating the vehicle miles traveled by Project residents for various purposes, such as work, shopping, education, recreation etc. The traffic generated by the Project has been evaluated in the traffic study prepared by Dudek.

82-13 The comment states an opinion the Proposed Project should not be built without an additional connection to Silverado Trail.

The Project does not include the extension of Adams Street to Silverado Trail. This is a separate City project and is not required for this Project. The comment is noted and forwarded to the decision makers for their consideration.

82-14 The comment states an opinion that the Project should incorporate fire-wise design and defensible space.

The Project's residences would be built in compliance with the California Building Code and California Fire Code requirements for fire protection in place at the time. Public landscape areas and yards would be regularly irrigated and maintained during the dry summer and fall months to reduce fuel for wildfires. Additionally, please see Master Response 1 regarding emergency evacuation.

82-15 The comment suggests that the Project be Net-Zero energy.

The Project would meet the most current Title 24 standards which require the design of building shells and building components to conserve energy. These standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards went into effect starting January 1, 2020. The 2019 standards aim to reduce energy use in new homes by more than 50% and require installation of solar photovoltaic systems for single-family homes. Development would be subject to whatever version of the state's Building Efficiently Standards are in effect at the time of construction.

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Comment Letter 83

From: John Milliken <jmzin@comcast.net>
Sent: Tuesday, November 2, 2021 2:56 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] PC Meeting 11/2/2021 Public Comment on Hunter Project DEIR from John Milliken

First of all, I would like to provide a link to an article written by Professor Nicholas Printer of the UC Davis Center for Watershed Science that I think should be mandatory reading for each Planning Commissioner and the City Staff involved in preparing the DEIR.

https://californiawaterblog.com/2016/07/17/st-helena-california-dealing-with-a-field-of-dreams-levee-residual-risk-and-a-flood-of-controversy/

None of the issues covered in this article were mentioned in this DEIR.

83-1

Second, I would like to express my dismay at what an unprofessional, non-comprehensive, and shallow effort this latest DEIR effort represents. It is absolutely mind boggling that this DEIR could only identify two significant impacts (both traffic related) for a major development project of this size after an almost four-year effort at a cost of over $450,000. The DEIR reads like an infomercial the applicant. I intend to submit separate comments on the many deficiencies and missed impacts either completely ignored or glossed over by this so-called DEIR. I do not know who was in charge of this effort, but I think the City Council and Planning Commission should seriously consider an inquiry into how this happened and there should be consequences for those responsible. This community (whose environment is being impacted!) deserves much better than this and this DEIR effort crosses the line of professional negligence. I am not asking for a DEIR that supports the grievances of the many members of the community who are opposed to this mammoth 87-unit development, rather, I was expecting a balanced DEIR that fairly identified ALL the environmental impacts presented by this development and was prepared to lawful CEQA standards. This DEIR does neither of those things. How can a DEIR propose meaningful mitigations if it cannot properly identify environmental impacts?

I do not know if this substandard DEIR effort was by intent or the result of a lack of oversight by the Lead Agency, the City of St. Helena, but the end product is seriously flawed. As you can probably see by all the public comments submitted to date and an avalanche of comments to be submitted by the November 8th deadline, I am not the only one to have noticed this. Thankfully, many members of our community have taken on the responsibility of correcting this wrong and will be submitting comments that identify way more impacts than were identified in this DEIR. And, they are not being paid $450,00 to do this and were only given 45 days to prepare comments instead of four years.

83-2

Oh,..one more thing. When several members of the community (whose environment is being impacted!) politely asked if the comment period could be extended so that they could have more time to prepare researched, cogent comments on the lengthy 28 Mb download and 633 page DEIR document, they were quickly rebuffed and simply told no. This seems a little harsh considering that this second DEIR effort is heading into its fifth year after a failed first seven-year effort. FYI: The comment period for the first failed EIR effort in 2012 was extended to 90 days. I guess this contempt for the community (whose environment is being impacted!) is the new norm and this is what we will be dealing with for the remainder of the process. It is my hope that Planning Commissioners will ask staff some questions about this DEIR process when they are afforded the opportunity after the Public Hearing closes. The ability to ask questions was not afforded community members.

83-3

John Milliken

jmzin@comcast.net

707-963-8134 (Office) 707-486-4266 (Mobile\Text)

1256 Hudson Ave.

St. Helena, CA 94574

Response to Letter 83
John Milliken
November 2, 2021

83-1 The comment refers to an article written by a professor at U.C. Davis and recommends City staff and the Planning Commission review the article.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

83-2 The comment states an opinion the Draft EIR does not address potential impacts and does not meet the standards set forth in CEQA for the preparation of EIRs.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the Draft EIR was prepared in compliance with California Public Resources Code [PRC], Section 21000 et seq., the CEQA Guidelines (14 CCR 15000 et seq.), and the City's procedures for implementing CEQA.

83-3 The comment refers to requests to extend the comment period.

Based on requests from the public, the City extended the public comment period from the required 45-days to 67-days to provide more time for review and comment. During this review period, the Draft EIR for the Project was available at (1) the St. Helena Public Library, 1492 Library Lane, St. Helena, CA 94574; (2) St. Helena Planning Department, 1572 Railroad Avenue, St. Helena, CA 94574; and (3) on the City's website at www.CityofStHelena.org.

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Comment Letter 84

From: John Milliken <jmzin@comcast.net>
Sent: Tuesday, November 30, 2021 7:41 PM
To: cityclerk <cityclerk@cityofsthelena.org>
Subject: FW: [External] Comments on the DEIR for the Hunter Residential Subdivision Tentative Map Application

Hi Cindy,

I sent this today at 11:54A and discovered that no one got it due to a link to a cloud photo album and an embedded photo.

I am resending this without those and will figure out another way to send the photos tomorrow so that the comment can be included in the DEIR comments.

Please confirm if you got this downsized version.

Thank you in advance.

John Milliken
jmzin@comcast.net
707-963-8134 (Office) 707-486-4266 (Mobile\Text]
1256 Hudson Ave.
St. Helena, CA 94574

From: John Milliken <jmzin@comcast.net>
Sent: Tuesday, November 30, 2021 11:54 AM
To: 'mderosa@cityofsthelena.org' <mderosa@cityofsthelena.org>; 'cityclerk@cityofsthelena.org' <cityclerk@cityofsthelena.org>; 'publiccomment@cityofsthelena.org' <publiccomment@cityofsthelena.org>
Subject: FW: Comments on the DEIR for the Hunter Residential Subdivision Tentative Map Application

November 30th, 2021

FR: John Milliken

1256 Hudson Ave, Saint Helena, CA 94574

Please include my comments and attachments concerning the DEIR for the Hunter Residential Subdivision Tentative Map Application (File no. PL 10-040).

1) Planning and Zoning Code Violations

There is no mention in the DEIR of the project's numerous violations of the St. Helena Zoning Ordinance. All land use decisions must be consistent with a city's general plan and zoning ordinance. *(Collier v. City and County of San Francisco (2007) 151 Cal. App. 4th 1326, 1333, citing Gov. Code 65860, subd. (a)(2); Napa Citizens for Honest Government v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 355. See also Land Management v. Contra Costa Bd. of Supervisors (1990) 222 Cal.App.3d 950,957-958 ("issuance of a permit inconsistent with zoning ordinances or the general plan may be set aside and*

84-1

invalidated as ultra vires"[.] The proposed Tentative Subdivision Map and related residential construction violate the St. Helena Zoning Ordinance.

Most of the violations involve non-compliance with the City's Inclusionary Housing Ordinance, Chapter 17.146, as documented by the attached Notification of Final Unresolved Issues and Questions prepared by the City's Building and Planning Director on 2/27/2020. There were no responses from the applicant to this notification mentioned in the DEIR or listed on the Project's Planning Archive. This notification was actually the fourth sent by the City Planning Department for this second attempt at a DEIR. All four document the same Chapter 17.146 violation issues. These same issues were also brought up at the initial Public Scoping Comments Meeting held in April of 2018. With the City and the Applicant well aware of the project's violations of the Inclusionary Housing Ordinance since 2018, it is a mystery as to why these violations were not addressed in the DEIR. Also, per the section in the Municipal Code cited by Contract Planner, Eric Norris, in a letter to the applicant concerning other violations of the Municipal Code: "More on point is the requirement that a map must be denied if it does not comply with the General Plan and Zoning Code. Muni Code (section 16.16.080.D) states, A tentative map shall be denied if any of the following findings are made: 1. That the proposed map is not consistent with the general plan, applicable specific plans, or other applicable provisions of this code. Simply put, the map as presented to the Planning Commission for approval must meet all of the applicable standards of the Zoning Code. No mechanism is available to avoid this requirement."

84-1 Cont.

84-2

2) The DEIR Analysis is based upon an Affordable Housing Proposal that does NOT conform to the City's Municipal Code and fails to account for potential California State Density Bonus and Development Concessions.

Because the applicant has featured "Affordable Housing" as a center piece of this project from day one, it is virtually impossible to prepare an EIR to CEQA standards without having a lawful Affordable Housing Agreement (AHA) in place that details the number, types and distribution of restricted units. As it stands now, the applicant is proposing that: NONE of the 51 Market Rate 4 Bedroom Single Family Homes will be restricted; ALL of the 25 Duets of the restricted housing will be on one lot, and the 11 ADUs will be on 11 of the Market Rate lots (location to be determined). If the City were to accept this legally dubious proposal as is, the project would be eligible for a State Mandated Density Bonus that could trigger development concessions as well as allow for between 30 or 40 more units. So, a legally comprehensive EIR would have to take into account the impacts of these concessions and potentially greater number of units. And, there is also some controversy about whether or not the ADUs that are located on Single Family Lots would qualify for a designation of restricted housing and qualify as units that could be applied to the Density Bonus calculation.

84-3

84-4

Also, since the latest Project Description has an Affordable Component that is violation of the Municipal Code, there may have to be further changes made to the number, types and distribution of the restricted units to bring the project into conformance. All of this speaks to the difficulty of preparing an EIR to CEQA standards where the legality, number, types and distribution of restricted units are a moving target. The City should insist that a legally conforming AHA be formalized and a new DEIR analysis be appended based upon the details of the AHA. To not do so will send this second attempt at an EIR to the same fate as the failed first seven-year effort. The applicant has had 11 years to provide a lawful AHA and the majority of the delay in this EIR can be laid at the feet of the applicant's inability or refusal to do so.

84-5

3) Environmental Diminishment of Taxpayer Funded Conservation Easements and a City Owned "Parklet" lot.

The DEIR makes no mention of how the extension of Adams and the intersection of Adams and Starr will be built upon a state taxpayer funded conservation easement. Additionally, there is a City owned parcel that will be paved over by the extension of Starr that is currently used as a non-motorized access point to the taxpayer funded river trail and levee hiking path. The conservation easements were agreed to by the City in exchange for funds from the Department of Water Resources to be used for the construction of the Flood Project in 2009. The City agreed that the conservation easements were to exist in perpetuity. This would not be the case if a paved road(s), that would accommodate vehicles to access the residential housing proposed by the applicant, were built on the western portion of a conservation easement. This easement is clearly shown a map of the Levee Zone Easement (map attached) by recently prepared by the City to facilitate the transfer of deed to the Napa Valley Land Trust. Not only does this proposed road development on a conservation easement violate the spirit of the DWR agreement, it also threatens the funding from this organization if they find out that an easement has been violated. There is a precedent for having to return a public agency's funding for the flood project. When it was found out the City had used FEMA funding improperly and also double billed FEMA for flood project activities, the City had to return $1.9 million in funds. 84-6 84-7

Attached are comments prepared in 2019 by a resident of St. Helena, Victoria Bradshaw, for the 2040 General Plan Update. These comments detail how the City never included plans for an extension of Adams in any of the funding agreements that provided funds to build the flood control project. None of this was reported in the DEIR. Also, in these comments is a report on the shocking lack of maintenance by the City of the levee (that continues to this day!) that was never built to accommodate a road. Once again, … none of this was mentioned or explored in the DEIR. 84-8

Environmental impacts that come with the diminishment of conservation easements were never addressed by the DEIR. These include: having to walk/ride right next to a trafficked through road lined with parking and housing instead of what is currently open space/vineyard/wild life corridor. The path from the library to the river or atop the levee is an open space jewel that is enjoyed by many residents and visitors. The open space agricultural character of path(s) that are used to walk/exercise pets away from traffic, provided sweeping views of the surrounding mountains, and provide a much-appreciated tax payer funded venue for outdoor exercise and fresh air will literally be paved over. (Please see the attached photo documenting local Starr residents out walking their dog on Thanksgiving Day along the proposed route of the Starr extension.) 84-9

4) Traffic and Public Safety Impacts Not Mentioned in the DEIR.

Although the DEIR claims to have studied the Traffic impacts of the project using the newer VMT standard (that only studies miles traveled by the project's residents), there are quite a few Traffic Impacts that were ignored by the DEIR. Also, the DEIR failed to study the impacts on Public Safety by ignoring the potential problems with evacuation routes created by the project, be it for flood or fire. 84-10

Other traffic impacts not mentioned in the DEIR include:

a) An increase in pass through traffic through surrounding residential neighborhoods by drivers looking to avoid congestion on Main Street (Highway 29) by crossing between the Silverado Trail and Main 84-11

Street. Taking highway traffic off the highways and routing it through residential neighborhoods is insane. However, this is what will happen with the advent of apps like Waze or Google Maps, that will direct drivers to go through residential neighborhoods to save just a few minutes of driving time if new connector streets (Adams and Starr) are built. Once again, ...none of this was studied or identified in the DEIR.

84-11 Cont.

b) Residents of Hunt's Grove and surrounding neighborhood will have to navigate and intersection with cross traffic (Hunt and Starr) to walk/drive to schools, shopping, etc. Simply put, there will be a lot more traffic on Starr if a connection is made to an Adams Street extension. Once again, ...none of the impacts of this new intersection on the safety of residents was identified in the DEIR.

84-12

c) Overflow parking from Hunt's Grove is already a problem on Starr and the surrounding neighborhood. These problems will be exacerbated by the new development from all the higher density development allowed on Lot 52. In addition, whoever develops Lot 52 can request a parking concession from the Density Bonus program that will allow fewer off-road parking spaces to be provided. Once again, ...none of the impacts on increased demand for limited parking spaces was identified in the DEIR.

84-13

d) Evacuation routes from Vineyard Valley and the surrounding neighborhood could be impacted by the additional pressures from the proposed development. Not only will residents in Vineyard Valley be evacuated, all the residents of the project will be using the same evacuation routes. This could turn the evacuation into a Public Safety failure. Once again, ...this was not studied or identified in the DEIR.

84-14

5) Public Safety Hazards Concerning the Lack of and Maintenance of the Flood Project and the Construction of the Levee

The aforementioned Comments prepared by Victoria Bradshaw in 2019 for the 2040 GP document the lack of maintenance of the Flood Project since its construction in 2010 and also how the levee was never intended to be used as a road bed. These two conditions result in a heightened degree of the chances for catastrophic levee/flood wall failure that could result in a loss of lives and property for residential development on a flood plain behind a compromised levee/flood wall. This is the opposite of risk management and it was never mentioned in the DEIR.

84-15

Here is a link to a cloud photo album that documents the construction and (lack of) maintenance from the time the levee/flood wall was started in 2009 to just last Thanksgiving Day:

As you can see, the rodent damage over the years is quite extensive. The rodent damage is most extensive at the base of the W flood wall as well as where the wall meets the levee. This is the area that would be most impacted by hydraulic forces in a major flood event. Perhaps even more disturbing are the levee inspection reports obtained from the City dating from 12/6/2019 – 7/7/2021. They state for Item 10 Animal Control, there is an Acceptable Rating ("Continuous animal burrow control program in place that includes the elimination of active burrowing and the filling in of existing burrows.") Based on the photos, the rating should be Unacceptable ("Animal burrow control is not effective or is nonexistent. Significant maintenance is required to fill existing burrows, and the levee will not provide reliable flood protection until this maintenance is complete.")

84-16

Additionally, since the City could be liable for levee/flood wall failure, the impact to the finances of the City and its ability to provide services to the community could also be at risk.

84-17

Response to Letter 84
John Milliken
November 30, 2021

84-1 The comment states an opinion that the Draft EIR does not indicate how the Project violates or is inconsistent with the City's Zoning Ordinance and asserts that there are numerous violations of the City's Zoning Ordinance and identifies non-compliance with the City's Inclusionary Housing Ordinance because correspondence from the City to the Project applicant regarding compliance concerns were not addressed.

The commentor is correct that the City's Inclusionary Housing Ordinance would require the Project provide a minimum level of affordability. The Project applicant's proposal to meet this requirement is part of a subsequent discretionary approval (Affordable Housing Agreement) which must be approved before development can occur, as noted on page 2-32 of the Draft EIR. Staff will review the applicant's proposal before making a recommendation to the City Council on the Affordable Housing Agreement; until that application is submitted, and the agreement approved by City Council, no development can occur on the site. Please also see page 2-18 of the Draft EIR which lists all the subsequent discretionary action approvals needed before development may occur and explains a final Affordable Housing agreement approved by the City Council would be required prior to recordation of a final subdivision map.

The letter to the applicant (dated April 13, 2021) which is noted by the commenter was responding to the applicant's suggestion that alternatives were available to address inconsistencies between the proposed tentative map as it existed at the time and the standards of the St. Helena Zoning Code. The map has since been revised, as shown in the Draft EIR and based on staff's review and consultation with the City Attorney, conforms with the requirements of the City's Zoning Code and the Subdivision Map Act.

84-2 The comment asserts that the Tentative Subdivision Map is to be denied if it is not consistent with the City's General Plan and any other relevant planning documents.

The commenter is correct. The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR is inadequate; therefore, no further response is required. Please see also Response to Comment 114-8.

84-3 The comment states an opinion that the Project is required to include an Affordable Housing Agreement and therefore it is not possible to prepare an EIR absent this agreement and notes the Project currently does not include an Affordable Housing Agreement which would make the Project eligible for a state mandated density bonus.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see also Response to Comment 84-1 that addresses the Affordable Housing Agreement.

84-4 The comment refers to the need for the EIR to evaluate any increase in units attributed to a density bonus, including how the accessory dwelling units (ADUs) would be defined.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see also Response to Comment 84-1 that addresses the Affordable Housing Agreement. As discussed in Response to Comment 84-4, a future density bonus request, including changes to development standards, would be made as part of the Use Permit approval process for the attached housing units, which would be subject to CEQA review.

84-5 The comment emphasizes that, in the commenter's opinion, because an Affordable Housing Agreement is not considered part of the Project, the Project violates the City's Municipal Code and would result in further changes to the number, types and distribution of units to comply with the City's affordable housing requirements. The comment requests that the City require the applicant to provide an Affordable Housing Agreement that is analyzed in this EIR.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Responses to Comments 84-3 and 84-4 that address the Affordable Housing Agreement requirement.

84-6 The comment refers to a conservation easement and implies that the extension of Adams Street and the intersection of Adams Street and Starr Avenue would be within this easement. The comment goes on to state that a City-owned parcel currently used to enable access to the walking path/trail and the separate levee maintenance road would be paved over by the extension of Starr Avenue.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. The City has confirmed that the easement noted by the commenter does not include any part of the Project site and would not be affected by the Project. The Proposed Project improvements would not remove the existing levee trail and would not prohibit access to the trail.

84-7 The comment refers to the City's Flood Protection Project and asserts that an issue exists associated with misuse of funds.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 3 for additional information on the Napa River levee.

84-8 The comment refers to comments submitted by another resident on the 2040 General Plan Update project specific to the extension of Adams Street and asserts that the City did not include the extension of Adams Street as part of the Flood Control Project, which was not discussed in the Draft EIR. The comment goes on to state an opinion that there is a lack of City maintenance of the levee and that the levee was never built to accommodate a road.

Comments specific to the 2040 General Plan Update are not relevant to addressing the accuracy or adequacy of the Hunter Subdivision Project; therefore, no response is required. Please see Master Response 3 that addresses concerns associated with the levee including maintenance.

84-9 The comment refers to the conservation easement and the change in character for people accessing the trail with residences proposed adjacent to a portion of the trail.

The change in visual character for people accessing the trail is addressed in detail in Section 3.1, Aesthetics/Visual Resources. As explained on page 3.1-27, the public trail that borders the north/northwest boundary of the site also provides public views of the site. The Project would modify long-range views of existing vineyards located to the west and on the Project site as well as views of rolling hillsides which would be partially blocked by development of new residences. The City has not identified this area for protection of public views.

Please see Response to Comment 84-6 for information regarding the conservation easement and a trails map included in Chapter 3, Changes to the Draft EIR that shows trails adjacent to the Project site.

84-10 The comment asserts that the Draft EIR evaluated the Project's increase in vehicle miles traveled (VMT) but did not address other traffic impacts and also did not address public safety concerns associated with evacuation in the event of an emergency.

The Draft EIR evaluates impacts associated with an increase in VMT. The comment does not specify what traffic impacts were not addressed; therefore, no response is required. Please see Master Response 1 that addresses concerns regarding evacuation in the event of an emergency.

84-11 The comment states an opinion that the Draft EIR does not address pass through traffic by those drivers seeking to avoid congestion on Main Street.

Please see Response to Comment 84-10. These types of transportation operational issues are not required to be evaluated in an EIR.

84-12 The comment discusses what the commenter projects will be an increase in traffic for neighboring areas to navigate with the new intersection of Hunt Avenue and Starr Avenue and the increase in traffic on Starr Avenue.

Please see Response to Comment 84-10.

84-13 The comment addresses existing parking concerns that the commenter feels exist on Starr Avenue, asserts that these existing parking issues will be exacerbated with the Project, and states the multi-family component can request a parking concession that will reduce the amount of parking to be provided.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required.

As noted in Response to Comment 84-4, the Project applicant is not requesting a density bonus as part of the Project.

84-14 The commenter asserts that evacuation routes for Vineyard Valley and surrounding areas could be impacted by the Project resulting in a public safety failure.

Please see Master Response 1 that addresses concerns regarding emergency evacuation.

84-15 The comment asserts that the City has not been maintaining the levee and the levee was never designed or intended to be used for a road, which could contribute to failure of the levee and goes on to claim this contributes to a compromised levee/floodwall.

Please see Response to Comment 73-5. Please see also Master Response 3 that addresses concerns associated with the levee.

84-16 The comment states an opinion that rodent damage has compromised the integrity of the levee and questions the City's maintenance records relative to rodent issues.

The manner in which inspection and maintenance responsibilities for the existing levee are assigned are not environmental effects related to the Proposed Project. Furthermore, under CEQA, the effects of the environment upon the project are not "impacts." Rather, CEQA requires the lead agency to consider the ways in which the project effects the environment. Please see Master Response 3 that addresses the maintenance, design and stability of the levee.

84-17 The comment claims that the City would be liable in the event of a levee failure resulting in a loss of City funds to provide services to City residents.

Legal liability for a potential future event is not within the scope of CEQA review. The comment does not identify specific issues regarding the adequacy or accuracy of the Draft EIR; therefore, no further response is required. Please see Response to Comment 73-5.

An attachment to this letter can be found in Appoendix B.

Comment Letter 85

November 29, 2021

To: Planning Commission, City of St. Helena

From: Michael Mills, 1380 Grove Court, St. Helena

Re: Hunter Subdivision Project

Does the draft Environmental Impact Report (the "Draft") completely and correctly set forth all "potential significant environmental effects" so the Planning Commission, the City Council, and the community can accurately and fairly evaluate the Hunter Subdivision Project (the "Project")?

No.

As documented in the many informed, detailed, and precise comments submitted, the Draft is deficient in many respects, most egregiously as to geology and soils and hydrology and water quality.

I join in those comments. However, this comment is limited to two apparently minor but in fact significant aspects of transportation and circulation.

The Draft concludes that the project will have a "significant and unavoidable impact" on Vehicle Miles Traveled (VMT, the statistical proxy for traffic) for which "there are no feasible mitigation measures available." (Page 3.14-41)

I agree with that conclusion. It might well be even stronger if VMT were calculated not on the basis of generic assumptions—as to the number of residents per unit and the number of vehicles per unit—but instead on the basis of actual data from St. Helena. Compare the Draft's assumptions to data from City-Data.com, https://www.city-data.com/zips/94574.html, which shows a significant fraction of both owner- and renter-occupied units having three or four vehicles per unit.

Nonetheless, the Project's consultants object even to the light VMT numbers the City calculated, complaining that the assumptions used should have been more generous to the Project. (Page 158, Agenda Packet Amended 11/23/21) To justify dismissing the "significant and unavoidable impact" found by the City, the consultants wrap their argument in an environmental cloak. Climate change

85-1

85-2

85-3

Page 1 of 2

analyses are based on regional VMT, so local traffic analyses should be too. The argument is sophistry, not statistics. 85-3 Cont.

A neighborhood walk confirms that Hunts Grove and Monte Vista Court parking spaces are insufficient, so residents park on Starr, Hunt, Meadowcreek, and Grove Court. In effect, the owners of those housing units have shifted the cost of providing parking to City taxpayers, who pay for street construction and maintenance, without compensation to the City. Those owners also shift burdens to houses nearby—air pollution, noise, and traffic. 85-4

The Draft accepts without analysis the proponents' statements as to parking.

The Draft is also deficient in providing adequately detailed and complete maps. The "proposed tentative map," Figure 2-4, is drawn at large scale without any indication of key features, particularly in Lot 52. Statements about vineyard preservation, planting strips, sidewalks and other features within and adjacent to the Project are material to evaluating it, but cannot be evaluated based on the Draft. 85-5

Response to Letter 85
Michael Mills
November 29, 2021

85-1 The comment states an opinion the Draft EIR does not accurately or fairly evaluate the Project's potential significant environmental effects, specifically regarding the topics of geology, soils, hydrology, and water quality.

The commenter's opinion is noted and forwarded to the decision -makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. However, potential Project impacts to geology and soils are addressed in Section 3.6, Geology and Soils; and potential impacts to hydrology and water quality are addressed in Section 3.9, Hydrology and Water Quality.

85-2 The comment agrees with the Draft EIR's VMT analysis conclusion of a significant and unavoidable impact. The comment goes on to suggest using vehicle ownership data for city residents to estimate the Project's VMT rather than values from the travel demand model.

The comment does not identify specific issues regarding the adequacy or accuracy of the Draft EIR; therefore, no further response is required. Please see Response to Comment 98-3 regarding VMT.

85-3 The comment disagrees with the consultant's (W-Trans) opinion provided in the peer review of the Project's VMT analysis that the significant and unavoidable impact determination by the City is conservative.

This is a closing comment that does not raise a significant issue regarding the adequacy or accuracy of the Draft EIR; therefore, no further response is required.

85-4 The comment states an opinion that parking in the area is insufficient and that neighborhood homeowners have trouble finding parking.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required.

85-5 The comment states an opinion that maps provided in the Draft EIR are deficient and lack information necessary to understand the Project, but notes specific problems with Figure 2-4 only.

Figure 2-4, referenced in the comment, shows the Project's proposed Tentative Subdivision Map. The level of detail requested by the commenter is not detail

provided on a tentative map. Information necessary to evaluate the proposed Tentative Subdivision map in the Draft EIR is adequate to evaluate potential Project impacts.

C

Comment Letter 86

-----Original Message-----
From: Doris Mosler <dhmosler@gmail.com>
Sent: Saturday, October 30, 2021 9:30 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Development

As a senior living in vineyard valley I am deeply opposed to the development of the area behind the library. This is too small a town to support a massive housing project. The disturbances while building will be terrible and noisy, the traffic impacts intense and the loss of a lovely natural resource and bird habitat a great loss.
Please do what you can to stop this unwise plan.
Doris Mosler

86-1

Sent from my iPhone

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Response to Letter 86
Doris Mosler
October 30, 2021

86-1 The commenter opposes the Project, claiming that the City is too small to support the Project and expresses general concerns related to noise, traffic, and bird habitat.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 87

From: Janell Myhre <janellrae@gmail.com>
Sent: Tuesday, November 30, 2021 6:40 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Vineyard Valley MHP <vineyardvalleymhp@gmail.com>
Subject: Fwd: [External] Vineyard Valley Shared Response - Hunter Project Draft EIR (DEIR)

Hello Maya,

I am writing as a resident of Vineyard Valley. I wholeheartedly support the shared response summarized below and attached. I understand this was submitted to the city and I want to make sure to add my name to the concerns listed in the response. My experience working in the area of emergency management for county governments including County Executive Offices, as well as Fire and Sheriff's departments, in four Bay Area counties (San Francisco, Santa Clara, Marin, Solano) has me very concerned about this development. 87-1

The ramifications of the lack of infrastructure mentioned in the Vineyard Valley Shared Response has far-reaching, negative impacts to the public health and safety of the Vineyard Valley and St Helena communities. Additionally, this development will literally eliminate a critical evacuation route for Vineyard Valley's residents, all of whom are of senior age and need quick access to exit routes. With the current catastrophic fire behavior that is becoming common to Napa, St Helena, and the North Bay area, this housing development poses dangerous ramifications to me and my neighbors. 87-2 87-3

As a resident of St Helena and Vineyard Valley, I appreciate you taking the attached Shared Response into consideration and doing what you can to stop the Hunter Subdivsion Project. If there is a need for addtional housing, I ask that you look into other options without such public health and safety implications. 87-4

Respectfully,

Janell Myhre

23 San Lucas Ct, St Helena, CA

Vineyard Valley Shared Response

This submission by Vineyard Valley is very specific to 3 areas of concern. The requested responses to the DEIR is to be prescriptive and specific to the DEIR. I know as we have gone through this process that there are **numerous issues** related to this project that concern us and many in St Helena. Again we have taken a very specific direction and focused on 3 of the many topics. With this in mind we submit these comments which are limited to the inadequacies perceived by us in the areas of 87-5

1.**transportation** (traffic impacts),

2.**utilities,** especially serious wastewater problems based on past experience, and

3.**emergency evacuation** (with fairly quick evacuation from Vineyard Valley in the current environment can be no small challenge)

A greater description and commentary is included in the attachment below.

87-5 Cont.

Public Comment on Draft EIR for the Hunter Subdivision Project
11/17/2021

These comments are submitted by the ownership and supported by the community of Vineyard Valley. It is beyond dispute that our community will be directly and significantly impacted by the Hunter Project. With this in mind we submit these comments which are limited to the inadequacies perceived by us in the areas of **transportation** (traffic impacts), **utilities**, especially serious wastewater problems based on past experience, and **emergency evacuation** (with fairly quick evacuation from Vineyard Valley in the current environment can be no small challenge.

Our comments relate solely to our reading of the adequacy of the Draft EIR regarding: Transportation and Circulation, Utilities and Service Systems and Omission of Emergency Evacuation

1. Transportation and Circulation

Draft EIR page 3.14-41 presents Table 3.14-3 which provides a Proposed Project VMT Summary. It is clear from the table the Proposed Project Transportation Demand Management (TDM) strategies would result in a Project VMT to be 15.2 % higher than the City wide VMT per capita.

The conclusion under the heading ***Mitigation Measures*** states because there are no feasible mitigation measures available to substantially reduce or lessen the impact of the Proposed Project to less than significant..... **the impact is a significant and unavoidable impact.**

Draft EIR concludes and clearly states that the Proposed Project has a significant and unavoidable impact.
It is our opinion that City Planning and Council has an obligation to the citizens of St Helena to protect their environmental integrity and respect the well substantiated conclusion of the Draft EIR; There is no legitimate basis for overriding such a clear unavoidable impact as stated in the Draft EIR.

2. Utilities and Service Systems

Draft EIR page 2-29 section entitled Sewer System states that wastewater flows will discharge from two locations on the proposed project site. The western end of the site is proposed to drain into an existing manhole at the corner of Starr and Hunt avenue.
The area **east of Starr avenue**, is proposed to drain east through the project site via new 8-inch sewer pipes through lot 21 within a public easement manhole on the adjacent parcel in the **Vineyard Valley Home Park.** The number of homes served on the eastern end of the project would number 46 and result based on estimates in the Draft EIR by RSA+, a civil engineering firm calculates approximately **13,000 gallons** of new discharge to the existing manhole per day taking into account the proportion of 46 homes to the Project 51 homes.

87-5
Cont.

The manhole on Vineyard Valley property connects to a sewer pipe that runs under Paseo Drive which is the central through fair in the Park. This pipe delivers the wastewater to a pipeline system ending up at the city wastewater facility.
The pipe is part of a wastewater siphon system that is owned and maintained by the City. The siphon was installed most likely because the discharge pipe has to cross Sulphur Creek. These systems **are well known to present problems in communities around the country** (EPA newsletter March 2015: "Inverted siphons carry wastewater flows under rivers, canals, road, etc. These structures can present problems, and communities look for ways to avoid siphons in their collection system when possible.") and here in Vineyard Valley we have had our share of problems over the years from backups of water and waste products from a city manhole located on Paseo during heavy rains. The result is a public health issue for our residents when spills occur. The city is fully aware of these issues since we call them to mitigate when they occur.

Additional wastewater flows projected from the Project are health and safety issues for the residents of Vineyard Valley.

The Draft EIR has not addressed this issue of sewage spilling in the streets of Vineyard Valley.

Further, after reviewing the estimates in the Water Neutral Report Volume III Appendix J prepared by RSA+ we believe the wastewater estimates could be as low by 50 to 100 %, thus: even making things worse. Also, we do not see estimates of wastewater from the **11 ancillary units**

The reason we disagree with the estimates in the EIR is the assumption of 35 gallons per occupant per day of residential wastewater discharge does not even come close to historical St Helena water usage as described in a 2016 Water and Wastewater study which ranges from 65 to 80 gallons per day (excluding landscaping) depending on assumptions of occupants per residential account.

In addition, currently Phase 2 of the City's water shortage emergency program calls for residents to limit non landscaping use to 65 gallons per day. How can 35 gallons per day be a reasonable assumption based on past practices. Why should the City in this time of water shortage consider this assumption of water use as reasonable?
We believe that the Draft EIR is wrong on the estimates of water use as calculated by RSA+

In summary, the Draft EIR does not address the public health and safety issue of increased flows and an inadequate sewage delivery system resulting in sewerage spilling into the streets of Vineyard Valley.
We believe the Draft EIR is wrong on the estimates of water use as calculated by RSA+

Sewage spills in Vineyard Valley have been documented in the past with vastly lower wastewater flows than the unrealistic estimates in the Draft EIR.

87-5
Cont.

3. Emergency Evacuation

During a Wildfire Fire emergency or any other major event in order to quickly and safely evacuate residents we need the two designated exits to be available and viable. These exits are Paseo Drive to Pope street and Paseo Drive connected to Adams street (or extended)
We believe the Hunter Project Development will seriously impact the adequacy of the Adams street evacuation plans, with the CEQA requirements not adequately addressed in the Draft EIR.

1. CEQA IX Hazardous and Hazardous Materials. Would the Project:
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
The issue of emergency evacuation in the event of a significant Hazardous waste spill event in Vineyard Valley is not covered in the Draft EIR

2. CEQA XVII Transportation Would the project: **d) Result in inadequate emergency access?**

We have not seen this topic covered in the draft EIR and we are very concerned that emergency access will be greatly diminished by the Hunter Project development.

3. CEQA XX Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
a) Substantially impair an adopted emergency response plan or emergency evacuation plan.

We believe the Hunter Project Development would impair our evacuation Plan and this has not been addressed adequately in the Draft EIR

The Draft EIR has failed to adequately address CEQA requirements related to section IX Hazards and Hazardous Materials f) section XVII Transportation d), and section XX Wildfire a)

We believe the implementation of the Hunter project puts the park residents in harms way in an emergency evacuation event.

87-5
Cont.

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Response to Letter 87
Janell Myhre
November 30, 2021

87-1 The comment states opposition to the Project, supports the claims listed in the letter from Vineyard Valley residents (Comment Letter 111), and wishes to be added to that letter. The comment also states the commenter's experience working in emergency management.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

87-2 The comment references Comment Letter 111 and asserts that the Project would negatively impact the Vineyard Valley community due to lack of infrastructure.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 4 that addresses wastewater infrastructure concerns.

87-3 The comment states an opinion the Project would eliminate evacuation routes for Vineyard Valley residents which would be dangerous in the event of an emergency.

Please see Master Response 1 that addresses concerns associated with emergency evacuation.

87-4 The comment requests that City staff explore other options to develop affordable housing.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 88

Attention: Planning Commission
From: Timothy Nieman, St. Helena

Comments for Hunter Subdivision DEIR

Comment about Use of Well for Irrigation

Page 3.9-43 states "Therefore, the well would draw from the deeper volcanic aquifer, below the Napa Valley alluvium which is considered hydraulicly connected to the Napa River (Appendix L). Therefore, the proposed pumping from this well is not likely to have any direct effect on surface flow in the Napa River." Appendix L then states "The well intercepts groundwater from rocks and deposits of volcanic origin. Well perforations begin at a depth of 80 ft below ground surface and extend to the bottom of the well 410 below ground surface. A 20 ft well seal is in place. The well does not draw water directly from the Napa Valley alluvium, which is believed to be interconnected with surface water of the Napa River. The degree of hydrogeologic connectivity between the underlying volcanic aquifer and the alluvial deposits on the surface of the Napa Valley Floor has not been quantified, but it is likely that withdrawals of groundwater from this deeper aquifer have a less direct effect on surface flow in the Napa River than withdrawals from the shallow alluvial aquifer." 88-1

As a geophysicist, I find this to be appallingly bad science and also bad logic. At best, the authors should simply state they don't know if the volcanic rocks are connected to the Napa River.

The authors state in Appendix L that the connectivity to the Napa River of the aquifer being tapped has not been quantified. The authors then conjecture, without data, that it might have a "less direct effect" on surface flow in the Napa River than a horizon known to be connected to the river. From this basis, they somehow conclude on page 3.9-43 that the proposed pumping from this well is not likely to have "any direct effect" on surface flow in the Napa River. So, they began with a statement that the connectivity has not been quantified (i.e., nobody knows) and then conclude that pumping will not have any direct effect on surface flow. That statement has no basis of support. They offer no data at all about the geologic column or about depositional units, if any, that exist between the shallow Napa Valley alluvium and the underlying volcanic aquifer. 88-2

The Napa River is a gaining river in this area and may well be connected to the aquifer from which the applicant plans to withdraw 5.6 million gallons of water per year. It is certainly not acceptable to approve the use of the well for irrigation at this time and until the aquifer's connectivity has been verified with subsurface data or other reliable hydrogeologic data. Further, the County's Groundwater Sustainability Agency is addressing the issue of groundwater withdrawals and will issue findings in 2022, followed by review by the State Department of Water Resources. Because the issue of connectivity is not known and the issue of groundwater withdrawals in this area is not resolved, this should be changed to an impact that is significant and unavoidable based on the data available at this time. 88-3

Comment about Levee Safety

Page 3.9-7 states "Based on the levee design, the Project site would be subject to a flood exceeding a 200-year recurrence interval, equivalent to less than a 0.5% annual chance. During such a flood (200 88-4

year), the style of flooding onsite would be slow and gradual, since the high velocity flows remain limited to the regulatory floodway."

The type of flooding referenced here is an overtopping event. The conclusion that such an event would be slow and gradual is absurd. An overtopping event would fill the area behind the levee rapidly as soon as the water goes over the levee, much as an empty bowl in a sink will fill rapidly once the water in the sink rises above its rim. The area behind the levee is the equivalent of the bowl in the sink. If anything, this type of flooding would be quick and catastrophic. "Overtopping of levees produces fast-flowing, turbulent water velocities on the landward-side slope that can damage the levee." (*Hydraulics of Levee Overtopping*, Li, Lin et al, CRC Press, 2021). "During a flood event, the risk of a levee overtopping can be significant and the consequences can be catastrophic." (National Research Council 2013. *Levees and the National Flood Insurance Program: Improving Policies and Practices*. Washington, DC: The National Academies Press. https://doi.org/10.17226/18309., pg. 100).

88-4 Cont.

Building behind a levee is never safe. The Association of State FloodPlain Managers states, "Because of the nature of levee failure flooding, the ASFPM believes that levees are not a wise community choice and should never be used to protect undeveloped land so development can occur in the flood risk area behind the levee." (*National Flood Policy Challenges, Levees: The Double-edged Sword,* Association of State FloodPlain Managers, 2007, *www.floods.org).*

88-5

Comment about Levee Maintenance

Page 3.9-8 states "Specifically, levee maintenance consists of bi-annual (spring & fall) levee side mowing and levee embankment inspection prior to the rainy season, immediately following a high-water event, and **at intervals not exceeding three months** (City of St. Helena 2012). The purpose of the inspections are to verify that no unusual settlement or loss of material is occurring, that there are no areas of seepage or boils, that **no animal burrows are encroaching upon the levee section**, that toe drainage ditches are flowing properly, and that access roads are properly maintained and are graded to drain."

88-6

Putting homes behind a levee is a bad idea, but at a minimum, requires the absolute assurance of levee integrity. Please include City of St. Helena records to show that required levee bank inspections and related maintenance have been conducted at least once every three months since the construction of the levee.

88-7

There are countless gopher holes all over the levee. Please provide verification that the animal burrows were identified during regular maintenance, what measures were taken to map their surface and subsurface extent, and how the problem was addressed. The following pictures were taken during the storm in January 2017, the first picture shows relative location and the second a closeup of just a few of the easily recognizable burrows on the upper edge of the levee.

88-8





Comment about Earthquakes

Page 3.6-12 states "The 1906 and 1969 earthquakes were of moderate magnitude with earthquake epicenters located near downtown Santa Rosa." The 1906 earthquake was not of moderate magnitude nor was its epicenter near Santa Rosa.

88-9

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Response to Letter 88
Timothy Nieman

88-1 The comment states an opinion that the conclusions in the peer-reviewed well capacity and sustainability analysis include "... appallingly bad science and also bad logic …" and should be revised to state the what the commenter asserts are uncertainties in the study about local geology and hydrology.

The conclusion of the independent analysis prepared by a California licensed and certified Engineering Geologist is that use of the on-site well and pumping from the deeper volcanic aquifer would have less of an effect on the Napa River than withdrawals from the shallow alluvial aquifer. The language on page 3.9-43 of the Draft EIR has been revised to follow the language of the report more closely. Please see Chapter 3, Changes to the Draft EIR for the revised language.

The findings of the independent analysis as well as the proposed volume of pumping support a the EIR's finding of a less-than-significant impact.

88-2 The comment states an opinion that the finding of less than significant related to the effects of using the onsite well for irrigation use is unsupported.

As stated above in Response to Comment 88-1, the conclusion related to the effects of the proposed onsite well use is based on the professional opinion of a California licensed and certified Engineering Geologist, the known details of the well screening exhibited in Appendix L of the Draft EIR, the relative volume of pumping proposed for the Project's irrigation purposes, and the direct observations of the well capacity test that was performed onsite. The Well Capacity report (DEIR Appendix L) also includes the recorded stratigraphy that was part of the well completion report that was completed at the time of well construction (Attachment C of Appendix L) that does offer data on the underlying geologic units at the site.

88-3 The comment states an opinion that approval of the well (to provide water for landscape irrigation) is not acceptable until more hydrogeologic data is obtained and the County's Groundwater Sustainability Agency issues its findings and the potential impact be changed to significant and unavoidable.

Please see Response to Comment 88-2.

88-4 The commenter takes issue with levee safety and the description in the Draft EIR of an overtopping event as something that would be slow and gradual.

To avoid confusion, the sentence that refers to the flooding as slow and gradual has been removed from the document, as shown in Chapter 3, Changes to the Draft EIR.

See also Master Response 3 for more information related to the levee and flood protection.

88-5 The comment includes a quote from the Association of State Floodplain Managers which states that levees should not be used to protect undeveloped land so that development can occur.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 3 regarding the levee.

88-6 The comment references the levee maintenance procedure described in the Draft EIR.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. please see Master Response 3 regarding the levee.

88-7 The comment requests documentation showing that levee bank inspection and related maintenance have been conducted as least once every three months.

