



City of St. Helena
Regular City Council Meeting
Tuesday, February 10, 2026 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

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

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

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

Simultaneous Spanish interpretation services during meetings can be scheduled upon request. To ensure interpreters are available, requests must be made at least 72 hours in advance by calling the Office of the City Clerk at (707) 968-2640 or emailing cityclerk@cityofsthelelena.gov.

The schedule of upcoming meetings and published meeting agendas can be found on the City of St. Helena website at <https://sthelelena.civicweb.net/portal/>.

Servicios de interpretación en español durante la reunión pueden ser solicitados por el público. Para asegurar que los intérpretes estén disponibles, los servicios tienen que ser solicitados al menos 72 horas antes de la reunión llamando a la oficina de la Secretaria de la Ciudad al (707) 968-2640 o por correo electrónico a cityclerk@cityofsthelelena.gov.

El horario de las reuniones publicadas y próximas puede ser localizado en el sitio de web de la Ciudad en <https://sthelelena.civicweb.net/portal/>.

Page

1. CALL TO ORDER

2. ROLL CALL

Mayor: Paul Dohring, Vice Mayor: Michelle Deasy, City Council Members:
Aaron Barak, Kate Spadarotto, Billy Summers

3. PLEDGE OF ALLEGIANCE

4. ADOPTION OF THE AGENDA

5. ADOPTION OF MINUTES

Estimated start time: 6:05 p.m.

5.1. Consideration and proposed approval of Regular Meeting Minutes of
January 27, 2026

9 - 19

[Regular City Council - 27 Jan 2026 - Minutes](#)

6. PUBLIC FORUM:

Members of the public are entitled to speak on matters of municipal concern not on the agenda during Public Forum. Each person's comments shall be limited to 4 minutes. Each person is entitled to speak on any non-agendized

item only once at any meeting. Brief questions by Council Members for clarifications may be posed and answered, and Council Members may make requests that items be placed on future agendas, but in accordance with state law, no substantive discussion or action may take place unless and until the matter properly appears on the agenda.

Estimated start time: 6:10 p.m.

- 6.1. [Public Comment - Michelle Covell 1](#)
[Public Comment - Brittany Tran](#)

21 - 24

7. REPORTS BY STAFF AND CITY COUNCIL, FUTURE AGENDA ITEMS, AND AB 1234 REPORTS:

Reports by staff and/or Council Members on items of general interest. Brief questions for clarification may be posed and answered, and Council Members may request that items be placed on a future agenda. Except under certain circumstances, the Brown Act prohibits any other discussion or action by the City Council.

Estimated start time: 6:20 p.m.

8. PRESENTATIONS AND PUBLIC RECOGNITIONS
None.
9. STAFF BRIEFING

Estimated start time: 6:25 p.m.

- 9.1. Streets Master Plan Public Review Period (January 22 - February 16, 2026)

25

CEQA Determination: Exempt

Prepared By: Joseph Leach, Assistant City Manager/Director of Public Works/City Engineer

Recommendation:

[Streets Master Plan Ready for Public Review](#)

[Staff Report - Streets Master Plan Public Review Period \(January 22 - February 16, 2026\) - Pdf](#)

10. CONSENT ITEMS

Members of the Council or the public (present at the meeting) may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions. (Roll Call Vote)

Estimated start time: 6:35 p.m.

- 10.1. Adopt resolution to authorize issuance of Request For Bids on the W25-01 Napa Intertie Pipeline Replacement Project

27 - 49

CEQA Determination: Class I Categorical Exemption under Section 15301 of CEQA

Prepared By: Mario Traverso, Project Manager

Recommendation:

Approve the Resolution

[Staff Report - Authorize to Bid for Napa Intertie Transmission Main Rehab Project - Pdf](#)

- 10.2. Consideration and proposed adoption of a Resolution (1) Awarding the Tank 2 Rehabilitation Project to Champion Painting Specialty Services. in the amount of \$1,194,310; (2) Authorizing the City Manager to execute the Construction Contract with Champion Painting Specialty Services; (3) Authorizing the Director of Public Works to approve Change Orders not-to-exceed 15% of the Contract price; and (4) Authorize the Recommended Budget Amendments/Transfers. 51 - 58

CEQA Determination: Class I Categorical Exemption under Section 15301 of CEQA

Prepared By: Mario Traverso, Project Manager

Recommendation:

Approve the Resolution

[Staff Report - W-101 Tank 2 Rehabilitation Project Contract Award - Pdf](#)

- 10.3. Consideration and proposed approval of a resolution authorizing the City of St. Helena Sesquicentennial parade on Main Street and authorizing City staff to assist with traffic control before, during, and after the parade. 59 - 63

CEQA Determination: Not a CEQA project

Prepared By: Ashley Sylvester, Director of Community Services

Recommendation:

Staff recommends the City Council adopt the resolution authorizing the City of St. Helena Sesquicentennial parade on Main Street authorizing City staff to seek Caltrans approval for the limited closure, and to provide traffic control before, during, and after the parade.

[Staff Report - Sesquicentennial Parade Road Closure - Pdf](#)

- 10.4. Consideration and Proposed Adoption of a Resolution (1) Authorizing the City Manager to Execute a Construction Contract with Marine Industrial Tank, Inc. in an Amount Not-To-Exceed \$83,281 for Interior Relining of Filters 5-8 at Stonebridge Wells; (2) Authorizing the Director of Public Works to Approve Change Orders up to 15%; and (3) Authorizing Appropriation of Water Enterprise Fund Balance. 65 - 127

CEQA Determination: Class I Categorical Exemption under Section 15301 of CEQA

Prepared By: Stephanie Killingsworth, Public Works Financial Analyst

Recommendation:

Staff recommends approval of the attached Resolution.

[Staff Report - Interior Relining of Filters 5-8 at Stonebridge Wells - Pdf](#)

11. PUBLIC HEARINGS

Estimated start time: 6:45 p.m.

- 11.1. Request by City Ventures, LLC for a Vesting Tentative Subdivision Map to subdivide three existing parcels totaling 2.53 acres into 42 lots, 41 for 129 - 787

condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one 0.1-acre lettered lot, Parcel A, to contain the riparian corridor not for development. The applicant also requests City Council authorization to pay the water neutrality in-lieu retrofit fee pursuant to SHMC Section 13.12.030. The two items currently before the City Council for review are a Vesting Tentative Subdivision Map and the Water Neutrality in-lieu retrofit fee request.

A Demolition Permit for three existing single-family residences located at 1447, 1505, and 1515 Spring Street was approved by the Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025, Planning Commission meeting (**Attachment 4**). In addition, Minor Design Review of the project architecture, landscaping, and site improvements for the proposed 41 townhomes has been ministerially approved by the Community Development Director (**Attachment 8**).

CEQA Determination: Exempt

Prepared By: Mike Janusek, Contract Planner

Recommendation:

For the reasons described above, staff recommends that the City Council:

1. Adopt the attached Resolution (Attachment 1) authorizing the applicant to pay the Water Neutrality In-Lieu Retrofit Fee pursuant to SHMC 13.12.030; and
2. Adopt the attached Resolution (Attachment 2) approving, pursuant to a statutory exemption under PRC 21080.66, the requested Vesting Tentative Map No. TSM25-001, File #PL24-065 for the Spring Grove Project.

[Staff Report - Spring Grove Vesting Tentative Subdivision Map and Water Neutrality In Lieu Fee Request - Pdf](#)

[Presentation 1](#)

[Presentation 2](#)

[Public