Please see Responses to Comments 75-1, 73-5 and Master Response 3.

88-8 The comment requests documentation regarding the identification and management of animal burrows at the levee.

Please see Responses to Comments 75-1 and 73-5 and Master Response 3.

88-9 The comment concerns a statement made about the location of the epicenter of the 1906 earthquake.

To clarify, the text has been edited on page 3.6-12 of the Draft EIR to correct the description of the 1906 earthquake and is included in Chapter 3, Changes to the Draft EIR.

Comment Letter 89

Via E-Mail to:

publiccomment@cityofsthelena.org
mderosa@cityofsthelena.org

November 22, 2022

Planning Commissioners
Mayor of St. Helena
St. Helena City Council
c/o Planning Department
1572 Railroad Avenue
St. Helena, CA 94574

Re: Concerned Citizens Against Hunter Subdivision Project
Comment Letter to Draft Environmental Impact Report SCH # 2018032014

Honorable Mayor, City Council Members and Planning Commissioners:

I am a resident at Vineyard Valley, a senior retirement community in St. Helena, immediately to the west of the proposed Hunter Subdivision Project (the "Project"). I am also an attorney with an expertise in land use and the California Environmental Quality Act ("CEQA"). This letter is submitted in my individual capacity and on behalf of others in the community and not as legal counsel for Vineyard Valley ownership, which has submitted its own comment letter in opposition to the Project. 89-1

Our entire Vineyard Valley community is united against this project as it has been proposed by the developer. The Environmental Impact report is inadequate and has no significant discussion of Vineyard Valley and the development's impacts on the senior citizens residing here. We are a population of sensitive receptors that is particularly sensitive to impacts from noise, glare and traffic and are extremely dependent upon the open space that will be eliminated by this project. 89-2

I am especially concerned about the lack of analysis of the impact to the existing walking path, which goes directly from Vineyard Valley into downtown St. Helena via Adams street. Many of us use this trail on a daily basis to maintain our physical strength and enjoy the scenic and natural beauty of St. Helena. The path, which currently borders pristine open space and vineyards, will soon front along backyards and fences under the developer's proposal, diminishing our quality of life by eliminated open space and the cultural and social environment created by our community trail. One need to look no further than Visual Simulation 3 on Figure 3.1-9 to see how profoundly walkers on the community trail would be impacted by this project. The loss of green space will also significantly impact our property values, which although not a CEQA impact, is within the purview of the City to consider in disapproving the Project. 89-3 89-4

It also appears that the Project would cut off the community trail at Star Avenue, essentially reducing the trail length by 40%, eliminating the prescriptive easement for the benefit of the public over any private land. The DEIR consciously diminishes the significance of this important community assest by referring to it as a "maintenance road". Eg See DEIR 2-23: "The southwestern portion of the existing gravel maintenance road at the end of Adam's Street would be **modified** by the Proposed Project to enable access to the Project site." What the DEIR glosses over is that this reference to 'modifying' 89-5

1

Adams is in fact extending Adams Street, which will now end at Star and the "modification' will in fact result in the elimination of approximately 40% of the existing trail.

89-5 Cont.

To be clear, we are not opposed to the development of this property. Our issue is merely how it has been proposed--without any regard to the Vineyard Valley senior community or input from our residents. There are a number of project mitigations discussed below not considered in the DEIR that would have improved the project and gained our support.

89-6

1. Comments to DEIR

A. Piecemealing of Project Approvals.

The Applicant concedes that additional entitlements will be required for the Project, including entitlements of significance to the community such as an Affordable Housing Agreement, design review and most importantly, a Conditional Use Permit ("CUP") for a large, undeveloped portion of the Project with a possible density bonus in the future that is not included here. All of these entitlements are related to and arise from the Project, hence, to limit the application of the DEIR to just the Subdivision Map Act approval eliminates many areas of potential controversy, impacts of significance and a plethora of political and social issues that the City and community is not afforded an opportunity to evaluate holistically. CEQA defines a project as "the whole of the action" [Guideline 15378a, Eg. See *Bozung v. Local Agency Formation Commission (1975)* 13 Cal. 3rd 263).] Similarly, in *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal. 3rd 376) the California Supreme Court held that related approvals had to be evaluated in the CEQA document when they were "reasonably foreseeable".

89-7

The segmenting of the Project is by the applicant's own admission as the DEIR states: "Beyond the Tentative Subdivision Map application before the City at this time, the Proposed Project applicant has stated their intent to ultimately develop the 51 lots with 51 single-family, market-rate residences. Additionally, homes on 11 of the 51 lots would be developed with an ADU as part of their initial construction." [DEIR 2-14] These are significant foreseeable entitlements and the failure of the application to include these is material and requires resubmittal and recirculation of the DEIR. The required 'direct environmental impacts analysis' and the 'indirect effects analysis' of these omitted entitlements should have been the subject of disclosure and public debate.

89-8

The DEIR authors acknowledge that "the MR district also allows attached duplex and triplex units, condominiums, and townhouses, and similar uses **with a conditional use permit**." [DEIR 2-13]. By ducking the CUP approval for the apartments, townhouses and other more controversial and less profitable Lot 52 multifamily uses, applicant's strategy is to push the CUP and the more controversial aspects of the project off to a future date. The developer's cynical goal is to get city council approval for the more profitable, high end single family residences and leave the 3.4-acre parcel with 25 attached multifamily residential units in indefinite limbo. This effort to cherry pick the profitable portion of its Project and defer the less profitable phases violates CEQA's anti piecemealing rule. In the future, the developer can submit an application for a revised 'concept plan' that includes less density or more density, or even possibly converting this 'house money' phase back to single family. At that time, the developer can request an EIR addendum from the City as a litigation defense for the CUP, a much lower legal hurdle. The developer's transparent strategy is to frame the Project as a simple tentative map approval and

89-9

2

avoid public dialogue around many of the details surrounding the Project as a whole that might sway the decisionmakers into an unfavorable verdict.

89-9 Cont.

B. Project Description—Community Walking Trail

The Project Description makes light of the community walking trail used by residents throughout the community, specifically the senior citizens living at Vineyard Valley, the northerly terminus of the "gravel maintenance road". This important community amenity is referred to a "a gravel maintenance road used by the public as an informal trail [that] borders the site along the north/northwest boundary . . ." This dismissive description in turn leads to an inadequate discussion on the importance of the community trail and the impacts of the project on its use, maintenance and quality as an open greenspace--despite the authors conceding nonchalantly that "the existing gravel maintenance road . . . is a popular walking trail for City residents". In addition to eliminating a substantial portion of the community walking trial by extending Adams to Star, both sides of the extended street would now include parking.

89-10

89-11

C. Project Objectives

The DEIR correctly states that the purpose of the Project Objectives is to "help the lead agency determine the alternatives to evaluate in the EIR (CEQA Guidelines, Section 15124(a))" [DEIR 2-13] However, the authors fail to acknowledge that the Hunter DEIR Project Objectives are solely the applicant's project objectives and are not the objectives of the City of St. Helena as the Lead Agency. As commenters have noted: "The statement of project objectives is supposed to represent those of the Lead Agency. Sometimes a private project applicant will have his or her own objectives that are not necessarily the same as the lead agency's. In these situations, the lead agency is under no obligation to use the proponent's objectives as its own and should write the project objectives in such a way as to that explains the underlying need from the standpoint of public need. . . [I]t is the lead agency's objectives that form the basis for determining the appropriate range of alternatives to be analyzed in the EIR." *CEQA Deskbook*, Bass, Bogdan and Rivasplata, P 137. Examples of less self-serving Project Objectives might be:

- Develop a residential project that is harmonious with the surrounding community and minimizes impacts to the sensitive receptors within the senior residential communities adjacent to the Project
- Enhance the benefits from the existing community walking trail by creating a walking experience that preserves portions of the adjacent green spaces for the community

89-12

D. Site Access and Onsite Circulation

The DEIR and the developer have proposed a site access and circulation solution that eliminates the community walking trail by extending Adams to Star. There is in fact a much more sensible solution. Star can be extended and widened to a cul de sac ending at the community trail. Access to the site would be only through Star, with feeder streets into Street A and Street B for onsite circulation. The developer would record a covenant dedicating a vineyard buffer/setback between the community trail and the vineyard parcel to the east of Star and a narrower open space vineyard buffer setback against that portion of the vineyard to the east side of Star. Lots 30 through 40 would be increased in length to include portions of lots 41 through 50 and these

89-13

10 lots would be eliminated. Adams would remain in its current configuration and the community trail would continue to Adams with the existing vineyards creating a buffer/green zone.

89-13 Cont.

E. Landscaping Plan

The developer suggests that the "The existing vineyards on the Project site would be removed with the exception of an approximately one-acre portion of the vineyard that would remain located in the westernmost "panhandle" portion of the site." [DEIR 2-25] This is an entirely unsatisfactory solution. As mentioned in Section D above, a much better alternative is to preserve a portion of the existing vineyards and make this the front yard for Lots 30 to 40. Such a solution will have the dual benefits of both preserving an important community amenity in the community trail and creating a desirable view corridor for Lots 30 – 40, which will now be larger and have direct vineyard access. By eliminating lots 41-50, the Project density is also reduced, thereby reducing the Project impacts.

89-14

F. Offsite Improvements

For the reasons stated above, I object to the extension of Adams street at the cost of the community trail. [DEIR 2-30}

89-15

G. Phasing and Timing.

The City should require the developer to enter into a development agreement to vest the 6 year phasing in of the multifamily portion of the project. The development agreement can require that the community trail be enhanced and preserved in the manner discussed in this letter. [DEIR 2-30]

89-16

H. Project Analysis Assumptions

The DEIR incorrectly conflates construction timing with phasing. If as Section 3.0-3 states, the future buildout is completely unknown, then there is no plausible way in which to evaluate the impacts of the buildout. Although CEQA does not require that purely speculative assumptions be made on future growth, the DEIR is fatally flawed because it consciously disregards entirely foreseeable market demand. The traffic analysis should have horizon years based on the projected buildout, with the possibility or deferring or accelerating the later phases after conducting additional supplemental CEQA analysis.

89-17

89-18

I. Aesthetics/Scenic Resources

In no place does the DEIR adequately describe the aesthetic and visual impact of the Project to the users of the community trail. An entire section should be dedicated to the deleterious impacts of the Project to the users of the trail. As **Figures 3.1-2 to 3.1-5** show, the community trail is currently a magnificent cultural resource with views of vineyards, wetlands and open space on both sides of the path, all the way to Adams street. There is no discussion in the DEIR of the harmful impacts to this visual experience that results from this development.

89-19

The General Plan is also supportive of the approach advocated for in this letter. It states:

"Policy 4.5.2: Open space should be brought into the community wherever possible as a reminder of the natural setting of the community. . ."

"Policy CD5.1: Preserve the visual and physical connection to agriculture by protecting views from streets, parks, and open spaces to vineyards, agriculture, and hillsides. Where new streets are extended adjacent to agriculture, encourage hillside, and vineyard views by maintaining agricultural activities at the road edge. Existing east and west entries should be maintained in their current appearance, protecting and improving views of vineyards and the surrounding hillsides wherever possible.

89-19 Cont.

The report authors give mere lip service to visual impacts. It establishes criteria for analysis but fails to apply its own analytical standards to make the obvious conclusion that the Project as proposed has a significant unavoidable impact to the users of the community trail. The criteria that can be applied are as follows:

"The determination of when changes to the visual environment become a substantial adverse effect is based on the following primary factors: (a) the existing scenic quality of an area; (b) the level of viewer exposure and concern regarding visual change; and (c) the level of actual visual change caused by the project as seen by a given viewer group. The overall visual sensitivity is first established based on existing visual quality, viewer exposure, and viewer concern. These factors are then considered together with the level of expected visual change or contrast and significance. Visual change is an overall measure of the alteration or change in basic visual attributes such as form, line, color, and texture as a result of the project. Thus, a substantial adverse effect can occur when a project results in high levels of visual change or obstruction of scenic views by sensitive receptors."

89-20

"Development of the Project site would change the undeveloped character of the site from vineyard and annual grasslands to a developed urbanized environment . . . The Proposed Project would change views at this viewpoint through removal of the vineyards and development of roads, residences, and new landscaping."

The DEIR concedes that "a scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. **This can include public views of agricultural open space, vineyards, creeks, and major landscape features.** Based on this definition, the Project creates an adverse and unavoidable impact to a scenic vista despite the conclusion in the DEIR to the contrary. The existing community trail fits this definition of a scenic vista for the users of the trail.

89-21

J. Alternatives

Under CEQA, a project is required to look at a reasonable range of feasible alternatives. In this case, all of the alternatives are straw men, meant to be easily discarded with a minimum of analysis, founded on project objectives that are inadequate. Alternatives 1 and 2 are the No Project alternatives and invariably fail. Doing nothing when we have a housing crisis merely avoids the problem. The increased density alternative will be politically unsupportable and financially unviable. Not surprisingly, the report concludes that the No Project/No Development alternative is environmentally superior.

89-22

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The Park/Open Space Preserve alternative is a step in the right direction but is neither aggressive nor visionary. Frankly, the developer should have simply incorporated the 1 acre wetlands preserve into the Project and saved the cost of offsite mitigation. I suspect this is part of the strategy—to allow the project to be approved with the 1 acre mitigation as a condition imposed by the Council. This change would be a win for the developer. 89-23

The Project should have been instead a more creative variant of the Park/Open Space Alternative. The range of alternatives must be selected to foster meaningful participation and informed decision making (Guideline 15126.6(f)Preserving the community trail and creating a buffer between the trail walkers with vineyards and green scape would have earned the support of the community. The best alternative would be a smaller project that eliminates lots 41 through 50 and creates the vineyard buffer. It would also incrementally increase the size of lots 30 through 40, giving these lots the benefit of the vineyard buffer and the view corridors to the north. This project would also eliminate the extension of Adams and instead creates a wider cul-de-sac ending out of Star street, using Star for primary circulation. The 3.4 acre future multifamily parcel would be stepped back from the community trail as well, with the vineyard buffer continuing to the existing terminus of Adams as well as over a portion of lots 24, 27 and 26 at the other end. As part of a development agreement with the city, the developer's rights would be vested for 10 years, and additional density would be allowed through the remaining parcels. 89-24

Conclusion:

The DEIR acknowledges, albeit halfheartedly and indirectly, that the impacts from the Project to the community trail are material, significant and unavoidable. "Adverse visual effects can include the loss of natural features or areas, the removal of urban features with aesthetic value, or the introduction of contrasting urban features into natural areas or urban settings. Natural features may include but are not limited to open space; native or ornamental vegetation/landscaping; topographic or geologic features; and natural water sources. The loss of natural aesthetic features or the introduction of contrasting urban features may have a local impact, or, if part of a larger landscape, may contribute to a cumulative decline in overall visual character. **The vineyard present in the southwestern portion of the Project site would be considered a natural feature."** 89-25

As proposed, the Project trips the threshold for significance to damage to an important scenic resource, namely the existing community trail. The St. Helena community recognizes the importance of new housing. I am not opposed to the development of housing—both single family and multifamily—as a fair response to the statewide imperative that local jurisdictions encourage the development of housing. My 89-26

6

request is that the City reject the project as proposed and recommend that the developer create a project that reduces the density along the frontage of the project to preserve and enhance the important cultural amenity that the community trail represents as proposed in the alternative above. The revised Project should include all of the entitlements needed by the Developer and address the phasing of buildout and examine the impacts of buildout.

89-26 Cont.

Sincerely,

Indrajit Obeysekere, Esq
SL Realty Advisors

iobeysekere@gmail.com
Vineyard Valley
43 Laguna Seca Ct., St. Helena

Copies: Ownership, Vineyard Valley
Vineyard Valley Homeowner's Association

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Response to Letter 89
Indrajit Obeysekere
November 22, 2021

89-1 The comment provides an introduction and clarifies that the letter is submitted as a resident of Vineyard Valley Mobile Home Park and not on behalf of other residents or as legal counsel for Vineyard Valley.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

89-2 The comment states the Vineyard Valley community is opposed to the Project and the Draft EIR is inadequate because it does not address impacts to the Vineyard Valley senior citizen residents, which are sensitive to impacts from pollutants, noise, glare and traffic and goes on to note the residents are dependent on the open space that will be eliminated by the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the EIR analysis is inadequate, but it should be noted that the Draft EIR includes detailed analyses of all of the topical areas noted in this comment.

89-3 The comment refers to the existing trail that is located parallel to the City's levee maintenance road and asserts the Project will diminish enjoyment of the trail due to development of the Project site and notes that the Draft EIR includes an analysis of aesthetic impacts.

The commenter's opinion that the Project would affect enjoyment of the trail is noted and forwarded to the decision makers for their consideration. The aesthetic impacts of the Project are addressed in Section 3.1 of the Draft EIR. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

89-4 The comment states an opinion that development of the Project site resulting in the loss of open space will impact property values and requests that the City Council to consider this as they review the Project.

CEQA does not require an evaluation of the potential financial impacts of a project. The commenter's opinion that the Project would affect neighboring property values is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

89-5 The comment claims that the Project would reduce the length of the "community" trail near the site by approximately 40%, and eliminate the prescriptive easement (of the trail) for the benefit of the public over private land and alleges that the Draft EIR diminishes the significance of this community asset.

The Draft EIR acknowledges the existence of the public trail, as noted on pages 2-2 and 2-23 in Chapter 2, Project Description. The EIR notes that the maintenance road adjacent to the northern boundary of the Project site is not a part of the Proposed Project, nor is it a City trail. There is an existing City trail located on the northside of the maintenance road, as shown on a trails map provided in Chapter 3, Changes to the Draft EIR. A small portion of the maintenance road, which is merged with the trail in this location would be paved to accommodate construction of the Adams Street extension, but sidewalks would be provided along the extension of Adams Street to provide a safe connection to the remainder of the maintenance road and the trail, which would remain unaltered by the Proposed Project.

89-6 The commenter states they are not opposed to development of the Project but are concerned that the Vineyard Valley community was not consulted and indicate the addition of mitigation would have improved the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

89-7 The comment states an opinion that the Draft EIR is piecemealing the Project because the "whole of the action" does not evaluate additional discretionary approvals effectively eliminating areas of potential controversy and impacts thereby denying the public an opportunity to review and comment.

As noted in Chapter 2, Project Description, the Project applicant submitted an application for a Tentative Subdivision Map that was deemed complete by the City in March 2011. The applicant will subsequently need to obtain approval of an Affordable Housing Agreement, Design Review, or a Use Permit to construct the attached multifamily housing at this time. The public will have the opportunity to review and comment on these subsequent actions. The City is not piecemealing the Project to reduce or eliminate Project impacts and the Draft EIR properly evaluated impacts of the Project.

89-8 The comment states an opinion that Project approvals are being piecemealed and therefore the Draft EIR should be resubmitted and recirculated.

Please see Response to Comment 89-7.

89-9 The comment states an opinion that the applicant plans to piecemeal the Project by deferring the multifamily housing to a further date since it would require a conditional use permit.

Please see Response to Comment 89-7.

89-10 The comment states an opinion that referring to the trail as a "gravel maintenance road" is dismissive and fails to convey the importance of the trail to the community.

Please see Responses to Comments 70-6 and 89-3.

89-11 The comment states an opinion that the Project would eliminate a substantial portion of the trail by extending Adams Street to Starr Avenue and adding parking to both sides of the extended street.

Please see Responses to Comments 89-3 and 70-6.

89-12 The comment states an opinion that the Project objectives are the applicant's objectives rather than those of the City as lead agency.

The Project objectives are endorsed by the City as lead agency. No further response is required; the comment is noted and forwarded to the decision makers for their consideration.

89-13 The comment suggests that instead of eliminating the trail by extending Adams Street to Starr Avenue, Starr Avenue can be extended and widened to a cul-de-sac ending at the community trail.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

89-14 The comment states an opinion that an alternative to preserve a portion of the existing vineyards is to incorporate the vineyards as a front yard for Lots 30 to 40.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

89-15 The comment states an objection to the extension of Adams Street at the cost of the community trail.

The comment does not identify any specific areas where the EIR or analysis is inadequate; therefore, no response is required; the comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 89-5 regarding the trail.

89-16 The comment states an opinion that the City should require the developer to enter into a development agreement to vest the 6-year phasing of the multifamily portion of the Project and to enhance and preserve the community trail in the manner stated in the comment.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

89-17 The comment states an opinion that the Draft EIR is flawed because it disregards foreseeable market demand.

The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

89-18 The comment states an opinion that the traffic analysis should be evaluated in phases and construction should be delayed or accelerated based on the phased analysis.

Section 3.14 of the Draft EIR contains the transportation analysis. The transportation analysis does not include a phased approach to buildout of the Project, and the horizon year analyzed was 2040. As stated in the Draft EIR and Appendix K, the Proposed Project would be expected to be completed and occupied by the year 2040.

89-19 The comment states an opinion that the Draft EIR does not adequately describe the aesthetic impact of the Project to users of the community trail.

Please see Responses to Comments 89-2 and 89-3.

89-20 The comment states an opinion that the Draft EIR fails to apply its own analytical standards and the Project would have an obvious significant unavoidable impact to users of the community trail.

Please see Responses to Comments 89-3 and 70-6.

89-21 The comment states an opinion that the community trail fits the definition of a scenic vista.

The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

89-22 The comment states an opinion that the Project alternatives were designed to be easily discarded in favor of the Proposed Project.

Chapter 5 of the Draft EIR evaluates Project alternatives. Section 15126.6(a) of the CEQA Guidelines states there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason. This rule is described in Section 15126.6(f) of the CEQA Guidelines and requires an EIR to set forth only those alternatives necessary to foster informed decision-making. As defined in Section 15126.6(f), the rule of reason limits alternatives analyzed to those that would avoid or substantially lessen one or more of the significant effects of a project. Of

those alternatives, an EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives that was selected for analysis includes those that would result in reduced impacts when compared to those of the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration.

89-23 The comment states an opinion that the Park/Open Space Preserve alternative is not aggressive or visionary and the developer should have incorporated the wetland into the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

89-24 The comment states an opinion that the best alternative would be a smaller project that eliminates lots 40 through 50, creates a vineyard buffer, and does not include the extension of Adams Street.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 89-22.

89-25 The comment states that the Draft EIR identifies significant and unavoidable impacts to the community trail and states an opinion that the vineyard would be considered a natural feature.

The analysis in Section 3.1, Aesthetics determines impacts to scenic vistas and the potential for the Project to conflict with zoning and other regulations that govern scenic quality or substantially degrade the existing visual character or quality of public views of the site and its surroundings to be less than significant. The Draft EIR does not identify any significant and unavoidable impacts to scenic vistas, changes in visual character or public views.The commenter does not state where in the Draft EIR it is stated that impacts to the adjacent trail are significant and unavoidable.

89-26 The comment states an opinion that the Draft EIR exceeds the threshold for significance for damage to scenic resources and requests the City reject the Project in favor of a project with reduced density and preservation of the community trail.

The commenter's opinion is noted and forwarded to the decision makers for their consideration.

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Comment Letter 90

From: Tishna Pastrama <pastrama@sbcglobal.net>
Sent: Tuesday, November 30, 2021 2:08 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Against the Hunter Subdivision

Dear City of St. Helena and to whom it may concern:

We have lived in St. Helena for 40 years. This was always such a quaint and special place to call home. We have lived through all of the changes that have taken place and have happily grown with those changes.

However, the last 5 years we have experienced so many things that we hadn't had to before and must now be prepared to face in the future on unfortunately a more continual basis that it has brought up many questions and concerns. The Hunter Project is the largest red flag among them.

With fires, extreme draught concerns, electricity outages, roads that have deteriorated to beyond abysmal condition, a parking state of emergency on our streets that prevent home owners from even parking in front of their own homes, a sewer system that can barely function right now without additional users, bridges that although historic and something to be proud of that would be unable to safely bare the load of more traffic in an emergency. 90-1

The Hunter Subdivision would add too many residents into a space that would not have adequate parking for each car that would be living in each dwelling. There is currently a major problem on the east side of St. Helena for that exact reason with the current residents of Hunt Avenue, Grove Court and Starr Avenue having to deal with cars lining their street with cars from tenants of the apartments on Monte Vista and the Huntsgrove Apartments. The streets for the new Hunter Subdivision will be packed with cars adding a major safety issue from many perspectives. Kids needing to walk through that subdivision to the bus stop will be dealing with high traffic. The overflow of cars needing a place to park will become worse than a nightmare as there are no spaces available in the immediate surrounding streets now. There will be no place for all those vehicles to park. 90-2

What provisions are in place to provide adequate parking that does not interfere with the current city residents? 90-3

What safety measures do you have in place to safely evacuate the whole east side from Adams to Pope with the additional up to 350-500 new residents in the case of an emergency and Silverado Trail is not accessible - as we have just experienced? 90-4

We feel it is extremely discriminatory for tenants to have all of the new subdivisions / apartments/ affordable housing on only one side of the town. How can you answer this major concern? 90-5

Our electricity grid is inferior currently without any new building. Does the city plan to improve the electric grid before any new subdivisions are approved or will we all be stuck with an even more taxed grid that can't handle the current use right now? 90-6

Wanting the best for our town,

Gabriel and Tishna Pastrama
Sent from my iPhone

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Response to Letter 90
Gabriel and Tishna Pastrama
November 30, 2021

90-1 The commenters state that they are concerned about the Project's impact on fire risks, drought conditions, electrical outages, road conditions, parking, sewer capacity, and emergency access.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. Further. the adequacy of parking supply is not an environmental impact under CEQA. The commenter's concern is noted for the decision makers and no further response is required. Therefore, the commenter's concern is noted for the decision makers.

The Project's impact on water supply is discussed in Master Response 2; the Project's impact on emergency access is discussed in Master Response 1; and the Project's impact on sewer capacity is discussed in Master Response 4. Please also see Response to Comment 51-4 related to fire protection.

90-2 The comment expresses concern regarding the Project's impact on parking and pedestrian safety.

See Response to Comment 90-1.

Regarding pedestrian safety, Section 3.14 of the Draft EIR addresses this concern. This section analyzes the Project's transportation impacts related to consistency with plans or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, hazardous design, and emergency access. The Draft EIR concludes that the Project would have less-than-significant impacts to pedestrian safety.

90-3 The comment repeats a concern related to the City's parking.

Please see Response to Comment 90-1.

90-4 The comment raises a concern regarding the Project's impact on emergency evacuation.

Please see Master Response 1, which discusses emergency access and evacuation.

90-5 The comment states an opinion that affordable housing should not be located on one side of the City and, because of this feels that the Project is discriminatory.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; Therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

90-6 The commenter is concerned with the Project's impact on the City's electrical grid and current condition of the City's grid.

No specific concerns with the existing electrical infrastructure were identified. The comment does not identify any specific areas where the Draft EIR analysis, finding that the Project's energy impacts are less than significant, is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

Comment Letter 91

From: Joann Patton <mcnjo@buckeye-express.com>
Date: October 31, 2021 at 3:33:55 PM PDT
To: publicomment@cityofsthelena.org
Subject: Hunter Project

To whom it may concern,
This project SHOULD concern us all and there are a myriad of reasons to be opposed to it. I will leave detail to others but two main reasons are lack of water and city liability in case of levee failure. This discussion needs to end and never reopen.
Thank you.
Joann Patton
1832 Crinella
St Helena CA
Sent from my iPhone

91-1

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Response to Letter 91
Joann Patton
October 31, 2021

91-1 The comment states opposition to the Project. In particular, the comment mentions the Project's water supply and potential levee failure as issues.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 92

From: Kathy Paulus <toonie.anderton@gmail.com>
Sent: Saturday, October 30, 2021 12:11 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision Project

The Hunter project is to be situated in the Napa River floodplain. Floodplains provide groundwater recharge, filter sediment and contaminates, transport nutrients, and support habitats for some of our most sensitive living resources. A floodplain is an area of land adjacent to a river which stretches from the banks of its channel to the base of the enclosed valley walls and which experiences flooding during periods of discharge. 92-1

Building on floodplains has serious consequences because water that would be otherwise absorbed by the land instead runs off more quickly into the river that then burst their banks. 92-2 An area that is subject to natural flooding from an adjoining waterway is in an area that makes the habitats for many creatures rare and unnatural as their natural habitable has been destroyed. 92-3 It also makes it very dangerous for the creatures to build down river as the oils and dirt gets washed in the river polluting it by dangerous amounts. 92-4

Developers see the advantage to building in a floodplain because they tend to be flat and therefore easy to develop and are close to other amenities. This is one of many very big reasons to STOP the Hunter Subdivision Project. 92-5

From a concerned citizen,
Kathleen Paulus
St. Helena

Response to Letter 92
Kathleen Paulus
October 30, 2021

92-1 The comment states that the Project would be located in the Napa River floodplain, which experiences periodic flooding.

Please see Master Response 3.

92-2 The comment states that building on floodplains has serious consequences because of increased runoff.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

92-3 The comment states that building on a floodplain would destroy natural habitat for many species.

Potential impacts to wildlife species are discussed in Section 3.4 of the Draft EIR. The comment is noted and forwarded to the decision makers for their consideration.

92-4 The comment states an opinion that construction on a floodplain would make it dangerous for wildlife habitat downriver as oils and dirt would pollute the river.

Potential water quality and runoff impacts are discussed in Section 3.9 of the Draft EIR. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see also Response to Comment 92-3.

92-5 The comment states an opinion that developers want to build in floodplains because they tend to be flat and tend to be close to other amenities.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 93

LAW OFFICES OF
PERRY, JOHNSON, ANDERSON,
MILLER & MOSKOWITZ LLP
438 First Street, 4th Floor, Santa Rosa, CA 95401

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November 1, 2021

Maya DeRosa, AICP
Planning and Building Director
City of St. Helena Planning Division
1572 Railroad Ave
St. Helena, CA 94574

Re: **Comments to Draft EIR - Hunter Subdivision Project**

Dear Ms. DeRosa:

Enclosed herewith please find the following two comment letters to the DEIR submitted on behalf of the Applicants:

November 1, 2021, W-Trans; and

October 20, 2021, DKS.

93-1

Very truly yours,

Leslie R. Perry

LRP:kh
Enclosure

November 1, 2021

Mr. Ben Van Zutphen
100 B Street
Santa Rosa, CA 95401

Comments on the Environmental Impact Report (EIR) for Hunter Subdivision Project

Dear Mr. Van Zutphen;

As requested, W-Trans has reviewed the Draft Environmental Impact Report (DEIR) completed for the City of St. Helena regarding the proposed Hunter Subdivision project. Based on our review we have comments regarding the approach that was used to analyze vehicle miles traveled (VMT), which is the metric used to evaluate the transportation impacts of development projects under the California Environmental Quality Act (CEQA). The DEIR concluded that the project would result in a VMT impact that would be significant and could not feasibly be mitigated. After reviewing this analysis, we believe that the approach taken in this analysis is overly conservative and does not meet the intent of current City and state policies, as described below. 93-2

Background

The proposed Hunter Subdivision project would be located north of Hunt Avenue and east of Adams Street in St. Helena. The site is 16.9 acres in size and the project would include 51 single-family homes, 11 of which would include affordable accessory dwelling units; a portion of the site is also being reserved for workforce housing, which would consist of 25 affordable units. Located approximately 0.4 miles from the center of St. Helena, the site is within walking distance of a range of commercial uses that could serve project residents.

CEQA requires analysis of the anticipated impacts of development projects, including transportation impacts. Senate Bill (SB) 743 established the assessment of Vehicle Miles Traveled (VMT) associated with the project as the metric for establishing traffic impacts due to a development project. As stated in guidance from the state's Office of Planning and Research (OPR) provided in in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018, the purpose of SB 743 was to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." The OPR guidance was established to support these goals and encourages development at locations that feature characteristics including proximity to a mix of land uses and access to non-vehicle modes of transportation, which generally reduce both the number and length of vehicle trips. 93-3

Lead agencies have the authority to adopt their own thresholds of significance, but since the City has not yet done so, the OPR guidance was used as the basis in the DEIR. The guidance indicates that either the citywide or regional per capita VMT may be used to establish a baseline for evaluating residential projects, and the staff directed the EIR consultant to use the citywide average.

Assessing VMT Impacts of Development Projects

Measuring VMT: The OPR guidance indicates that travel demand models are the recommended data source for estimating VMT. At the time the analysis was conducted, the Napa-Solano Travel Demand Model was the most localized model available, although the Napa Valley Transportation Authority has since completed its development of an updated model. The unit of measurement in travel demand models is traffic analysis zones (TAZs), of which there are seven in St. Helena. The assumption in analyzing VMT is that incoming development will result in similar travel patterns as existing development in the vicinity of the proposed project; therefore, the VMT rate for residential development in the project TAZ is assumed to be applicable to the project. 93-4

490 Mendocino Avenue, Suite 201 Santa Rosa, CA 95401 707.542.9500 w-trans.com
SANTA ROSA • OAKLAND

Adopting the citywide or countywide average as the baseline for VMT has important implications for incoming residential development projects. As indicated in the table, the two TAZs for which the VMT impacts could potentially be mitigated when using a citywide threshold would require project VMT to be reduced by 4.8 percent and 12.4 percent. While generally considered feasible, this level of mitigation would be difficult to achieve for residential projects in the context of St. Helena. For example, transit-related mitigation measures are among the most effective strategies to reduce project VMT, but to achieve this reduction would require more frequent service than is currently available.

93-8

Provision of affordable housing has also been identified as a strategy that can be presumed to reduce project VMT. As noted in the DEIR, the OPR guidance indicates that if a proposed project consists of 100-percent affordable housing, VMT impacts may be presumed to be less than significant. The guidance also states that lead agencies may determine that the VMT impacts are less than significant for projects with a high percentage of affordable units, or that some lower level of VMT reduction may be factored into the estimation of project-related VMT based on a lower amount of affordable housing. The DEIR noted the inclusion of affordable workforce housing as part of the project but did not attempt to estimate any associated VMT reductions.

93-9

Given the limited options available to reduce VMT for residential projects in St. Helena, if the citywide average is used as the baseline for determining significance, it appears likely that all incoming residential development projects (that generate more than 110 trips per day) in at least six of St. Helena's TAZs would have a significant VMT impact, while it may be feasible to mitigate the impacts for some projects in the remaining zone; unmitigable impacts would require preparation of an EIR and City Council adoption of a statement of overriding considerations. This would increase the cost to project applicants and could increase the difficulty in addressing the City's need for housing. Conversely, adoption of the countywide per capita VMT as the basis for a threshold of significance would result in a less-than-significant VMT impact for all proposed residential projects within the City limits.

93-10

Meeting the Intent of SB 743 and Addressing St. Helena's Housing Needs

As noted above, SB 743 was passed with the intent of reducing greenhouse gas emissions, promoting use of active transportation, as well as providing infill development. As such, the adoption of an appropriate baseline to evaluate VMT impacts of incoming development should be considered in the context of how those projects relate to the goals of SB 743 as well as other adopted goals and policies. St. Helena's unique characteristics that warrant consideration include the existing commute pattern, need for affordable housing, and jobs/housing balance; taken together, these factors indicate a need to increase housing options for local workers which, in turn, would reduce commute trip lengths and support reductions in VMT.

- **Commute pattern:** The Housing Element notes that 78.1 percent of workers in St. Helena commute from outside the City. Considering the distance that workers travel, the 2018 American Community Survey estimated that 75.4 percent of workers in St. Helena travel more than 10 miles to work, and 31.9 percent travel more than 25 miles.
- **Housing affordability:** The "St. Helena Housing Update Report" commissioned by the City in 2018 noted that 37.6 percent of St. Helena residents are considered "housing burdened" as they spend more than 30 percent of their incomes on housing.
- **Jobs/housing balance:** As noted in the Housing Element of the City's General Plan, the ratio of jobs to housing in St. Helena is substantially higher than other municipalities in Napa County, meaning that more houses are needed to accommodate workers with jobs in the city. The ratios of jobs to employed residents for Napa County municipalities are summarized in Table 2.

93-11

Table 2 – Ratio of Jobs to Employed Residents in Napa County

Jurisdiction	Jobs per Employed Resident (2010)
Napa County	1.20
American Canyon	0.55
Calistoga	1.02
Napa City	0.98
St. Helena	**1.90**
Yountville	1.76
Unincorporated	1.89

Source: *Housing Element Update, 2015-2023 Housing Needs Assessment*, City of St. Helena, 2015.

93-11 Cont.

The Hunter Subdivision project, which would be located within walking distance to the center of town, provides affordable housing and would give preference to local workers, appears to be a project that could help address these issues. It is reasonably anticipated that the residents of these homes would reduce their commutes to jobs in St. Helena by moving to the City, which is the primary purpose of the VMT metric. However, using the citywide per capita VMT as the basis for evaluating VMT impacts, the DEIR has determined that the project impacts are significant and unavoidable, which is counterintuitive. Had the countywide per capita VMT been selected as the baseline, the project would have been identified as having a less-than-significant impact, indicating the far-reaching implications of this approach for the Hunter Subdivision and other projects.

93-12

For the City of St. Helena to be able to achieve its housing goals, as stated in the General Plan, consideration should be given to the implications of selecting the appropriate baseline to evaluate VMT impacts in terms of the type of development that it will encourage; how this relates to the City's land use, housing, and transportation goals; and how it responds to statutory requirements. This is one of the many issues involving implementation of SB 743 that has been challenging for communities across California. Given the differences between communities throughout the state, there is no one-size-fits-all policy. So, while the OPR guidance has provided the basis for implementing SB 743, many jurisdictions have adopted policies that have built on and modified this guidance.

93-13

Please contact us if there are any questions regarding these comments.

Sincerely,

Barry Bergman, AICP
Senior Planner

Dalene J. Whitlock, PE, PTOE
Senior Principal

REGISTERED PROFESSIONAL ENGINEER DALENE J. WHITLOCK TR001552 TRAFFIC STATE OF CALIFORNIA

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TECHNICAL MEMORANDUM

DATE: October 20, 2021

TO: Tim Massey | Organization

FROM: Jim Damkowitch | DKS Associates
Josh Pilachowski | DKS Associates

SUBJECT: Review of City of St. Helena Application of SB 743 Requirements Project #21082-000 of the Planned Residential Development

INTRODUCTION

The purpose of this white paper is to review the project description of a proposed residential project in St. Helena for compliance and consistency with local zoning and policies and the expected effect on the surrounding community and circulation network, as these relate to the Project's Vehicle Miles Traveled (VMT) potential impacts. The components analyzed include the following:

- Consistency with City zoning and land use designations
- Consistency with current ongoing planning initiatives
- Non-market-based housing ratio and California Density Bonus Law criteria
- Project VMT generation within Regional Average VMT per Capita threshold

This paper describes each of these four components and their relevance to the proposed development as a consideration for VMT analysis.

93-14

PROJECT DESCRIPTION

The Project site is a 16.9-acre lot in northeast St. Helena with 87 proposed residential dwelling units in the form of detached single-family homes, some of which will have accessory dwelling units, and attached multi-family units (duplex and/or triplex units). The multi-family units are to be presented as Affordable Housing units, representing 29% of the Project dwelling units (i.e., 25 units).

93-15

PROJECT COMPONENTS FOR CONSIDERATION

CONSISTENCY WITH CITY ZONING AND LAND USE DESIGNATIONS

As stated in the Project EIR[1], the Project site was designated as Medium Density Residential (MDR) in the City of St. Helena 1993 General Plan and this zoning was not changed in the recent General Plan Update 2040 (adopted June 2019). MDR zoning allows for single family homes (detached or attached) and accessory dwelling units (ADU) or junior accessory dwelling units[2] (JADU), at densities between 5.1 to 16.0 dwelling units per gross acre (an increase over the upper density of 12.0 dwelling units per acre used in the 1993 General Plan allowing for higher residential density).

As detailed in **Table 2-1** of the Project EIR, the total development will include 51 Single-family detached residences with an additional 11 accessory dwelling units, as well as 25 attached units in the form of duplexes and/or triplex units. This results in a density of 5.15 dwelling units per acre, within the accepted range of densities for the designated zoning. This is the minimum number of units which would meet the density requirements for the designated zoning.

The Project proposed 11 ADUs, representing 22% of the planned single-family residences. Relevant policies in the zoning code include the following:

- 17.116.030.B. **Effect of Conforming**. An ADU or JADU that conforms to the standards in this section will not be:
  - Deemed to be inconsistent with the city's general plan and zoning designation for the lot on which the ADU or JADU is located.
  - Deemed to exceed the allowable density for the lot on which the ADU or JADU is located.
  - Considered in the application of any local ordinance, policy, or program to limit residential growth.
- 17.116.030.E. **General ADU and JADU Requirements**. The following requirements apply to all ADUs and JADUs:
  - Zoning. An ADU or JADU may be created on any lot that is zoned to allow single-family dwelling residential use or multifamily dwelling residential use (i.e., residential, mixed-use, and agriculturally zoned parcels).

While ADUs have not previously been common in St. Helena According to the Project EIR, only 37 ADU applications have been submitted between 2013-2020 representing 1.7% of single-family residences, the Project is consistent with all relevant density restrictions and zoning code policies, including ADU use.

93-16

[1] Hunter Subdivision Project EIR, September, 2021
[2] 500 sq.ft. or less, fully contained within single-family structure, includes bathroom and kitchen accessories.

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CONSISTENCY WITH PLANNING INITIATIVES

Upon review of the Planning Department active and ongoing projects, there are no current or planned projects overlapping or nearby the project Site. The following documents were reviewed for policies and planning initiatives relevant to the Project:

- Napa Countywide Bicycle Plan
- St. Helena Pedestrian Plan
- St. Helena General Plan Circulation Section
- St. Helena General Plan Climate Change Section

The following relevant policies, programs, and initiatives and their relevance to the Project were identified:

Based on the Proposed Bicycle Network in the Citywide Bicycle and Multimodal Plan (2012), the proposed Napa Vine Trail passes adjacent to the project Site, allowing for easy connection to the regional bicycle and Pedestrian trail network. St. Helena has a 2.6% mode share of bicycles for commuting to work, three times higher than the Countywide mode share. Residential projects that connect to regional trails provide incentive for increase alternative transportation modes as a viable alternative for travel.

93-17

VMT ANALYSIS SCREENS (PER SB 743)

SB 743 was signed into law in 2013 with the intent to better align California Environmental Quality Act (CEQA) practices with statewide sustainability goals related to efficient land use, greater multi-modal choices, and greenhouse gas reductions. The provisions of SB 743 became effective Statewide on July 1, 2020 and are applicable to the Project's environmental clearance under CEQA.

The Office of Planning and Research (OPR) released its Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018). The advisory lists the following screening thresholds for land use projects. OPR's Technical Advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing as described below.

- Projects that are consistent with the Sustainable Communities Strategy (SCS) or General Plan and generate or attract fewer than 110 daily trips (consistent with trip generation associated with projects eligible for a Categorical Exemption under CEQA).
- Map-based screening for residential and office projects located in low VMT areas, and incorporate similar features (density, mix of uses, transit accessibility).
- Certain projects within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor. However, this will not apply if information indicates that the project will still generate high levels of VMT.

93-18

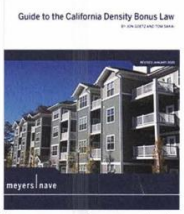
- Affordable Housing Development in infill locations.
- Locally serving retail projects, typically less than 50,000 square feet.

Although many lead agencies in urban and suburban areas are closely following OPR's recommendations, the guidance provided in OPR's technical advisory are considered to be recommendations, rather than requirements. It is also important to note that the technical advisory does not have the authority of law. As SB 743 implementation continues, cities and counties throughout the state have developed alternative approaches and criteria to address the intent of SB 743. The technical advisories provide the perspective of the State of California as interpreted by OPR but do not elevate to mandatory legal requirements. In many cases, local or regional agency perspectives differ from those of the state where substantial evidence would support alternative approaches.

As stated in the Project EIR, the Project did not meet any the VMT screening criteria (small projects with low trip generation, map-based screening, nearness to transit, or 100% affordable housing). Of the project-level screening criteria established by SB 743, three could be potentially applicable to the proposed project based on alternative applications/interpretations of OPR guidance as seen in other jurisdictions of the State: project size; map-based screening; and, affordable housing. These examples are described below.

93-18 Cont.

Affordable Housing Screen



SB 743 allows non-market based residential projects to be screened from having to perform a VMT analysis for CEQA. This screen is consistent with many other initiatives statewide to address California's housing crisis. The Office of Research and Planning (OPR) advises that residential projects consisting of 100 percent affordable units be presumed to have less than significant VMT impact. No additional guidance was provided on when or how to screen projects that have a substantial affordable component, but less than 100%.

Jurisdictions have the discretion to specify additional criteria such as a specific percentage of non-market rates units within an overall development proposal for application of this screening option. An alternative approach example to OPR's 100% affordable unit guidance is described below.

93-19

Example City of Goleta

If at least 20 percent of a housing development consists of non-market rate housing then the entire development proposal would satisfy this screen. This includes farmworker housing. The 20 percent justification comes from the Guide to the California Bonus Law. The Density Bonus Law (California Government Code Sections 65915 – 65918) provides incentives to encourage developers to develop affordable and senior housing (i.e., a developer who meets the requirements of the state law is entitled to receive the density bonus and other benefits).

As stated in the Project EIR, the multi-family units are to be presented as affordable housing units, which represents 29% of the proposed project dwelling units. Based on the 20% affordable housing VMT screen provisions implemented in other jurisdictions (e.g., City of Goleta), the proposed project would be screened from having to perform a VMT analysis and hence would not be subsequently determined to result in a significant and unavoidable VMT impact under CEQA.

93-19 Cont.

COMPARISON WITH REGIONAL AVERAGE VMT

In lieu of not having formally adopted VMT thresholds or screens for CEQA purposes, the City of St. Helena directed the EIR consultants in preparation of the DEIR to apply a VMT per capita VMT threshold for residential developments at 15% below the Citywide average to determine VMT impacts. Although the choice of average (statewide, countywide, regionwide or citywide) is at the discretion of the local agency, basing a VMT average on a larger geographic area (i.e., regional, multi-county or countywide) is generally a more common and accepted choice by local agencies statewide. This is driven by the strong nexus between SB 743 and the State's long-term climate action goals which alludes to a more "regional" analysis of VMT as required for regional air quality emissions analyses. The relationship of SB 743 with the State's climate action goals is described below.

SB 743 and Climate Change

The State of California is committed to reducing greenhouse gas (GHG) emissions and achieving long-term climate change goals. To achieve these climate change goals, California needs to reduce VMT. Over the last 40 years, with increase in statewide population, the overall VMT has also increased. Transportation is the single largest sector contributing to the State's GHG emissions. More than 40 percent of the GHG emissions come from the transportation sector, primarily passenger cars and light-duty trucks. Reducing the number of vehicle trips and the length of the trips are expected to result in reduced VMT and reduced GHG emissions. The new State CEQA Guidelines and the establishment of VMT thresholds for CEQA analyses is linked to GHG reduction strategies and overall statewide climate change goals.

93-20

Given that the impact of transportation has shifted from congestion to climate change, the purpose of the CEQA analysis is to disclose and ultimately reduce GHG emissions by reducing the number and length of automobile trips. As part of the SB 375 land use/transportation integration process and GHG goal setting, the State and Regional Transportation Planning Agencies (RTPAs) have agreed to reduce GHG through integrated land use and transportation planning by a statewide average of approximately 15 percent by 2035. Furthermore, in its 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals, the California Air Resources Board recommends total VMT per capita rates approximately 15 percent below existing conditions.

In addition to SB 743, other legislative mandates and State policies speak to GHG reduction targets. A sample of these include:

- Assembly Bill 32 (2006) requires statewide GHG emissions reductions to 1990 levels by 2020 and continued reductions beyond 2020.

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- SB 32 (2016) requires at least a 40 percent reduction in GHG emissions from 1990 levels by2030.
- Executive Order (EO) B-30-15 (2015) sets a GHG emissions reduction target of 40 percent below 1990 levels by 2030.
- EO S-3-05 (2005) sets a GHG emissions reduction target of 80 percent below 1990 levels by 2050.
- EO B-16-12 (2012) specifies a GHG emissions reduction target of 80 percent below 1990 levels by 2050 specifically for transportation.

93-20 Cont.

This direct tie with on-road mobile source GHG emission reduction goals strongly supports the application of a larger geographic area (i.e., regional, multi-county or countywide) for establishing a reasonable baseline average for CEQA purposes. Choosing a citywide average, particularly for a relatively small city, is counter-intuitive and would suggest the need for substantial evidence to support the agency's decision. By basing its' VMT threshold on a citywide average, the City of St. Helena has one of the lowest average VMTs in the region with a value of 11.34. This is 66% of the Countywide average of 17.30. VMT analysis of the project results in an average project VMT for the associated TAZ of 11.37. This is well over the threshold of 9.64, but well below (34%) the regional average of 17.30.

On a more base and fundamental perspective, basing a VMT average on a larger geographic area (i.e., regional, multi-county or countywide) is also related to generating an adequate sample size for developing a stable/meaningful baseline average. The smaller the geographic area used for averaging – the smaller the sample of geographical units used. As shown in **Figure 1**, the City of St. Helena is small and as such is represented by only six Traffic Analysis Zones (TAZ) within the Solano-Napa Activity-Based Model (SNABM). The SNABM is the operable travel demand model used to establish average VMT, VMT thresholds and project-level VMT. As basic geographic unit of analysis, each TAZ is analyzed as being above or below the citywide average. Taking the average of such a small sample of TAZs representing a small area results in little to no variation in VMT efficiency by TAZ. Using a citywide average only provides a meaningful representation when the number of TAZs are large (larger sample size) where VMT efficiency for a given land use type varies across a larger area. As an example, **Figure 2** shows the City of Santa Maria's TAZ representation that includes a much larger sample of TAZs (i.e.,100+) that demonstrate differences in VMT efficiency.

93-21

At this time, none of the other jurisdictions in Napa County have formally adopted VMT thresholds or screening criteria. However, as a gauge for how other jurisdictions outside Napa County are applying SB 743, of among approximately 30 cities that DKS is aware of, only one has chosen to implement a city-wide baseline average and it is applicable to non-residential uses only. For non-residential uses, the City of Rancho Cordova has chosen to use a city-wide baseline average given that it generates a slightly higher baseline average. This will allow the City to potentially screen more non-residential projects (office, manufacturing etc.). Conversely, for residential uses, the City of

93-22

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Rancho Cordova is using the six-county regional average as its baseline average. Hence, DKS is not aware of any city that has applied a city-wide average baseline for residential land uses.

93-22 Cont.

Figure 1. SNABM Traffic Analysis Zone Representation of City of St. Helena (not to scale)

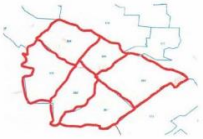
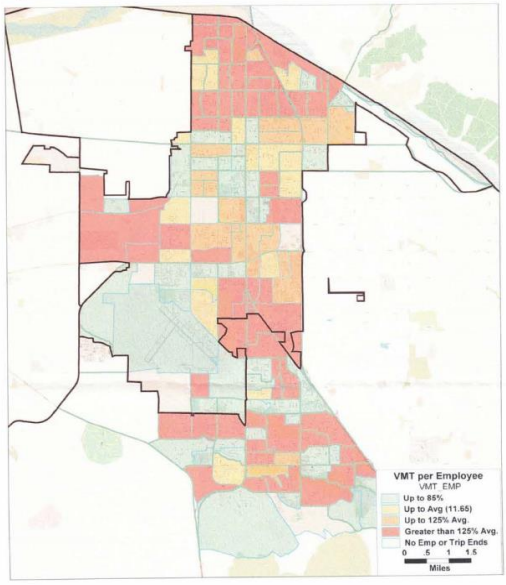


Figure 2. Traffic Analysis Zone Representation of City of Santa Maria (not to scale)



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CONCLUSIONS

The OPR provides a Technical Advisory (TA) as a SB 743 implementation guidance document to establish VMT thresholds. The laws and rules governing the CEQA process are contained in the CEQA statute (PRC Section 21000 and following), the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 and following), published court decisions interpreting CEQA, and locally adopted CEQA procedures. The TA is intended as a reference document; it does not have the weight of law. Yet, deviating from the TA is best undertaken with substantial evidence to support the agency action.

Of the project-level screening criteria established by SB 743, three could be potentially applicable to the proposed project based on reasonable alternative applications/interpretations of OPR guidance as seen in other jurisdictions of the State: project size; map-based screening; and, affordable housing. Based on how some other jurisdictions are applying SB 743, all or portions of the proposed project could be effectively screened from having to perform a VMT analysis. Also, while OPR guidance does not provide specific guidance on whether to use Citywide average or regional average VMT as an impact threshold, the existing City practice of using citywide VMT baseline average results in an unreasonable barrier to residential development on this lot. Mixed-use development is not allowed under the current zoning designation and the proposed project is currently at the lowest allowed density but still significantly over the City's directed trip generation screening criteria.

93-23

Per OPR guidance, development measured against city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the Sustainable Community Strategy (SCS) for that city because greater-than-planned amounts of development in areas above the region-based threshold would undermine the VMT containment needed to achieve regional targets under SB 375. The proposed development does not exceed the population or number of units specified in the Sustainable Community Strategy (SCS).

93-24

Applying a citywide VMT baseline average for residential uses, although within the authority of the City of St. Helena, does not align with the goals, policies, and directives of SB 743 and is generally inconsistent with how the VMT per capita performance metric is applied by some other jurisdictions around the state. Applying a regional baseline average for establishing the VMT per capita residential threshold would be more in line with the intent of SB 743 and support a finding that this Project has a less than significant traffic related impact.

93-25

Response to Letter 93
Leslie R. Perry, Law Offices of Perry, Johnson, Anderson, Miller & Moskowitz
November 1, 2021

93-1 The comment is an introduction to responses prepared by W-Trans and DKS on the Draft EIRs transportation analysis.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. the comment is noted and forwarded to the decision makers for their consideration.

93-2 The comment provides a general introduction to the VMT analysis and asserts that the VMT analysis included in the Draft EIR is conservative and does not meet the intent of current City and state polices.

Please see Response to Comment 93-8.

93-3 The comment reiterates the intent of SB 743 and quotes guidance from OPR's Technical Advisory regarding assessment of VMT impacts and the ability of the lead agency to adopt their own thresholds of significance.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

93-4 The comment reiterates OPR's recommended guidance for measuring VMT, screening criteria, and significance threshold to evaluate VMT impacts.

The commenter is confirming the approach used to evaluate the Project's VMT analysis. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-5 The comment reiterates OPR's recommended guidance and screening criteria to determine VMT significance.

The commenter is confirming the approach used to evaluate the Project's VMT analysis. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-6 The comment reiterates OPR's approach to establish VMT thresholds.

The commenter is confirming the approach used to evaluate the Project's VMT analysis. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-7 The comment provides results of the Napa-Solana Travel Demand Model VMT for the City and the Project's traffic analysis zones (TAZ).

The commenter is confirming the approach used to evaluate the Project's VMT analysis. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-8 The comment states that using the citywide average compared to the countywide average as the baseline for VMT would require mitigation measures which are not achievable for residential projects in the City.

The OPR guidance under the frequently asked questions for SB 743 Implementation section, in response to consideration of geographic boundary for VMT impacts (https://opr.ca.gov/ceqa/sb-743/faq.html#VMT-TA-regional) states that:

As used in the VMT Technical Advisory, "regional" refers to the full geography within the jurisdictional borders of a metropolitan planning organization (MPO) or a regional transportation planning agency (RTPA). Comparing a project's VMT per capita or VMT per employee to that of the entire region (i.e., MPO or RTPA) or entire city allows a lead agency to better align with the state's climate commitments. Comparison to only a portion of the region or city could result in a less environmentally protective significance threshold, potentially disconnecting significance determinations from those commitments. For example, comparing a project to only the unincorporated areas of a county, or just a select portion of a county, may exclude lower VMT areas. However, thresholds that vary by location, but where each threshold is more environmentally protective than a region- or city-based threshold, would still be aligned with state climate commitments.

Additionally, it is stated in the OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018):

Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.

As mentioned in the OPR guidance, a more environmentally protective approach would be considered aligned with state climate goals. Therefore, using the citywide average (11.34 VMT per capita) as the baseline provides the city a threshold that is more conservative than the countywide average (17.30 VMT per capita). This would result in significant VMT impacts and require projects to implement mitigation measures to reduce VMT. However, it is possible that some projects may need to adopt overriding considerations if feasible mitigation measures are not available or

adequate. Future residential projects would be consistent with the City's goal of providing more housing units including affordable housing. Additionally, the residential units provided by the Project are consistent with City's General Plan, General Plan Housing Element requirements and the Plan Bay Area 2040 Regional Transportation Plan and Sustainable Communities Strategy.

93-9 The comment states that affordable housing has been identified as a strategy that can be presumed to reduce a project's VMT.

The Draft EIR notes inclusion of affordable workforce housing as part of the Project but does not estimate any associated VMT reduction. Based on OPR guidance, projects that propose 100% affordable housing can be presumed to have a less-than-significant VMT impact. Guidance for VMT reduction strategies is available in the document Quantifying Greenhouse Gas Mitigation Measures, August 2010 from the California Air Pollution Control Officers Association (CAPCOA) which has been recently updated in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, August 2021. Per the CAPCOA 2010 handbook, a maximum of 1.2% VMT reduction is achievable by including affordable housing in a project. Per the updated 2021 handbook, integrating affordable and below market housing units is considered a supporting or non-quantified greenhouse gas and VMT reduction measure. Therefore, it is inferred that the VMT reduction due to integration of affordable housing in the Project would not reduce the Project's VMT impact to less than significant and hence is not included in the Draft EIR VMT analysis, which presents a more conservative approach.

93-10 The comment states that adopting the citywide average as the baseline for determining VMT impacts would result in all future residential projects in the City (that generate more than 110 trips per day) to result in a significant VMT impact requiring preparation of an EIR and adoption of overriding considerations. This would increase the cost to project applicants and increase the difficulty in addressing the City's need for housing.

As noted in Response to Comment 93-8, using the citywide average as the baseline provides the City a threshold that is more conservative and would require projects to implement mitigation measures to reduce VMT. However, it is possible that some projects may result in a significant and unavoidable VMT impact and need to adopt overriding considerations.

93-11 The comment explains that the commute pattern, housing affordability, and jobs/housing ratio in the City supports and meets the intent of SB 743 and achieves VMT reduction if more housing is provided in the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-12 The comment supports using the countywide VMT as baseline for comparing the Project's VMT per capita and concluding less than significant impact.

Please refer to response 93-8.

93-13 The comment restates that the City should consider adopting an appropriate VMT baseline for determining VMT impacts which allows the City to achieve its housing goals.

Please see Response to Comment 93-8.

93-14 The comment states that DKS analyzed consistency with City zoning and land use designations, current planning initiatives, non-market-based housing ratio and California Density Bonus Law criteria, and the Project's VMT.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

93-15 The comment is restating information from the Project description.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

93-16 The comment states that the Project is consistent with all relevant density restrictions and zoning code policies.

The commenter is correct. The Project is consistent with the City's land use designation and zoning for the site. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-17 The comment states that the Napa Countywide Bicycle Plan, St. Helena Pedestrian Plan, and General Plan Circulation and Climate Change sections were reviewed for policies and planning initiatives relevant to the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

93-18 The comment states the intent of SB 743 and guidance from the OPR's Technical Advisory on VMT screening and notes that the Project does not meet any of the screening criteria.

The commenter is correct. The Project was reviewed to determine if it would meet any of the screening criteria established by OPR and based on this review the Project does not meet any of the screening criteria.

93-19 The comment elaborates on the affordable housing VMT screening criteria and provides an example from the City of Goleta which allows any housing development that provides 20% non-market rate housing units, to screen out from doing a VMT analysis. The comment suggests that the City should consider such screening criteria to presume less than significant VMT impacts.

As described in Response to Comment 93-9, available methods for estimating VMT reduction by integrating affordable and below market housing units suggest that the VMT reduction achieved by doing so is either low (less than 2%) or non-quantifiable. The City has chosen to use the methodology which provides the most conservative or environmentally protective criteria and threshold to assess VMT impacts.

93-20 The comment describes the intent of SB 743 and its relationship with the state's climate change goals and lists other legislative mandates and mandates that target greenhouse gas emission reduction. The comment compares the citywide VMT and countywide VMT and suggests that regional average should be used for establishing the baseline VMT.

Please see Response to Comment 93-8 for an explanation regarding use of the citywide VMT baseline.

93-21 The comment compares the TAZ structure representing the City with a larger city such as Santa Maria and states an opinion that, in order to establish a citywide baseline threshold, there should be a larger sample of TAZs and variation in land uses.

The commenter is providing their opinion, which is not supported by the OPR guidance and recommendations, regarding the size or land uses of a city. As stated in Response to Comment 93-8, the OPR guidance has allowed the lead agency to determine whether a citywide or regional VMT should be used as the baseline and the lead agency can also choose a more environmentally protective threshold, which the City has done.

93-22 The commenter states they are not aware of any other city that has used a citywide baseline average for residential uses and that most cities within the Napa County have not formally adopted VMT threshold or screening criteria.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

93-23 The comment provides a closing statement and restates that OPRs Technical Advisory is an implementation guidance to establish VMT thresholds and suggests the OPR recommended VMT screening criteria be used for the Project's VMT analysis and reiterates using the regional baseline versus the citywide VMT.

Please see Responses to Comments 93-8, 93-9 and 93-10.

93-24 The comment confirms that the Project does not exceed the population or number of units specified in the Plan Bay Area 2040 Regional Transportation Plan and Sustainable Communities Strategy.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

93-25 The comment restates that using the citywide VMT baseline does not align with the intent of SB 743.

Please see Responses to Comments 93-8 and 93-10.

Comment Letter 94

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November 8, 2021

VIA ELECTRONIC AND U.S. MAIL

Maya DeRosa, AICP
Planning and Building Director
City of St. Helena Planning Division
1572 Railroad Ave
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Email: MDeRosa@cityofsthelena.org

Re: **Comment Period for Draft EIR - Hunter Subdivision Project**

Dear Ms. DeRosa:

The applicant team has been advised that the City has extended the comment period beyond the original set date and beyond that provided for by CEQA.

We object to the extension. There is no rational basis for the extension. Given the numbers of comments received, it is apparent that the notice of the DEIR was widely viewed, and many were easily able to meet the deadline.

The only explanation is the City's continued and unjustified delay in processing the Project. The mandatory time for completion of an EIR has been egregiously ignored by the City, and this is just the latest example.

94-1

Very truly yours,

Leslie R. Perry

LRP:kh
cc: client
Andrew M. Skanchy

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Response to Letter 94
Leslie R. Perry, Law Offices of Perry, Johnson, Anderson, Miller & Moskowitz
November 8, 2021

94-1 The letter objects to an extension of the CEQA comment period and claims the City has delayed processing the Project.

Based on numerous requests from local residents to extend the Draft EIR comment period the City granted an extension of an additional 22 days. The City has not intentionally delayed processing the Project or completion of the CEQA process.

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Comment Letter 95

From: Vivian Pirchner <vivianhpirchner@gmail.com>
Sent: Thursday, November 18, 2021 2:12 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter project

I must add my name to the protest over the proposed construction of more than fifty large houses behind Vineyard Valley. It seems obvious that we will be exacerbating water problems for drinking, ground water, and waste water. The problems that will be created by routing emergency exits though the middle of Vineyard Valley are staggering to contemplate. Please consider the environmental impact report and decide against this project.
Sincerely, Vivian Pirchner

95-1
95-2
95-3

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Response to Letter 95
Vivian Pirchner
November 18, 2021

95-1 The commenter requests to be added to a list of those opposed to the Project.

The commenter has been added to a list of interested public members; however, this list does not distinguish those who support or oppose the Project.

95-2 The comment states a concern regarding the Project's impact on the City's water supply.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 related to water supply.

95-3 The comment raises a concern that the Project would negatively impact emergency evacuation within the area.

Please see Master Response 1 that addresses concerns associated with emergency evacuation.

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Comment Letter 96

-----Original Message-----
From: Chuck Pniower <chuckcfp@comcast.net>
Sent: Tuesday, November 16, 2021 4:34 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter subdivision

This is repose to the proposed development on the north side of Vingard Valley. I understand the the property owners have the right to develop their property. What I have concerns is the city will be able to maintain the existing utilities, fire, water sewer, pubic safety without effecting the existing residents and resources and raising costs. As things move on there is a need for housing. But for who is it for? We live in a agricultural area that are reliant on the work of what is becoming low cost labor. These people are being forced out the housing market. As I see St Helena as a liberal community, what are we to do? As I see it this is a opportunity. Do we need 51 single family homes with no open space to enjoy. This is a chance for the city to support the people that support us, from the vineyard workers, gardens, restaurant workers, house keepers. The city needs to find a balance that will support the developers and the people that give us the support and the need maintain the ambience of where we live. 96-1 96-2

Yours
Charles Pniower, 9 Del Campo Ct.
Sent from my iPad

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Response to Letter 96
Chuck Pniower
November 16, 2021

96-1 The commenter is concerned regarding the Project's impact on the City's sewer infrastructure and fire department.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

96-2 The comment acknowledges the need for housing and requests the City to find a balance in supporting developers and the community.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 97

St. Helena tallies $58 million in infrastructure projects

St. Helena Star Jun 1, 2021, updated July 19, 2021

"It's a familiar story in St. Helena: Too many infrastructure projects, not enough money."

City of St. Helena addresses complaints about water quality

St. Helena Star Mar 2, 2021, updated April 28, 2021

"St. Helena's water system id drawing more water from the City of Napa...to conserve water in St. Helena's Ball Canyon Reservoir, which is down to 40% capacity."

City of St. Helena Fails Drinking Water Standard

Patch.com April 8, 2021

"The city did not meet treatment requirements while working to disinfect the Louis Water Treatment Plant after the Glass Fire."

St. Helena approves plans for $16.2 million sewer plant upgrade

St. Helena Star Feb 23, 2021, updated Jun 9, 2021

"It's a necessary move for the city....the plant isn't capable of complying..."

The above headlines tell a story about the current state of critical infrastructure in the City of St. Helena. The most telling headline is the first - much more infrastructure is needed for St. Helena's current footprint and the City doesn't have enough money!

97-1

When you think of current (and future) infrastructure needs of the City we should consider the adequacy of:

- Water
- Sewer
- Storm drainage
- Utilities
- Police
- Fire
- Schools, and
- Other infrastructure assets

We believe the addition of 51 single family homes, 25 multifamily units, and the corresponding increase in population as contemplated by the proposed project will further strain and likely break the above infrastructure.

We are not anti-growth. In fact, we are for thoughtful growth in the City of St. Helena. However, the above headlines strongly suggest that City doesn't' have sufficient infrastructure for its current footprint let alone a project of the scope proposed. We believe that growth needs to be thoughtful and provide a means to improve (not cause further deterioration) of the City's financial condition and infrastructure.

97-1 Cont.

In addition to very serious infrastructure issues, we believe the proposed project will cause the already problematic traffic, congestion, and parking situation in St. Helena to become much worse. As you are aware, St. Helena is the only major city where Highway 29 goes directly through its downtown area. As a result, the traffic entering and exiting St. Helena via Highway 29 is truly awful. Substantially more people means substantially more traffic. People familiar with the area (or using apps such as Waze) find ways around this downtown traffic and congestion. The most common "detour" is using Silverado Trail and turning on Pope Street. Given the configuration of the Pope Street bridge and the location of the Pope Street and Silverado Trail intersection in close proximity to the proposed project, traffic will most certainly back up on Pope Street and on Silverado Trail. All of this increasing traffic and congestion as well as the lack of adequate parking detract from the quality of life of St. Helena residents.

97-2

In addition, open spaces, agricultural land and access to the pedestrian walking paths enrich and enhance the lives of all residents and particularly those most closely located near the proposed project. We watch all kinds of people (families, adults, children, and dogwalkers) enjoying the open space and vineyards on the walking path from town to the river. Often families bike together and have a picnic near the path. People walk their dogs enjoying the beautiful open space. Undeniably, the loss of open space and vineyards and safe access to the walking paths will negatively impact residents.

97-3

Often, a picture is worth a thousand words! I attach a picture from consultants for the proposed project.
Do we really want the outlined area to be developed as proposed? We believe most residents say no.
We respectfully urge the council to not proceed with the proposed project. 97-4

Patrick and Laura Pohlen

601 Fulton Lane



Response to Letter 97
Patrick and Laura Pohlen

97-1 The comment refers to the City's infrastructure and states an opinion that improvements are needed before the City can approve new development. The comment mentions general concerns related to the following topics: water, sewer, storm drainage, utilities, police, fire, and schools and states an opinion that City's infrastructure cannot handle the increased Project demand.

Impacts regarding public utilities and public services are addressed in Sections 3.12 and 3.13 of the Draft EIR. Please see Master Responses 1, 2 and 4 regarding the ability of the City's police and fire departments to serve the Project, and water and wastewater infrastructure. See also Response to Comment 14-4 related to public services.

97-2 The comment raises concerns related to the Project's impact on traffic congestion and parking.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. Please see Responses to Comments 10-2 and 36-2 that address general traffic concerns.

97-3 The comment states an opinion about the advantages of maintaining open space and opines that the loss of the site's open space will negatively impact residents.

The Project site is privately owned and is therefore not a public open space. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

97-4 The comment provides an aerial image of the project site and asks the City to reject the Project.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

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Comment Letter 98

-----Original Message-----
From: Charlotte Powell <charlottecora@gmail.com>
Sent: Sunday, October 31, 2021 3:17 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision

To whom it may concern:

Please do not approve the Hunter Subdivision. The open space, and field provide homes to so many local wild plants and animals. I have often seen a plethora of birds, foxes and coyote in that field on early morning walks. We have far too open spaces like that for people to enjoy in town. Please do not build there!!!!

98-1

Thank you for your time.

Charlotte Powell

Sent from my iPhone

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Response to Letter 98
Charlotte Powell
October 31, 2021

98-1 The comment states opposition to the Project due to potential impacts to wildlife and open space.

Please see Section 3.4 of the Draft EIR and Responses to Comments 14-2 through 14-6, 55-3, 121-28 and 121-32 for more information on impacts to wildlife and habitat.

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Comment Letter 99

From: Lisa Redmon <lisa@redmonwines.com>
Sent: Thursday, October 28, 2021 12:22 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunt Street Project

Hello, My name is Lisa Redmon and I am a 45 year local to St. Helena. For the last 20 years I have lived at 1185 Starr Avenue which is at the corner of Hunt and Starr. I am learning that the single family home project across the street from my house is going up for approval again. I've got several concerns: 99-1

1. The flooding and water issues - I know this was one of the key reasons the project was turned down prior. I assume the same issue is at play now which is very worrisome. What is different this time around? How can there possibly be enough water as we are already rationed. 99-2
2. I evacuated for the 2021 fire and am worried about traffic is this happens again. 99-3
3. Parking is already a mess on Starr Avenue due to the existing low income housing. I'm on the corner and have absolutely no parking by my house. Especially during harvest seasons when folks are here to work. There is really no room for more overflow parking which we have seen happens. The parking in the the existing low income housing is tandem which also contributes to folks needing Starr Ave. 99-4
4. ALL of the low income housing is packed into the same area of St. Helena. It does not seem right to put more instead of spreading it out a bit. I think it will affect our neighborhood more than it already has. 99-5

Regards,

Lisa Redmon
Owner, Redmon Wines
www.redmonwines.com
707-235-0282

REDMON

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Response to Letter 99
Lisa Redmon
October 28, 2021

99-1 The comment provides the commenter's personal history as a resident of the City.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

99-2 The comment raises concerns about flooding and water supply and states that previous projects were rejected due these considerations.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Please see Master Responses 2 and 3 related to the Project's water supply and potential flood-related impacts.

99-3 The comment raises a concern about emergency evacuation in the event of a fire.

Please see Master Response 1 addressing concerns regarding emergency evacuation.

99-4 The comment raises a concern regarding the Project's impact to parking.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required.

99-5 The comment states an opinion that low-income housing should be spread out throughout the City, rather than concentrated in one area.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 100

From: Greg Reynolds <greynoldsmail@gmail.com>
Sent: Friday, November 5, 2021 2:34 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Written Comments on The Hunter Subdivision Draft Environmental Impact Report SCH # 2018032014

Please add

Good Evening

I am Greg Reynolds, 290 Pope Street St Helena

I am the managing partner for Vineyard Valley Mobile Home Park.

Thank you

There are a myriad of concerns we have about the Hunter Project.

As our residents understand more about the project topics of impact are significant and across the board from levee access and levee maintenance to vista and privacy concerns the electorate here in VV is not happy.

100-1

There are so many mitigating circumstances raised in today's current environment around water, fire safety, emergency response, traffic to name a few that your job as City Planners and perhaps City Council members makes it all the more critical that evidence doesn't get ignored. You have a tough job you need to forecast where a project like this takes the citizens of Vineyard Valley and the greater City of St Helena.

I will focus just on three issues tonight

- Emergency Evacuation
- Water specific to Sewer Discharge
- Traffic

100-2

Vineyard Valley is a Retirement Community 55 and older approximately 218 homes When everyone is home, The park is home to 350 people, many are retired seniors.

After the last 5 years and last year with the Glass Fire We have spent more time each year focused on fire suppression, readiness and safety....this year primarily in neighborhood reach and resident evacuation in the event of emergency.

100-3

After the devastating floods of 86 and 95 the park was transformed with a significant investment in the Flood Wall Project. The design and building of that project attempted to mitigate the flood plane realities **with the Flood Wall, the levee and holding pond and pumps.** The deployment

100-4

of that significant investment did not include the construction referenced here. **Hunter Project** was not part of that plan and the safety it proposed to deliver. 100-4 Cont.

We are very concerned that a safe evacuation and access through the back of the park will disappear with this project. We are concerned that the construction will undermine the levee and overwhelm the Army Corp Strategy put in place to protect our 350 residents and their homes. 100-5

We are concerned about water as many have commented. As we all engage to participate in phase 2 this concerns us greatly. 100-6

We will comment in writing specifically about wastewater flows and what appears to be a plan to connect a portion of the **Hunter Project** to Vineyard Valleys waste water discharge sewer. This is a City sewer that is documented to have significant issues when it does rain. The majority of the Hunter Project single family homes 46 out of 51 will be connected to the VV sewer. We will be getting most of this sewer flow. Taking into account the multi-family units as well almost 75% of the total project discharge is directed our way. Our VV sewer is already overtaxed, this will clearly drown this infrastructure. As in other parts of the City this is unacceptable and expensive as the City spends and documents every clean up situation. 100-7

The traffic data clearly demonstrates significant challenges for our senior contingent. In the DEIR It is clear from the table the Proposed Project Transportation Demand Management (TDM) strategies would result in a **Project VMT to be 15.2 %** higher than the City wide VMT per capita. Draft EIR concludes and clearly states that the Proposed Project has a significant and unavoidable impact, **then it is our opinion that the council has an obligation to the citizens of St Helena to protect their environmental integrity and vote to deny acceptance of the Draft EIR.** 100-8

Thank You

Response to Letter 100
Greg Reynolds
November 5, 2021

100-1 The comment serves as an introduction to the commenter and notes numerous concerns about the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

100-2 The comment states three areas of concern: emergency evacuation, water/sewer discharge, and traffic.

Please see Master Response 1 for information on emergency evacuation concerns and Master Response 4 for information specific to wastewater. The comment does not indicate any specific concerns regarding traffic or where the Draft EIR analysis is inadequate; therefore, no further response can be provided.

100-3 The comment introduces the Vineyard Valley Mobile Home Park and asserts that the mobile home community has spent an increasing amount of time focused on fire suppression, readiness, and safety.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

100-4 The comment states the Project was not part of the City's Flood Protection project.

Please see Master Response 3 that addresses the Flood Protection Project in relation to this Project.

100-5 The comment expresses a concern about emergency evacuation for Vineyard Valley residents and harm to the levee from Project construction.

Please see Master Response 1 for additional information on emergency evacuation concerns and Master Response 3 for information on the Napa River levee (or the City's Flood Protection Project).

100-6 The comment states the commenter's concern about water conservation.

Please see Master Response 2 for more information on water supply.

100-7 The comment states an opinion that connecting the Project to the Vineyard Valley wastewater discharge sewer would overwhelm the sewer system.

Please see Master Response 4 which addresses this concern in detail.

100-8 The comment states an opinion that, because the Project's VMT is estimated to exceed the City wide VMT per capita and would result in a significant and unavoidable impact, the Project should be denied.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 101

November 2, 2021

St. Helena City Planning Department
St. Helena, CA 94575

Dear Members:

I am writing as a resident of St. Helena with my concerns and opposition to the Planning Commission and City Counsel's continued support and consideration of the development of the Hunter Project. The community at large has been in opposition to this proposal for many years now. It is for the benefit of the developer and provides no positive contribution to the community. 101-1

There are so many environmental concerns and potentially negative effects to the land, the community as well as the negative impact on short and long term fire and flood control. I will address some items that come to mind here that should be specifically addressed, hopefully with studies completed as applicable, before any approval of the DEIR. I will list them in the order of the Environmental Impact Report Chapters. 101-2

1. Aesthetics/Visual. I would think this speaks for itself. Two story homes in this cluster will eliminate any vista for residents in Vineyard Valley MHP, in addition to any visitors/residents walking the current open space. My understanding of allowing development as part of the affordable housing initiative is that ALL the accommodations should be of similar design and appearance with the affordable housing scattered throughout, to eliminate the stigma and obvious segregation associated with clustering. This plan appears to be a very upscale home development using over 80% of the land for 56% of the total housing. This *is without* figuring in the 24 "granny unit" apartment/condos in these percentages, which really benefit again the owner of the upscale home on which these units are located. 101-3

   Another factor which impacts aesthestics is the long term (6 years plus) construction. 101-4
   Aside from the visually offensive nature of long term construction, there is the consideration of the traffic impact to residences and businesses. This is not a small project. This will have a huge impact, affecting local residents and deterring visitors, which, in turn, affects revenue. And, what about the actual road damage the city incurs from this long term project? The number of heavy equipment vehicles and substantial increase WILL impact the quality of our road surfaces as well as the flood plain area itself. Who pays for that? 101-5

2. Agricultural and Forestry Resources: Loss of prime agricultural vineyards. What impact will this development have on the current riparian preserve? 101-6

3. Air Quality: there is the extensive construction vehicle/machinery impact for years and the addition of an approximate 100-200+ vehicles for residency, averaging only a maximum of 2 per household. 101-7

4. Biological Resources: there are so many studies on this subject that support the damage from human development. This is just an excerpt from one: The emerging field of Conservation Physiology links environmental change and ecological success by the application of physiological theory, approaches and tools to elucidate and address conservation problems. Human activity has changed the natural environment to a point where the viability of many ecosystems is now under threat. Philos Trans R Soc Lond B Biol Sci. 2012 Jun 19; 367(1596): 1607–1614. *Conservation Physiology may be defined as the application of physiological theory, approaches and tools to elucidate and address conservation problems with the aim to provide a mechanistic understanding of how environmental disturbances and threatening processes impact physiological responses and thereby ecological function, population persistence, and species survival.* 101-8

5. Cultural and Tribal Resources: has there been a study/archeologic study done on this land? A tribal burial ground has been defined in adjacent land. 101-9

6. Geology and Soils: The levee has not been maintained since 2010. Note the fresh gopher holes on the side facing Del Rio. Significant rodent activity in the levee. Concerned about liquification of alluvial soils. Think of what happened to the levees during Hurricane Katrina. 101-10

7. Greenhouse Gas Emissions: vehicles, as mentioned above; construction, as mentioned above. There should also be consideration given to the global warming effects from additional roadways, home emissions and reflection, reduction of absorbing land surface. 101-11

8. Hazards and Hazardous Materials: Hazards. The open space provides a buffer to manage and help control fires. Homes and vehicles in the area is fire fuel. This greatly increases the potential for flooding as this is currently again a buffer. With homes there, there would be damage in a flood with substantial financial loss to city, personal and other agencies. It also creates a bigger potential for fire and flood threat to existing Vineyard Valley homes as they lose this buffer. 101-12

9. Hydrology and Water Quality: *Def: noun the branch of science concerned with the properties of the earth's water, and especially its movement in relation to land.* Contruction of this magnitude is reducing the ability for natural water saturation and flow. Again, contributing to higher potential for flooding and causes a higher rate of run off of natural soils that remain (No.8). 101-13

10. Land Use: Refer to the question regarding unauthorized changes to the intended use of the land as certified by the ACOE below. The proposed Affordable Housing violates Municipal Code 1741 101-14

in that it has been segregated from the other residences and appears to be significantly different. 101-14 Cont.

11. Noise and Vibration: This category is really spread over several – light noise, traffic noise, general vibration/shifting of the natural landscape from the various facets of development including but not limited to shifting, removal of soil and topographic natural flow, extensive road materials being cleared and laid. General construction noise estimated to last a minimum of 6 years. 101-15

12. Public Services and Recreation
    Our police and fire, emergency services, and schools will be impacted, putting a strain on services. 101-16
    The walking trails are used by many people from all over St. Helena. My understanding was the intended purpose of the land was to remain open space for both public enjoyment and long term safety regarding both flood and fire. 101-17

13. Utilities and Service Systems: City water, sewer have limitations. We are currently in a severe drought situation. 101-18 The approval of development of this magnitude does not serve the city or its residents. The costs alone will ultimately be absorbed by current residents, at least partially. 101-19 The pandemic has greatly impacted the small businesses in this area. Adding a project of this size will mean streets being torn up, traffic congestion 101-20 the city plan does not have the capacity to handle and a greater reduction of visitors and revenue for many years. It is very easy for travelers to choose Sonoma or other destinations, especially in light of today's instant information and reviews available via the internet. 101-21

14. Transportation and Circulation: I would think self-evident. As mentioned above, these are just a few of the impacts I can think of. I am sure there are many more. 101-22

15. Energy: We have had so many varieties of energy emergencies using PGE as an example. Older lines, older transformers to name two that are current observations. Homes in Vineyard Valley have not had power for the past week. What is the plan to update an infrastructure to support the current needs incorporated into an expansion of this magnitude? And who pays for that? 101-23

In addition to the items of concern that are either overlooked or not included as part of the DEIR, I am attaching just a small item from part of the Army Corps of Engineers Policy and Procedures: my understanding is that the flood plain project had to be approved and certified by the ACOE. The Hunter Project seems to be in direct violation of this. 101-24

Excerpt taken from an ACOE Policy and Procdure document:

Water Resources Policies and Authorities POLICY AND PROCEDURAL GUIDANCE FOR PROCESSING REQUESTS TO ALTER US ARMY CORPS OF ENGINEERS CIVIL WORKS PROJECTS PURSANT TO 33 USC 408

j. Unauthorized Alterations. The policy of USACE is to pursue enforcement and correction of unauthorized alterations of covered projects. If an unauthorized alteration is discovered, the district, after consulting with the Offices of Counsel and Real Estate, should take the appropriate steps to remedy the unauthorized alteration. The Chief of Regulatory should be notified of any unauthorized alterations so the appropriate course of action can be taken with respect to Section 10/404/103 permits. Specific enforcement steps the district takes will depend on the particular nature of the unauthorize d alteration and whether the unauthorized alteration is located on project boundaries where a non-federal sponsor holds the land rights for operations and maintenance. Non-federal sponsors with operations and maintenance responsibilities for the USACE project, reference paragraph 6.e.(1), remain responsible for ensuring no unauthorized alterations are occurring within the project boundaries. k. Authorized Project Purpose. **No granting of permission is allowed under Section 408 for a proposed alteration that would have an effect of deauthorizing a project or eliminating an authorized project purpose.**

I am sure there are so many items I am neglecting to address, but I hope these will have some weight in your recognizing that this developmental plan is not in the best interest of our community and approval of same would not be serving the public need nor interests.

101-24 Cont.

101-25

Response to Letter 101
Ringenberg
November 2, 2021

101-1 The comment is opposed to the Project and states an opinion that it would provide no positive contribution to the community.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-2 The comment states an opinion that there are many environmental concerns that would arise from the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-3 The comment states an opinion that two-story homes would eliminate views of scenic vistas for Valley Vineyard residents and any pedestrians who use the open space area and the Project seems to be an upscale development.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision -makers for their consideration.

101-4 The comment states an opinion that long-term construction of the Project would impact aesthetics.

Short-term visual construction-related impacts are not evaluated because the impacts are temporary and would not result in any long-term, permanent impacts. Please see Responses to Comments 7-6 and 84-9 that address potential aesthetic impacts.

101-5 The comment states an opinion that Project construction would cause traffic impacts and damage roads.

The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

101-6 The comment asks what impact the Project would have on the current riparian reserve.

Impacts to riparian habitat are discussed in Section 3.4 of the Draft EIR. Please see also Response to Comment 14-2 that addresses impacts to riparian resources.

101-7 The commenter states an opinion, related to air quality, that there is an extensive amount of construction vehicles and heavy-duty construction equipment resulting in approximately 100-200 vehicles for residency, averaging a maximum of two per household.

It is unclear if the commenter is stating construction of the Project would generate 100-200 vehicles relative to the number of proposed residents. However, as discussed in Section 3.3, Air Quality, the construction equipment mix used for estimating the construction emissions of the Proposed Project is shown in Table 3.3-5 of the Draft EIR. Notably, because detailed specific information regarding the construction equipment fleet is unknown at the time of analysis, the analysis is based on the default construction equipment fleet provided by California Emissions Estimator Model (CalEEMod) which is based on land use information such as the number of dwelling units to be developed. Furthermore, construction tabs within CalEEMod contain default information that was obtained from a survey of other construction sites conducted by the South Coast Air Quality Management District. The construction survey data is grouped by construction phase and lot acreage. The default construction equipment list and phase length data were determined to be the most appropriate for the size and types surveyed. Regarding vehicle trips generated by operations, trip generation of the Project was based on the Traffic Impact Study. Overall, construction and operations of the Project would not exceed the air district's significance thresholds, as presented in Tables 3.3-8 and 3.3-9 in the Draft EIR, and impacts would be less than significant.

101-8 The comment includes an excerpt which states that human activity has changed the natural environment to a point where the viability of many ecosystems is now under threat.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-9 The comment asks whether an archaeologic study has been performed at the Project site and asserts that a tribal burial ground was identified at adjacent land.

The analysis conducted for the Draft EIR included a very thorough evaluation of the potential for subsurface cultural resources, as well as human remains to be present. As noted on page 3.5-23, "a Cultural Resources Inventory and Extended Phase I and Phase II Report was prepared for the Proposed Project in March 2020 (Appendix E). The inventory included a review of the CHRIS records search provided by the NWIC, NAHC sacred lands file search, Native American coordination, historic research, an intensive pedestrian survey, XPI investigations, Phase II excavation, and ground penetrating radar. The study also reviewed historical aerials and topographic maps. The

CHRIS records search included a review of their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the NRHP, California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information."

Please see also Response to Comment 55-4.

101-10 The comment asserts, without providing evidence, that the levee has not been maintained since 2010 and that there is significant rodent activity in the levee. The comment also brings up a concern about liquification of alluvial soils.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. Please see Master Response 3 regarding the levee.

Liquefaction impacts are discussed in Section 3.6 of the Draft EIR. Mitigation measure GEO-1 requires prior to the issuance of any site-specific grading or building permits, the Project applicant shall have a design-level geotechnical report prepared and submitted to the City for review and approval in accordance with adopted City standards. The proposed structural building designs are also required to adhere to the currently adopted version of the California Building Code, which includes standards for seismic safety related to soil stability.

101-11 The commenter states an opinion that, due to the increase in vehicular traffic, the global warming effects from additional roadways, home emissions, reflection, and reduction of absorbing land surface should be considered. In addition, the comment appears to address two separate issues: changes in GHG emissions from Project activities, and what is often referred to as the "urban heat island effect" resulting from land use changes. Both issues are addressed below.

GHG emissions related to Project construction and operation, including vehicular emissions, is discussed under Impact 3.7-1 on page 3.7-30 of the Draft EIR. The Project would result in estimated GHG emissions of 815 MT CO_2e per year, which would be a cumulatively less-than-significant GHG impact. The GHG analysis also increases the potential for CO_2 emissions due to the loss of agriculture land (loss of carbon sequestration). The proposed landscape plan includes planting approximately 185 trees, including scarlet maple (*Acer Rubrum*), Chinese pistache (*Pistacia Chinensis*) and tulip tree (*Liriodendron Tulipifera)*. Furthermore, an approximately one-acre portion of the existing vineyard within the project site would remain. The California Emissions Estimator Model (CalEEMod) includes carbon content values, which are based on Intergovernmental Panel on Climate Change (IPCC) reports, to estimate the loss of sequestered carbon (release of CO_2). For cropland, which would be the closest land use associated with the existing vineyards, removal of cropland

would result in a rate of 6.2 MT CO_2/acre. Regarding carbon sequestration from the planting of a variety of tree species, the Project would result in a sequestration rate of 0.0354 MT CO_2/tree/year assuming growth over 20 years. Therefore, the Project would result in an overall gain in sequestered carbon, reducing the Project's overall GHG emissions presented in Table 3.7-6 of the Draft EIR.

Regarding the potential for increased temperatures due to additional roadways and structures, this effect is typically associated with high density urban development, rather than the more suburban densities typical of the project area. Furthermore, these effects are localized, rather than contributors to global warming. Heat islands are most commonly addressed through the planting of street trees. As discussed above, the Project would plant approximately 185 trees. There is no evidence that the Project would contribute to an adverse environmental impact due to any heat island effect.

101-12 The comment states an opinion that the current open space area provides a buffer to wildfires and that the Project would create a bigger potential for fire and flood threat to existing Vineyard Valley homes.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 regarding flooding concerns.

101-13 The comment states an opinion that the Project would reduce the ability for natural water saturation and flow, contributing to a higher potential for flooding and runoff of natural soils.

Please see Response to Comments 35-4 through 35-6.

101-14 The comment states an opinion that the Project violates Municipal Code 1741, since affordable housing would be, in the commenter's opinion, segregated from other residences and appears to be significantly different from market-rate units.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. In addition, the commenter appears to be referencing an incorrect section of th City's Municipal Code bcasue there is no section "1741". It is assumed the commenter is referring to chapter 17.146 of the Municipal Code that addresses affordable housing. Please see Response to Comment 45-2.

101-15 The comment states an opinion that the Project would cause traffic and construction noise, and vibration which would shift soils and impact natural water flow.

The Project's impact on transportation and circulation is addressed in Section 3.14. Noise and vibration impacts are discussed in Section 3.11 and hydrology impacts are

discussed in Section 3.9. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-16 The comment states an opinion that the Project would strain police, fire, and emergency services, as well as schools.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-17 The comment states an opinion that the intended purpose of the land was to remain open space for public enjoyment and safety from floods and fire.

The Project site is not publicly owned and is therefore not a public open space. In addition, the Project site has been designated and zoned for residential development dating back to the 1975 General Plan. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-18 The comment states an opinion that City water and sewer services have limitations and that the City is currently in a severe drought situation.

Please see Master Response 2 regarding water supply and Master Response 4 regarding sewer capacity.

101-19 The comment asserts that the cost of the Project would be absorbed by current residents.

The CEQA Guidelines do not require the fiscal or economic costs of a project to be evaluated, unless they could indirectly result in result in significant physical changes in the environment. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-20 The comment states an opinion that the Project would result in traffic congestion and damage to streets.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

101-21 The comment suggests that the Project would result in a reduction in the number of visitors to the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-22 The comment states an opinion that there would be transportation and circulation impacts.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the EIR or analysis is inadequate; therefore, no further response is required. The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles traveled (VMT), and potential impacts to transit, bicycle, and pedestrians.

101-23 The comment states an opinion that the City has had many energy-related emergencies and asks if the City has is a plan for infrastructure updates to support current needs as well as the Proposed Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-24 The comment states an opinion that the Project is in direct violation to the Army Corps of Engineers Policy and Procedures document.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

101-25 The comment states an opinion that the Project is not in the best interest of the community.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

Comment Letter 102

-----Original Message-----
From: jim ritchie <carrottopone@yahoo.com>
Sent: Monday, November 1, 2021 3:42 PM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Hunter Project

My two main concerns are the scarcity of water sources for the town at the present time. With this many new dwellings, where is the added water coming from? You can only retrofit so many toilets. What if the developer could also retrofit dishwashers/washing machines (replace with a percentage or rebate of new water wise units paid for by said developer? Is the new norm now on/off showers, no vegetable or fruit gardens, dead landscaping, saving grey water to keep plants alive? If this project does move forward, maybe some of the conditions should be all drought tolerate landscaping, no to pools using city water, putting in grey water systems for all landscaping. 102-1

My second concern is traffic. If Adams and Starr are extended but Adams doesn't cross over to the Trail the traffic just impacts all the current residential streets. Adams and Hunt become feeders to Pope Street along with Church, Edwards, Jiune, which are already very well travelled. We've all seen what traffic is like when part of the Trail is shut down and now maybe with this development an additional 200 vehicles with no new exit out of town but the current residential streets surrounding this project. 102-2

With the added vehicles comes over flow parking into existing neighborhoods as is evident with Hunts Grove and the multi units on Monte Vista. 102-3

It just seems that this many units is going to decrease the quality of living in St. Helena by those in close proximity to this proposed development. 102-4

Jim Ritchie
830 Hunt Ave
963-3836

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Response to Letter 102
Jim Ritchie
November 1, 2021

102-1 The comment expresses the commenter's concern regarding the Project's impact on the City's water supply and suggests regulating the Project's water usage.

Please see Master Response 2 that addresses the City's ability to supply water to the Project and the Project's compliance with City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the City's Municipal Code.

102-2 The comment expresses the commenter's concern related to the Project's impact on local traffic. Specifically, potential traffic impacts to Pope Street.

Please see Response to Comment 57-11.

102-3 The comment addresses the Project's impact on parking availability.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required.

102-4 The comment states opposition to the Project because it would, in the commenter's opinion, decrease the quality of life for St. Helena residents.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 103

From: Vivian Robison <vivian.robison@gmail.com>
Sent: Thursday, November 4, 2021 1:39 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Opposition to the Proposed Hunter Subdivision per DEIR

Dear Ms DeRosa,

My husband and I have lived in St Helena for 47 years with the last six years as residents of Vineyard Valley Mobile Home Park. We are strongly opposed to the development of the proposed Hunter Subdivision for just a few of the following reasons specific to the DEIR found on the City's website: 103-1

1. Geology Soils Wildlife Recreation: Building and paving behind a levee will most certainly result in levee failure by taking away the permeable soil drainage. The runoff from rainstorms will have no where to go but to overwhelm the river, overtake the levee, and cause severe flooding. 103-2 This massive subdivision will eliminate our open space fire break, encroach on agricultural land, negatively impact our viewscape, diminish our sacred greenbelt, destroy the wildlife habitat of the river, and deprive all of us and future generations of the beauty of nature. 103-3

2. Hydrology Utilities Public Services: There is also the higher elevation of the subdivision such that their runoff will have immediate flooding impact on neighboring Vineyard Valley where we live. Our streets will flood and damage our homes, cars, and personal property. Emergency Services will be unable to rescue everyone off their roofs in the event of flooding. Sewage will back up right down Paseo Grande, the main street of Vineyard Valley, and threaten our health, safety, and welfare. Wildfires and floods will potentially knock out the power. 103-4 Excess energy consumption from the subdivision will most certainly burden the power grid and the high density population will over consume water. 103-5 Prolonged construction will torture neighbors with increased heavy equipment traffic, noise, vibration, light pollution, and affect our air quality with dust and off gassing contaminants for the several years it is projected to take and beyond. 103-6

3. Transportation Circulation: This high density subdivision will not have through street capability to Silverado Trail so the lack of traffic flow will create immense traffic congestion in our neighborhood and tax the already much over used aging Pope Street Bridge. 103-7 The intersection at the bridge and trail is a tremendous safety hazard with more traffic accidents sure to happen. Again Emergency Services will have extreme difficulty in navigating the traffic to get to Vineyard Valley. Additionally the subdivision will clearly obstruct our evacuation exit to Adams Street because traffic congestion will prevent us from exiting via Pope Street. 103-8

The Hunter Subdivision is an oversized market rate housing development and should be rejected in its entirety. We St Helenans deserve better, we deserve a legacy with a conscience not of greed. 103-9

Respectfully,
Vivian L Robison
35 Redondo Ct
St Helena CA 94574-1251
Cell 707 337-9352
Email vivian.robison@gmail.com

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Response to Letter 103
Vivian Robison
November 4, 2021

103-1 The comment serves as an introduction to the commenter and their opposition to the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

103-2 The comment states an opinion that construction behind the levee would result in levee failure by taking away permeable soils.

Please see Master Response 3.

103-3 The comment states an opinion that the Project would eliminate an open space fire break, encroach on agricultural land, negatively impact views, destroy wildlife habitat, and remove the existing walking trail.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

103-4 The comment states an opinion that the higher elevation of the Project would result in runoff waters flooding the Vineyard Valley Mobile Home Park and threaten health and safety.

Please see Responses to Comments 35-4 through 35-6.

103-5 The comment states an opinion that excess energy and water consumption from the Project would burden the power grid and water supply.

Potential impacts regarding energy, public utilities, and water are discussed in Sections 3.15, Section 3.13, and Section 3.9, respectively. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. Please see Master Response 2 regarding water supply.

103-6 The comment states an opinion that construction of the Project would disturb neighbors with noise, vibration, light pollution, and air pollution.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. However, please see Response to Comment 38-1 that addresses these concerns.

103-7 The comment states an opinion that traffic congestion and overall vehicular safety within the neighborhood would worsen as a result of the Proposed Project and that an additional connection to Silverado Trail would be needed.

Overall safety and vehicular collisions within the City were analyzed within Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please see Response to Comment 57-11 for additional information regarding the extension of Adams Street to Silverado Trail.

103-8 The comment expresses an opinion that emergency services would have difficulty in navigating within the City as a result of the Proposed Project and that emergency evacuation along Adams Street and Pope Street would be reduced.

For additional information regarding emergency vehicle access and evacuation, please see Master Response 1.

103-9 The comment states an opinion that the Project is an “oversized market rate housing development” that should be rejected.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter’s opinion is noted and forwarded to the decision makers for their consideration.

Comment Letter 104

From:	Linda Rose <linda@mgrose.com>
Sent:	Monday, October 4, 2021 4:22 PM
To:	Public Comment
Subject:	[External] Hunter Project

Dear Planning Commission,
Please do not approve the Hunter Project. It was turned down before, because it is such an ill-advised project. We don't have the water for it. We don't want, and can't handle the traffic it would generate. It's in the wrong place, where nothing should be build. And it is much too big for our town.
Sincerely,
Linda Rose
St. Helena

104-1

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Response to Letter 104
Linda Rose
October 4, 2021

104-1 The comment states opposition to the Project and raises concerns regarding the availability of water to serve the Project, traffic generation, and size of the development.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the EIR or analysis is inadequate; therefore, no further response is required.

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Comment Letter 105

-----Original Message-----
From: Alexandrine Venezia <eretz5660@gmail.com>
Sent: Saturday, October 30, 2021 7:04 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Subdivision Project protest

To the Building and planning Director
How can such a project be presented, when there are currently such restrictions on the use of water for us residents of st Helena. How can this be omitted? We are told an even worse future. City Hall penalizes residents financially because there has been no serious planning for water management and apparently it is even worse for the future. So I hope that this will be taking in consideration in the protest against that project.

105-1

A Venezia Rouas

Sent from my iPad

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Response to Letter 105
A. Venezia Rouas
October 30, 2021

105-1 The comment states opposition to the Project regarding the Project's water usage and references water restrictions for City residents.

The commenter's opinion is noted and forwarded to the decision makers for their consideration.

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Comment Letter 106

From: Schlatter, Laurence <lschlatter@merryvale.com>
Sent: Sunday, November 14, 2021 9:33 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Opposition to proposed Hunter Project

Dear Mrs De Rosa,

As a resident of Starr Avenue for the last 23 years, I am writing to express my opposition to the Hunter Project. 106-1

With the current water shortage, it is unimaginable to think that such a big development could take place in our town. Also, the extension of Starr Avenue would turn our safe, and kid/pet friendly neighborhood into a high traffic and dangerous street. 106-2

Also, it would destroy one of St Helena's resident's favorite walking trail. A special place where families, kids, seniors and others have a chance to connect with nature, and enjoy the river. 106-3

In case of a natural disaster, what is your evacuation plan for so many people? 106-4

It is shocking to me that this project can be proposed once again, knowing that the majority of this town is clearly opposed to it. 106-5

Respectfully,

Laurence Schlatter
1183 Starr Avenue
Saint Helena

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Response to Letter 106
Laurence Schlatter
November 14, 2021

106-1 The comment expresses opposition to the Project and explains the commenter's history as a resident of the City. The comment also raises a general concern, stating an opinion that the City is under a water shortage.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration. Also, please see Master Response 2, which addresses the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

106-2 The comment expresses a concern related to the Project's impact on traffic and pedestrian safety.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required.

106-3 The comment states an opinion that the Project would remove a popular walking trail.

The Project does not propose removing the existing trail or levee maintenance road, as explained in Section 3.12, Public Services and Recreation on page 3.12-17 and on page 2-23 in Chapter 2, Project Description. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision makers for their consideration.

106-4 The comment raises a general concern related to emergency evacuation.

The comment is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, in response to the commenter's concern related to emergency access and evacuation, please see Master Response 1.

106-5 The comment expresses general opposition to the Project and claims that many residents are also opposed to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 107

From: John Schoof <jpschoof@comcast.net>
Sent: Saturday, October 30, 2021 11:33 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Patricia N. Schoof <pnschoof@comcast.net>
Subject: [External] Hunter Subdivision Project concerns

Dear Ms. DeRosa:

I missed the public comment period in 2018 as we were new to the area during that time. However, I want to share my perspective of the Hunter Subdivision Project. With the drought conditions we are experiencing, my initial reaction to the project is that it should be deferred until a more abundant and sustainable water supply is available; one that can support existing and future potable water demand for Saint Helena. The ideas that follow are my concerns with the project, along with some suggested solutions that collaterally provide some additional benefits in the City of Saint Helena. 107-1

Preserve the vineyards

There are two healthy, productive, and beautiful vineyards on the proposed development site, and as you are aware, those vineyards are also bordered by additional vineyards to the north. While it is not a city park, it seems to get visited by dozens of residents each day – residents out for their daily strolls, residents walking their dogs, and children riding their bikes or flying kites. To me this is part of the charm of Saint Helena. Let's preserve that which is a foundation of the county and city in which live and that we thoroughly enjoy. 107-2

I understand that the owners of the property desire to monetize their investment. I also assume that if only half of the land was developed for housing, that the economics might not work for the developers. Perhaps there is a solution away from greenfield development on the planted/producing land to an infill development within the City of Saint Helena. I have often thought to myself that the land on Mitchell Drive (behind the Umpqua Bank) might be a great location for high(er) density/affordable housing that is closer to shopping and main vehicle traffic lanes. A conceptual solution would be for the City of Saint Helena to acquire the Mitchell Drive property(ies) and exchange it for the vineyard land at the end of Starr Avenue; the Hunter Subdivision Project developers could then develop affordable housing off Main Street and Mitchell Drive and the City of Saint Helena could put the vineyards into a land trust to protect them for perpetuity (and enjoy the benefits of positive cash flow from a long-term lease of the vineyards). 107-3

Integrate safer vehicle traffic patterns

Starr Avenue, running from Pope Street to Hunt Avenue is already used as a bypass route to downtown Saint Helena. There is a current child safety iss due to the number of vehicles that ignore the stop signs at the intersection of Hunt Avenue and Starr Avenue. In addition, along with Meadowcreek Circle the two streets accommodate an abundance of overflow parking for the Hunt's Grove Apartments. The current proposal to extend Starr Avenue to intersect with an extension of Adams Street would exacerbate the current traffic, child safety and parking situation. 107-4 107-5

If only the land in the unplanted portion of the Hunter Subdivision Project was developed, the development could be accessed via an extension of Adams Street (only) without a tie-in from Starr avenue such that Adams Street could (someday) be extended over the Napa River to intersect the 107-6

Silverado Trail. From the Adams Street extension, among the requisite streets required for the project, the developer could incorporate a feeder street built behind the east end of the preserved vineyards. This street would also be configured to provide a second vehicle access to the Hunt's Grove Apartments. Finally, within the Hunt's Grove Apartment's property, provide a secondary rear parking solution for the tenants and their guests (I believe that part of that parcel is already owned by the City of Saint Helena).

107-6 Cont.

Migrate to sustainable energy resources

I would hope that all utilities would be underground. To mitigate the use of natural gas and the movement to all electric homes in California all homes in the development should be outfitted with solar panels, as well as electric storage batteries. As a further contribution to affordability and energy sustainability, a solar electric generation system along with storage batteries should be installed as part of the development project – the solar panels could be located over the water collection basin between the east end of the development and the levee with related storage batteries installed on the Hunt's Grove Apartment's property. The proceeds from this additional power to the electric grid could be used to finance the development of the additional parking in the Hunt's Grove Apartment's property with any excess funds going to improvements of the water and sewage systems in the City of Saint Helena.

107-7

107-8

Conserve water

The residents of Saint Helena are frequently asked to conserve water. Adding 80+ new households does not help that effort. Furthermore, adding 80+ new households to the demand for limited amounts of water does not have a positive impact in the effort to create affordable housing for people – this higher cost of water contributes to the cost of living in Saint Helena. The development plan calls for using ground water from an existing well for irrigation but there is no solution for a neutral effect on the use of potable water.

107-9

Unfortunately, I do not have an environmentally sound solution for a neutral effect on the use of potable water, but I do have a suggestion to not use precious ground water for residential irrigation. That is to incorporate a series of cisterns under any newly constructed streets (and parking areas in Hunt's Grove Apartments) to store run off from streets, parking lots and buildings for nonpotable water uses such as irrigation to help conserve our limited sources of drinking water.

107-10

Agricultural land/vineyard preservation, traffic management improvements, sustainable energy resources, and thoughtful water management in the Hunter Subdivision Project warrant further consideration to help the City of Saint Helena evolve.

107-11

Respectfully submitted,

John Schoof

Response to Letter 107
John Schoof
October 30, 2021

107-1 The comment states that the Project should be deferred until more water supply is available that can support existing and future potable water demand of the City.

Please see Master Response 2.

107-2 The comment states an opinion that the existing vineyards should be preserved.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

107-3 The comment proposes alternative locations for infill housing development.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-4 The commenter claims that Starr Avenue is being used as a bypass route to downtown and that child safety is reduced because vehicles ignore stop signs at the intersection of Hunt Avenue and Starr Avenue.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-5 The comment claims that parking in the neighborhood is full and that the extension of Starr Avenue and Adams Street would make parking more difficult.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required.

107-6 The comment states an opinion that the Proposed Project be revised to eliminate the extension of Starr Avenue. The commenter also asserts that parking is an issue in the area.

The Project does not preclude the future expansion of Adams Street connecting to Silverado Trail. This is a separate City project and is not required for the Project. The comment is noted and forwarded to the decision makers for their consideration. Please refer to Response to Comment 107-5 for concerns regarding parking.

107-7 The commenter states an opinion that, in order to mitigate the use of natural gas and promote the movement to all-electric homes, the Project should be outfitted with solar panels and electric storage batteries.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-8 The comment states an opinion that additional power from solar panels could be used to finance the development of additional parking for the Hunt's Grove apartments as well as water and sewer improvements.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-9 The comment states an opinion that additional households from the Project would impact water conservation efforts and would contribute to the higher cost of living in the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-10 The comment states an opinion that groundwater should not be used for residential irrigation.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

107-11 The comment summarizes the concerns discussed in the comment letter.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

Comment Letter 108

November 3, 2021

St. Helena City Planning Department
St. Helena, Ca 94574

Dear Members,

I am writing this letter as a resident of St. Helena with my concerns and opposition to the Planning Commission and City Counsel's continued support and consideration of the development of the Hunter Project. The following are a list of my concerns. 108-1

The proposed site is a place where Native Americans lived and were buried. This is a place that should be left intact. Would you dig up the local cemeteries in Saint Helena to build 87 homes? These graves maybe unmarked to you and me, but the fact remains there are Native American people buried there who lived, laughed and played here. As a community we need to respect the people who lived here before we absorbed their land. 108-2

There are lots of issues concerning water. Where are we going to get enough water to take care of Saint Helena's needs right now? We have been on water rationing all summer and heavily fining those who use too much water. You have a pending law suit stating that the City has pulled out too much water from the some of its wells. We allowed precious water to course down the river and out to the ocean when we could have captured some of this water to refill our dams or reservoirs. Most people in St. Helena have installed all the water saving gadgets available just so they don't have to pay the fine imposed by the city if they were to accidently use too much water. Where are you going to get the water? 108-3

If there are going to be 81 structures built, we will be over taxing our public services. We will need to hire more police and fire or give up what we have and join forces with another city. If we can't afford to hire more people, then we will be getting slower response from the first responders since they will have to come from further away. Our city parks will see more usage and we will need more people to keep them clean. (I have been told that we don't have enough City Parks workers now to keep the parks mowed and clean.) What will the future hold for our beautiful city parks? 108-4 108-5

Our schools in the city will be affected as well by the influx of children. How are you planning on accepting another 174 plus (2 children per household) children from this new housing complex? Are we going to build new schools, install trailers as classrooms to teach the children? More children will be on our streets trying to get to school. How are you going to keep the children safe on the busy streets? 108-6 108-7

Honestly I don't think you can get any more cars on the street near Starr and Adams. Now you want to put even more cars there? If you open up Starr Ave, you are putting more traffic onto Pope St. The Pope St Bridge is already overused. I have seen the traffic build up on Pope St because drivers will not stay on the correct side of the yellow line when crossing the bridge. I have seen trucks use this bridge and block traffic. This will be an even bigger problem once we have 174 (2 cars per household) more cars going over this bridge to get to work, school, or wherever. Why is Adam Street not being extended to Silverado Trail? We have problems with speeders zooming down Pope Street and people not paying 108-8 108-9

attention to stop signs. (I was in the middle of the crosswalk at Pope & Starr when a car zooming down Starr came within inches of hitting me.) The flashing yellow lights at the intersection of Pope and Starr are ignored as well. We have the orange flags which are a good idea, but doesn't seem to work for the pedestrian. I have seen more cars on the residential streets on both the West and East side of town since the Trail has been closed. They seem to be in a hurry because they are going over the speed limit. I get that they are doing their best to get somewhere but we have traffic in town and they are trying to avoid it all costs. By doing this, they are endangering the people who live on the residential streets. When will someone take notice? When someone is injured or killed?

108-9 Cont.

Building this project next to a levee which has not been tested is probably not a great idea. If we have a major flood and the levee failed, where would the water go? It appears the new homes would be built higher than Vineyard Valley. If that is true, then Vineyard Valley would be inundated with the excess water and become flooded. Who will pay for the damage the flood would bring? Since this land is part of the original Flood Plain, do we need to re-evaluate the danger of flooding to the area? Would the City of St Helena be in violation of the terms of Measure A? I understand that neither the Army Corps of Engineers nor FEMA have inspected and certified that the levee meets required standards. I am also told that the levee has not been maintained since 2010. This concerns me. What happens if the levee should fail?

108-10

The open space and field provide home to so many local wild plants and animals. With all the fires we have had which destroyed wildlife habitat, more and more wildlife are coming to stay in St Helena. I love seeing the birds, foxes, coyotes and other wildlife hunt in this area. It is always such fun to go for a walk and enjoy the peace and quiet while watching the birds soar and various animals run after the rodents. Please let our wildlife habitat be left alone so they can thrive.

108-11

A practice evacuation drill was held for the Vineyard Valley residences where it was decided to utilize the area being proposed as a road for the new development. It appears this road may no longer be accessible if this project were to be built. It would, however, put a large strain on the Vineyard Valley residents as to their evacuation route. 200 plus people would be trying to get out of the park along with everyone from the new housing project all trying to use the same streets (Pope, Starr and Adams) to get out of danger. This is putting our community at risk. Who will pay the cost of law suits should anything go wrong?

108-12

Please do not approve the Hunter Project. It was turned down before, because it is such an ill-advised project. It is in the wrong place, it is the wrong time and it is too big for our little town.

108-13

Sincerely,
Cathy Small

Response to Letter 108
Cathy Small
November 3, 2021

108-1 The comment expresses opposition to the Project due to concerns noted in the letter (and addressed below).

The commenter's opinion is noted and forwarded to the decision-makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

108-2 The comment asserts, without indicating the source of information, that the Project site is the location of where Native American's "lived and were buried" and this needs to be respected.

Please see Response to Comment 55-4, which provides more detail specific to the presence of any tribal cultural resources or human remains.

108-3 The commenter states their concerns regarding availability of water to serve the City residents and asks where the City will get water to serve the Project.

Please see Master Response 2 that addresses concerns regarding water.

108-4 The comment raises a concern that the City's police and fire services will be impacted by the Project resulting in the need to hire more staff and slower response times.

The Draft EIR evaluates the ability of the City's police and fire departments to accommodate the increase in demand for service in Section 3.12, Public Services and Recreation. As noted on page 3.12-1, the closest police and fire station to the Project site is located 0.2 miles to the southwest. Development of the site was assumed in the City's 1993 General Plan as well as the recently adopted 2019 General Plan. The addition of new residences would not adversely affect the ability of the City's police and fire personnel to serve the site. The City's police and fire departments have adequate staff to accommodate the increase in demand for services and do not anticipate a decline in response times to the site.

108-5 The comment states an opinion the City's parks will experience more usage and will require more City staff to maintain the parks due to the increase in demand.

The Project would accommodate an increase in the City's population but as discussed on page 3.12-17 of the Draft EIR, the City requires the Project applicant to pay park and recreational impact fees to cover the cost of land acquisition and park improvements and property tax revenue would help fund additional City park staff, if

required. The Draft EIR concluded that payment of the required park and recreation impact fees would ensure the Project would not adversely impact City park facilities.

108-6 The comment addresses the ability of the school district to provide for additional students.

Based on the St. Helena Unified School District (SHUSD) student generation demand rates, the Project would add a total of 28 K-12 students to the SHUSD, as discussed in the Draft EIR starting on page 3.12-11. Based on 2019 enrollment numbers there is adequate capacity to accommodate the increase in students and existing schools are estimated to have more than sufficient capacity for projected enrollment through 2025. Under SB 50, payment of required school impact fees is complete and full mitigation for any potential impacts related to the need for school facilities.

108-7 The comment asserts that more children will be on local roadways and asks how the children will be kept safe.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

108-8 The commenter is concerned about traffic congestion along Starr Avenue and Adams Street. The comment asserts that traffic congestion is already high in the neighborhood and that the Pope Street Bridge is not wide enough to accommodate trucks.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision-makers for their consideration.

108-9 The comment asserts, without citing a source, that there are speeding issues along Pope Street and that drivers do not pay attention to stop signs and crosswalks. The comment also states an opinion that overall safety for pedestrian and motorists would be worsened with the proposed project.

Transportation impacts are analyzed in Section 3.14 of the Draft EIR. This Section analyzed Project transportation impacts related to consistency with plans or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, hazardous design, and emergency access. The Draft EIR concludes that the Project would have less-than-significant impacts to these matters.

108-10 The comment raises numerous concerns on the part of the commenter regarding the levee including status of certification by FEMA and the Army Corps of Engineers, levee maintenance, storm water flows from the site into the adjacent Vineyard Valley development, and status of the floodplain.

The levee provides a 200-year level of flood protection, rather than the "100-year flood plain" referenced in the comments. The manner in which inspection and maintenance responsibilities for the existing levee are assigned are not environmental effects related to the Proposed Project. Furthermore, under CEQA, the effects of the environment upon the project are not "impacts." Rather, CEQA requires the lead agency to consider the ways in which the project effects the environment. The potential hydrological effects of the Project, including the potential to impede or redirect flood flows, are considered in Section 3.9 of the Draft EIR. See also Master Response 3 for further details regarding the levee, required certification, and maintenance responsibilities.

108-11 The comment expresses a general belief that open space provides habitat to plants and animals and requests that wildlife habitat be left alone.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, the comment is noted and forwarded to the decision-makers for their consideration.

108-12 The comment is referencing the emergency evacuation route used by Vineyard Valley residents along the existing levee maintenance road and questions if this road would be accessible if the Project is approved.

Please see Master Response 1 that provides more details specific to the maintenance road for emergency evacuation for both Vineyard Valley residents and Project residents.

108-13 The comment requests the Project not be approved because it is "too big for our little town."

The commenter's opinion is noted and forwarded to the decision-makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 109

-----Original Message-----
From: Patricia Stephens <trishstephens2110@gmail.com>
Sent: Tuesday, November 2, 2021 9:57 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] HUNTER SUBDIVISION PROJECT

I am writing in protest of the Hunter Subdivision project. I am a resident homeowner in Saint Helena and am amazed anything of this magnitude would ever get passed. Given the current water situation and the already apparent immense traffic how could anyone even think this is a good idea. The negative impact to our city and it's limited services would be strained to breaking point. No consideration has been given to the strain on the police and fire departments let alone the tax paying citizens who will have to endure the construction, the mess and noise, and the traffic problems such a development would cause. 109-1

I believe this to be a very unpopular project. If the elected officials will not listen and heed the wishes of the people who elected them then they do not get re-elected or they are recalled. 109-2

Patricia Stephens

Sent from my iPad

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Response to Letter 109
Patricia Stephens
November 2, 2021

109-1 The comment provides the commenter's personal history as a resident of the City. The commenter is concerned about the City's current traffic and water supply and states an opinion that the Project would negatively impact the City's police and fire departments.

The Draft EIR evaluates the ability of the City's police and fire departments to accommodate the increase in demand for service in Section 3.12, Public Services and Recreation. The Draft EIR concludes that City's police and fire departments have adequate staff to accommodate the increase in demand for services and do not anticipate a decline in response times to the site.

Please see Master Response 2 that addresses water supply.

The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles travelled (VMT), and potential impacts to transit, bicycle, and pedestrians.

109-2 The comment expresses general opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 110

From: Carolyn Troyan <carolyn@troyan.org>
Sent: Saturday, November 6, 2021 3:59 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Development Project

I am writing to let you know as a St Helena resident I am not in favor of the Parker project. The open land is a popular walking area for residents and their pets. The further strain on resources right now feels like we should wait until we recover from the drought. 110-1

Thanks for listening!

Carolyn Troyan

1134 Valley View St

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Response to Letter 110
Carolyn Troyan
November 6, 2021

110-1 The comment states opposition to the Project regarding concerns related to the Project's potential impact to the adjacent walking trail and City's water supply.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 111

From: Vineyard Valley MHP <vineyardvalleymhp@gmail.com>
Sent: Monday, November 29, 2021 11:09 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Vineyard Valley Response Hunter Project Draft EIR

Maya,
Please confirm receipt of this submission. Thank you.

Vineyard Valley Shared Response
These comments are submitted by the Vineyard Valley Managing Partner and supported by the following residents of the Vineyard Valley community.

Andree Bryan	Denise Leonetti
Kristi Lyn Matthews	Doris Bryant
Margret O'Fallon	Judith Greene
Maureen Barton	Paul Piazza
Betsy Holzhauer	Barbara Ringenberg
Linda Titus	John West
Elizabeth Green	Mary West
Rodney Green	Nora O'Neill
Diane J Barr	Mariam Hansen
Kenneth G Young	Carol Havens
John Polley	Barrie Rose
Chris Echols	Gary Rose
Michael Powell	Neil Walden
Mara M Rankin	Barbara Barnhart
David Chan	Rob Tedeschi
Rebecca Soret	Dagmar Gewiese-David
Vivian Pirchner	Janeen Dirienzo
Gunter Pirchner	Geri Densberger
Trevor Barlow	Cathy Small
Beth Rodda	Leanne Corkill
Steve McNabb	Tom Corkill
Donna McNabb	Sherie Downie
Dottie Gingerelli	Chris Duffey
Lauretta Cecchino	Grace Kistner
Chuck Pniower	Doris Mosler
Gary Crosman	Tom Vence
Madeline DeMarco	Jenna Lavagnino
Marina Lavagnino	

It is beyond dispute that our community will be directly and significantly impacted by the Hunter Project. With this in mind we submit these comments which are limited to the inadequacies perceived by us in the areas of **transportation** (traffic impacts), **utilities**, especially serious wastewater problems based on past experience, and **emergency evacuation** (with fairly quick evacuation from Vineyard Valley in the current environment can be no small challenge. 111-1

Our comments relate solely to our reading of the adequacy of the Draft EIR regarding: Transportation and Circulation, Utilities and Service Systems and Omission of Emergency Evacuation

1. Transportation and Circulation
Draft EIR page 3.14-41 presents Table 3.14-3 which provides a Proposed Project VMT, Vehicle Miles Traveled Summary.
It is clear from the table the Proposed Project Transportation Demand Management (TDM) strategies would result in a Project VMT to be 15.2 % higher than the City wide VMT per capita.
The conclusion under the heading ***Mitigation Measures*** states because there are no feasible mitigation measures available to substantially reduce or lessen the impact of the Proposed Project to less than significant…… **the impact is a significant and unavoidable impact**.
Draft EIR concludes and clearly states that the Proposed Project has a significant and unavoidable impact. It is our opinion that City Planning and Council has an obligation to the citizens of St Helena to protect their environmental integrity and respect the well substantiated conclusion of the Draft EIR; There is no legitimate basis for overriding such a clear unavoidable impact as stated in the Draft EIR. 111-2

2. Utilities and Service Systems
Draft EIR page 2-29 section entitled Sewer System states that wastewater flows will discharge from two locations on the proposed project site. The western end of the site is proposed to drain into an existing manhole at the corner of Starr and Hunt avenue.
The area **east of Starr avenue**, is proposed to drain east through the project site via new 8-inch sewer pipes through lot 21 within a public easement manhole on the adjacent parcel in the **Vineyard Valley Home Park.** The number of homes served on the eastern end of the project would number 46 and results based on estimates, in the Draft EIR by RSA+, a civil engineering firm calculates approximately **13,000 gallons** of new discharge to the existing manhole per day taking into account the proportion of 46 homes to the Projects 51 homes. 111-3
The manhole on Vineyard Valley property connects to a sewer pipe that runs under Paseo Grande Drive which is the central thoroughfare in the Park. This pipe delivers the wastewater to a pipeline system ending up at the city wastewater facility.
The pipe is part of a wastewater siphon system that is owned and maintained by the City. The siphon was installed most likely because the discharge pipe has to cross Sulphur Creek. These systems **are well known to present problems in communities around the countr**y (EPA newsletter March 2015: "Inverted siphons carry wastewater flows under rivers, canals, road, etc. These structures can present problems, and communities look for ways to avoid siphons in their collection system when 111-4

possible."} and here in Vineyard Valley we have had our share of problems over the years from backups of water and waste products from a city manhole located on Paseo Grande Drive during heavy rains. The result is a public health issue for our residents when spills occur. The city is fully aware of these issues since we call them to mitigate when they occur.

Additional wastewater flows projected from the Project are health and safety issues for the residents of Vineyard Valley.

The Draft EIR has not addressed this issue of sewage spilling in the streets of Vineyard Valley.

Further, after reviewing the estimates in the Water Neutral Report Volume III Appendix J prepared by RSA+ we believe the wastewater estimates could be as low as 50 to 100 %, thus: even making things worse. Also, we do not see estimates of wastewater from the **11 ancillary units**

The reason we disagree with the estimates in the EIR is the assumption of 35 gallons per occupant per day of residential wastewater discharge does not even come close to historical St Helena water usage as described in a 2016 Water and Wastewater study which ranges from 65 to 80 gallons per day (excluding landscaping) depending on assumptions of occupants per residential account.

In addition, currently Phase 2 of the City's water shortage emergency program calls for residents to limit non-landscaping use to 65 gallons per day. How can 35 gallons per day be a reasonable assumption based on past practices. Why should the City, in this time of water shortage, consider this assumption of water use as reasonable?

We believe that the Draft EIR is wrong on the estimates of water use as calculated by RSA+

In summary, the Draft EIR does not address the public health and safety issue of increased flows and an inadequate sewage delivery system resulting in sewage spilling into the streets of Vineyard Valley.

We believe the Draft EIR is wrong on the estimates of water use as calculated by RSA+

Sewage spills in Vineyard Valley have been documented in the past with vastly lower wastewater flows than the unrealistic estimates in the Draft EIR.

3. Emergency Evacuation

During a Wildfire Fire emergency or any other major event in order to quickly and safely evacuate residents we need the two designated exits to be available and viable. These exits are Paseo Grande Drive to Pope street and Paseo Grande Drive connected to Adams street (or extended)

We believe the Hunter Project Development will seriously impact the adequacy of the Adams street evacuation plans, with the CEQA requirements not adequately addressed in the Draft EIR.

1. CEQA IX Hazardous and Hazardous Materials. Would the Project:

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

111-4 Cont.

111-5

111-6

111-7

111-8

111-9

111-10

111-11

111-12

111-13

The issue of emergency evacuation in the event of a significant Hazardous waste spill event in Vineyard Valley is not covered in the Draft EIR
2. CEQA XVII Transportation Would the project: **d) Result in inadequate emergency access**?
We have not seen this topic covered in the draft EIR and we are very concerned that emergency access will be greatly diminished by the Hunter Project development.

3. CEQA XX Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
a) Substantially impair an adopted emergency response plan or emergency evacuation plan.
We believe the Hunter Project Development would impair our evacuation Plan and this has not been addressed adequately in the Draft EIR
The Draft EIR has failed to adequately address CEQA requirements related to section IX Hazards and Hazardous Materials f) section XVII Transportation d), and section XX Wildfire a)

We believe the implementation of the Hunter project puts the park residents in harm's way in an emergency evacuation event.

111-13 Cont.
111-14
111-15
111-16
111-17

Response to Letter 111
Valley Vineyard Mobile Home Park
November 29, 2021

111-1 The comment states an opinion that the Vineyard Valley Mobile Home Park community would be directly and significantly impacted by the Project. The comment introduces the concerns discussed in the comment letter.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

111-2 The comment states an opinion that because the Project's VMT is estimated to be 15.2% higher than the Citywide VMT per capita it would be a significant and unavoidable impact which cannot be mitigated, and the EIR should not be approved.

Please refer to Response to Comment 93-8 for clarification on VMT baseline and significance threshold used for the Project's VMT comparison. The commenter's opinion the EIR should not be certified is noted and forwarded to the decision makers for their consideration.

111-3 The comment restates information included in the Draft EIR regarding the sewer system and wastewater flows.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. See also Master Response 4.

111-4 The comment states that the sewer pipe connecting to the Vineyard Valley manhole is part of a wastewater siphon system and asserts, citing an EPA newsletter article, that siphon systems are known to result in water and waste backups.

Please see Master Response 4.

111-5 The comment states an opinion that additional wastewater flows from the Project would result in health and safety issues for Vineyard Valley residents. The comment states an opinion that the Draft EIR does not address the issue of sewage backup at Vineyard Valley.

Please see Master Response 4.

111-6 The comment states an opinion that wastewater estimates in the Water Neutral Report (Appendix J) may be 50% to 100% lower than reality.

Please see Master Response 4.

111-7 The comment states an opinion that the assumption of 35 gallons per occupant per day of residential wastewater discharge does not match historical City water usage described in the 2016 Water and Wastewater Study, which ranges from 65 to 80 gallons per occupant per day.

Please see Master Response 2.

111-8 The comment asserts that 35 gallons per occupant per day is not a reasonable assumption.

Please see Master Response 2.

111-9 The comment states an opinion that the Draft EIR does not address the public health and safety issue of increased wastewater flows resulting in sewage backup at Vineyard Valley.

Please see Master Response 4.

111-10 The comment states an opinion that the Draft EIR is wrong about its water use estimates.

Please see Master Response 2.

111-11 The comment asserts that sewage spills at Vineyard Valley have been documented to occur with lower wastewater flows than the estimates presented in the Draft EIR.

Please see Master Response 4.

111-12 The comment states an opinion that the Proposed Project would have a negative effect on emergency evacuation in the City, especially along Adams Street.

For concerns regarding emergency evacuation, please see Master Response 1.

111-13 The comment asserts that the issue of emergency evacuation in the event of a hazardous waste spill event is not covered in the Draft EIR.

Please see Master Response 1 regarding emergency evacuation.

111-14 The comment claims that emergency access was not analyzed in the Draft EIR and expresses an opinion that emergency access would be greatly diminished due to the Proposed Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. Emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please also see Master

Response 1, that provides more details specific for emergency evacuation for both City residents and the Proposed Project.

111-15 The comment states an opinion that the Project would impair the Vineyard Valley evacuation plan and that this issue has not been adequately addressed in the Draft EIR.

Please see Master Response 1.

111-16 The comment states an opinion that the Draft EIR fails to adequately address CEQA requirements related to hazards and hazardous materials, transportation, and wildfire.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. The Draft EIR evaluates the potential for the Project to expose future residents to potential hazards in Section 3.8, Hazards and Hazardous Conditions. The analysis concludes impacts would be less than significant with the exception for the potential for residual pesticides to be present in the soils. Compliance with required mitigation would ensure the impact would be reduced to less than significant. Please see Responses to Comments 10-2, 36-1 and 36-2 regarding transportation and 39-5 and 82-14 regrading wildfire.

111-17 The comment states an opinion that the Project would harm Vineyard Valley residents in an emergency evacuation event.

Please see Master Response 1. The commenter's opinion is noted and forwarded the decision makers.

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Comment Letter 112

Public Comment on Draft EIR for the Hunter Subdivision Project
11/17/2021

These comments are submitted by the ownership and supported by the community of Vineyard Valley. It is beyond dispute that our community will be directly and significantly impacted by the Hunter Project. With this in mind we submit these comments which are limited to the inadequacies perceived by us in the areas of **transportation** (traffic impacts), **utilities**, especially serious wastewater problems based on past experience, and **emergency evacuation** (with fairly quick evacuation from Vineyard Valley in the current environment can be no small challenge.

Our comments relate solely to our reading of the adequacy of the Draft EIR regarding: Transportation and Circulation, Utilities and Service Systems and Omission of Emergency Evacuation

112-1

1. Transportation and Circulation

Draft EIR page 3.14-41 presents Table 3.14-3 which provides a Proposed Project VMT Summary. It is clear from the table the Proposed Project Transportation Demand Management (TDM) strategies would result in a Project VMT to be 15.2 % higher than the City wide VMT per capita.

The conclusion under the heading ***Mitigation Measures*** states because there are no feasible mitigation measures available to substantially reduce or lessen the impact of the Proposed Project to less than significant…… **the impact is a significant and unavoidable impact**.

Draft EIR concludes and clearly states that the Proposed Project has a significant and unavoidable impact.
It is our opinion that City Planning and Council has an obligation to the citizens of St Helena to protect their environmental integrity and respect the well substantiated conclusion of the Draft EIR; There is no legitimate basis for overriding such a clear unavoidable impact as stated in the Draft EIR.

112-2

2. Utilities and Service Systems

Draft EIR page 2-29 section entitled Sewer System states that wastewater flows will discharge from two locations on the proposed project site. The western end of the site is proposed to drain into an existing manhole at the corner of Starr and Hunt avenue.
The area **east of Starr avenue**, is proposed to drain east through the project site via new 8-inch sewer pipes through lot 21 within a public easement manhole on the adjacent parcel in the **Vineyard Valley Home Park.** The number of homes served on the eastern end of the project would number 46 and result based on estimates in the Draft EIR by RSA+, a civil engineering firm calculates approximately **13,000 gallons** of new discharge to the existing manhole per day taking into account the proportion of 46 homes to the Project 51 homes.

112-3

The manhole on Vineyard Valley property connects to a sewer pipe that runs under Paseo Drive which is the central through fair in the Park. This pipe delivers the wastewater to a pipeline system ending up at the city wastewater facility.
The pipe is part of a wastewater siphon system that is owned and maintained by the City. The siphon was installed most likely because the discharge pipe has to cross Sulphur Creek. These systems **are well known to present problems in communities around the country** (EPA newsletter March 2015: "Inverted siphons carry wastewater flows under rivers, canals, road, etc. These structures can present problems, and communities look for ways to avoid siphons in their collection system when possible.") and here in Vineyard Valley we have had our share of problems over the years from backups of water and waste products from a city manhole located on Paseo during heavy rains. The result is a public health issue for our residents when spills occur. The city is fully aware of these issues since we call them to mitigate when they occur. 112-4

Additional wastewater flows projected from the Project are health and safety issues for the residents of Vineyard Valley. 112-5

The Draft EIR has not addressed this issue of sewage spilling in the streets of Vineyard Valley.

Further, after reviewing the estimates in the Water Neutral Report Volume III Appendix J prepared by RSA+ we believe the wastewater estimates could be as low by 50 to 100 %, thus: even making things worse. Also, we do not see estimates of wastewater from the **11 ancillary units** 112-6

The reason we disagree with the estimates in the EIR is the assumption of 35 gallons per occupant per day of residential wastewater discharge does not even come close to historical St Helena water usage as described in a 2016 Water and Wastewater study which ranges from 65 to 80 gallons per day (excluding landscaping) depending on assumptions of occupants per residential account. 112-7

In addition, currently Phase 2 of the City's water shortage emergency program calls for residents to limit non landscaping use to 65 gallons per day. How can 35 gallons per day be a reasonable assumption based on past practices. Why should the City in this time of water shortage consider this assumption of water use as reasonable? 112-8
We believe that the Draft EIR is wrong on the estimates of water use as calculated by RSA+

In summary, the Draft EIR does not address the public health and safety issue of increased flows and an inadequate sewage delivery system resulting in sewerage spilling into the streets of Vineyard Valley. 112-9

We believe the Draft EIR is wrong on the estimates of water use as calculated by RSA+ 112-10

Sewage spills in Vineyard Valley have been documented in the past with vastly lower wastewater flows than the unrealistic estimates in the Draft EIR. 112-11

3. Emergency Evacuation

During a Wildfire Fire emergency or any other major event in order to quickly and safely evacuate residents we need the two designated exits to be available and viable. These exits are Paseo Drive to Pope street and Paseo Drive connected to Adams street (or extended)
We believe the Hunter Project Development will seriously impact the adequacy of the Adams street evacuation plans, with the CEQA requirements not adequately addressed in the Draft EIR. 112-12

1. CEQA IX Hazardous and Hazardous Materials. Would the Project:
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
The issue of emergency evacuation in the event of a significant Hazardous waste spill event in Vineyard Valley is not covered in the Draft EIR 112-13

2. CEQA XVII Transportation Would the project: **d) Result in inadequate emergency access**?

We have not seen this topic covered in the draft EIR and we are very concerned that emergency access will be greatly diminished by the Hunter Project development. 112-14

3. CEQA XX Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
a) Substantially impair an adopted emergency response plan or emergency evacuation plan.

We believe the Hunter Project Development would impair our evacuation Plan and this has not been addressed adequately in the Draft EIR 112-15

The Draft EIR has failed to adequately address CEQA requirements related to section IX Hazards and Hazardous Materials f) section XVII Transportation d), and section XX Wildfire a) 112-16

We believe the implementation of the Hunter project puts the park residents in harms way in an emergency evacuation event. 112-17

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Response to Letter 112
Vineyard Valley Residents
November 17, 2021

The City received a second letter from the Vineyard Valley residents that is a duplicate of Letter 111. Please see Responses to Letter 111.

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Comment Letter 113

From: Maria Villegas <marrivilla1@comcast.net>
Sent: Friday, October 29, 2021 1:29 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] DEIR questions and comments

Dear Ms. DeRosa,
The following are questions and comments on the DEIR.

Question 1

ES.5. Effects found to be less than significant
Wildfire

"Starting in August 2020, there were a number of wildfires including the LNU lightning Complex Fire and the Glass Fire that burned large areas of Napa County including a small portion of the Project site. Based on the current CAL FIRE maps the Project site is not located within a State Responsibility Area and is not designated as a VHFHSZ"

113-1

Question
1. If the Glass Fire burned a small portion of the Project, please clarify why the Project site has not been re-evaluated as a fire zone?

2. When determining State Responsibility Areas, has Climate Change been taken into consideration given recent extreme fire behavior and patterns?

113-2

3. The last fire which crossed Silverado Trail and came extremely close to residents at Vineyard Valley, had limited evacuation routes or evacuation warnings. Evacuation routes would not only impact existing surrounding neighborhoods, but the newly proposed Project. Please clarify how evacuation routes will be mitigated.

113-3

With the current closure of Silverado Trail, the current traffic conditions gives insight how dangerous and life threatening any disaster would be to the community. While the DEIR readily admits traffic is a problem, I see no reasonable data which would mitigate the problem.

113-4

Question 2

Landscaping and Lighting

"Approximately 74 scarlet maple trees would be planted along the Adams Street extension...57 Chinese pistachio trees would be planted along Street A. Approximately 54 tulip trees would be planted along Street B ..."

Question

1. Currently the City is in a Phase II water conservation. The city has mandated discontinuation of landscaping irrigation how will the water shortage be mitigated in a severe drought? 113-5
2. Why is the City of St Helena the only city in Napa County being penalized for over usage of water? Will the current penalty fees be used on the Hunter Project in any way? 113-6
3. Is the proposed well currently functioning and operational? 113-7
4. When was the well last inspected or tested?
5. If the applicant is proposing the well be owned and maintained by a homeowners association or similar method, how will that impact the city's water usage in the event the well is non-functioning? 113-8
6. How was it determined the applicant determine who owns the well and through what means it will be maintained?

It is known most citizens of St. Helena have not been pleased with excessive penalty fees. Why would any new development be considered now? 113-9

Question 3

3.5 Cultural and Tribal Cultural Resources

Records Search

"This work has demonstrated the area to contain significant and highly sensitive archaeological resources. A total of 163 human remains/burials were recovered from one site (CA-NAP-399) as part of the Flood Protection project, the largest number of burials recovered from a single site in the Napa Valley to date (Schneider et al. 2013:44).

"Subsurface probing (XPI probing or investigation) was conducted by a Dudek archeologist from November 15, 2018 to November 17, 2018...Excavation included three 6-inch hollow-stem augers and 5 shovel test probes. Excavations did result in the identification of areal within the Project site that contain, and have the potential to contain archaeological resources."

AB 52

AB 52 requires consultation with Native American tribes traditionally and culturally affiliated with the geographic area in which a project requiring CEQA review is proposed if those tribes have requested to be informed of such proposed projects....This law is in addition to existing legislature protecting archaeological resources associated with California Native American tribes. AB 52 applies to all projects initiating environmental review in or after July 2015.

Question

1. If the area contains "significant and highly sensitive archaeological resources with a total of 163 human remains/burials, the largest number of burials recovered from a single site in the Napa Valley to date (Schneider et al. 2013:44)..., why is the site no longer eligible for the California Register of Historic Resources and the National Register of Historic Places? 113-10

2. The DEIR states a number of prehistoric sites have been identified within the study area and "two sites were identified with the boundaries of the proposed Project". Please clarify. 113-11

3. Have the following artifacts been returned to the Wappo Tribe?
Found on two sites of the project were:
- Historic Wappo - Trade Beads
- Projectile points
- Charmstones, Bone Tools, Groundstone

113-12

4. If the artifacts were not returned to the Wappo Tribe, who has current possession of the artifacts?

5. AB 52 requires consultation with Native American Tribes traditionally and culturally affiliated with the geographic area. The DEIR indicates Scott Gabaldon, Tribal Chairman, Mishwah-Wappo Tribe was not notified. Please clarify why the Tribal chairman was not contacted? 113-13

6. Where are the 163 human remains? 113-14

7. California Health and Safety Code Section 7070.5(b) of the California Health and Safety Code specifies protocols to address any human remains that may be discovered. Was this protocol followed? Please clarify. 113-15

The DEIR has addressed the issue of human remains and historical artifacts in a most deplorable manner. I trust the applicant would demonstrate some sign of decency and respect for human sanctity. 113-16

Thank you,
Maria Villegas

Response to Letter 113
Maria Villegas
October 29, 2021

113-1 The comment asks for clarification on why the Project site has not been re-evaluated as a very high fire hazard zone if part of the site was burned in the Glass Fire.

On page E-3 of the Draft EIR Executive Summary, it explains the Project site is not located within a state responsibility area and not designated as being within a very high fire hazard severity zone. Neither the City or applicant are involved in the designation of fire hazard zones. Please see Response to Comment 76-9 regarding the Glass Fire.

113-2 The commenter asks whether climate change is considered when determining state responsibility areas.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 113-1.

113-3 The comment states an opinion that the neighborhood does not have adequate evacuation routes and that the Proposed Project would need to mitigate for additional evacuation routes in case of wildfire.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate. However, emergency evacuation was analyzed Section 3.14 of the Draft EIR and Project impacts were concluded to be less than significant. Please also see Master Response 1, that provides more details related to emergency evacuation for both Vineyard Valley residents and the Proposed Project.

113-4 The comment states that the Silverado Trail is currently (October 2022) closed, and asserts that traffic congestion in the City has worsened. The comment asks for additional traffic mitigations.

Please see Response 50-4.

113-5 The comment asks how water shortages would be mitigated in a severe drought.

Please refer to Master Response 2.

113-6 The comment asks why St. Helena is the only city in Napa County penalized for overuse of water and whether the Project would also be subject to current penalty fees.

Please refer to Master Response 2.

113-7 The comment asks if the well to be used for the Project is currently functioning and when it was last inspected or tested.

Please refer to Master Response 2 and Response to Comment 57-5.

113-8 The comment asks how the City's water usage would be impacted in the event the well is non-functioning. The comment also asks how it was determined who owns the well and how it would be maintained.

Please refer to Master Response 2 and Response to Comment 57-5.

113-9 The comment asks why new development should be considered when residents of the City are already not pleased with excessive water penalty fees.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

113-10 The comment notes that the area contains sensitive archeological resources along with human remains and asks why the site is no longer eligible for the California Register of Historic Resources and the National Register of Historic Places.

The Draft EIR addresses the history of the area, including the Project site for the potential for cultural resources (including human remains) to be present on the Project site. To evaluate the potential for the Project site to contain sensitive archeological resources and human remains a Cultural Resources Inventory and Extended Phase I and Phase II Report (confidential Appendix E) was prepared for the Proposed Project. Research conducted included a California Historical Resources Information System (CHRIS) records search, which was conducted at the Northwest Information Center (NWIC) for the Project site and surrounding 0.5-mile radius. This search included their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/California Register of Historical Resources (CRHR) and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information. The records search concluded that 59 previous cultural resources technical investigations have been conducted within a one half-mile of the Project site. Of these, seven have included a portion of the Project site resulting in approximately 90% of the Project site included in previous investigations.

Archaeological investigations conducted the Flood Protection Project overlapped the western and northern portions of the present Project site. As a result of the survey work conducted for the Flood Protection Project eight archaeological resources were identified (all in the general vicinity of the present Project site). Of the eight resources five lacked sufficient data potential and integrity to meet the criteria for NRHP eligibility. It was determined that three sites were eligible for listing in the NRHP. Only one archaeological resource (CA-NAP-406) which intersects the Project site has been determined to be eligible for CRHR and NRHP listing. The Phase I and Phase II archaeological excavations conducted on the Project site in addition to a ground penetrating radar investigation concluded there are no intact deposits or features associated with CA-NAP-406 that appear to extend into or within the Project site.

The Cultural Inventory and Extended Phase I and Phase II Report conducted for the Proposed Project noted three archeological sites were previously identified within the Project site (CA-NAP-406, CA-NAP-843, and CA-NAP-1008), two of which (CA-NAP-843 and CA-NAP-1008) were determined not to be NRHP/CRHR eligible. The Cultural Inventory Report determined that impacts to CA-NAP-843 and CA-NAP-1008 would not represent a significant effect.

The Flood Protection Project resulted in a substantial level of previous archaeological investigation work along the western and northern portions of the Project site. A total of 163 human burials were recovered from one site as part of the Flood Protection Project, the largest number of burials recovered from a single site in Napa Valley to date. However, based on the Phase I and Phase II investigations conducted on the Project site along with ground penetrating radar no human remains were documented within the archaeological resources that intersect the Project site.

The Draft EIR concluded that there are no resources that would qualify the entire Project site to be eligible for listing on either the National Register of Historic Places (NRHP) or the California Inventory of Historical Resources/California Register of Historical Resources (CRHR). Detailed information and analysis supporting this conclusion is provided in Section 3.5 of the Draft EIR.

113-11 The comment references resources identified within the Project site and requests this be clarified.

Please see Response to Comment 113-10 that addresses this comment.

113-12 The comment asks if specific artifacts, trade beads, projectile points, and charmstones, bone tools and groundstone have been returned to the Wappo Tribe, and who has current possession of the artifacts.

There is no mention of beads being discovered at the Project site; 3 projectile point fragments were identified as part of cultural evaluation conducted in 1993 for a different project in proximity to the Project site (DEIR p. 3.5-7). There is no reference to charmstone, bone tools or groundstone being found on the Project site. It is not

known if the other artifacts identified at the other project were returned to the Wappo Tribe or where these artifacts currently are located.

113-13 The comment references AB 52 and is asking why the Mishwah-Wappo Tribal chairman was not contacted.

A letter was sent to Vincent Salsedo with the Mishewal-Wappo Tribe of Alexander Valley on April 23, 2018. The Mishewal-Wappo Tribe did not respond to the City's letter requesting consultation on this Project.

113-14 The commenter requests information on where the 163 human remains are located.

As noted in Response to Comment 113-10, the human remains were discovered as part of the City's Flood Protection Project. The location of any recorded cultural resource is confidential so the location of where the human remains were discovered is not available for public review.

113-15 The comment states that California Health and Safety Code Section 7050.5 includes specific procedures to follow to address any human remains that may be discovered and is asking to clarify if this procedure was followed.

It is not clear if the comment is asking about the Proposed Project or the City's Flood Protection Project. Since the Project is under review at this time it is assumed the comment is referencing the Proposed Project. Compliance with this state law is required during any ground disturbing activities and has been identified as Mitigation Measure CUL-2.

113-16 The comment expresses an opinion that the Draft EIR addressed human remains and historical artifacts in a "deplorable manner" and requests the applicant demonstrate decency and respect.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required.

Comment Letter 114

November 29, 2021

Maria Villegas
1166 Meadowcreek Circle
St. Helena, Ca 94574

Maya De Rosa, AICP
Planning and Building Director
City of St. Helena, Planning& Community Improvement Department
1572 Railroad Ave., St. Helena, Ca 94574

Dear Maya,
The following are my comments regarding the draft EIR for the Hunter Subdivision Project, Assessor's Parcel Number 009-030-057.

Project Background 10839, ES-1

The majority of the Project site was acquired by Dennis Hunter in 1997. **Planning efforts were first initiated for development of the Project site in 2005 and an application was submitted to the City in September 2010** that included a request for a Tentative Map to subdivide the property for residential development. **A completeness letter for the proposed subdivision was issued by the City on March 28, 2011. Since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project. Nonetheless, this EIR also evaluates consistency with the City's current "General Plan Update 2040" for information and consistency purposes.**

Question
Planning efforts were initiated for development of the project site in 2005 and the application was submitted to the City in September 2010, why was the application submission date accepted as qualifying for the 1993 General Plan? 114-1

1. What is the approval date for the application? 114-2

2. How long is an application valid before a developer needs to submit a new application?
3. Has an extension been applied to the application to prevent a lapse in the permits?
4. If so, on what basis was the extension applied?
5. What is the time frame for filing an extension?
6. What work has allowed an extension to be applied since the date of the permit's completion?
7. If an extension is inapplicable, shouldn't the current general plan be used to analyze the project's impacts?

114-2 Cont.

114-3

114-4

"A completeness letter for the proposed subdivision was issued by the City on March 28, 2011." Why isn't the date the City issued the completeness letter implemented, given the City's request for a Tentative Map, when the application was submitted?

114-5

1993 General Plan
1.2 Purpose and scope of the General Plan 1-3
The St. Helena General Plan is a legal document required by State law. It serves as the City's "constitution," identifying the City's long range plans for development of land and the conservation of resources.
…**The 1993 St. Helena General Plan establishes City policy for the period between 1993-2010.**

While each community's General Plan should be tailored to the specific concerns or interests of its residents, State law requires that at a minimum seven topics or "elements"be addressed.These elements include: land use, housing, circulation, conservation, open space, public safety and noise. **The Plan can also include other elements as needed to address issues of local importance. Other issues that are often addressed in separate elements include: recreation, public services and facilities, community design, historic preservation, and growth management. The 1993 St. Helena General Plan addresses all of these issues, but combines some of them into single elements…**

Question:
1993 General Plan - 1.2 Purpose and scope of the General Plan 1-3

The St. Helena General Plan is a legal document required by State law. It serves as the City's "constitution,"….The 1993 St. Helena General Plan established City policy for the period between 1993-2010.

1. Please clarify why approval of the proposed subdivision does not fall under the jurisdiction of the 2019 General Plan. 114-6

2. There are changes with the City's water supply, electrical grid and climate change. Is the City accepting outdated data? Please clarify the justification for accepting data that was applied in 1993 to our current infrastructure of 2021. 114-7

DEIR 2040 10839 4-8

4 - CEQA Considerations

The City updated the General Plan in 2019. However, since the Proposed Project application was submitted in September 2010 and deemed complete by the City in 2011.

Exhibit A
CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE ST. HELENA 2040 GENERAL PLAN UPDATE - 1

II. THE PLAN

4. The Plan is the St. Helena 2040 General Plan Update (Plan or or Project) analyzed under CEQA, which addresses growth and preservation within the City of St. Helena to the horizon year of 2040. **The Plan replaces the existing 1993 General Plan. The Plan referred to in these findings is the Plan as approved by the St. Helena City Council on May 14, 2019**
6. The Plan provides the basis for the City's land use and development policy and represents the basic community values, ideals and aspirations that will govern development and conservation through the planning horizon year of 2040. Specific objectives established for the Plan include the following:

    (b) Focus future development so that it is contiguous to

Page 3 of 5

existing developed areas and supports efficient delivery of public services and infrastructure;

(e) Reduce traffic congestion by providing alternative transportation choices, enhancing regional public transit connections, and achieving an appropriate jobs-to-housing balance to reduce commuter trips;

(j) Provide a high-quality network of parks, open spaces, and trails that enhances quality of life and connectivity in the community; and

Question:

1. According to Exhibit A, CEQA Findings of Fact and Statement of Overriding Considerations for the St. Helena 2040 General Plan Update, II. The Plan-4. States the Plan replaces the existing 1993 General Plan. The Plan was approved by City Council on May 14, 2019 is inconsistent with the current draft EIR. Please clarify how the draft EIR is valid. 114-8

Question:

Exhibit A specifies objectives to include:
"6 (b) Focus future development so that it is contiguous to existing developed areas and support efficient delivery of public services and infrastructure."

2. Currently the City is in a severe drought prompting the City to impose significant fines to residents for water overuse. St. Helena is the only city in Napa County imposing such fines. Please clarify how imposing a fifteen second hand wash, which is not what CDC advises as precautionary measures for COVID-19, and three flushes per day, would not impact the City's existing developed areas. 114-9

6 (e) Reduce traffic congestion by providing alternative transportation choices…

3. The proposed Projects eighty-seven (87) units would increase traffic on Starr, Adams Street and Hunt Street. There are only two (2) routes for evacuation which are Starr and Adams Streets. There is not mitigation in the draft EIR addressing evacuation for residents. Please address how the developer will resolve traffic and evacuations routes. 114-10

6 (j) "Provide a high-quality network of parks, open spaces, and trails that enhancers quality of life and connectivity in the community."

4. The eighty-seven (87) units would eliminate the walking path residents use daily. Please specify how the developer will mitigate the walking path and how will the removal of vineyards preserves our open space. 114-11

Respectfully,

Maria Villegas

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Response to Letter 114
Maria Villegas
November 29, 2021

114-1 The comment asks if the application was submitted to the City in 2010 why does the 1993 General Plan take precedence.

As explained in the Draft EIR on pages ES-1, 2-12 and 3.0-2 through 3.0-3, because the tentative map application was submitted in September 2010 and deemed complete by the City in 2011, this EIR uses the 1993 General Plan as the applicable general plan for the purposes of evaluating the Proposed Project, since 1993 General Plan was the adopted general plan in effect in 2011. The City did not adopt an updated general plan until 2019. Therefore, as required by the Subdivision Map Act, the consistency of the proposed subdivision with the general plan must be evaluated under the 1993 General Plan. However, regarding policies that are adopted to avoid or reduce an environmental effect, the Draft EIR also considers the current General Plan (adopted 2019).

114-2 The comment wants to know what the approval date was for the application and how long an application is valid.

The application was deemed complete by the City in 2011. The City has determined that the application is still valid, and the applicant continues to seek approval of the Project.

114-3 The comment is asking if an extension has been requested to prevent a lapse in permits; the basis for the extension; time frame for filing an extension and what work has been completed since the extension.

The application does not require an extension, as described below under Response to Comment 114-4. The tentative map has not been approved, no City permits or other agency permits have been issued for the Project, and no work has been done on the Project.

114-4 It appears the commenter believes an extension is required for the application and if not then the Project would be subject to compliance with the current (2019) City General Plan.

Please see Responses to Comments 114-1 and 114-2 which explains why the application is not subject to an extension and why the Project is required to be evaluated under the 1993 General Plan. In addition, the Project also reviewed consistency with the City's General Plan Update 2040 that was adopted in 2019.

114-5 The comment notes the City issued a completeness letter for the application in 2011. The commenter appears to be asking why the City has not yet taken action on the Project.

As noted on page 2-11 of the Draft EIR, the City prepared an EIR to evaluate the Proposed Project in 2012 and in 2013 the Proposed Project came before the City's Planning Commission for review. The Planning Commission did not take action on the Proposed Project at that time and the item was continued. Additional information was subsequently submitted by the Project applicant, which resulted in the need to revise and update the Draft EIR. The original EIR consultant was not able to revise the EIR so the City retained a new EIR consultant in 2017 to prepare a new EIR to evaluate the Project.

114-6 The comment is requesting to know why the Project is not required to be evaluated under the City's current General Plan since the 1993 General Plan was developed to oversee 1993 through 2010.

Please see Response to Comment 114-1.

114-7 The comment appears to be questioning the accuracy of information contained in the 1993 General Plan pertaining to the City's water supply, electrical grid, and climate change. It appears the commenter believes data from the 1993 was used to address potential impacts to these services.

Please see Response to Comment 9-4 that addresses these concerns as well as Master Response 2 that addresses water supply.

114-8 The comment is referencing the Findings of Fact and Statement of Overriding Considerations prepared for the City's 2040 General Plan, which was adopted in May 2019 and states the Draft EIR in inconsistent with the 2019 General Plan.

The St. Helena General Plan Update 2040, adopted in 2019, is the City's current general plan. Any development application made today would be considered under the 2040 Plan. However, as stated in Response to Comment 114-1, the Project application was deemed complete in 2011. The Subdivision Map Act requires that the proposed subdivision be evaluated under the general plan that is in effect at the time the application is deemed complete. Therefore, the consistency analysis for the proposed subdivision is on the general plan adopted in 1993. The Draft EIR therefore considers consistency with the 1993 General Plan, but also considers policies of the 2040 Plan that relate to the avoidance or reduction of an environmental effect.

114-9 The comment is referencing the City's mandatory water conservation requirements and requests clarification on limits for hand washing and flushing of toilets and the impact this would have on the City's existing development.

The comment appears to be general in nature and it is not clear what the commenter is requesting be clarified. The comment is not addressing the accuracy or adequacy of the Draft EIR; therefore, no further response is required. Please see Master Response 2,

which provides additional information on water and the City's Water Neutral Policy and Chapter 13.12, Water Use and Efficiency of the Municipal Code.

114-10 The comment references emergency evacuation and how the Project proposes to address traffic and emergency access.

Please see Master Response 1 that addresses emergency access and evacuation concerns.

114-11 The comment asserts that the Project would eliminate the existing walking path and the on-site vineyards and wants to know how this will be mitigated and how removal of the vineyards preserves open space.

The Project does not propose removing the existing trail or levee maintenance road, as explained in Section 3.12, Public Services and Recreation on page 3.12-17 and on page 2-23 in Chapter 2, Project Description. The existing trail parallel to the maintenance road would remain and would not be altered by the Proposed Project. The Project would not impact the existing walking path and no mitigation is required.

The existing vineyards on the Project site would be removed with the exception of the one-acre portion located in the "panhandle" portion of the site. The vineyards are not officially protected, so no mitigation is required.

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Comment Letter 115

Maria Villegas
1166 Meadowcreek Circle
St. Helena, Ca 94574

Maya DeRosa
Planning and Building Director
City of St. Helena, Planning & Community Improvement Department
1572 Railroad Ave. St. Helena, Ca 94574

Dear Maya,

The following are my questions on the draft EIR for the Hunter Project.
Thank you,
Maria

3.3 Air Quality
City of St. Helena 1993 General Plan
Policy 8.2.6: Minimizing local adverse air quality impacts related to construction by requiring dust abatement procedures for local projects.

Toxic Air Contaminants

"Sensitive receptors are groups of individuals, including children, older adults, the acutely ill, and the chronically ill, that may be more susceptible to health risks due to chemical exposure. **Sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes.** As previously discussed, the nearest sensitive receptors are single-family residences located approximately 20 feet east of the Project site.

Question:

With medical advancements, there are more and more individuals receiving medical care at home. This would include chemotherapy, dialysis and respiratory care. Please address mitigation for the above individuals (sensitive-receptors) including pediatric data and detailed dust control for the project. 115-1

3.6 Geology and Soils

Soil Settlement and/or Collapse

"…As discussed above, the subsurface investigation of the site found that there is an approximately 3-foot-thick layer of clayey silts under recently placed and compacted fill that may be prone to soil settlement or differential settlement. Based on the findings of the geotechnical investigation, the settlement risk at the Project site presents a potentially significant hazard (Appendix F)"

Question:
The settlement risk at the Project site presents a potentially significant hazard, why is the developer inclined to build in a hazardous zone? 115-2

Seismic Hazards

"The Project site is mapped as having a moderate liquefaction susceptibility, based on the Quaternary geologic units described above (USGS 2006). …According to the well completion report for the onsite well, the static water level was recorded as being 11 feet bus in 1992 (DWR 1992). Given these factors, there is a potentially significant risk for liquefaction at the Project site."

State Regulations

The statewide minimum public safety standard for mitigation of earthquake hazards (as established through the California Building Code (CBC), AP Act, and the Seismic Hazards Mapping Act) is that the minimum level of mitigation for a project should Reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy…"

Question:
With the significant risk for liquefaction as described in the draft EIR will the ground be able to withstand a 6.0 magnitude earthquake? The recommended mitigation seems insufficient. Please clarity.

115-3

Question:
According to State regulations, a minimum level of mitigation should reduce the risk of ground failure during an earthquake to buildings for human occupancy.
Please address how the multiple soil hazards reported will be mitigated, given "no seismic hazard zones have yet to be delineated for the City including the Project site."

115-4

Significant and Unavoidable Impacts

"The proposed Project would result in the following significant and unavoidable transportation impacts. **There is no feasible mitigation available to reduce the impacts to less than significant."**

- The proposed Project would generate an increase in project-specific vehicle miles traveled (VTM) that would exceed the Office of Planning and Research's (OPRs) threshold of 15% below that of existing development .

- Under cumulative conditions the Proposed Project would generate an increase in VMT that would exceed the threshold.

Question:

The applicant recognizes "there is no feasible mitigation available to reduce these impacts to less than significant."

Please make clarify why the current draft EIR is accepted as complete.

115-5

Response to Letter 115
Maria Villegas

115-1 The comment references construction-related air emissions and how the Project is proposing to address these concerns.

Section 3.3, Air Quality, of the Draft EIR, provides a detailed analysis of construction-related emissions and measures to reduce impacts.

115-2 The commenter asks why development is proposed on a site that, as noted in the Draft EIR, presents a risk of settlement.

The potential for settlement to be a concern for the Project is evaluated under Impact 3.6-2 on page 3.6-24. Because there is the potential the recompacted native and non-native soils could be unstable mitigation measure GEO-1 is required which ensures that a design-level geotechnical report be prepared and expands upon the typical steps completed as part of standard building and grading permit approvals in order to ensure weak/compressible soils are mitigated and the potential impact would be less than significant.

115-3 The comment is asking if the Project would be able to withstand a 6.0 magnitude earthquake and questions if the mitigation is adequate to address the potential for liquefaction.

The Draft EIR describes liquefaction starting on page 3.6-14 and notes the Project site is mapped as having a moderate liquefaction susceptibility; however, due to fairly shallow depth to groundwater the risk for liquefaction to occur is potentially significant. Mitigation measure GEO-1 requires a design-level geotechnical report be prepared to identify specific site preparation methods, grading practices, foundation designs, and other recommendations appropriate for minimizing damage from weak soils, expansive soils, differential settlement, and seismic hazards, including liquefaction.

115-4 The comment asks how the soil hazards onsite would be mitigated “given ‘no seismic hazard zones have yet to be delineated for the City including the Project site.’”

As stated in the Draft EIR on page 3.6-14, the California Geological Survey has not mapped the Project site area as part of the Seismic Hazards Zonation Program. Implementation of mitigation measure GEO-1 would ensure that the required final design-level geotechnical report be consistent with Special Publication 117A which specifies how to mitigate seismic hazards through site preparation methods (e.g., removal of liquefiable soils, use of engineered fill, and soil treatment methods) and/or foundation design (e.g., deep foundation

systems). Adherence to Special Publication 117A and building code requirements have proven sufficient to reduce potential impacts to less-than-significant levels.

115-5 The comment references the significant traffic impact to an increase in vehicle miles traveled (VMT) and asks if the Draft EIR is complete since no mitigation is available to address this impact.

The CEQA Guidelines recognize that a project may result in significant impacts that cannot be mitigated to a less-than-significant level. The City can approve a project that has a significant and unavoidable impact providing the benefits of the project outweigh the adverse environmental effects.

Comment Letter 116

From: LORI VRABEL <winterchampagne@comcast.net>
Sent: Monday, October 11, 2021 3:44 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Opposing Hunter Subdivision

Dear Maya,

I just want to register my strong opposition to the Hunter Subdivision Project. We are in a severe and long term draught so the additional water use and sewage requirements at this time are totally ridiculous. We are also inundated with traffic on weekends and the addition of these homes would greatly increase that frustration. We also do not have sufficient escape routes for fire evacuation as it is. Thank you for your consideration of my objections.

116-1

116-2

Respectfully,
Lori Vrabel

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Response to Letter 116
Lori Vrabel
October 11, 2021

116-1 The comment expresses opposition to the Project. The comment also raises two general concerns related to the City's water supply and sewage capacity.

The commenter's opinion is noted and forwarded to the decision-makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2, which addresses the City's Water Neutral Policy and Master Response 4 that addresses wastewater capacity.

116-2 The comment expresses concern related to the Project's impact on local traffic and emergency evacuation.

Please see Master Response 1 that addresses concerns associated with emergency evacuation. The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles travelled (VMT), and potential impacts to transit, bicycle, and pedestrians.

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Comment Letter 117

From: Ree Whitford <reewhitford@gmail.com>
Sent: Saturday, November 6, 2021 7:52 AM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project

Hello Judy,

I totally agree that a massive project such as the Hunter Project is inappropriate in these times of over taxed infrastructure and of course, the drought. 117-1

I hope we can find ways to convince the politicians to stop approving endless growth. The increased taxes don't pay the costs inflicted on all of us! 117-2

Thank you for speaking out for sanity!

Best,

Ree

Ree Whitford

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Response to Letter 117
Ree Whitford
November 6, 2021

117-1 The comment states opposition to the Project and makes reference to the drought.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2, which addresses the Project's impact on the City's water supply.

117-2 The commenter is opposed to the Project and to more development within the City.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

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Comment Letter 118

From: mark willey <mark.c.willey@gmail.com>
Sent: Saturday, October 30, 2021 1:05 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Cc: Jeanette Cheeseman <jkc525@msn.com>
Subject: [External] For ST. Helena's planning department / Hunter Subdivison project

TO: Maya DeRosa, Planning & Building Director
City of St. Helena, Planning Department
1572 Railroad Avenue, St. Helena, California 94574

Good day Ms. DeRosa,

Please accept our comments regarding the Hunter Subdivision Project: While we agree that adding additional affordable housing can help our community we have concerns with the proposed location of this project. As St. Helena residents at 36 Laguna Seca Ct. we thank you for allowing my wife and I to share our serious concerns. 118-1

1) Safety-- having an affordable housing complex located by 2 retirement communities will bring crime. Vineyard Valley will be easily accessible by the planned development residents and the new complex will also bring crime to The Springs Retirement complex which is close by as well. Residents of both communities are older and will be easy victims. Note that the Vineyard Valley community which consists of mobile homes has many elderly residents that live independently with virtually no security systems and with easy access to their homes and vehicles it further increases the likelihood of crimes being committed. 118-2

Fire / earthquake evacuation-- the residents of VV recently held a practice evacuation driving drill which included, upon the decision of town officials and safety experts, to utilize the area being proposed as a road for the new development. So now this emergency access goes away and is replaced with more traffic and maybe not even accessible to all residents? Are we now saying our residents' safety is not as important as new affordable housing? One assumes also that the increased traffic into the area will slow the ability of medical response and also fire and police when the needs occur. One further assumes that the additional houses and population will increase the probability and likelihood of fires, ie BBQ's, smoking, etc. What happens to our community seniors when they must be evacuated and lose their homes? Or potentially their lives. Is that what is best for our community? Who will pay the cost of additional police, fire, medical equipment and personnel? Why were these and the following not either at all, or completely, addressed in the environmental impact report nor by the developer? 118-3

2) Wildlife--very near the proposed development there is a habitat restoration area that is posted keep out. We believe the development will severely and negatively impact this area. One would guess that the housing will include children and pets that may run free into this protected area. Have studies been done to address and successfully mitigate this and related issues? 118-4

3) Loss of use of the walking trail for residents and the negative impact on the wineries built along the pathway-- Napa Valley is known for its beauty, wineries etc.. The development will have a negative effect on existing residents and visitors to the area who will no longer be able to enjoy the openness and use of the walkway and current open areas proposed to be lost to the project. Vineyard Valley residents and visitors often throughout the day use the walkway along the proposed Adam Street extension to walk to town, to walk their pets and to just enjoy the beauty of the surrounding area. Taking this away 118-5

also forces more traffic onto either Pope Street, or along the new proposed extension now with vehicles again putting our seniors, pets and others in potential danger. 118-6

There are existing and new wineries that have been built to take in the existing views and experience and if the project is approved the existing wineries customers, the number of which will surely drop, will be looking out at affordable housing. We do not see how the proposed development will be anything but negative for the wineries built and being built along the area. Millions have been invested to utilize the surrounding area with vineyards and wineries, shouldn't the area be used the same? Let's increase the visitors and residents' experience which will increase St Helen's revenue while not severely hurting our existing community residents and businesses. 118-7

4) Water- St. Helena has been in drought conditions for years. With climate change the conditions are expected to worsen and will continue to do so. This year we were forced to discontinue exterior watering, which while understandable, hurts our lifestyle and even resale and we wonder how close were we, as a community, to enter into mandatory water rationishing? 118-8

We reviewed a comment and offer by the developer and his consultant to provide low flow water units to a certain number of existing homeowners which would, according to the developers consultant, actually, even with the new housing, lessen the current usage of water for all of St. Helena. WOW, this is probably one of the most ludicrous proposals to mitigate a very serious environmental issue. Seriously, let's build almost a hundred of new homes / townhouses/ apartments which increase the population by much more than the total units built, then install low flow water toilets and faucets in a few thousand homes, assuming existing residents accept the offer; or will this be mandated by the Town? ,and the ultimate net water affect is a savings to all the water used in St. Helena. There is no way. The water use and needs in St Helena will go up, and dramatically. Where will the water come from? We also wonder who pays any additional repairs that are found to be necessary should a resident accept the new low flow units? Forcing, or even offering, units to an existing resident and then having them incur additional costs does seem like a positive step for our community. Oh, and will the developer guarantee contractors will be available to do the work? What about the added impact to the Town's existing infrastructure? Roads and utilities will fail sooner and maybe more often with the added use. 118-9 118-10

While we appreciate the County and town's concerns to address the mandate for affordable housing, we must oppose the Hunter subdivision development based on numerous factors, some as touched on above. 118-11

Respectfully submitted, Mark and Jeanette

Best regards,

Mark Willey
707-480-3645

Response to Letter 118
Mark Willey
October 30, 2021

118-1 The comment serves as an introduction to the concerns that follow.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

118-2 The comment states an opinion that having an affordable housing complex located next to retirement communities would increase the likelihood of crimes being committed.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. CEQA does not require an analysis of social issues such as criminal activity. The comment is noted and forwarded to the decision makers for their consideration.

118-3 The comment states an opinion that emergency evacuation would be made more difficult due to the Project's location and number of residents and raises concerns regarding emergency vehicle access.

Please also Master Response 1 for more details related to emergency evacuation for residents.

118-4 The comment states an opinion that the Project may result in children and pets disturbing the habitat restoration area near the Project site.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

118-5 The comment states an opinion that the loss of the walking trail would impact views and the enjoyment of residents and visitors to the site.

Please see Response to Comment 114-11.

118-6 The comment states an opinion the Proposed Project would increase traffic congestion on Pope Street and along the roadways leading to the project site.

Please see Response to Comment 108-8.

118-7 The comment states an opinion that the Project would result in a decrease in visitors and revenue at local wineries.

The comment does not identify any specific areas where the Draft EIR or analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 2-4 regarding economic concerns.

118-8 The comment states an opinion that water restrictions hurt residents' lifestyles and resale values.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

118-9 The comment states an opinion that toilet retrofits would not mitigate water impacts from the Project.

Please see Master Response 2.

118-10 The comment asks who would be responsible for repairs to toilet retrofits and if it is guaranteed that contractors would be available to do the work. The comment also states there would be an added impact to the City's infrastructure.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 4 regarding the City's wastewater infrastructure.

118-11 The comment states opposition to the Project in light of the concerns presented in the comment letter.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

Comment Letter 119

-----Original Message-----
From: Connie Wilson <clw1956@comcast.net>
Sent: Sunday, October 31, 2021 4:30 PM
To: Maya DeRosa <MDeRosa@cityofsthelena.org>
Subject: [External] Hunter Project Opposition

Dear Ms. DeRosa,

I wish to express my opposition to the Hunter Project. I believe that no new commercial or residential construction or projects should be considered at this time with our dire water situation. Additionally, the Hunter Project has been continually rejected by the majority of St. Helena citizens. 119-1

With our water and sewer problems and historical local opposition, this project should not be considered for approval.

Thank you.

Connie Wilson
1658 Scott Street
St. Helena

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Response to Letter 119
Connie Wilson
October 30, 2021

119-1 The commenter states opposition to the Project and references the City's sewer infrastructure, water supply, and historical opposition to the Project.

The commenter's opinion is noted and forwarded to the decision makers for their consideration. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required. However, please see Master Response 2 which addresses the Project's impact on the City's water supply and Master Response 4 which addresses concerns regarding the City's sewer system.

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Comment Letter 120

-----Original Message-----
From: Terry Wood <terrywod1798@gmail.com>
Sent: Tuesday, November 2, 2021 10:03 AM
To: Public Comment <publiccomment@cityofsthelena.org>
Subject: [External] Water

Where will the additional water come from?
Terry Wood

120-1

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Response to Letter 120
Terry Wood
November 2, 2021

120-1 The commenter asks where water to supply the Project would come from.

Water to support the Project would come from a variety of sources, as discussed in Section 3.13, Utilities and Service Systems. Please see Master Response 2 that provides further details on water supply and the City's Water Neutral Policy and Municipal Code.

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Comment Letter 121

Angela M. Zivkovic, PhD
1180 Starr Avenue
St. Helena, CA. 94574

City of St. Helena Planning Division
1572 Railroad Avenue
St. Helena, California 94574
(707) 967-2783
mderosa@cityofsthelena.org

Dear Members of the City Planning Commission of St. Helena,

I am writing regarding the Hunter Project Draft Environmental Impact Report (EIR). I have carefully reviewed the report and am writing to express serious concerns about the findings of the report and, more importantly, all of the considerations that are **missing from the report**. In particular I am **extremely concerned** about the **lack of consideration of the environmental impacts with regard to climate change**. Instead of taking into account the changing landscape of future impacts on such issues as water, infrastructure, and natural disasters, **this draft EIR uses old data, outdated reports, and irrelevant projections** based on assumptions about the climate staying the same as it always was, of water availability staying predictable, of flood risks fitting outdated "100-year flood plain" approaches that are no longer being used by the Federal Emergency Management Agency (FEMA), and sewage capacity and other reports based on outdated materials such as reports from as long ago as 2008 and 2011. 121-1 121-2

Climate change is happening. We all know it and have lived it and seen it over the last several years. Each fire season is worse than the last, each winter is warmer than the last, each year the weather patterns become more unpredictable. The recent conclusion from the United Nations Glasgow Climate Change Conference (COP26) meeting is that even if all countries that pledged to fully implement changes needed to meet agreed upon greenhouse gas reduction goals are actually able to meet those goals, we are still on a trajectory to see increases in the earth's temperature of at least 1.8 degrees Celsius (https://www.washingtonpost.com/climate-environment/2021/11/09/cop26-un-emissions-gap/). This means that the recently experienced natural disasters in our area including wildfires, flooding, mud slides, and droughts, are only going to be more frequent and exacerbated over the next 10-20 years and beyond. 121-3

What were once "100-year flood areas" will now effectively need to be renamed "it could flood any time" areas, highlighting the issue of the levy and the fact that **the Hunter project is in a high-risk flood zone**, which is inadequately addressed in the EIR. Furthermore, more frequent wildfires, as we have seen recently, will require more frequent evacuations, thus **public safety and transportation during emergencies and natural disasters** is another area that was not adequately addressed by the EIR. Finally, we are currently and in all likelihood will continue to experience droughts of unknown severity and duration and **we barely have enough water for the current citizens of St. Helena**, and this threat to our future water supply is inadequately 121-4 121-5 121-6

addressed in the EIR. I have addressed each of these issues, as well as several additional issues in my comments below.

121-6 Cont.

1) **The Hunter Project is in a flood zone behind a levy that is NOT supported by federal funds, and when the levy fails and the homes within the project are flooded the residents of the city of St. Helena will be fully responsible for paying for repair of the levy and all the damage to the homes.**

For the first time in 50 years the Federal Emergency Management Agency (FEMA) is changing its flood insurance program to better reflect the real risks associated with flooding in certain high-risk zones, and that take into account climate change. **The entire idea of "100-year flood" zones is now outdated and no longer being used** because it uses outdated projections about yearly percentage risk of flooding based on irrelevant, old information about weather patterns over the last 100 years. The new Risk Rating 2.0 is instead tailored to each individual property, and is designed to "adapt and re-adjust rates based on a changing, unpredictable climate," clearly highlighting the fact that **the risk of catastrophic floods and failing levies in certain high-risk areas is so volatile as to be unpredictable** (https://www.houstonpublicmedia.org/articles/news/energy-environment/2021/06/24/401402/femas-changing-its-flood-insurance-program-heres-how-it-will-impact-texans/). The new approach also takes into account more causes and types of flooding, including storm surge, river overflow and heavy rainfall, because **climate change is increasingly and unpredictably leading to flooding due to heavier rain falls, sea-level rise, and stronger wind and storm weather patterns**. The new risk rating policy is in effect starting October 1, 2021 for any new projects (https://www.fema.gov/flood-insurance/risk-rating). This is **brand new information that is not in any way reflected in the EIR** and in fact, all of the material in the EIR with regard to the fact that this project is in a high-risk flood zone, behind a levy that is city-managed and maintained rather than being maintained by the Army Corps of Engineers, is completely ignored by the EIR.

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According to the official FEMA map of the city of St. Helena, the Hunter Subdivision project is clearly within a flood zone (https://map1.msc.fema.gov/firm?id=06055C0264E). Although the city paid for consultants to try to mitigate this risk by providing independent evaluations that take into account the mitigation of the flood risk due to the existence of the levy, as I pointed out above, this all goes out the window **with the current increased risks we are facing due to climate change**. How does the city plan to provide and pay for the rescue of hundreds of additional citizens in this high-risk area, repair the failed levy and all the damaged homes WHEN (not if) there is a catastrophic flooding event, possibly as early as within the next 5-10 years? The unfortunate truth is that this parcel of land is in a flood zone. The entire parcel was purchased for a laughably low amount that currently cannot get you an average 2-bedroom, 1-bathroom home in this town. **This parcel was sold cheap, because it should never be built on. A levy was constructed against the recommendation of the Federal government**, which walked away from the project because it is not a good idea to build homes in a flood zone, and **the city of St. Helena and its residents are entirely financially responsible for the maintenance, repair, and when needed, re-building of the levy when it fails.** Where is the accounting on the financial implications of such an undertaking and the environmental impact of such a financial burden on the city and its citizens? Not to mention the financial toll on the

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people who will have bought these houses falsely deluded into thinking that they were "safe" behind the levy? The simple truth is that levies fail. Even a brand new, world-class levy built by the Army Corps of Engineers to protect the city of New Orleans failed a *second time*, after it was professionally rebuilt.

It was only last month, as we all remember so vividly, that we experienced an "atmospheric river." Anyone who lives near the Napa River here and walked out to take a look over the bridge saw for themselves that the water rose well beyond the riverbed, and in some places flooded over the river banks. And this was, even in comparison to the atmospheric storm that we experienced last year, actually a fairly modest event. What will the next one look like? We simply do not know. But one thing is for sure: there will be a catastrophic weather event, and the levy will fail. The only question is when. The likely NEW answer, given the accelerating rate of climate change, is that it will be in significantly less than 100 years.

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2) **Climate change is drastically and unpredictably altering weather patterns, and the incidence of wildfires and all of their consequences, both acute and long-term, is increasing to unprecedented rates that are surpassing all predictions based on historical data.**

According to the National Interagency Fire Center the state of California faced over 8,000 fires that burned over 500,000 acres of land in 2002 (https://www.predictiveservices.nifc.gov/intelligence/2002_statssumm/fires_acres.pdf). In 2020 those numbers jumped to nearly 10,000 fires that burned over 4 million acres of land (https://www.predictiveservices.nifc.gov/intelligence/2020_statssumm/fires_acres20.pdf)! The state of California is facing unprecedented increases in wildfire incidences just in the last 20 years, at a time when the earth's temperature has increased by less than 1 degree Celsius (https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature), while **the *best-case* scenario projections for temperature change, as pointed out above, are on the order of 1.8 degrees Celsius over the next 20 years, strongly suggesting that the incidence of wildfires is only going to increase**. The current EIR does not account for these increases in risk due to wildfire. This is a problem in two specific ways: 1) more fires means more evacuations and more people that need to be able to leave in a short amount of time in a limited geographic area with limited evacuation routes, and 2) more fires also means more mud slides due to deforestation and loss of vegetation, which makes our beautiful hills more susceptible to slides when heavy rains hit.

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The recent wildfires in Napa Valley and Sonoma Valley are a sobering reminder of what happens when wild, unpredictable winds coincide with extreme dry conditions and ignition sources. Sometimes those ignition sources are dry lightning, other times sparking generators, other times, devastatingly, even arson. Regardless of the ignition source, which in and of itself is growing in incidence (dry lightning storms in the Napa Valley in August?), the cold, hard truth is that **due to climate change the "wildfire season" in California is increasing. More and more days out of more and more months of the year, from as early as April to as late as December, there are days when the combined conditions of extremely low humidity and high winds make this area ripe for fires to start** (https://www.latimes.com/projects/wine-country-fires-california-sonoma-napa/). The fact is that there are only two ways out of town. Highway 29 and Silverado Trail. These are both narrow, 2-lane highways that can only move so many cars out

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per minute, and that is if all goes well and there are no accidents from people panicking and driving recklessly.

I remember very vividly driving in the middle of the night and listening to the radio with the announcer imploring people to please drive carefully so that our only arteries out of danger are not blocked by overturned vehicles, effectively trapping everyone trying to evacuate to safety. We have no right to endanger the people who already live in this town by building a large development that would add as much as 10% to our overall population in the city, with **an even higher impact on the residents on the East side of town, where the population density is already higher and the population is already more vulnerable, with multiple apartment complexes and low-income housing areas housing our town's low income residents and seniors**, including Hunt's Grove apartments, Stonebridge apartments, the Silverado Orchards Retirement apartments, and the Vineyard Valley Mobile Home Park 55+ community.

This is not the part of town where half of the homes are second homes that sit unoccupied most of the year. **The East side of St. Helena where the Hunter parcel is located is the part of town where there are more people per square mile that need to be able to evacuate in an emergency.** The **draft EIR already concedes that the one environmental impact that cannot simply "be mitigated"** as has so conveniently been down with all of the other potential impacts, **is the unavoidable impact on traffic.** Phrasing it as a simple "traffic problem" makes it seem like just a minor nuisance. This is not about us having to wait a few extra minutes to make a left turn onto Pope Street when we are trying to get to work on a Monday morning. **This could mean the difference between a family being able to evacuate to safety in time, or not being able to do so** because they are stuck in traffic with 500 more people than should be living here all trying to leave their homes at the same time. And make no mistake this is also an equity issue: the very people who are the most likely to have to wait until the last minute to evacuate and thus be in danger when traffic is backed up and they cannot evacuate from fire, are those who do not have the funds to evacuate earlier than "necessary" because they cannot afford to simply pay for a hotel for days on end.

It is also critical to consider that the only way out, on one of only two roads out of town via the Silverado Trail for residents of the East side of town, is **the Pope Street bridge. A historic, narrow, completely inadequate bridge** that if even one car failed, crashed or overturned while trying to drive across, would completely cut off this evacuation route, and **redirect all traffic from the East side of town onto Highway 29**. It is difficult to envision how such an accident could even be remedied in a situation such as this, given that the bridge is barely wide enough for two vehicles to drive across, with no shoulder at all for emergency vehicles to be able to approach. **It is easy to see how very quickly this very real danger of too many vehicles on the road all trying to go the same way out in a nightmare, yet very real, and recently experienced emergency wildfire evacuation scenario, becomes not just an East side problem, but also a problem for those trying to evacuate from the West side of town.**

Just as the recent "atmospheric river" weather event increased our awareness of the high risk of flooding on the Hunter parcel, perhaps even more convincingly it reminded us of the extreme vulnerability of recent burn areas to heavy rainfall, the resulting mud slides, and the further impacts on our roads. I am sure that I do not need to remind anyone of the nightmare traffic that we experienced for nearly 3 weeks following the October 22 weather event that caused a mud slide that resulted in the closing of Silverado Trail

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(https://patch.com/california/napavalley/storm-takes-out-part-silverado-trail). Traffic on Highway 29, from vehicles being redirected from Silverado Trail north and south of town, was atrocious. Many residents who either needed to drive north or south out of town were dealing with traffic delays of up to 2 hours. On a normal day this is very frustrating and disruptive to work and school schedules. In an emergency situation where fast-moving wildfires necessitate immediate evacuations, a situation such as this is a devastating problem for a town that has only two roads out of town.

121-21 Cont.

3) **The severe drought and water shortages we are currently experiencing in the city of St. Helena are a harbinger of even worse times to come. We simply cannot support a large development which will drastically increase water demands on an already strained and inadequate system that can barely supply enough water to our current residents.**

Unfortunately, our water shortage problems here in St. Helena are happening all over the state. **Wells are running dry** (https://calmatters.org/environment/2021/08/california-groundwater-dry/). Despite changes to California ground water laws in 2014 to enact sustainable practices that protect ground water, seven years later wells around the state continue to run dry. Current climate change projections, as outlined already above, are dire, and suggest that drought severity, intensity, and duration will only worsen over the coming decades. We simply cannot rely on old projections about water availability because we are in uncharted territory. Our ground water sources are not being normally replenished. The normal water cycles are not operating the way they used to. And it is not just wells that are running dry.

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Snowpack in the Sierras normally "supplies about 30% of water statewide when the spring melt comes and water runs off to be captured in the state's system of reservoirs" (https://www.sfgate.com/bayarea/article/Sierra-snowpack-satellite-image-atmospheric-river-16568005.php). But last year's snowpack was only 59% of average, and even more disturbing and unexpected was the fact that 80% of the already lower than normal, predicted water runoff was simply soaked up or evaporated because the soils were so hot and dry, severely impacting water levels in reservoirs across the state. Even after the "atmospheric weather" event in October which brought heavy rains and a rise of over 20 feet to Lake Oroville, for example, according to the Department of Water Resources, this reservoir is at only 27% capacity. So it is **not just our ground water and wells that are drying up, our Sierra snowpack, and thus reservoirs and rivers are also drying up.** As mentioned earlier, climate change means that we are experiencing more and more warmer and warmer days, and this means that **even if we do get big storms the snowpack does not stick around, and even when we do get runoff from the snowpack, the earth is so parched that the water simply disappears on its way to our reservoirs.**

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Our own reservoirs and water sources are not doing so well. This summer, as I am sure we are all quite vividly aware of given the astronomical water bills, we entered severe drought restrictions (Phase II Water Regulations), with water use limited per household, and very unpopular and extreme fines being put in place in an attempt to mitigate the very real risk that we could run out of water before the reservoir was replenished by winter storms. We were lucky this time, we did happen to get the big storm in October that saved us from imminent disaster, but next time we may not be so lucky. What is our city's plan for dealing with these new, unexpected, unpredicted risks of severe and sustained drought conditions due to climate

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change? How do we plan to supply water to even the current residents, much less to 500 more residents if the Hunter parcel were to be developed? The current draft EIR does not adequately address these issues. Laughably simplistic solutions like the use of "low flow toilets" as a mitigation solution for our real water shortage issues that are only going to worsen over time, are so inadequate as to be insulting. **We cannot rely on water supplies staying what they were even in the recent past, or being predictable based on what we used to know about how much water we might expect any given year based on old weather patterns.** In fact, it is quite clear that this year's severe drought and water shortages are likely to occur with much greater frequency in the coming years and decades, as our ground water supplies, snowpack, river flows, and reservoir levels continue to be severely impacted by climate change. The draft EIR does not address these very real water issues in any real way.

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There are several additional environmental impacts that are inadequately addressed by this draft EIR:

1) The **aesthetics** of the entire East end of the town are inextricably linked with the vineyards, wetlands, and public outdoor space in the designated project area. Every day dozens of St. Helena residents, from both the East and West side of town, access the areas in and around this site for recreation, as do visitors and tourists to the area. If the Hunter parcel were to be developed it would irreversibly damage the aesthetics of this town as a small, agricultural town with historic significance. No longer would one be able to walk on the walkway through the area and have a view of the hills on either side of the valley, and of the natural habitat restoration area. The housing development would also permanently alter the aesthetics of the East Side of town, by drastically increasing traffic and congestion in this area.
2) As a direct result of the building work itself and the subsequent increase in traffic and congestion to and from the development by hundreds of new residents, there would also be significant impacts on the **air quality** of the East side of town, which would additionally impact the West side of town, and to all of the current residents as well as wildlife that live in the protected wildlife habitat zone directly adjacent to the development. The impacts on air quality from hundreds of additional vehicles driving to and from these residences, and from the extension of Starr Avenue and Adams Street, with the additional "cutting over" of vehicles from Main Street and Silverado Trail, would have a significant cumulative and negative impact on air quality. This would be especially true during the summer, when air quality is already severely impacted.
3) It is difficult to fathom how the Hunter development project could possibly fit in with the goals and aspirations of our community for **public services and recreation** as well as **public utilities**. As it is, our community is barely able to meet the needs of current residents with regard to basic public services, recreation and utilities. Everything from schools and recreational programs to water, sewer, and garbage collection would be severely impacted by a construction project that would increase the population of St. Helena by 10% practically overnight. It is difficult to understand how our schools could possibly continue to provide quality teaching to a student body that could grow by 10% from one year to the next. Where would the funds for the additional space and teachers come from to support such rapid growth? Our current water and sewage treatment

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facilities are severely in need of repair and maintenance, and are barely able to supply the basic needs of current residents. A substantial amount of infrastructure development would be required to accommodate any growth, much less a 10% increase all at once as would occur with a single development project of this scale and size, relative to the small size of our town. There is zero evaluation of how adding over 500 residents could possibly be accommodated by the current building plan. The plan naively states that the sewage would simply be diverted to existing sewer lines on Starr Avenue and Vineyard Valley. It is very disturbing to note that there is already something amiss with the sewage on Starr Avenue, where in the fall especially there is often a bad sewage smell on the corner of Starr Avenue and Hunt Avenue, clearly indicating an issue with capacity. The idea that we would simply add the sewage from over 500 additional residents to this already overwhelmed system is unsupportable.

4) Finally, it is important to note that **the Hunter parcel is very likely to be an important wildlife habitat area**. There are hundreds of waterfowl, including geese and ducks, that nest or stop off on that parcel every winter on their migratory route, a fact that is easily noted by anyone who regularly uses the walking path adjacent to the Hunter parcel for recreation in the winter time. According to the California Farm Bureau Federation as many as 60% of waterfowl in the Pacific Flyway, the main migratory route for water fowl on the West Coast, use California wetlands and grasslands for habitat in the winter months (https://www.cfbf.com/wp-content/uploads/2019/06/CommitmenttoConservation.pdf). **The draft EIR does not in any way address the impact of the proposed development project on the waterfowl that currently use this land in the winter months on their migratory route.**

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I request that the city planning commission address the concerns expressed above about the inadequacy of the draft EIR for the Hunter parcel.

Sincerely,



Angela M. Zivkovic

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Response to Letter 121
Angela Zivkovic

121-1 The comment states an opinion the Draft EIR is inadequate and does not address environmental impacts due to climate change.

The comment does not identify any specific areas where the EIR or analysis is inadequate. However, please see Master Response 2 and Responses to Comments 3-1, 9-4 and 14-9 that address concerns associated with climate change.

121-2 The comment states an opinion that the Draft EIR used outdated and irrelevant data, including the 100-year flood plain approach no longer used by FEMA, based on assumptions that the climate would remain unchanged.

Please see Master Response 3 and Response to Comment 31-1.

121-3 The comment states an opinion that climate change will exacerbate natural disasters including fire, floods, and droughts.

The comment does not address the adequacy of the Draft EIR, but instead expresses the commentor's opinion about the project. The comment is noted and forwarded to the decision makers for their consideration.

121-4 The comment suggests that the flood analysis in the Draft EIR is inadequate and claims that the Project site is in a high-risk flood zone.

As detailed in the Draft EIR on page 3.9-7 in Section 3.9, Hydrology and Water Quality, the Project site is not located within a FEMA designated Special Flood Hazard Area as a result of construction of the levee. The newly constructed Napa River levee is designed to provide 200-year flood protection with additional flood protection provided by the additional freeboard. The Draft EIR includes a thorough description and analysis of the flood protection measures that the levee provides starting on page 3.9-7 through 3.9-13 as well as pages 3.9-44 and 3.9-45. See also Master Response 3 for further information on the levee.

121-5 The comment states an opinion that public safety and transportation during emergencies and natural disasters is not adequately addressed in the Draft EIR.

Please see Master Response 1.

121-6 The comment states an opinion that the threat to future water supply is not adequately addressed in the Draft EIR.

Please see Master Response 2.

121-7 The comment claims that the levee is not supported by federal funds and that the concept of a 100-year flood is outdated.

Please see Master Response 3 for a response to comments regarding the levee.

121-8 The comment claims that the Draft EIR ignores "the fact that this Project is in a high-risk flood zone" and is City managed and maintained rather than maintained by the US Army Corps of Engineers.

As described in Response to Comment 121-4, the Project site is not located in a Special Flood Hazard Area as a result of construction of the levee. The levee provides a 200-year level of flood protection, rather than the "100-year flood plain" referenced in the comments. The manner in which inspection and maintenance responsibilities for the existing levee are assigned are not environmental effects related to the Proposed Project. Furthermore, under CEQA, the effects of the environment upon the project are not "impacts." Rather, CEQA requires the lead agency to consider the ways in which the project effects the environment. The potential hydrological effects of the Project, including the potential to impede or redirect flood flows, are considered in Section 3.9 of the Draft EIR. See also Master Response 3 for further details regarding the levee, required certification, and maintenance responsibilities.

121-9 The comment claims the Project site is within a flood zone and the levee does not account for increased risks associated with climate change.

As detailed in the Draft EIR beginning on page 3.9-7, the Project site is not located within a FEMA designated Special Flood Hazard Area as a result of construction of the levee. In addition, the levee provides greater than the often standard 100-year flood protection with a 200-year flood design to account for other factors such as climate change. See also Master Response 3 for further details regarding the levee and Response to Comment 121-1 regarding climate change.

121-10 The comment states that levee failure would result in a financial burden on the City and its residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate, and CEQA does not require a discussion of financial impacts. Therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. However, please see Master Response 3 regarding the potential for levee failure.

121-11 The comment states that the recent atmospheric river event that flooded parts of the river bank was modest in comparison to impending catastrophic weather events.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 3 regarding the Napa River levee.

121-12 The comment states an opinion that wildfire incidents will increase due to climate change.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Responses to Comments 39-5, 76-9 and 82-14 that address wildfire issues.

121-13 The comment states an opinion that the Draft EIR does not account for the increased wildfire risk from climate change and the increase in evacuations.

Please see Master Response 1 and Responses to Comments 121-1 and 121-12 regarding climate change and wildfire concerns.

121-14 The comment states an opinion that increased wildfire incidents would result in more mudslides.

Please see Response to Comment 39-5.

121-15 The comment references the recent wildfires in Napa Valley and Sonoma Valley, and asserts that the wildfire season in California is increasing in length.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. The Draft EIR addresses if the Project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires under Impact 3.8-4 on page 3.8-21 of the Draft EIR.

121-16 The comment asserts that the two evacuation routes out of the City (Highway 29 and Silverado Trail) are inadequately sized.

Please see Master Response 1.

121-17 The comment states an opinion that the Project would endanger existing City residents by adding to the population.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

121-18 The comment expresses concern regarding emergency evacuation and claims the Proposed Project would reduce the ability for residents to safely evacuate the area during emergencies and requests additional mitigation measures.

Please also see Master Response 1, that provides more details related to emergency evacuation for both City residents and Project residents.

121-19 The comment states an opinion that emergency evacuation would be made more difficult due to the Proposed Project and that there are equity issues.

Please see Master Response 1.

121-20 The comment asserts that the Pope Street Bridge is not sufficient to facilitate emergency evacuation resulting in a reduction in access in the event of a wildfire evacuation.

Potential Project impacts along Pope Street and the Pope Street Bridge are analyzed in detail within Section 3.14, Transportation and Circulation of the Draft EIR and within Appendix K, Traffic Impact Study Please see Master Response 1.

121-21 The comment references a recent event in which a mudslide resulted in the closure of Silverado Trail.

Please see Response to Comment 39-5.

121-22 The comment states an opinion that, due to drought conditions and predictions for future droughts, the Project's water demands cannot be supported.

See Master Response 2 for further details regarding the City's water supplies and demands.

121-23 The comment asserts that climate change is decreasing snowpack and water supply.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 121-1.

121-24 The comment asks what the City's plan is for dealing with severe and sustained drought conditions due to climate change and providing adequate water supply for current and future residents.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. However, please see Master Response 2 regarding water supply.

121-25 The comment states an opinion that toilet retrofits are inadequate and that water supply will continue to be severely impacted by climate change. The comment states that the Draft EIR does not address these issues.

Please see Response to Comment 2 regarding water supply.

121-26 The comment states an opinion that the Project would irreversibly damage the aesthetics of the City by impacting views of the natural habitat restoration area and hills on either side of the valley.

Please see Responses to Comments 7-6 and 50-7.

121-27 The comment states an opinion that the Project would alter the aesthetics of the City's east side by increasing traffic and congestion.

The comment does not identify any specific areas where the EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 121-26.

121-28 The comment states an opinion that the increase in traffic generated by the Project would significantly impact air quality and surrounding areas including current residents as well as existing wildlife.

As discussed in Section 3.3, Air Quality, in developing thresholds of significance for air pollutants, the Bay Area Air Quality Management District (BAAQMD) considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. Construction and operations of the Project be substantially lower than the BAAQMD significance thresholds as presented in Tables 3.3-8 and 3.3-9 (DEIR pp. 3.3-32 and 3.3-33). Thus, the Project would have a less-than-significant impact on air quality associated with construction and operation of the Project. The Project would not result in a significant degradation of the area's air quality that could adversely impact City residents and local wildlife.

121-29 The comment states an opinion that the Project would severely impact schools, recreation programs, water supply, sewer capacity, and garbage services.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Responses to Comments 89-2, 97-1 and 108-6 regarding schools; 70-7 and 79-3 regarding parks and Master Responses 2 and 4 that address water supply and wastewater. The Draft EIR addresses the Project's increase in solid waste in Section 3.13 Public Utilities. See Impact 3.13-4 starting on page 3.13-33.

121-30 The comment states an opinion that increased population from the Project would lower the quality of schools and asks where funds would come from in order to support rapid growth.

Please see Response to Comment 8-6.

121-31 The comment states an opinion that current water and sewage treatment facilities are in need of repair and that substantial infrastructure improvements would be required to accommodate growth. The comment asserts that there is no evaluation of how 500 new residents would be accommodated by the Project.

Please see Master Response 2 regarding water supply and Master Response 4 regarding wastewater. Additionally, the City uses a persons per household factor of 2.45 people per unit for medium/higher density residential land uses. Using this factor, the 87 units in the applicant's development proposal (including ADUs) would conservatively generate 213 residents, as explained on page 2-23 in Chapter 2, Project Description.

121-32 The comment asserts that that the Project site is used by various waterfowl species and contends that this use includes nesting.

The Draft EIR concluded that some birds may use the grassland for nesting when sufficient cover (i.e., tall vegetation) is present, but that it is unlikely that the approximately 9.7 acres of mowed annual grassland without a nearby open water area such as a pond or marsh represents critical foraging or nesting habitat for waterfowl species. The Draft EIR includes mitigation (BIO-2) to detect and avoid any nesting birds, including waterfowl that may nest within the Project site prior to commencing any construction activities.

Comment Letter 122

13 Jan 2022

Maya DeRosa Planning Director
City of Saint Helena

Comments RE Hunter EIR: (itemized outline of concerns/questions)

Believe in general there is a too consistent "readiness" or "swiftness" to jump into the LTS (less than significant Impact) category on a majority of topics. I find that to be counterproductive. I believe it would be more sincere to admit and embrace the reasonable conclusion that a project of this scope will have significant impacts in many areas. In my view that admission does not equate to reason to not proceed with an acceptable project that meets code. I am a firm believer in setting expectations based upon realities. Realities that include that this parcel has been designated by the the City of St Helena as MDR and as such should be afforded the expectations and right to pursue those outcomes as defined by applicable code. 122-1

On Alternatives:
General sense is that these are produced as mostly ineffective place fillers or easily dismissible fodder. Understand that is part of EIR format but again find little imagination or actual examination was undertaken to produce any powerful alternative options. I believe an actual consideration and some research into a more dense and more diverse (housing types and household types) solution would have been appropriate and ideally/possibly lead to more powerful and successful solutions. 122-2

3.9-3: 10.9 acres of additional impervious coverage (roads/roofs/walks etc…) (area that would require an engineered solution) out of a total site area of 16.9 acres is difficult to not consider that a substantial alteration of the existing drainage pattern. 122-3

3.12-1: Is there any data that shows the current capacity/state of the SH infrastructure (Water/ Sewer/wastewater) that demonstrates that this additional load would fit within existing capacity? Without that data I believe that jumping to a LTS impact condition is premature. 122-4

3.13-1: See above

3.13-2: Given current and expected ongoing water emergency situation "water supply" is a critical consideration. We are currently in a state that we do NOT have sufficient water supply to serve the existing built environment without taking measures/restrictions. I do not agree that it would in any way be appropriate to ignore that existing and ongoing condition. 122-5

3.13-3: Data on capacity of existing system and demonstration that added load would fit capacity in report? 122-6

3.13-6: I believe the added number of units to a stressed infrastructure system would be "considerable"…by considerable I believe that it should be shown that it was considered and demonstrations made that can show that capacity of the infrastructure can meet the added demand. 122-7

All of the above deal with increased demands on City water and sewer infrastructure systems which have been demonstrated to be under some stress with current demand. To conclude LTS impacts on any of these fronts in my view does not given these items adequate consideration…nor does it outline or generate possible solutions to mitigate or overcome these 122-8

added stressors to the somewhat fragile infrastructure systems. I believe we can and are obligated to service/maintain and upgrade those infrastructure systems that have been long neglected…but first we need to accept there is an issue. 122-8 Cont.

Alt 3- Park/Open Space: Generally find project ignores potentially powerful adjacency to an existing highly valued though under-maintained open space (river loop path). 122-9

2.3 Proposed project: I find it very difficult to support the concept of an incremental approval of a subdivision map that defers to a (to be approved later) housing agreement as the subdivision map itself essentially end runs/usurps/skips ahead a critical piece of our existing Inclusionary Housing Ordinance…setting in place a dynamic that accepts the condition without consideration the segregation of units of different types into sections. 122-10

See item 3.10 Land Use Inclusionary Housing 17.146.050(1)

3.9 H20: Very difficult to come to a LTS conclusion when adding 10.9 acres of impervious coverage to a 16.9 acre undeveloped site (64% of site). 122-11

3.12-2: Missing/ignoring consideration of impact to River loop path/open space adjacent to entire project site. In my view project concept also ignores the opportunity of this adjacency/ connectivity to a highly valued amenity. 122-12

Believe there is an inconsistency in EIR regarding the existing well that represents it as inoperable in one section and claims ignorance to if that well was used to water vineyard but later in appendix shows a high production value that is used to eliminate a large portion of water neutrality requirements. 122-13

On Water neutrality:

333 retrofits or an equivalent fee in lieu…? Experience tells me how difficult it is to find a single (or a handful) of Saint Helena households to retrofit and accomplish water neutrality. At some point as the inventory of retrofit opportunities naturally "evaporate" the mechanisms to achieve better water use need to be introduced into code or practice. In the least it would need to be demonstrated that 333 retrofit households exist. 122-14

In report there is some enticing info on the power of some alternate ways to actually achieve water neutrality (grey water systems etc…) but there is no attached commitment to pursuing any of those options. I believe it would be entirely appropriate for the City to introduce/induce or encourage some solutions that would accomplish water neutrality in a way that begins to service some of our greater critical infrastructure obligations/needs. 122-15

Call text or email with any questions.

Daniel Hale

1616 Madrona Avenue
Saint Helena CA 94574
707.227.4322

Response to Letter 122
Daniel Hale

122-1 The commenter is stating an opinion that there is a desire to conclude an impact is less than significant and that many impacts are significant.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

122-2 The comment states an opinion that the alternatives evaluated for the Project are not well thought out and that a more dense alternative with more housing diversity would be better for this Project.

Please see Response to Comment 89-2.

122-3 The comment references the amount of impervious surface area and states an opinion that the Project would contribute to a substantial alteration to the existing drainage pattern due to the increase in impervious surfaces.

The Draft EIR evaluates the increase in impervious surface area and changes to the existing drainage pattern under Impact 3.9-3 starting on page 3.9-44 in Section, 3.9, Hydrology and Water Quality. The Draft EIR concludes that Project would increase the amount of stormwater; however, increased runoff would be contained within the City's detention basin without the need to expand the basin. Therefore, impacts were determined to be less than significant.

122-4 The comment requests data for the current capacity and condition of the City's water and wastewater infrastructure.

The City has indicated the water and wastewater infrastructure is adequate and have not identified any concerns with the ability to serve the Project, as addressed in the Draft EIR starting on page 3.13-17. Please see also Master Response 4 that addresses the wastewater infrastructure.

122-5 The comment raises a concern regarding adequate water supplies to serve the Project.

Please see Master Response 2 that addresses water supply.

122-6 The comment requests information on the capacity of the City's existing wastewater system to serve the needs of the Project.

Please see Master Response 4 that addresses wastewater infrastructure.

122-7 The comment states an opinion that the Project would further stress the ability of the City's infrastructure to serve the additional load generated by the Project.

Please see Response to Comment 122-4 and Master Response 4 that addresses wastewater infrastructure.

122-8 The commenter disagrees with the finding that the City's water and wastewater infrastructure is adequate to serve and that the existing infrastructure is fragile and has been neglected.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Responses to Comments 122-4 through 122-7.

122-9 The comment states an opinion that the Project ignores the presence of the adjacent trail.

The Draft EIR recognizes the trail specifically in Chapter 2, Project Description and also in Section, 3.12, Public Services and Recreation. Please see also Response to Comment 114-11.This comment does not relate to the adequacy of the Draft EIR (which discusses the trail). The comment is forwarded to decision makers for their consideration. Please see Chapter 3, Changes to the Draft EIR for a figure showing the adjancent trails.

122-10 The comment states an opinion that it is difficult to support the incremental approval of a tentative map followed by other required approvals because the Project is not addressing compliance with the City's Inclusionary Housing Ordinance.

Please see Responses to Comments 19-1 and 84-3 that explain the approval process. There is no requirement that the Tentative Map have an Affordable Housing Agreement approved at the time of Map approval.

122-11 The commenter disagrees that increasing the amount of impervious surface area would result in a less-than-significant impact.

Please see Response to Comment 122-3.

122-12 The comment states an opinion that consideration of the adjacent trail and impacts to the trail are not addressed.

Please see Responses to Comments 84-9, 89-3, 89-5 and 114-11.

122-13 The comment asks if the Draft EIR accurately addresses the status of the onsite well.

The onsite irrigation well is addressed in detail in the Draft EIR in Section 3.9, Hydrology and Water Quality starting on page 3.9-40. The well is currently not operating as noted on page 3.9-43. The history of the well is unknown but it is assumed it was used at one time for irrigation of the onsite vineyard. Please also see Master Response 2 for more information specific to the onsite well.

122-14 The comment questions whether retrofitting homes to achieve water neutrality is practical.

Please see Master Response 2 that addresses this concern.

122-15 The comment asserts that there are alternate ways to achieve water neutrality and encourages the City to look at other solutions to offsetting an increase in water demand.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see also Master Response 2.

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City of St. Helena Regular Planning Commission Meeting

November 2, 2021

CHAIR JOHN PONTE: Good evening. Thank you for coming to the St. Helena Planning Commission meeting of November 2nd, 2021.

There's a paragraph I need to read first before we get started.

This meeting will be conducted pursuant to the provisions of government code Section 54953 as amended by AB 361. It authorizes teleconference meetings under the Brown Act during certain proclaimed states of emergency. The governor of California proclaimed a state of emergency related to COVID-19 on March 4th, 2020.

This teleconference meeting is necessary so that the City can conduct essential businesses and, as permitted under government code Section 54953, in order to protect public health and safety of attendees.

Consistent with government code Section 54953, this Planning Commission meeting will be held via teleconference only and will not be physically open to the public.

Commission members and staff will be teleconferenced into the meeting by audio and/or video. The meeting will be conducted via Zoom webinar.

Ms. Gamero, do you have anything more for us?

SECRETARY XINIA GAMERO: Yes. Thank you, Chair Ponte. I will be sharing my screen here. Okay. Perfect.

Members of the public that wish to participate in public comments can do so by phone by dialing 669-900-6833. At the prompt, you may enter the meeting ID, 845 1730 1810. Press pound, and during public comment, press Star 9 to speak.

Additionally, tonight's meeting will have live Spanish interpretation. To access the interpretation, you will need to use the Zoom application from either your phone, tablet, or computer. Instructions on how to use the Zoom app are listed in English and Spanish on the agenda posted on the City's website.

Once you join the meeting from the Zoom application, you will see a small globe at the bottom or top of the screen. You can click the globe, and you will be able to access the live interpretation. We have Marci and Claudia who are the interpreters for this evening.

That will be all, Chair Ponte.

CHAIR JOHN PONTE: Thank you.

Vice Chair Hale, will you lead us in the pledge of allegiance, please?

VICE CHAIR DAN HALE: Surely.

I pledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

CHAIR JOHN PONTE: Thank you. I'd like to call the meeting to order.

Secretary Gamero, will you take the roll please?

SECRETARY XINIA GAMERO: Yes. Commissioner Anderson?

COMMISSIONER AUTUMN ANDERSON: Here.

SECRETARY XINIA GAMERO: Commissioner Segura?

COMMISSIONER ROSAURA SEGURA: Here.

SECRETARY XINIA GAMERO: Commissioner Rothfeld?

COMMISSIONER MARIKA ROTHFELD: Here.

SECRETARY XINIA GAMERO: Vice Chair Hale?

VICE CHAIR DAN HALE: Here.

SECRETARY XINIA GAMERO: And Chair

Ponte?

CHAIR JOHN PONTE: Here. Thank you.

That takes us to Item 3, which is the public forum. This is an opportunity for the public to address the Commission on items of interest to the public that are not listed on the agenda.

Because of restrictions imposed by the Brown Act, the Commission may not engage in discussion nor take action on matters not described on the agenda. Please observe the time limit of four minutes.

Ms. Gamero, is there anybody who seems to wish to speak under public comment?

SECRETARY XINIA GAMERO: Yes, Chair Ponte. It looks like we have Nancy Dervin who would like to speak at the moment.

Nancy, will -- let me unmute you here. And I believe you're able to speak now.

NANCY DERVIN: Good evening. I would like to make a request. Since this is a public meeting, would you guys be so kind as to tell us how many people are logged in to view the meeting? So even though -- I mean, we don't know who they are, but it would be nice to know how

well attended the Zoom meetings are.

CHAIR JOHN PONTE: Is that even possible, Ms. Gamero?

SECRETARY XINIA GAMERO: I am able to see the number of attendees, and I believe there's -- I'm able to disclose that information. And it should be -- it's 25 attendees at the moment.

NANCY DERVIN: Thank you very much. It would be great if we could get updated if that number changes at some point, you know, if it goes up significant by like five or more, or people drop off, just to get a sense for how much involvement from the community there is.

Thank you very much, you guys.

CHAIR JOHN PONTE: Thank you.

Ms. Gamero, is there anyone else who wishes to speak under public comment? You're on mute.

SECRETARY XINIA GAMERO: I apologize. We have Angela -- I'm sorry -- Zivkovic, and you are unmuted now.

ANGELA ZIVKOVIC: Hi, good evening. My name is Angela Zivkovic, and I'm a resident of St. Helena.

I've been reading through the Hunter Project Develop EIR, and I realize that there's a public comment period that is open until November 8th. I'm wondering if it would be possible to advertise this more broadly because I don't feel like very many people are aware of this public comment period that's open.

And I would also like to express concern about the project in general, and --

CHAIR JOHN PONTE: Ms. Zivkovic?

ANGELA ZIVKOVIC: Yeah.

CHAIR JOHN PONTE: This item actually is on the agenda. This is for --

ANGELA ZIVKOVIC: Oh, it is.

CHAIR JOHN PONTE: This is for comments on items that are not on the agenda, so I need to ask you to hold your comment until we actually get down to the item of concern.

ANGELA ZIVKOVIC: Okay. Will do.

CHAIR JOHN PONTE: Thank you very much.

Anyone else, Ms. Gamero?

SECRETARY XINIA GAMERO: Yes. We have Tracy McBride has raised her hand. And you have been unmuted, Tracy.

TRACY MCBRIDE: Hi. Good evening,

commissioners. Thank you so much.

Could you please review the process for making a public comment? I have not made a public comment in a Zoom commission meeting before. You had the instructions for the phone public comment, but I'd like the instructions for the Zoom public comment.

And then just as a -- as a side note because I don't know all of you, just for future reference, it'd be really awesome if the commissioners could put "commissioner" in front of their names, and the city employees could state their roles on their names on the screen so that I can understand your roles.

Thank you so much.

CHAIR JOHN PONTE: We'll certainly take that into advisement for the future, ma'am, but I don't think we can backtrack at the present time.

TRACY MCBRIDE: Understood.

CHAIR JOHN PONTE: Yeah. Ms. Gamero, would you please direct her to where she could pick up the Zoom link on the city agenda?

SECRETARY XINIA GAMERO: She is logged in to the Zoom meeting.

CHAIR JOHN PONTE: Okay.

SECRETARY XINIA GAMERO: I'm not sure what her question is, but during public comments, during the item -- public hearing item, which is 5.1, Chair Ponte will open up the public hearing. And just like you did now, you'll be able to raise your hand, and I'll be going down the list and calling on your name, and that's how you can provide your public comment for the specific item.

TRACY MCBRIDE: Great.

SECRETARY XINIA GAMERO: Did that answer your question?

TRACY MCBRIDE: Great. Thank you so much. Yes.

CHAIR JOHN PONTE: Is there anyone else, Ms. Gamero?

SECRETARY XINIA GAMERO: Give me one second, Chair Ponte.

CHAIR JOHN PONTE: Thank you.

SECRETARY XINIA GAMERO: I do not see anybody else raising their hand at the moment.

CHAIR JOHN PONTE: All right. That takes us to Item 4, which is consent items. Members of the Commission or the public may ask that any items be considered individually for

purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions.

We only have one item tonight. That's the minutes of October 19th, 2021. Are there any members of the Commission that wish to pull that item for further consideration?

I do not see any. Secretary Gamero, is there anyone who -- online who wishes to have that item pulled for further discussion?

SECRETARY XINIA GAMERO: I do not see any raised hands, Chair Ponte.

CHAIR JOHN PONTE: Okay. Thank you. Then a motion from the Commission will be in order, if someone cares to make one.

Commissioner Anderson. You're on mute, Autumn. You're still on mute.

COMMISSIONER AUTUMN ANDERSON: I motion to approve the minutes.

CHAIR JOHN PONTE: Okay. Do I have a second?

COMMISSIONER ROSAURA SEGURA: I second.

CHAIR JOHN PONTE: Thank you, Commissioner Segura.

Ms. Gamero, will you tally the votes, please?

SECRETARY XINIA GAMERO: Commissioner Anderson? You're on mute.

COMMISSIONER AUTUMN ANDERSON: Yes.

SECRETARY XINIA GAMERO: Commissioner Segura?

COMMISSIONER ROSAURA SEGURA: Yes.

SECRETARY XINIA GAMERO: Commissioner Rothfeld?

COMMISSIONER MARIKA ROTHFELD: Yes.

SECRETARY XINIA GAMERO: Vice Chair Hale?

VICE CHAIR DAN HALE: Yes.

SECRETARY XINIA GAMERO: And Chair Ponte?

CHAIR JOHN PONTE: Yes. Thank you.

That takes us to the public hearing for this evening, 5.1, which is receiving comments on the Draft Environmental Impact Report for the Hunter Subdivision Project.

This may take us a while to get through, but I want to make it clear that that's all we're doing. We're not acting on the Environmental tonight. We're not acting on the

subdivision tonight. We're making no recommendations to the City Council on either one of those items. All we're doing is recording and listening to the comments from the public on the Draft Environmental Impact Report.

SECRETARY XINIA GAMERO: Additionally, Chair Ponte --

CHAIR JOHN PONTE: Director DeRosa --

SECRETARY XINIA GAMERO: I apologize. There's an announcement I'd like to make.

Any comment that was e-mailed, received after 3 p.m. this afternoon, will be added to the agenda tomorrow morning, so you will not see that on the Planning Commission agenda for tonight's meeting.

CHAIR JOHN PONTE: Thank you.

Director DeRosa, do you want to introduce this for us, please?

DIRECTOR MAYA DEROSA: Certainly. Thank you. We have the City's project manner, Eric Norris, here. We'll give a brief prestation and then open it up for public comment.

So Eric, you can go ahead and take it away.

ERIC NORRIS: Thank you, Maya. I'm

going to turn my camera off here briefly, and we'll get our show going.

Mr. Chair, members of the Commission, thank you very much for being here tonight.

I'm going to give a brief PowerPoint show, just a little bit of overview about the project itself. I think the chairman has already mentioned this is not an evening at which decisions will be made or recommendations made. It's also not a meeting where we will respond to comments. Tonight's meeting is all about getting comments from the public.

So let's talk a little bit about the project. So what we're talking about is a project called the Hunter Subdivision. It's a subdivision map, a tentative subdivision map at the end of Adams and -- Adams Street and Starr Avenue. Aerial photograph here shows where it is. Hunt Avenue also provides primary access to the site. It's about a 17-acre parcel, and they're proposing a total of 87 dwelling units on that land.

This is the -- what we call the tentative map. This is the kind of map that creates single-family lots that most of our homes

sit on, or larger lots that apartments sit on.

This is a very normal part of the development process when someone is planning to build a residential project, is to first of all subdivide the land into lots, and that's what they have proposed to do here. The map shows the arrangement of lots, the locations of streets, emergency access, some parcels on which houses won't be placed but other things will happen, and so on.

So again, just really briefly, the project is just under 17 acres. They're proposing 87 dwelling units. Now that's -- we've broken that down. It's 51 single-family homes, 25 multifamily homes on one of the larger parcels, and then 11 accessory dwelling units, and those are the second units or the granny flats that typically go on a lot with a single-family home.

The general plan density is -- or the general plan land use designation for the entire property is medium density residential, and I'll show you the general plan map in a moment.

The 2019 general plan recently adopted shows this density. The 1993 general plan which

predated it also showed that same density, so they're not requesting any change in land use policy, any change in zoning.

So the zoning matches the general plan. It's MDR, medium density residential. And within that density range that the general plan requires that the site build at, there's a floor and a ceiling on that, if you will. The minimum number of units that can be built on the site is 87, which is the number that they're coming in and proposing to build. Under the general plan, the site would support about three times more units, about up to 270. But they're not proposing that. They're coming in at 87.

So this is the general plan map. The site is outlined in red. It's adjacent to agriculture, high density residential, a lot of other MDR or medium density residential land as well.

So the applications currently, one of those is the Draft Environmental Impact Report, which is currently out for public review and which is the subject of tonight's meeting, and then the native subdivision map. That's the totality of what the city will be considering

early next year when this goes into public hearings at the Planning Commission and City Council.

Now, there are future applications that will need to be filed and considered before any development can take place. If this tentative map is approved, they won't be able to build any homes yet. There are several other steps. Those are listed on here.

There's an affordable housing agreement that will need to be approved by the City Council, and that's under the City's inclusionary housing ordinance, which generally requires that any new housing project include housing which is affordable to lower income households.

There is the design review of the proposed homes. They have not submitted any detailed designs for the homes yet. Again, all they're consider -- all they're pursuing at this point is the subdivision itself.

And then finally, there's a conditional use permit which is required under the City zoning code for the multifamily housing that they're proposing on the largest of the lots, Lot Number 52 on the subdivision.

The Draft EIR looks at a variety of topics. I'm not going to read all these off on the screen, but it's everything from aesthetics to energy. Some of the more important ones are probably transportation and circulation are certainly the ones that are going to receive a lot of attention. Utilities and service systems, which includes the issue of water service -- but basically a very complete range of topics for the Environmental Impact Report.

The document also looks at alternatives to the project and a number of other topics that are required to be examined under state law.

The Draft EIR, which is lengthy -- we understand that, but it's that way in an effort to make sure that all the information is out there -- concludes that all of the project's impacts, with one exception, can be reduced to a level of less than significant.

That one impact that can't be mitigated or can't be reduced to a level of less than significant is what we call vehicle miles travelled, or VMT. VMT or vehicle miles travelled is simple a measure of how far all the cars that basically live in this subdivision will

travel on an average day, and that's everything from driving from home to work, driving from home to school, driving home to shopping and back, and so on. It's a measure of how much vehicle travel is being generated by the project.

That's a new topic, actually, for CEQA that was imposed by state law just recently. What the state is trying to do is encourage cities to reduce the amount of vehicle travel as part of overall reductions in greenhouse gas emissions, which come partly from vehicles driving on the roadways.

But that's the one impact that can't be reduced to a less-than-significant level, and that is identified as significant, unavoidable.

Now, that doesn't mean that the EIR recommends adopting the project or approving it or not. The EIR doesn't do that. The EIR does not recommend anything about the project. It simply provides information. And in this case, it has identified that there's a significant impact, and there are methods provided in state law for the city to take action on a project even if it has significant impacts.

A little bit of history about the

project. Going back to 2010 was when the first application for this project came into the city. It was accepted as complete in 2011, so it's been around for a while. An earlier CEQA process started soon after that going between about 2011 and 2016. For various reasons, it was not completed.

This current process began about four years ago in 2017, which brings us up to September 23rd of this year, which was when the Draft Environmental Impact Report was released for public review for a minimum 45-day review period as required by state law. We're actually extending that because 45 days would've ended on a weekend, so we're extending that to the 8th of November.

Looking forward to next steps, once the comment period on the EIR closes on November the 8th, we will look at all those comments with the City's environmental consultant. If you're looking at your screen, you'll see someone named Christine Kronenberg. Christine is with the firm of Dudek. They are also working, as I am, for the City and on behalf of the City. They wrote the EIR, and they will be writing responses to

the comments that come in.

So that whole process of reviewing those comments, responding to them, and preparing a final EIR for consideration is going to happen through the winter. And then we're looking at the first quarter of next year for public hearings on the EIR and the tentative map.

Then, as I mentioned, there are future entitlements which can either happen next year or later. It's really up to the applicant on when they want to bring those in. Assuming that the subdivision map is approved, those being the affordable housing agreement, which goes to the City Council; the design review of the proposed homes; and the conditional use permit for multifamily housing, both of which would come back to this planning commission for approval.

So there are many opportunities throughout this entire process for public input, as we're showing on the screen here. The comment period that we're currently in is one of those, and this meeting is certainly an important part of that.

In addition to this, I mentioned there will be hearings next year, early in the year, in

the first quarter. Those will all be open to the public, and you'll be able to again come in front of the Planning Commission or the City Council, and express your concerns, ask questions, make comments about the project.

So once again, for tonight's meeting, we're trying to focus attention on comments on the Draft EIR. What we're looking for are your comments, your concerns that affect the adequacy of the environmental document that we're looking at tonight. Is there any information that's missing? Is there analysis that's not correct? Is there conclusions that you feel are incorrect? Are there typos in the document? We're looking for anything that -- any kind of comments like that.

So as the Chair mentioned, we're not looking tonight for comments on the project itself. There will be hearings at which time that is going to be a more appropriate topic of discussion.

I'll also mention that there are a number of different ways to comment. Well, first of all, the EIR is available on the City's website. I've put the web address up here. It's

also available, if you don't want to go online, in printed form at City Hall and at the St. Helena Public Library. The comment deadline is November 8th.

You can comment tonight. We certainly encourage you, if you have the ability to, to comment in writing either by U.S. mail or via e-mail. That way, we're sure that we get your exact comments in the record. We'll be taking notes tonight. As I mentioned, Ms. Kronenberg from Dudek is online, so she'll be just taking notes about the meeting tonight. But if you really want to be certain that your full comments exactly as you want to express them are in the record, we encourage you to do that in writing.

So Mr. Chair, staff's recommendation for tonight is that you finish receiving this presentation, open the public hearing, receive comments, close the public hearing, and then if there are any commissioner comments on the Draft EIR, we'd certainly welcome the commission members to provide those.

And with that, I will end my presentation, turn my camera back on, and again, thank you for the time.

CHAIR JOHN PONTE: Thank you very much, Mr. Norris.

With that, I will indeed open the public hearing. And this is actually -- right as we get started is the time for any commissioner who's had ex parte communications to place that on the table so we all know about it. Are there any commissioners who've had ex parte communications over this particular subject?

I see no hands going up, so Secretary Gamero, are there any members of the public who wish to speak on this item?

SECRETARY XINIA GAMERO: Yes. We have some hands, and I will start off with Angela Zivkovic. You are unmuted, Angela.

ANGELA ZIVKOVIC: Okay. Can you hear me all right?

SECRETARY XINIA GAMERO: Yes.

ANGELA ZIVKOVIC: Great. Thank you.

So I've read through the Draft Environmental Impact Report, and I'm surprised that so many of the issues that were covered were deemed as mitigated to a level of less than significant. I feel that there are quite a few issues that would, in fact, have significant

PC-1

impact, and I will go through the list as I see it.

I strongly support Alternative Number 1, which is no project, no build alternative for the following reasons.

One, the aesthetics of the east side of the town are inextricably linked with the vineyards, wetlands, and public outdoor space in the designated project area. Every day, hundreds of St. Helena residents access the areas around the site -- this site for recreation, as do visitors and tourists to the area.

If there were a large housing development erected on the site, it would irreversibly damage the aesthetics of this town as a small agricultural town with historic significance. We would not be able to walk on the walkway through the area, have a view of the hills on either side of the valley and the natural habitat restoration area.

The housing development would also permanently alter the aesthetics of Starr Avenue by drastically increasing traffic and congestion in this area.

As a direct result of the building work

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itself and the subsequent increase in traffic and congestion to and from the development by hundreds of new residents, there would also be significant impact on the air quality, particularly when you look at it as microclimate on the east side of town, and to all of the current residents as well as wildlife that live in the protected wildlife habitat zone directly adjacent to the development.

The impacts on air quality from hundreds of additional vehicles driving to and from these residences and from the extension of Starr Avenue and Adams with the additional cutting over of vehicles from Main Street and Silverado Trail would have additional significant and cumulative negative impact on air quality.

The impacts of the development on water quality and hydrology have also not been adequately evaluated and mitigated in this report. The idea, it seems, is to simply use an agricultural well to supply the water needs of hundreds of residents, and I feel that this is naïve and inequality addressed.

We're living in a time of unprecedented water shortages with climate change projections

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predicting worsening in this regard over the next several decades. And with clear evidence that wells and underground water sources are simply running out all over California, it is completely irresponsible to propose that the water needs of potentially over 500 residents in this development could possibly be met with an agricultural well as the water source.

Next, with regard to land use, it is remarkable that the development in question does not take into account the fact that there is hardly any public open space available in town as it is, much less if the project were to go through.

Even chickens in the state of California have humane standards on the amount of minimum access to open space that they can have at about 60 square feet of space. At an equivalence of approximately 30 times body size for an average human, that would mean that every citizen of this community should have the right to a minimum of 1,800 square feet of open space.

Currently, the City of St. Helena has only a couple of parks, adding up to about 3 million square feet of open space. And with over

PC-10 Cont.

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PC-13

6,000 residents, that means that each St. Helena resident has only about 500 square feet of open space, which is already less than the bare minimum requirement that even poultry has access to. We really can't afford to lose the last bit of open space that we have in this area.

Noise and vibration would also increase significantly with the development in the area, and this has not been adequately accounted for with regard to the residents of not just Starr Avenue and the adjacent neighborhoods but also the existing low-income housing development on Hunt Avenue, which would be severely impacted not just during construction but also once the development is finished, and there is significant traffic and congestion that's increasing in the area.

Finally, it's difficult to fathom how the development project could possibly fit in with the goals and aspirations of our community for public services, recreation, and public utilities. As it is, our community is barely able to meet the needs of current residents with regard to basic public services, recreation, and utilities.

PC-13 Cont.

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Everything from schools, water, sewage, garbage would be severely impacted by a construction project that would increase the population of St. Helena by 10 percent practically overnight. PC-17

It is difficult to understand how our schools could possibly continue to provide quality teaching to a student body that could grow by 10 percent from one year to the next. PC-18

And our current water and sewage treatment facilities are in need of repair and maintenance, and are barely able to supply the basic needs of current residents. A sustainable amount of -- PC-19

SECRETARY XINIA GAMERO: Ms. Angela Zivkovic, just a reminder that there's a time limit of four minutes per public comment. Your four minutes are up. If you'd like to wrap up your public comments, now would be a good time.

ANGELA ZIVKOVIC: Okay. I would like to just finish by saying that I think a major problem is sewage and water. The plan states that the sewage would simply by diverted to existing sewer lines on Starr Avenue and Vineyard Valley, and there's already some issues there. PC-20

We have a bad smell on the corner of Starr and Hunt in the fall on a regular basis, and we feel that this would be even more severely impacted by the development.

Thank you so much for giving me this opportunity to voice my opinion.

CHAIR JOHN PONTE: Thank you.

Ms. Gamero, is there a next person?

And I would like to remind everybody there is indeed a time limit of four minutes. We're trying to stick to that.

SECRETARY XINIA GAMERO: Yes. Chair Ponte, there is Greg Reynolds from Vineyard Valley who'd like to speak.

And Greg, you're more than welcome to speak now.

CHAIR JOHN PONTE: Mr. Reynolds, welcome.

GREG REYNOLDS: Thank you. Can you guys hear me?

CHAIR JOHN PONTE: Yes, we can.

GREG REYNOLDS: Okay. Good evening, I'm Greg Reynolds, 290 Pope Street, St. Helena. I'm the managing partner for Vineyard Valley Mobile Home Park. Thank you once again for an

PC-20 Cont.

opportunity to speak.

There is myriad of concerns we have about the Hunter Project. As our residents understand more about the project, topics of impact are significant and across the board. From levee access and levee maintenance to vista and privacy concerns, the electorate here in VV is not happy. PC-21

There are so many mitigating circumstances raised in today's current environment around water, fire safety, emergency response, traffic, to name a few, that your job as city planners and perhaps City Council members make it all the more critical that evidence doesn't get ignored. You have a tough job. You need to forecast where a project like this takes the citizens of Vineyard Valley and the greater city of St. Helena. PC-22

I'll focus on just three issues tonight, and we will follow up in writing next week as well.

My three issues are emergency evacuations; water, specific to sewer discharge; and traffic.

Vineyard Valley is a retirement

community 55 and older, approximately 218 homes when everyone is home. The park is home to 350 people. Many are retired seniors.

After the last five years and last year with the Glass fire, we've spent more time each year focused on fire suppression, readiness, and safety, this year primarily in neighborhood reach and resident evacuation in the event of an emergency.

After the devastating floods of '86 and '95, the park was transformed with a significant investment in the floodwall project. The design and building of that project attempted to mitigate the floodplain realities with the floodwall, the levee, and holding pond, and pumps.

The deployment of that significant investment did not include the construction referenced here. Hunter Project was not part of that plan and the safety they propose to deliver. We're very concerned that a safe evacuation and access through the back of the park will disappear with this project. We are concerned that the construction will undermine the levee and overwhelm the Army Corps strategy put in

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place to protect our 350 residents and their homes.

We are concerned about water, as many have commented. As we all engage to participate in Phase 2, this concerns us greatly. We will comment in writing specifically about wastewater flows and what appears to be a plan to connect a portion of the Hunter Project to Vineyard Valley's wastewater discharge sewer. This is a city sewer that is documented to have significant issues when it does rain.

The majority of the Hunter Project single-family homes, 46 out of 51, will be connected to the VV sewer, Vineyard Valley sewer. We will be getting most of the sewer flow, taking into account the multifamily units as well as 75 percent of the total project discharge is directed our way. Our VV sewer is already overtaxed. This will clearly drown this infrastructure. As in other parts of the city, this is unacceptable and expensive, as the City spends and documents every cleanup situation.

The traffic data clearly demonstrates significant challenges for our senior contingent. In the DEIR, it is clear from the table, the

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proposed project transportation demand management, TDM, strategies would result in a project VMT to be 15.2 percent higher than the citywide VMT per capita.

The Draft EIR concludes and clearly states the proposal project has a significant and unavoidable impact. Then it is our opinion that the Council has an obligation to the citizens of St. Helena to protect their environment, environmental integrity, and vote to deny the acceptance of the Draft EIR.

Thank you so much.

CHAIR JOHN PONTE: Thank you very much, Mr. Reynolds.

Secretary Gamero, please.

SECRETARY XINIA GAMERO: Yes. One moment. We have Maria. Maria, you should be unmuted now. You can speak now.

MARIA VILLEGAS: Hi. Good evening, everyone, and thank you for taking my comment.

CHAIR JOHN PONTE: Good evening, ma'am. If you could give us your full name. You don't have to, but we would appreciate it.

MARIA VILLEGAS: Yes. This is Maria Villegas. I'm at 1166 Meadowcreek Circle.

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PC-28

CHAIR JOHN PONTE: Thank you very much.

MARIA VILLEGAS: Sure. Well, on the surface for some, the proposed project appears to be advantageous to the community, but is it?

Though the project will increase the number of homes, including affordable housing, additional residents will increase the need for an electrical grid that can supply power for our extreme hot and cold seasons. PC-29

The Draft EIR states the (indiscernible) uses the 2016 state requirements. However, it is compliant with the updated 2019 version. There are increased power outages with our current population. Adding a new subdivision would stress an already struggling power system. PC-30

I was not able to find added evacuation routes in the event of a fire or flood. This leaves Adams and Starr as the only evacuation routes for the additional 87 units. The two streets would also be the evacuation routes for residents on Starr, Meadowcreek, Hunt, and spillover from Vineyard Valley. PC-31

As years have gone by, parked vehicles from surrounding neighborhoods have significantly increased on Hunt, Starr, and Meadowcreek. With PC-32

the current extreme fire danger and longer fire seasons, in the event of an emergency, evacuations will create a dangerous and potentially deadly situation.

If residents in surrounding neighborhoods are forced to park farther away from their homes, this would increase foot traffic and vehicle traffic during an emergency evacuation. As we all know, people panic, and the situation could become deadly. The Hunter Project would greatly impact -- increase traffic and a deadly situation more likely.

I was born and raised in St. Helena and have seen it grow from a sleepy town to a popular tourist destination. As a child, I remember residents never wanting to live on the east side of town, not because it was the wrong side of the tracks but because it flooded, and it was agricultural.

There were (indiscernible) trees and walnut trees, and yes, there were two wineries. It was (indiscernible) and Berringer.

And the early -- if the early settlers were standing before you today with the current proposed project, they would ask you, "Why would

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you build in a flood zone?" And though there is currently a levee to project the proposed development, the elders would say, "Respect Mother Nature." When she decides to flood, there's no levee that would -- that's going to stop flooding. We need to respect nature and listen to what it's telling us. If the recent fires haven't taught us, we really need to reevaluate our understanding of climate change.

This isn't rocket science. This is common sense. When a proposed project is being built in an area never meant for human habitat, it screams, "This proposed project should not move forward."

Lastly, the willingness to build a subdivision over a Native American burial site, the largest discovered in the Napa Valley, should give pause not only to the developer but all our elected officials. The site qualifies for both national and state registry as a historical site. 163 human remains were discovered along with trading beads believed to be from Spain. The DEIR recognized there is potential for more artifacts to be uncovered.

And under AB 52, the Native American

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tribe affiliated with the artifacts and/or human remains are to be notified. The Wappo tribal chairman was not listed in the DEIR as being notified. The artifacts discovered at the project site are part of St. Helena's history. It's part of us.

Thank you.

CHAIR JOHN PONTE: Thank you very much.

Ms. Gamero?

SECRETARY XINIA GAMERO: Yes. We have Patrick Band. Patrick, you should be able to speak now.

PATRICK BAND: Thank you very much.

Patrick Band, executive director of the Napa County Bicycle Coalition. I wanted to provide some general comments this evening in advance of a formal comment letter that we'll be submitting within the next week.

We would also like to request an extension of the EIR -- or DEIR comment deadline by an additional 30 to 45 days given the number of significant issues that we've identified as well as other community members are bringing up this evening.

Specific to the Bicycle Coalition, we

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have pretty significant concerns regarding a lack of adequacy of the bicycle and pedestrian facilities that are proposed within this project.

Despite, as the consultant has referenced, the significant and unavoidable impacts primarily from VMT as a result of project buildout, notably the DEIR fails to acknowledge the city's own 2019 adopted bicycle plan, which would call for Class 1 multiuse facilities on Adams as well as Starr. Those facilities would provide a safe, separated opportunity for bicyclists and pedestrians to travel to and from the project location to a number of local destinations, including grocery stores, shopping, schools nearby, and that connectivity would only be leveraged further by the planned improvements for the Napa Valley Vine Trail, which is also likely to include a section of Adams.

Again, this project is very walkable and bikeable if those project facilities are included, which they are not currently.

We again will be providing a full comment letter, but suffice to say we are very disappointed that the DEIR is basing a number of their transportation assumptions on either

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outdated or faulty plans and would like to request an extension of the comment period by an additional 30 to 45 days.

Thank you very much.

CHAIR JOHN PONTE: Thank you.

I would like to say one thing here right now. The Commission is not empowered to make any sort of decision on extending the review time for this EIR. That's beyond our purview. That would come out of either senior City staff or the City Council itself. We have no power to do that. So if there's anyone else who is online waiting to request that, we are not the venue that can act on any such request.

Ms. Gamero, is there another person who wishes to speak?

SECRETARY XINIA GAMERO: Yes. We have Tracy McBride who would like to speak. And you have four minutes, Tracy.

TRACY MCBRIDE: Good evening, commissioners and staff. Thank you to those who have spoken, and thank you for this opportunity.

I want to say that I feel this is a design of the past, and I'm not quite understanding the City staff person who said

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PC-43

tonight is about comments on the EIR but not on the project.

I do support more housing, more diversity in St. Helena, and property owner rights. But I strongly feel the proposal for 87 units needs to take into consideration energy efficiency, housing equity, working to achieve net zero impact on the environment, and resource consumption.

Constructing separate and unequal load to moderate-income housing will forever mark those units as affordable units, lesser quality, and be easily identified as the low-income section. The affordable housing should look and feel very similar to all the homes developed. I can accept they may be smaller and have smaller yards, but why do they need to look different?

I have an issue with the east side versus the west side of St. Helena. There are no similar big developments in the heart of the so-called west side or perimeter of the west side. You commissioners need to tip the scales to help the developers build homes that attract the next generation of residents to even the score between the east side and the west side.

PC-43 Cont.

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I believe there should be public open space, mentioned in the EIR, of at least one acre. As commissioners, you know our per capita per public parks, and where do we stand? Just as the Signorelli development created Jacob Miely Park, which is much bigger than an acre, don't you feel creating public open space is the right thing to do for our community and the new residents who will live here? I believe this park should connect to a walking path to the Napa River. PC-46

This proposal should allow for owned, affordable housing, which should be regulated in the same way but not a rental. The affordable housing in St. Helena is only rentals. This eliminates home ownership, a very important component of our society. Owners will not be able to achieve the same appreciation as the free market, but they will be able to enjoy home ownership benefits. My opinion, at least 50 percent of the moderate and below-income housing should be owned. There are Bay Area cities that implement owned affordable housing. PC-47

The new construction should be fire retardant with underground utilities, even if PC-48

it's not in a high fire natural hazard zone. Anyone who's lived next to a fire knows it can sweep through any neighborhood. Has the City considered requesting the project be 100 percent electric, no natural gas for both environmental and fire hazard reasons?

This project absolutely has an impact on an evacuation plan with possibly hundreds more cars needing to evacuate. We absolutely need another connection to the Silverado Trail, other than Deer Park, the historic Pratt, or Pope bridges. Our stone bridges are not seismically sound. It's time to wake up to what we need to do for efficient, safe traffic flow. We are living on borrowed time with the old bridges, and we need to alleviate the weight of traffic on Hunt and Pope.

Then we get to the clincher. Would the proposed project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal dry and multiple dry years? "This is a less-than-significant impact." Come on. Really? Retrofitting toilets is something that was done 20 to 40 years ago. This will not make the

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project water neutral. The only thing that will make this project water neutral is investment in infrastructure to get more water for the whole city. The City can ask or incentivize the developer to do this.

In summary, I support development and property owner rights, but I do not support taking a step backwards to gain not enough. I'm talking about housing equity, forward thinking, balance east side and west side, build a new bridge, water, water, water, and I also think that the EIR comment period should be extended, and I'm making this comment out loud to the City staff.

Thank you so much.

CHAIR JOHN PONTE: Thank you.

Ms. Gamora?

SECRETARY XINIA GAMERO: Next we have Ms. Elizabeth Alderman. You can speak now.

ELIZABETH ALDERMAN: Hi. Hello. I guess in contrast to several people who have spoken tonight, we are actually very new to town. We moved here in February, and we are probably the most impacted by the potential construction, living at the corner of Hunt and Starr.

PC-51 Cont.

PC-52

There's a few things I would like to say. We have two small children who ride the bus every morning. We stand out, you know, at the corner of Hunt and Starr, and every single morning, I have to stand in the crosswalk of Hunt and Starr to prevent cars from driving past the bus and putting children in peril. The stop sign at our intersection is faded almost to not being recognizable. It has not been replaced. PC-53

So I think, you know, to sum up, I have no confidence that there is the ability to safely manage a new inflow of hundreds of cars for the children that ride that bus every single day. PC-54

The other thing I'd like to point out is there is a major parking issue in our neighborhood. I have been in contact with the manager of Hunt's Grove. My children are friends with kids in the community. You know, we live right next to them.

Those apartments right now have many more people living in them because of the affordable housing crisis, and it's trickling over into a parking situation. PC-55

What I have not seen is any plan from the City to accommodate the existing traffic PC-56

problems and parking problems we have right now as well as what we will do when there is an additional 80 units of housing.

I would also like to point out that from an equity perspective, I would much rather see another Hunt's Grove in the community where we give affordable housing to people who truly need it and who truly want to contribute and work in the community rather than potentially opening up multiple units of housing to second home owners who do not live here. There are too many people that need housing in this community to make that even a possible option that these would turn into Picasso homes or anything like that.

And echoing what other commenters have said, there's not enough time to react to this Environmental Impact Review. I know for a fact that many people in the Hunt's Grove community have not read it, and they are majorly impacted by this development, so I would like to also echo the sentiment as well.

CHAIR JOHN PONTE: Thank you, Ms. Alderman.

SECRETARY XINIA GAMERO: Yes, we have Nancy Dervin who would like to speak. You can

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speak now.

NANCY DERVIN: Good evening again. Ditto to all the other speakers' concerns. I really thought a lot about this, and I don't know how it would be physically possible to undertake that type of a development in that particular location without serious degradation to the flora and fauna in the area. PC-59

It's adjacent to a conservation easement, agricultural lands, and publicly accessed property that the City owns, and I just don't see how you could go in there and do that kind of construction without devastating the habitat of wildlife, and plants, and shrubs, and other things that are trying to thrive and that we've been working towards trying to bring back, actually. PC-60

So there's an environmental effort underway now to try and restore habitat and preserve, and even enhance it, and this kind of a project just simply is not compatible. PC-61

And beyond the plants and animals and whatnot, I think as a society, if we don't take seriously what sacred ground actually means and honor it, we're going down a path that even if

fiscally a project is successful, there are other ramifications that aren't measured by dollars that are going to be very detrimental to our community, to the psyche of our community. So I think we need sometimes to think behind just the hard numbers, and the calculations, and whatnot.

And then lastly, I'd like to remind you guys -- I think you all know this, but possibly you don't -- that St. Helena Housing Coalition and our town, St. Helena, have some significant affordable housing projects that they're trying to bring forward. And at some point, if we're not already there, there just isn't enough water.

We're struggling with water now. We have hundreds of affordable housing units the government has asked us to provide. We have two nonprofit agencies working to that end. I think the priority should be for the developments to address mandated needs that are not just mandated but are demonstrated to us every single day with literally thousands of people commuting to jobs, many of them service workers or even City employees that cannot afford to live here.

So I don't even know if in this process it's possible for you guys to look at the bigger

PC-62

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picture and recognize at some point, we will have built out all that we can give our resources, and I don't think it's appropriate to bypass the affordable efforts that are being made in favor of something like this that would just be so irrevocably harmful on so many different levels.

Thank you for giving the opportunity to speak. I appreciate it. Goodnight.

CHAIR JOHN PONTE: Thank you, Ms. Dervin.

SECRETARY XINIA GAMERO: And at the moment, I do not see any more hands raised. I'll give it a few seconds to see if anybody raises their hand.

We have Marina Lava -- I'm sorry -- Lavagnino. I apologize if I messed that up. You can speak now.

MARINA LAVAGNINO: Great. Thank you. You did very well with that. Lavagnino. Marina Lavagnino.

I'm curious. I actually live in Vineyard Valley and look out on the side of this every day. My office looks out on the property, and I see so many people using this as a recreation area.

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I am going through the DEIR carefully, and there's a lot of really interesting information there, so I would encourage people to read it carefully and not just briefly because there's a lot of detail.

But I'm wondering if there has been any survey of the people who use this -- the walking trail because they don't just stick to the (indiscernible). They do a loop around the property, and depending on the time of day and the fog in the area, or the sunshine, people use this area in many different ways. And it's certainly not just the Vineyard Valley residents or the people from Hunt's Grove.

I'd be curious -- and I think it's very relevant -- if there could be a survey of who uses the property and how fully. It would definitely be very different if they were walking along a set of homes rather than between a vineyard and field.

I think there's a recreational usage that people are experiencing right now that if we lose that, we don't have another place in St. Helena that provides that kind of access and usage. So I don't -- I know you can't answer

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this right now, but I think that that kind of survey would be really important.

Thank you.

CHAIR JOHN PONTE: Thank you very much.

SECRETARY XINIA GAMERO: Next, we have Ben Alderman. Go ahead, Ben.

BEN ALDERMAN: Oh, hi. Can you hear me okay?

CHAIR JOHN PONTE: Yes, we can, Mr. Alderman.

BEN ALDERMAN: Thank you. I was just wondering, taking into account recent weather events, the closing of throughways and how that's going to have an impact that we've seen already on the main streets. Once Starr is connected, that would then likely drive a lot of that traffic down Starr and over.

So when we're looking at traffic patterns, is there the opportunity to look at traffic patterns now? I don't remember the exact day -- I'm sorry -- the traffic patterns were taken, so we can look at the impact of the closing of Silverado Trail and what the likely impact to that would be on the thoroughfare through Starr. Because as we know, this

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development has no access to Silverado from either side, if there was a closure. So all of that is then likely to be driven down not the main street but along Starr.

We know traffic is already an issue as part of the Environmental Impact Study. Recent events suggest to me it would actually be a much greater issue than what's been put into the study so far.

CHAIR JOHN PONTE: Thank you, Mr. Alderman.

Ms. Gamero?

SECRETARY XINIA GAMERO: I do not see any other hands raised at the moment, Chair Ponte.

CHAIR JOHN PONTE: All right. Well, let's close the public hearing for now, and we will check before we go on. But at this point, this would be the opportunity for planning commissioners to comment on the draft EIR if there are any comments from the Planning Commission. Any commissioner who wishes to throw their oar in the water on this subject this evening?

I do not see any hands, but I will

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remind -- oh. Vice Chair Hale, please.

VICE CHAIR DAN HALE: Yeah. I'm going to try to not get too deep in the weeds on my comments, but I would just encourage everybody out there to take the available time and the time it's going to take, actually, to read through some of this because there is a -- there's a mountain of data that's in this.

And I think what I would suggest that it's important to understand is what we're trying -- the comment process here about the EIR, the Draft EIR, is -- what we're trying to form is a more perfect tool to analyze this project. It's, I think, keeping your comments relevant to that -- to perfecting that tool will be really, really most useful.

And it's -- know it's a little -- it's dense, and it's difficult to kind of parse out the different pieces of this and the process of it. but I think if we can do that, this will be more productive, and it'll give us the most accurate kind of read on this, so I think if you can kind of push to perfect the data, you know, point out where pieces are missing, and if there's pieces that you feel are inaccurate, of



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course do that too. That would be the most productive thing. And I'll leave it there.

CHAIR JOHN PONTE: Any other commissioner care to comment on the Draft EIR at this point?

I do not see any hands raised. So with that, Ms. Gamero, has anyone come online the last couple of minutes?

SECRETARY XINIA GAMERO: I do not see any other hands raised, Chair Ponte.

CHAIR JOHN PONTE: Okay. In which case, I will --

ERIC NORRIS: Mr. Chair?

CHAIR JOHN PONTE: Yes, sir. Mr. Norris.

ERIC NORRIS: Perhaps the clerk could just mention the number of participants who are on the call at this time. It has gone up.

CHAIR JOHN PONTE: You're correct.

SECRETARY XINIA GAMERO: The number of participants is 32.

CHAIR JOHN PONTE: 32. Okay. We were at 25.

SECRETARY XINIA GAMERO: And I do see a hand that just raised.

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CHAIR JOHN PONTE: Okay. Could you --

SECRETARY XINIA GAMERO: We have Mr. Hussong who would like to speak. Go ahead.

RANDY HUSSONG: That's correct. Great pronunciation, my last name. Thank you very much. Hunt Avenue resident.

I'm concerned about the water. I mean, everything else is going to be parsed out and mitigated. Traffic and so forth is going to be heavily impacted.

I can -- I read through the entire report. I cannot understand how retrofitting some toilets is going to make the water usage neutral, along with the sewer. We've got some serious, serious problems with the water in Bell Canyon. We're not doing anything to increase that to an adequate amount, and I beg any person in the town of St. Helena to say that 65 gallons a day, or a two-minute shower, is the luxury that you expect for the tax base that we're paying for.

So this is a significant impact, the water usage, that is not being addressed in the EIR. And I beg to differ that the -- it is not an impact and that the well is going to produce

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some portion of all the landscaping and that retrofitting 300 toilets is going to make this a water neutral situation when you can't provide enough water for the residents that are already paying for it. It's absurd.

So this needs to be addressed in a more significant way and more detailed. So thank you very much.

CHAIR JOHN PONTE: Thank you, Mr. Hussong.

SECRETARY XINIA GAMERO: We have Michael Mills next. You can speak now, Mr. Mills.

MICHAEL MILLS: Thank you. Commissioner Hale has pointed out that this document is -- I think his words were -- dense. And it seems to have encouraged us all to read it carefully.

And there was a request earlier from two people that the comment period, which is remarkably brief -- I think, per page, it's a really very minimal comment period. There was a suggestion that the comment period be extended. The Chair has said that the commission does not have the power to do that but suggested that the

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staff has that power. Is that correct?

CHAIR JOHN PONTE: Not -- well, certain members of City staff have that power. But basically, it falls to the City Council to do so or to certain members of upper management of the City acting in their place.

MICHAEL MILLS: Then, Mr. Chairman, I would suggest that you identify specifically how we can submit that request. I think that would be fair to those who've made the request, that you give us the direction on how to do that.

CHAIR JOHN PONTE: You have made the request now. We just can't act on it. It's beyond our purview to act on it.

MICHAEL MILLS: Well, is the Commission then transmitting that request to the appropriate authorities on behalf of those who have asked?

CHAIR JOHN PONTE: We will be transmitting that request indeed.

MICHAEL MILLS: Thank you.

CHAIR JOHN PONTE: Anything else, Mr. Mills?

MICHAEL MILLS: No. Thank you very much.

CHAIR JOHN PONTE: Very good. Thank

PC-71 Cont.

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PC-73

you.

SECRETARY XINIA GAMERO: Next, we have -- excuse me -- Maureen 436. Maureen, if you could state your last name. You don't have to, but it would be great if you could do that for the record. You can speak now.

MAUREEN LEVANDOWSKI: Hi. I'm Maureen Levandowski. I live off of Fawn Park here in St. Helena, and I just feel like the most important thing of this whole scenario is definitely the water. I would have to agree with Randy Hussong that that is probably the biggest issue here. We are living in a time when there is an unprecedented amount of no water, and we need to be addressing that more than anything in this whole project.

And that's pretty much it. Thank you.

CHAIR JOHN PONTE: Thank you.

There are no other hands up at the moment, Chair Ponte.

CHAIR JOHN PONTE: No hands the moment. All right.

DIRECTOR MAYA DEROSA: Chair Ponte, if I may --

CHAIR JOHN PONTE: Yes.

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DIRECTOR MAYA DEROSA: -- respond and articulate for our public what the -- again, I know we spoke a little bit about what the process looks like going forward, and I did hear the request to extend the comment period.

The -- what I want the public to understand is that while the formal comment period on the EIR closes on the 8th so staff can prepared detailed responses through the final EIR, there actually will still remain an open period to still comment on the project and the EIR all the way up into the final hearing going to the City Council, which is still months away.

So -- and we had done a news release about this. So how we would endeavor to respond to those comments would be through the staff report at those respective public hearings.

So I want to, you know, not have a sense of alarm that just because they don't get their comments in by the 8th that they're going to be dismissed. That is not the intent at all.

CEQA is a public process. The purpose of the EIR is just to disclose what are the impacts, and there are statutory timeframes along that process of where we receive additional input

and feedback.

So I hope that helps clarify to the public that they're -- they are still welcome to submit comments on the EIR post the 8th, but there's just going to be -- it's just going to be a slightly different process of what it looks like of how those comments are addressed.

Thank you.

CHAIR JOHN PONTE: Thank you, Director DeRosa.

All right. Ms. Gamero, one last time, anybody who wishes to speak?

SECRETARY XINIA GAMERO: No additional hands are up, Chair Ponte.

CHAIR JOHN PONTE: All right. I'm going to, in which case, close the public hearing. And since we've already requested comments from the planning commissioners, unless there's anyone else on the Planning Commission who wishes to address this item -- I don't see any hands -- we will move on, which takes us to Item 6, new business. We have none.

Item 7, schedule matters. We have none.

Item 8, department reports. Director

DeRosa, do you have anything for us tonight?

DIRECTOR MAYA DEROSA: No formal report, but just to let you know that our next meeting will be cancelled in November, but we are looking to have a meeting, the first meeting in December on the 7th. So that would be our next scheduled meeting.

CHAIR JOHN PONTE: Thank you.

Agenda forecast, as always, it's on the City website, the list of current projects that are in process.

And this is also the opportunity for any commissioner to request an item on a future agenda. Is there any commissioner who'd like to bring an item forward for discussion or consideration on a future agenda?

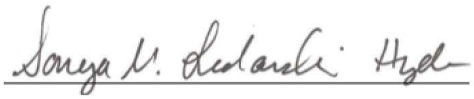
Once again, seeing none, that brings us to what was (indiscernible) favorite item, adjournment.

We are adjourned. Thank you.

C E R T I F I C A T I O N

I, Sonya Ledanski Hyde, certify that the foregoing transcript is a true and accurate record of the proceedings.

Date: December 1, 2021



Sonya Ledanski Hyde

Responses to Planning Commission Meeting Commenters
November 2, 2021

PC-1 The comment states an opinion that many issues areas dismissed in the Draft EIR that would cause a significant environmental impact.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-2 The comment is in support of the No Project Alternative because the Project would irreversibly damage the aesthetics of the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-3 The comment asserts that residents would not be able to walk through the Project area to view the natural habitat restoration area and hills on either side of the valley.

The Project site is not publicly-owned and is therefore not a public open space. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-4 The comment states an opinion that the Project would alter the aesthetics of Starr Avenue by increasing traffic congestion.

The aesthetics due to an increase in traffic is not an issue evaluated because traffic is always changing and does not constitute a permanent physical change. The comment is noted and forwarded to the decision makers for their consideration.

PC-5 The commenter states an opinion that the increase in traffic generated by the Project would significantly impact air quality and surrounding areas including existing residents as well as wildlife.

Please see Response to Comment 61-2 regarding air quality concerns and Response to Comment 14-2 regarding wildlife.

PC-6 The comment states an opinion that the Project would impact the wildlife in the protected wildlife habitat zone adjacent to the Project site.

It is not clear from the commenter what habitat zone is adjacent to the Project site. The City has not identified the presence of any habitat zone. The comment does not

identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-7 The commenter states an opinion that the increase in vehicular traffic due to the Project would result in a significant impact to air quality.

Please see Response to Comment PC-5 that addresses this concern.

PC-8 The comment states an opinion that the Draft EIR does not adequately evaluate and mitigate water quality and hydrology impacts.

Please see Master Response 2 and the Response to Comments for Letter 32.

PC-9 The comment states an opinion that the idea to use an agricultural well to supply water to Project residents is naïve and inadequately addressed in the Draft EIR.

Please see Master Response 2 and Responses to Comments 88-2 and 88-3.

PC-10 The comment asserts that climate change is limiting water supply and that it is irresponsible to propose that 500 new residents be served by an agricultural well.

As stated in Chapter 2 of the Draft EIR, the Project is estimated to result in the addition of 213 new residents to the City and the City would provide water to serve future residents. The onsite well would only be used to provide water for irrigation. Please see Master Response 2 regarding water supply.

PC-11 The comment states an opinion that the Project does not consider the limited amount of public open space available in the City.

Public recreational spaces are discussed in Section 3.12 of the Draft EIR. Additionally, the Project site is not publicly-owned and is therefore not a public open space The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-12 The comment states an opinion that based on the minimum open space access requirement of 60 square feet for chickens in California, City residents should have a right to at least 1,800 square feet of open space.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-13 The comment states an opinion that each resident of the City only has access to about 500 square feet of open space which is less than the equivalent minimum requirement for chickens.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-14 The comment asserts that noise and vibration impacts to adjacent residents and the existing low-income housing development on Hunt Avenue have not been adequately addressed.

Noise and vibration impacts are discussed in Section 3.11 of the Draft EIR. See also Response to Comment 38-1. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-15 The comment asserts that the Project would increase traffic congestion in the area.

The Project's impact on transportation and circulation is addressed in Section 3.14, Transportation and Circulation. The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles travelled (VMT), and potential impacts to transit, bicycle, and pedestrians. See also Responses to Comments 10-2 and 36-2. The comment does not identify any specific areas where the Draft analysis is inadequate; therefore, no further response is required.

PC-16 The comment asserts that the City already has difficulty serving current residents with regard to public services, recreation, and utilities.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Impacts to public services, recreation, and public utilities are discussed in Section 3.12 and Section 3.13 of the Draft EIR. Please see also Response to Comment 97-1 for additional information.

PC-17 The comment states an opinion that the Project would severely impact schools, water supply, sewer capacity, and garbage services.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decisionmakers for their consideration. Please see also Response to Comment 121-29.

PC-18 The comment asserts that local public schools would be unable to provide quality education to a growing student body.

Please see Response to Comment 108-6.

PC-19 The comment asserts that current water and sewage treatment facilities are in need of repair and are barely able to meet current needs of residents.

Please see Master Response 2 regarding water supply and Master Response 4 regarding wastewater. The City has not identified any issues with their water infrastructure or wastewater treatment plant to serve the Project.

PC-20 The comment asserts that there are already issues at the sewer lines on Starr Avenue and at Vineyard Valley that would be severely impacted by the Project.

Please see Master Response 4.

PC-21 The comment asserts that there are many concerns about the Project ranging from levee access and maintenance to scenic vistas and privacy concerns.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Responses 1 and 3 regarding emergency access and the Napa River levee and Responses to Comments 7-6 and 50-7 regarding visual issues. Privacy is not an issue required to be evaluated in an EIR and is not relevant to this Project.

PC-22 The commenter stated an opinion that there are many circumstances regarding the current environment that must not be ignored by City planners and City Council members.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-23 The comment asserts that the “Flood Wall project” did not include the Proposed Project and that there is concern that the Project would remove safe evacuation and access through the adjacent Vineyard Valley Mobile Home Park.

Please see Master Response 1 regarding emergency evacuation concerns and Master Response 3 regarding the Napa River levee.

PC-24 The comment states the commenter’s concern that the Project would undermine the levee and overwhelm the Army Corps of Engineers strategy to protect Vineyard Valley residents and their homes.

Please see Master Response 3.

PC-25 The comment asserts that Vineyard Valley residents are concerned about water.

Please see Master Response 2.

PC-26 The comment asserts that Vineyard Valley's wastewater discharge sewer is documented to have significant issues when it rains.

Please see Master Response 4.

PC-27 The comment states an opinion that, because the Project's VMT is estimated to be 15.2% higher than the City wide VMT per capita and has a significant and unavoidable impact which cannot be mitigated, that the Project and the EIR should be denied.

Please refer to Responses to Comments 93-8 and 111-2.

PC-28 The commenter asserts that the City Council has an obligation to citizens to protect the environment by denying the Draft EIR.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-29 The commenter is concerned that the Project would increase the need for power.

The Project's energy use and potential impacts to public utilities are described in Section 3.13, Utilities and Section 3.15, Energy. As documented in the Draft EIR adequate facilities and supplies are available to serve the Project and impacts are less than significant. The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-30 The commenter states an opinion that the Project would result in an increase in power outages due to the City's struggling power system.

See Response to Comment PC-29.

PC-31 The comment asserts that Adams Street and Starr Avenue are the only evacuation routes for additional residents from the Project site as well as existing residents in the area.

Please see Master Response 1.

PC-32 The comment states an opinion that parking supply is an issue within the neighborhood and that wildfires that create emergency evacuations would be a problem.

The adequacy of parking supply is not an environmental impact under CEQA; therefore, the commenter's concern is noted for the decision makers and no further response is required. . For concerns regarding emergency evacuation, please see Master Response 1.

PC-33 The comment claims that a lack of parking would require future residents to panic during emergencies and that the Proposed Project would increase traffic congestion during emergency situations.

Please see Master Response 1.

PC-34 The comment suggests that nature should be respected by not building the Project in an area protected by a levee.

Please see Master Response 3.

PC-35 The comment asserts that it is "common sense" that the Project site is not meant for human habitat.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. The Project site is located within the City limits and has been designated and zoned for housing since the 1975 General Plan.

PC-36 The comment states that Project would be built over a Native American burial site that contains human remains and artifacts.

Please see Response to Comment 55-4. There is no evidence that the site is a Native American burial site.

PC-37 The comment asserts that the Wappo tribal chairman was not listed in the Draft EIR as being notified under AB 52.

Please see Response to Comment 55-4.

PC-38 The comment requests an extension of the Draft EIR comment deadline by an additional 30 to 45 days.

Based on requests from the public, the City extended the public comment period from the required 45-days to 67-days to provide more time for review and comment. During this review period, the Draft EIR for the Project was available at (1) the St. Helena Public Library, 1492 Library Lane, St. Helena, CA 94574; (2) St. Helena Planning Department, 1572 Railroad Avenue, St. Helena, CA 94574; and (3) on the City's website at www.CityofStHelena.org.

PC-39 The comment states the commenter's concerns regarding a lack of adequacy of the Project's proposed bicycle and pedestrian facilities.

Please see Response to Comment 1-2.

PC-40 The comment restates the opinion expressed by others that VMT impacts would be significant and unavoidable. The comment also states that the City's 2019 Bicycle Plan calls for Class I multi-use facilities along Adams Street and Starr Avenue, which would connect to other multimodal uses and to the Napa Valley Vine Trail.

Please see Response to Comment 1-2.

PC-41 The comment claims that the Project would be more walkable and bikeable if additional bicycle facilities were included.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 1-2.

PC-42 The comment asserts that the Draft EIR uses outdated or faulty plans for transportation assumptions.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no further response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

PC-43 The commenter states that there is confusion as to why the public meeting is about comments on the EIR rather than comments on the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. The purpose of the hearings held to take comments on the Draft EIR is not to discuss the merits of the Project but rather the adequacy of the information provided in the Draft EIR. The Planning Commission hearing to review the Project will be an opportunity to provide input on the merits of the Project.

PC-44 The comment states an opinion that the Project should consider energy efficiency, housing equity, and resource consumption to achieve a net-zero impact on the environment.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see also Responses to Comments 82-15 and 107-7 regarding state required building code requirements.

PC-45 The comment states an opinion that the affordable housing units should look similar to market-rate units.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-46 The comment states an opinion that there should be at least 1 acre of public open space that connects to a walking path to the Napa River.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-47 The comment states an opinion that the Project should allow at least 50% of the moderate and lower income units to be owner-occupied rather than offered as rentals.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-48 The comment states an opinion that new construction should be fire-resistant with underground utilities.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration. The Project is required to comply with the California Building Code Standards and Fire Code as well as the City's development requirements which oversees undergrounding of any electrical lines.

PC-49 The comment asks whether the City has considered requesting the Project only be served by electric power.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. However, the City has not adopted an ordinance requiring all new construction be electric and it is not a requirement of the state building code.

PC-50 The comment states an opinion that the Project would affect emergency evacuation in the area and that another connection to Silverado Trail is needed to alleviate traffic congestion on Hunt Avenue and Pope Street.

For concerns regarding emergency evacuation, please see Master Response 1. The Project does not include the future expansion of Adams Street connecting to Silverado Trail. This is a separate City project and is not required for the Project.

PC-51 The comment states an opinion that retrofitting toilets would not make the project water neutral and that there needs to be more investment in infrastructure.

Please see Master Response 2.

PC-52 The comment states the commenter's opposition to the Project and requests the Draft EIR comment period be extended.

Based on requests from the public, the City extended the public comment period from the required 45-days to 67-days to provide more time for review and comment. During this review period, the Draft EIR for the Project was available at (1) the St. Helena Public Library, 1492 Library Lane, St. Helena, CA 94574; (2) St. Helena Planning Department, 1572 Railroad Avenue, St. Helena, CA 94574; and (3) on the City's website at www.CityofStHelena.org. The commenter's opposition to the Project is forwarded to the decision makers for their consideration.

PC-53 The comment states an opinion that the intersection of Hunt Avenue and Starr Avenue is unsafe for pedestrians and for people waiting for the bus. The commenter said that cars frequently do not stop fully, and the stop sign is faded.

Transit, pedestrian access, and collisions have been analyzed in detail within Section 3.14, Transportation and Circulation of the Draft EIR and within Appendix K, Traffic Impact Study and no safety impacts were identified. For additional information, please see Response to Comment 74-6.

PC-54 The comment states an opinion that additional traffic would make conditions even more unsafe for children that ride the bus.

Please see Response to Comment 74-6.

PC-55 The comment expresses concern regarding parking in the neighborhood.

The CEQA Guidelines do not require parking be evaluated in an EIR; therefore, the commenter's concern is noted for the decision makers and no further response is required.

PC-56 The comment states an opinion that existing traffic and parking problems have not been addressed by the City and that the Proposed Project would make matters worse.

Existing traffic conditions, along with the addition of the Proposed Project, and 2040 buildout of the City are analysis scenarios which have been analyzed in detail within Section 3.14, Transportation and Circulation of the Draft EIR and within Appendix K,

Traffic Impact Study. The comment does not raise does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. Please see Response to Comment PC-55 that addresses parking concerns.

PC-57 The commenter states they would rather have an affordable housing development similar to Hunt's Grove rather than the potential for new homes to be owned by second homeowners.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-58 The comment states an opinion that there is not enough time to review the Draft EIR and requests that the comment period to be extended.

Please see Response to Comment PC-52.

PC-59 The comment states an opinion that it would not be possible to develop the Project without serious degradation of plant and wildlife species in the area.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see also Response to Comment 14-2 regarding wildlife concerns.

PC-60 The comment states an opinion that the Project would devastate wildlife and plant habitat at the adjacent conservation easement, agricultural lands, and public property.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Responses to Comments 14-2 and 36-3 regarding impacts to biological resources and the conservation easement noted in the comment,

PC-61 The comment states an opinion that the Project is not compatible with current habitat restoration efforts.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. It is unclear from the comment what habitat restoration efforts are ongoing within the Project site.

PC-62 The comment asserts that the City is struggling with water supply and expresses an opinion that the priority for new development should be to provide housing for employees that cannot to afford to live in the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Master Response 2 regarding water supply.

PC-63 The comment states an opinion that the Project is incompatible with available resources and current environmental efforts.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-64 The comment asks whether there has been a survey of people who use the walking trail at the Project site.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-65 The comment asserts that weather events which closed roadways in the City would cause more traffic congestion once Starr Avenue is connected to Adams Street.

Potential Project impacts, as well as impacts related to construction of the Project, along Starr Avenue and Adams Street, and the connection of both roadways to one another, are analyzed in detail within Section 3.14, Transportation and Circulation of the Draft EIR and within Appendix K, Traffic Impact Study. The comment describes that roadways in the area, such as Silverado Trail, were closed due to weather events; however, these closures are assumed to be temporary. Since the closure is not expected to be permanent and is not related to the Project, no further response is required.

PC-66 The comment asks for additional analysis of traffic patterns if Silverado Trail is closed and the effect the closure would have on Starr Avenue, especially during weather related closures.

Please see Response to Comment PC-65.

PC-67 The comment asserts that the traffic issues associated with the Proposed Project are greater than that those evaluated in the Draft EIR.

The comment does not raise does not identify specific areas where the Draft EIR is inadequate; therefore, no further response is required. The commenter’s opinion is noted and forwarded to the decision makers for their consideration.

PC-68 The comment states an opinion that retrofitting toilets would not make the Project water neutral and that water usage is not addressed in the Draft EIR.

The Project's increase in water demand was analyzed in the Draft EIR in Section 3.13, Public Utilities starting on page 3.13-24. Please see Master Response 2 for additional details regarding the Project's water usage and compliance with the City's water neutral requirements.

PC-69 The comment states an opinion that water supply problems should be addressed in more detail in the Draft EIR.

Please see Response to Comment PC-69 and Master Response 2.

PC-70 The comment states an opinion that the Draft EIR comment period is short and asks whether the City staff has the power to extend the comment period.

The comment was addressed during the public meeting and no further response is required. Please see also Response to Comment PC-52.

PC-71 The comment asserts that certain members of City staff have the power to extend the Draft EIR comment period.

Please see also Responses to Comments PC-52 and PC-71.

PC-72 The comment asks how to submit a request for extension of the Draft EIR comment period and if the appropriate authorities would be notified of the request.

The comment was addressed during the public meeting and no further response is required. Please see also Response to Comment PC-52.

PC-73 The comment states an opinion that water is the biggest issue of the Project.

Please see Master Response 2.

City of St. Helena

Special Planning Commission Meeting

November 30, 2021

SECRETARY XINIA GAMERO: And Chair Ponte, we are ready to begin the meeting when you are.

CHAIR JOHN PONTE: I will, as soon as Commissioner Anderson and Commissioner Rothfeld come on. Good evening. Welcome. Thank you for attending the Tuesday, November 30th, 2021 special meeting of the planning commission. There is a little bit of paperwork we need to do first and I'll start by reading this.

"This meeting will be conducted pursuant to the provisions of government code Section 54953 as amended by AB361 which authorizes teleconference meetings under the Brown Act during certain proclaimed states of emergency.

The Governor of California proclaimed a state of emergency related to COVID-19 on March 4th, 2020. This teleconference meeting is necessary so the City can conduct essential business and is permitted under Government Code 54-953 in order to protect public health and safety of attendees.

Consistent with Government Code Section 54953, this planning commission meeting will be

held via teleconference only and will not be physically open to the public. Commission members and staff will be teleconferenced into the meeting by audio and/or video. This meeting will be connected via Zoom Webinar."

Ms. Gamero, you have some additional information for us all?

SECRETARY XINIA GAMERO: Yes, I do. Thank you Chair Ponte. I will share my screen momentarily.

Members of the public who wish to participate in public comment by phone can do so by dialing (669) 900-6833. At the prompt, you will enter the meeting ID, 848 0893 5175. You will then press pound and during public comment you will press star-nine to speak.

Additionally, tonight's meeting will have live Spanish interpretation. To access the interpretation, you will need to use the Zoom application from either your cellphone, tablet, or computer.

Instructions on how to use the Zoom app are listed in English and Spanish on the agenda posted on the City's website.

Once you join the meeting from the Zoom

application, you will see a small globe at the bottom or top of the screen. You will click on the globe and you'll be able to access the live interpretation. We have Marci and Claudia who are our interpreters this evening.

And that concludes my presentation, Chair.

CHAIR JOHN PONTE: Thank you. That takes us to the pledge of allegiance. Commissioner Rothfeld, will you lead us all in the pledge of allegiance, please?

COMMISSIONER MARIKA ROTHFELD: Sure. I pledge allegiance to the flag of the United States of America and to the republic for which it stands, one nation, under God, indivisible, with liberty and justice for all.

CHAIR JOHN PONTE: Thank you very much. Like to call the meeting to order. Ms. Gamero, will you take the roll, please?

SECRETARY XINIA GAMERO: Thank you. Chair Ponte.

CHAIR JOHN PONTE: Here.

SECRETARY XINIA GAMERO: Commissioner Anderson.

COMMISSIONER AUTUMN ANDERSON: Here.

SECRETARY XINIA GAMERO: Commissioner Rothfeld.

COMMISSIONER MARIKA ROTHFELD: Here.

SECRETARY XINIA GAMERO: Commissioner Segura is absent this evening. And Vice Chair Hale.

VICE CHAIR DANIEL HALE: Here.

CHAIR JOHN PONTE: Thank you very much. That takes us to public forum. Under California law, public comments at special meetings are limited to subject on the agenda only; therefore, public comment will take place during consideration of the item. Each person's comments shall be limited to four minutes.

Consent items, we have none tonight, so that takes us to the public hearing for this evening; 5.1, continuing to receive comments on the draft environmental impact report for the Hunter Subdivision project.

I will open the public hearing and at this time, I will ask if any commissioner has any ex-parte communications they wish to bring to our attention.

Seeing none, Director DeRosa, staff report, please.

MAYA DeROSA: Thank you, Chair Ponte. Good evening, planning commission. It's our pleasure to host this special meeting, our second meeting to talk about the Hunter EIR and receive public comments. The public comment period does end today and we have posted all those comments on the agenda page.

As we did on the November 2nd meeting, I'm going to have the project manager, Eric Norris, provide a brief PowerPoint presentation to familiarize the public with what the project proposal is and then we can proceed with the rest of the meeting. And so I'll hand it over to Mr. Norris. Thank you.

ERIC NORRIS: Thank you, Maya. Get out slideshow going here. So yeah, I'll keep this brief, but just for those who weren't here at the first comment meeting, first of all, welcome to the second public comment meeting on the environmental impact report.

I'll give just a brief overview of the project so we all have a clear under -- at least a common understanding of what the project is. This is the location. It's at the end of Adams and -- Adams Street and Starr Avenue. It's

highlighted there in a tan color.

This is the application which we're all looking at currently. This is the only active application on the project site. There are others that will follow on. I'll talk about those in a minute. But at the moment, what the applicant is proposing is to create this subdivision. What this does is it creates lots on which single-family homes can get built and then one additional lot on which multi-family housing would be built.

But this is the only application currently being processed. Now, the environmental impact report looks at the effects of both this subdivision and the subsequent applications that would be needed in order to construct homes on the site.

Real briefly, we're looking at a site that's just a little under 17 acres, 16.9 acres. There are a total of 87 proposed housing units. That breaks down into 51 single-family homes, 25 multi-family homes, and then 11 accessory dwelling units that would be built with the single-family homes.

So of the 51 single-family homes, 11 of

them would have an accessory dwelling unit built with them from day one.

The general plan designation is medium density residential. It has been that way since at least the '90s and we believe probably back into the 1970s, so they're not requesting a change in either the general plan or the zoning. The zoning is also MDR, which matches that general plan designation.

Now, the general plan requires that you build at a number of units which falls between the two density numbers, 5.1 per acre and 16. For this site, that gets down to 87 to 270 dwelling units. They are coming in, therefore, at the very bottom end of the range. The general plan would allow them to build more units than they're proposing to build.

This is the current zoning on the site, so it is designated MDR, as I mentioned before. Variety of other kinds of zones around it, open space, agriculture, high density residential, and then getting further down as it goes sort of to the bottom of the picture, we're starting to get more into the commercial area over near Main Street.

So currently, what the planning commission will be looking at when this goes into a public hearing mode early next year are two things. One of those is the draft environmental impact report that we show as EIR here on the slide. The other is the tentative subdivision map.

Now, in the future, as I mentioned, there are other things that need to get approved. The tentative subdivision map does not give them the ability to build any homes. It simply creates lots.

They will need an affordable housing agreement which is something that's approved by the City council. They will need to have the design of the proposed homes reviewed by the planning commission. And for the multi-family housing, that requires a conditional use permit which is also reviewed an approved by the planning commission.

So those are all future actions which are not part of their current application package, but they will have to, assuming that they get through the first hurdle, getting the subdivision app approved, they'll have to come

back with additional applications.

The draft EIR looks at a variety of topics and I'm sure anyone who's looked online and opened up the document knows that it's very long and very comprehensive. I'm not going to go into all the topics here, but it is basically every topic that we could examine, is being looked at in the EIR, everything from aesthetics to energy and everything in between.

So taking all of those almost 700 pages in the EIR down to a paragraph, if I could, the draft EIR based on the technical studies that were conducted to provide the basis for the analysis concludes that the project's impacts can all be reduced to a total less than significant level which means it may have impacts but they're not significant. They don't rise to a threshold where the City becomes concerned that the impacts are negative, I guess if you want to say it that way, with one exception, and that's vehicle miles traveled.

That's something new that is part of CEQA analysis for just a few years now. It looks at the number of vehicle miles that people who live in this subdivision will drive on an average

day or in an average year. The state is trying to get cities to look at this in an effort to reduce overall vehicle traffic as a part of a strategy to reduce greenhouse gas emissions, improve energy efficiency, and so on.

So that one measure, vehicle miles traveled, is the one impact that is identified as significant and unavoidable, but everything else in the EIR can be mitigated to a level of less than significant, some of those, because there really are no impacts, others because there are mitigation measures which are in the environmental document that says, well, if we would have an impact, if you impose this mitigation measure, that impact is reduced or eliminated.

So a real quick timeline. The project goes back to 2010 when the first application for this subdivision was submitted to the City. Without going through the whole timeline here, suffice to say that in September of this year, September 23rd, we released the draft environmental impact report which is the subject of tonight's meeting. That initially went out for a 456-day review period. We had a public

comment meeting on November 2nd.

One of the inputs that came back out of that meeting was the public saying, we'd really like to have more time to review the EIR. So that now has been extended to today, which gets us to a total of 67 days of public review. Forty-five are required by state law, so the City has gone over and above what's required in order to give the public more time to look at the document.

Looking forward into the end of this year and into next year, we're going to spend the next probably month or so responding to the comments that came in. Those responses all get put into a response to comments or final environmental impact report document. So we'll say, we got thee comments. Here's how we responded to them. The public has an opportunity to review those responses to the comments before it goes into hearings.

We are looking in the first quarter of next year. We don't have a date yet to have actual public hearings on the project which would be then the EIR and the tentative map. And then either later in 2022 or really the time the

applicant chooses, again, those other three applications, the affordable housing agreement, the design review, and the use permit for multi-family housing would come back. Those would all be subject to their own individual public hearings but those are future items not on our calendar at all at this point.

And really briefly, again, just highlighting opportunities for public input. So we're now in the lefthand column which is the 67-day, the expanded public review and comment period. When it comes to the planning commission for the tentative subdivision map, there will be public hearings there. There'll be public hearings in the future at the City council for the affordable housing agreement, and again, additional comments at the -- or public hearings, rather, at the planning commission for the other two items.

So that gets us to tonight's meeting which is, again, an opportunity for the public to provide comments on the draft EIR. The focus of comments, really, should be on the adequacy of that document. It is a technical document. We're looking for information on whether there

was something perhaps analyzed incorrectly, information that we could have maybe updated information or corrected information. Those are the kinds of things we're looking for.

Tonight's meeting is really not the time to comment on must the pros and cons of the project itself. That comes in the public hearings next year.

So that completes my presentation. I will note real briefly the EIR has been available in -- online since the beginning of the public review period. It's also been in printed format the library and the City hall. And here, commission members, is staff's recommendation which is that you receive this presentation, open the hearing, receive comments, close the hearing, and then if any commissioner wants to comment on the EIR, tonight would be an appropriate time to do that.

I'll also mention that -- well, Maya, I guess if they submit an email comment by the end of this meeting, I guess we'll still accept that.

MAYA DeROSA: That's correct.

ERIC NORRIS: Yeah, and there will be opportunities during the public hearings to

comment on the environmental document, but the deadline to get comments in so they're responded to and included in the final EIR really is tonight. And I will end my presentation here and bring it back to the commission. Thank you.

CHAIR JOHN PONTE: Thank you, Mr. Norris. With that, I suppose we will start taking comments from the public, so at this time, we will open the public testimony portion of this hearing. Ms. Gamero, is there any member of the public who wishes to speak on the environmental document?

SECRETARY XINIA GAMERO: One second, Chair Ponte.

ERIC NORRIS: Mr. Chair, if I could, while we're waiting for the speaker to come on, one thing I forgot to mention, the recorded testimony from the first public comment meeting is being transcribed. That'll be part of the written record now.

We're also recording tonight's meeting. That recording will also be transcribed and the comments will be in the written record. So if you speak tonight, you can expect to see your words transcribed and in the final EIR.

CHAIR JOHN PONTE: Thank you very much, Mr. Norris. Ms. Gamero?

SECRETARY XINIA GAMERO: Chair Ponte, there are 13 members of the public at the moment. There are no hands raised.

CHAIR JOHN PONTE: Well --

SECRETARY XINIA GAMERO: Oh, I see Tracy McBride just raised her hand. I will allow you to speak here in a second.

CHAIR JOHN PONTE: Please, Ms. McBride. You're on mute. There you go. Thank you.

TRACY McBRIDE: Okay. Thank you. Good evening, commissioners. Thank you for having this meeting and doing extension and thank you Ms. DeRosa for answering questions that I had between this meeting and the last meeting. I just want to say that I found that the project's attorney's letter that was submitted was threatening.

I thought it was kind of a threatening letter stating that the time period to extend the public comments shouldn't have been granted and I just want to make the comment that we are still in a pandemic and people are struggling with their own jobs and working with the pandemic and

PC-75

PC-76

this is a very, very complicated project, and to understand it, and I want to say I appreciate the extra time given.

And I do hope you'll take some time to read my letter in the packet, but I do just want to super briefly highlight three items that it is a false equivalence and it's incorrect in this draft EIR to state that supplying the cost of water fixtures equates to the water usage for this project.

As many people also state, the safety and evacuation and circulation is not adequately addressed in this EIR project and I also feel that the multi-family, low-income housing is segregated and creating inequity issues for our town that just are not appropriate. So I just want to highlight those three topics.

I also would really encourage the City to continue outreach to the other members of the town through social media like Nextdoor, because I think a lot of people just don't really understand how to, you know, read the City documents, how to access them. They still don't know who to email. I see that question on Nextdoor. How do I email my comments in? Even

PC-76 Cont.

PC-77

PC-78

PC-79

PC-80

though you think this might be really available to al lot of people, I think people are having a hard time understanding, really, how to read it, access it, and to comment. So thank you very much.

CHAIR JOHN PONTE: Thank you very much. Ms. Gamero, anyone else?

SECRETARY XINIA GAMERO: Yes. We have Marina Lavagnino. You can go ahead and speak now.

MARINA LAVAGNINO: Okay, hello. Thank you. I agree that I greatly appreciate that the time was extended. I am one of those people who only found out about this in the last two weeks of the comment period and the documentation is very detailed, which is great, but -- and voluminous, and life is really crazy right now and it's been difficult to find the time, even with the extra month, to go through it carefully, but I have tried to do so.

Secondly, I wanted to say that having these Zoom meetings, while very convenient in some ways, makes it much more difficult to rally the troops to get together and attend the meeting. I think we'd have a greater response

PC-80 Cont.

PC-81

PC-82

and more public comment if we were doing this in person. So I hope that you don't think that any low turnout this evening is representative of a disinterest in the project. I think it's just very challenging for a number of people to get involved in the Zoom call.

My mother, for example, would not do this in a million years, but she might come with me to a public meeting. So hopefully in the spring, we have an opportunity to communicate in person. That would be really wonderful.

I did file -- my sister and I filed a document yesterday and I see that it's part of the agenda packet, so I know you received it, but I would like to read one portion of it that is -- what comes to me as the most important thing that's lacking from the draft EIR, and that related to the recreational aspect of this project.

So there's much to review within the section of public service and recreation; 2.45 persons per household for the purpose of calculating park and recreation facility demands is very different from the eight persons per four-bedroom home estimate used in the utility

PC-82 Cont.

PC-83

PC-84

section. Twelve elementary students among 87 residential units seems low. We would be interested in seeing what the numbers are at Hunt Street, so I'm curious as to whether or not some of the numerical things that look so easy to remedy if they're really going to be accurate.

I'm focusing here on recreation. In Section 3.12-16, it is stated that the City would have a ratio of 4.48 acres per thousand residents, which falls below the goal of 5 acres per thousand residents. So we would be short almost 5 acres of this goal. And interestingly, that's about 40 acres short of the nationally recommended standard mentioned, and don't we in St. Helena desire and deserve the higher standard?

What this section woefully ignores is the recreation usage that will be taken away by this development. Yes, there are parks in St. Helena. Table 3.12-2 lists 11 parks. Eight of these are mini-parks. None of these parks provides a connection to the grandeur of St. Helena's position in the Napa Valley. There is a reason why so many St. Helenans flock to the maintenance path and it is not to look at the

PC-84 Cont.

PC-85

PC-86

PC-87

gravel beneath our feet.

Walking along the berm provides a view of Mount St. Helena, both sides of the valley, beautiful vineyards, unique architecture with water towers and barns, a meadow, a habitat restoration area, and a river, all of which are home to numerous wildlife, and there's a tremendous view of the sky.

From glorious sunrise to inspiring sunset, people come to this area to experience nature. It is convenient to the center of town and the library. It is free and currently available to all. It is a natural resource that provides space that we need that isn't available in any of our 11 parks. This resource should be better understood if we are trying to document St. Helena's recreational facilities. It will be drastically diminished if homes are built up to the edge of the maintenance road. So I covered a few other --

SECRETARY XINIA GAMERO: (indiscernible), I would like to note that your four minutes are up, so if you would like to (indiscernible) your comment --

MARINA LAVAGNINO: Perfect.

PC-87 Cont.

PC-88

SECRETARY XINIA GAMERO: -- that would be good.

MARINA LAVAGNINO: That's all that I needed to say. Thank you very much.

CHAIR JOHN PONTE: Thank you. Ms. Gamero, next if we -- assuming we have one.

SECRETARY XINIA GAMERO: I'll give -- we have Matt Courtney who would like to speak. You may go ahead and speak now.

CHAIR JOHN PONTE: -- Courtney, please.

ANYA COURTNEY: Hello. My name is Anya Courtney. I am ten years old and I go to St. Helena Elementary School. I looked over the EIR and saw there was nothing said about climate change. I don't think it makes sense to build a ton of houses where there is a river that can flood, especially now during climate change when the floods are stronger and more unpredictable. PC-89

I am a skier and I notice every year there is less and less and less snow pack which means less and less water. This EIR completely ignores this reality. PC-90

I don't think this EIR does a good job of covering the impact of this project on air pollution. I don't like the idea of hundreds more cars driving on my street every PC-91

day. I like living in our small town and breathing fresh air.

Also, I use that fun grassy area to play in the outside. All in all, in my opinion, the EIR does a terrible job of taking into account all of these issues that are important to me and our community. Thank you.

CHAIR JOHN PONTE: Thank you. Ms. Gamero?

SECRETARY XINIA GAMERO: Waiting here a couple of second, Chair. I do not see any more hands raised at the moment, Chair Ponte.

CHAIR JOHN PONTE: All right.

MAYA DeROSA: Chair Ponte, I did receive an email from somebody who's having trouble joining and I advised that they call in, so we might want to just give it another minute or so to give them an opportunity to dial in. Thank you.

CHAIR JOHN PONTE: Good.

SECRETARY XINIA GAMERO: I do see a hand raised, Chair Ponte.

CHAIR JOHN PONTE: Okay.

SECRETARY XINIA GAMERO: Greg Reynolds, Vineyard Valley. You can begin to speak now, Mr.

PC-91 Cont.

PC-92

Reynolds.

GREG REYNOLDS: Thank you. (indiscernible). Appreciate an opportunity to speak again. Appreciate you folks extending this experience. I just wanted to comment that I am the managing partner for Vineyard Valley. I had commented the first time around and a couple times online. The comments submitted yesterday by Vineyard Valley Mobile Home Park, I just wanted you guys to be -- realize that they included an additional 55 people who put their name on our comments.

PC-93

We have that documented in writing, et cetera, so that all of them felt comfortable with what we had put together as our response and I wanted to go on record to share that we have email support for all 55 names and a significant number of folks that would like to see this EIR evaluated in a different and more thoughtful way than what appears to be what's in front of us at this point.

PC-94

That's it. Thank you.

CHAIR JOHN PONTE: Thank you very much, Mr. Reynolds. Ms. Gamero?

SECRETARY XINIA GAMERO: There are no

additional hands raise at the moment, Chair Ponte.

CHAIR JOHN PONTE: Let's pull it back to the commission for a few seconds. Is there any commissioner that has questions or comments on the environmental document? This would be the time for that. I do not see any. So Ms. Gamero, Director DeRosa, have we gotten that phone call yet?

SECRETARY XINIA GAMERO: I do not see anybody that has -- any of the attendees that are attending this meeting via phone. Oh, I do see a phone number. Not sure if they will be raising --

MAYA DeROSA: Can you go over the instructions again on how to raise your hand when you're on the phone?

SECRETARY XINIA GAMERO: Yes. So during public comment, now, you can press star-nine and a hand will be raised so I can see it. There you go. Okay. Please state your name for the written record. Thank you.

I will ask you to unmute. Seems like you are muted as well. Can you -- I believe you (indiscernible) now.

JENNA LAVAGNINO: Hello.

CHAIR JOHN PONTE: Good evening.

JENNA LAVAGNINO: Hi. My name is Jenna Lavagnino and I live on Del Rio in Vineyard Valley. And one thing that -- I walk out on the berm once, sometimes twice a day. I've been enjoying it since I was a kid. One thing I've noticed that I don't think anyone's ever talked about is that as far as the recreation aspect of the area, I see people on a weekly basis.

I see fathers and mothers teaching their children how to ride a bicycle. I see elderly people walking with a cane, getting exercise. I see people who are stroke victims walking with their son -- I saw that yesterday -- as a way to spend time with each other as well as doing recreation as well as physical therapy.

The other thing I see, I see groups of people coming out and they bring their chairs and they fly model airplanes. I see families coming out and they bring cooler and they've got their sodas and their kids are riding bikes and they've got their little model airplanes and that type of thing. So I see this on a weekly basis and the space out here allows for that type of activity.

PC-95

The smaller parks, not as much. There's trees and wires and telephone, you know, wires and such.

And I just feel like there's a real family connection out there where you've got people spending time. They're not on their cellphones. They're not on their laptops. They're not playing video games. It's families out in nature, moving, talking, laughing, learning.

And I just think that that's a very important aspect and the space allows for that and I think in a time where everyone is trapped on their phones and their, you know, TVs and such, to have a space where families can go and congregate and work together and be together and learn together is hugs.

So that's just one aspect I really haven't heard about while researching this. So that's really it. That's my two cents. We need this space and if we don't have it, there's going to be a lot less activity of the such that I just talked about, so that's it I guess.

I hope that you will take this into consideration along with all the other -- I mean,

PC-95 Cont.

the water issues, sanitation issues, crime, fire, flood. I mean, those are all super, super important, but I think this is a really valuable thing to consider as well. So thank you so much.

CHAIR JOHN PONTE: Thank you very much. Do we have anyone else?

SECRETARY XINIA GAMERO: No hands raised, Chair Ponte.

CHAIR JOHN PONTE: No hands raised. All right. I will ask one more time if any commissioner has anything they'd care to say. I don't see anything. Well, unless there's anyone else out there who wishes to say something --

SECRETARY XINIA GAMERO: I do see a hand raised, Chair (indiscernible) and it's (indiscernible) a phone number, so if you could state your name for the written record I will give you permission to speak now.

I believe you are also muted. I will try to unmute you.

ANGELA ZIVKOVIC: -- hear me?

CHAIR JOHN PONTE: We can no. Thank you.

ANGELA ZIVKOVIC: Oh, wonderful. Hi. My name is Angela Zivkovic and I wrote in a

PC-96

letter with some comments and I just wanted to also state them at this meeting. I have some concerns about the adequacy of the environmental impact report with regard to the fact that most of the data that are being used to make evaluations about whether there's enough water and whether it makes sense to consider the impacts, like the impact on potentially the traffic flow and other issues.

None of these are actually taking into account the fact that there's a lot of changes that are taking place right now due to climate change. I think that we really have to, you know, be realistic about the fact that we practically ran out of water even just without this development this year in this town and that had it not been for that one big storm in October, we would be in a really dire situation right now a month later with water for this entire community.

And to put in even more housing which would need to accommodate hundreds more people's water needs, I think it actually not very well considered and it doesn't take into account the fact that we seem to be having a lot of drought

PC-97

PC-98

PC-99

issues and that that situation is going to be unpredictable going forward.

The other issues that I raised had to do with climate change impact on the likelihood that there be a catastrophic flood that will occur in the near future potentially. We do see bigger and bigger storms all the time because of climate change and even the Federal Emergency Management Agency has revised the way that they consider what is a flood zone.

The current environmental impact report does not take any of that into account and uses outdated flood scaling and assessment strategies. FEMA does not use the concept of the hundred-year flood zone anymore as of October of this year. That is now an outdated concept. In recognition of climate change, they of course are now actually considering that, you know, these algorithms have to change from year to year because we can no longer predict climate.

That's just the kind of phase we're in. It's an unfortunate and sobering fact, so the fact that this development is in a flood zone and we think that oh, well, it's okay, because there's a levee; levees fail and the likelihood

PC-99 Cont.

PC-100

PC-101

PC-102

that this one might fail under a catastrophic flood situation is very possible.

And then finally, I also brought up concerns regarding evacuation and safety with regard to having hundreds more individuals living in the area where we already have the highest density in town and we also have some of the most vulnerable populations in town, including low-income housing that's already right there, adjacent to this proposed development, as well as elderly housing and other high density housing areas that all are going to be needing to use the same emergency evacuation routes that are going to be highly impacted by having a higher number of people living here.

And because there's more and more fires every year, in emergency evacuations our -- a growing reality for us =, this is something that is not being accounted for correctly in the environmental impact report. So I encourage you to please read the full statement that I sent in and I thank you for your consideration.

CHAIR JOHN PONTE: Thank you very much. Do we have any further comments?

SECRETARY XINIA GAMERO: No further

PC-102 Cont.

PC-103

PC-104

hands raised, Chair.

CHAIR JOHN PONTE: I'm a little reluctant to halt the meeting after 40 minutes, but unless there's somebody else who wishes to come forward, I will do that. All right.

I will close the public hearing and that finishes this item and moves us on to Item 6 which is new business. Don't see any. And schedule matters, none.

Number eight, department reports. Director DeRosa, do we have anything for this evening?

MAYA DeROSA: Yes. Just want to let you know that we will be -- our next meeting will be December 9th instead of the 7th, so I think you all have your Zoom information for that, but just a friendly reminder and we'll see you at that meeting. Thank you.

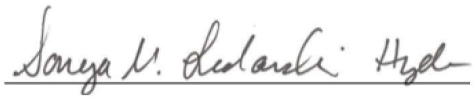
CHAIR JOHN PONTE: Agenda forecast, as always, are available on the City website and this is also the time if any member of the commission wishes to see something added to a future agenda. Is there any member of the commission that has something -- I don't see any hands waiving around for that.

So that brings us to item ten, which is adjournment and we are adjourned. Thank you very much.

C E R T I F I C A T I O N

I, Sonya Ledanski Hyde, certify that the foregoing transcript is a true and accurate record of the proceedings.

Date: December 8, 2021



Sonya Ledanski Hyde

Responses to Planning Commission Meeting Commenters
November 30, 2021

PC-74 The comment states an opinion that the Project attorney's letter regarding extension of the Draft EIR comment period was threatening.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-75 The comment asserts that residents are still struggling through a pandemic and expresses the commenter's opinion that the extension of the comment period is appreciated.

Please see Response to Comment PC-52.

PC-76 The comment states an opinion that supplying the cost of water fixtures would not equate to the water usage of the Project.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see also Master Response 2.

PC-77 The comment states an opinion that safety and evacuation and circulation are not adequately addressed in the Draft EIR.

Safety, collisions, and overall circulation are all analyzed within Section 3.14, Transportation and Circulation of the Draft EIR and within Appendix K, Traffic Impact Study. For concerns regarding emergency evacuation, please see Master Response 1.

PC-78 The comment states an opinion that the multifamily housing is segregated from the rest of the Project and would create inequity issues in the City.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-79 The commenter encouraged City staff to continue outreach to the community through social media and educate residents on how to access the Draft EIR and provide comments.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-80 The commenter states that they appreciate the extension of the comment period but that it is still difficult to find the time to review the Draft EIR.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-81 The comment states an opinion that allowing attendance of the public meeting through Zoom results in low in-person turnout and fewer public comments.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. See also Response to Comment 30-6 regarding online public meetings.

PC-82 The commenter states that they would appreciate an opportunity during the spring to comment on the Project in person.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. The City will post a notice when the Project is scheduled for hearings before the Planning Commission as well as City Council.

PC-83 The comment states their opinion that the estimated persons per household for the purposes of calculating park demand is very different from the estimate used in the utility section. The commenter also asserted that the estimate of 12 elementary students from the Proposed Project seems low.

Please see Response to Comment 70-4.

PC-84 The commenters states their interest in the persons per household and number of elementary students that live along Hunt Street.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required.

PC-85 The comment states an opinion that the City's parks inventory does not meet park ratio goals and that residents of the City desire and deserve a higher standard.

Park ratio goals are discussed in Section 3.12 of the Draft EIR. Please see also Response to Comment 70-5.

PC-86 The comment states an opinion that the Draft EIR ignores the loss of the recreational value of the maintenance path.

Please see Responses to Comments 70-6 and 89-3.

PC-87 The comment states an opinion that the Project site is visited for recreation and to experience nature and that the Project would diminish a recreational resource.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. Please see Response to Comment 82-11.

PC-88 The comment states an opinion that the Draft EIR does not mention climate change and that it does not make sense to build houses where it can flood.

The Draft EIR addresses climate change in Section 3.7, Greenhouse Gas Emissions. Additionally, please see Master Response 3 which addresses climate change concerns.

PC-89 The comment asserts that there is less snowpack each year which results in less water availability and that this is not addressed in the Draft EIR.

Please see Master Response 2.

PC-90 The commenter states an opinion the increase in traffic generated by the Project would significantly impact air quality.

Please see Response to Comment PC-5.

PC-91 The commenter states that they play in the grassy areas of the Project site and opines that the Draft EIR does not account for issues important to the community.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 82-11.

PC-92 The commenter said that there are an additional 55 people that signed the comment letter representing the concerns of the Vineyard Valley Mobile Home Park.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The comment is noted and forwarded to the decision makers for their consideration.

PC-93 The comment asserted that the residents of Vineyard Valley would like to see the Project evaluated more thoughtfully than what is provided in the Draft EIR.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration.

PC-94 The comment asserts that residents use the Project site as a recreational area and it should be preserved for recreational purposes.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. The commenter's opinion is noted and forwarded to the decision makers for their consideration. Please see Response to Comment 82-11.

PC-95 The comment states an opinion that, in addition to loss of a recreational area, the Project would also result in effects on water, sanitation, crime, fire, and floods.

The comment does not identify any specific areas where the Draft EIR analysis is inadequate; therefore, no response is required. Please see Master Responses 1, 2, 3 and 4 that address concerns associated with public safety, water supply, the Napa River levee, and wastewater. See also Responses to Comments 39-5 and 121-15 regarding wildfire.

PC-96 The comment states the commenter's concern about the adequacy of the Draft EIR due to data relied upon to evaluate water supply and traffic.

Please see Master Response 2 that addresses water supply and Responses to Comments 10-2 and 89-2 regarding traffic.

PC-97 The comment states an opinion that the Draft EIR does not account for changes occurring due to climate change, including less water availability.

Please see Master Responses 2 and 3 and Responses to Comments 14-9 through 14-17.

PC-98 The comment states an opinion that the Project does not consider drought issues and that new development would require more water to accommodate residents.

Please see Master Response 2.

PC-99 The comment states an opinion that climate change raises the likelihood of a catastrophic flood and that FEMA has revised what is considered a flood zone.

Please see Master Response 3.

PC-100 The comment states an opinion that the Draft EIR does not account for climate change and uses outdated flood data.

Please see Master Response 3.

PC-101 The comment states an opinion that it is a possibility that the levee would fail under a catastrophic flood situation.

Please see Master Response 3 regarding the potential for levee failure.

PC-102 The comment states an opinion that the Project would exacerbate problems with emergency evacuation.

Please see Master Response 1 regarding emergency evacuation.

PC-103 The comment states an opinion that fire incidents and emergency evacuation incidents are increasing and that this is not accounted for in the Draft EIR.

Please see Master Response 1 regarding emergency evacuation.

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HUNTER SUBDIVISION TRAFFIC ANALYSIS SUMMARY

The following is a summary of the results of the traffic analysis is Appendix K to the Draft EIR. For detailed information, please refer to the traffic analysis.

Existing Conditions

- Under existing conditions (without project traffic), the City's current level of service (LOS) standards for traffic congestion are exceeded on weekdays at three locations:
    - Main Street/Pope Street-Mitchell Drive: LOS F in the morning peak hour, LOS F in the evening peak hour
    - Paseo Grand Drive – College Avenue/Pope Street: LOS D in the morning peak hour
    - Silverado Trail/Pope Street: LOS D in the evening peak hour

    At ten other locations examined in the study, the City's LOS standards are not exceeded on weekdays.

- On Saturdays, the City's current LOS standards are exceeded at one location:
    - Main Street/Pope Street – Mitchell Drive: LOS F in the evening peak hour

Project Impacts

- The proposed project would add traffic to the local roadway system:
    - A total of 798 trips on a typical weekday
    - 62 weekday morning peak hour trips
    - 82 weekday evening peak hour trips
    - 815 total trips on a weekend day (Saturday)
    - 80 weekend evening peak hour trips
- The addition of traffic from the proposed project to existing traffic would add trips to the local roadway system, and would affect the intersections already exceeding the City's desired LOS standards on weekdays:
    - Main Street/Pope Street – Mitchell Drive: Continues to operate with unsatisfactory LOS at LOS F during both the AM and PM peak hours. However, the increase in delay is less than 5.0 seconds in the AM peak hour (4.8 seconds), while the increase in delay is greater than 5.0 seconds in the PM peak hour (11.4 seconds). This constitutes a deficiency with the City's LOS impact criteria for the PM peak hour.
    - Paseo Grand Drive – College Avenue/Pope Street: Continues to operate with unsatisfactory LOS at LOS D in AM peak hour. This intersection is unsignalized and does not satisfy peak hour signal warrants (traffic signal), and the increase in delay is less than 5.0 seconds (1.1 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.
    - Silverado Trail/Pope Street: Continues to operate with unsatisfactory LOS at LOS D in the PM peak hour. This intersection is unsignalized and satisfies the peak hour signal warrant (traffic signal) for the PM peak hour, however the increase in delay is

less than 5.0 seconds (1.3 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.

- Adding traffic from the proposed project to existing traffic would have the following impact on the existing location where weekend LOS standards are exceeded:
    - Main Street/Pope Street – Mitchell Drive: Continues to operate with unsatisfactory LOS at LOS F, however, the increase in delay is less than 5.0 seconds (3.7 seconds). Therefore, the project would not exceed the City's impact criteria and would be consistent with the City's LOS policies.
- Based on the LOS results of the Existing plus Project weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would be inconsistent with the City's LOS policies, and would require an improvement:
    - Main Street/Pope Street – Mitchell Drive: LOS F during the weekday PM peak hour.
- Adding project traffic to projected future (2040) traffic on local roadways would affect the intersections which already operate below the City's LOS standards on weekdays:
    - Main Street/Pope Street – Mitchell Drive: LOS F in AM and PM peak hours. The proposed project would contribute traffic to this LOS deficiency.
    - Paseo Grand Drive – College Avenue/Pope Street: LOS E in AM peak hour. This intersection would remain unsignalized in the Buildout condition, and would not satisfy the peak hour signal warrant in the AM peak hour. Therefore, this would be consistent with the City's LOS policies.
    - Silverado Trail/Pope Street: LOS E in AM peak hour, and LOS F in the PM peak hour. This intersection would remain unsignalized in the Buildout condition. However, the AM and PM peak hour traffic volumes would satisfy the peak hour signal warrant. The proposed project would contribute traffic to this LOS deficiency.
- Under Saturday Buildout (2040) conditions, the project would add to the following intersections where weekend LOS exceeds City standards:
    - Main Street/Pope Street – Mitchell Drive: LOS F in the weekday and Saturday peak hours. The proposed project would contribute traffic to this LOS deficiency.
    - Silverado Trail/Pope Street: LOS F. This intersection would remain unsignalized in the Buildout condition. However, its Saturday peak hour volume would satisfy the peak hour signal warrant. The proposed project would contribute traffic to this LOS deficiency.
- Based on the LOS results of the Buildout (2040) weekday and Saturday peak hour traffic analysis, and the City's impact criteria, the proposed project would create an LOS deficiency at the following intersections, and would require improvements:
    - Main Street/Pope Street – Mitchell Drive: LOS F during the weekday and Saturday peak hours.
    - Silverado Trail/Pope Street: LOS E during the weekday AM peak hour, LOS F during the weekday PM peak hour and Saturday peak hours. The weekday and Saturday peak hours volumes satisfy peak hour signal warrants.

Recommended Improvements and Conclusion

- The traffic study recommends several improvements to address existing+project and future (2040) traffic impacts:
    - Implement the following improvement to the intersection of Main Street/Pope Street – Mitchell Drive:

      • Westbound right turn phase to allow for overlapping turns. This will allow for permitted right turns occurring during a red light and also a protected right-turn phase occurring turning a non-conflicting movement, such as the southbound left-turn protected phase.
    - Implement the following improvement to the intersection of Main Street/Pope Street – Mitchell Drive:
        - Construction of one or more of the various roadway connections recommended in the St. Helena General Plan Update EIR (discussed in detail in Section 3.13 – Transportation and Traffic). These connections would improve overall LOS in the Buildout (2040) scenario:
        - Connection 2A: College Avenue extension to Mills Lane (may require realignment of Mills Lane to meet Main Street/Grayson Avenue intersection).
        - Connection 3: Oak Avenue extension from Mitchell Drive to Grayson Avenue.
        - Connection 2B, Connection 2C, Connection 5B, or a combination of Connections 1, 4 and 5A may provide congestion relief to Main Street/Pope Street-Mitchell Drive, but these improvements have additional considerations related to neighborhood traffic volumes and costs related to crossings of the Napa River.
    - Implement the following improvement to the intersection of Silverado Trail/Pope Street:
        - Installation of a traffic signal at the intersection, as well as, at the adjacent, closely-spaced intersection Silverado Trail/Howell Mountain Road. This intersection is recommended for signalization according to the analysis in the St. Helena General Plan Update EIR. With a traffic signal in-place, this intersection would operate with satisfactory LOS.
- If these improvements are implemented, the intersections would operate at acceptable levels.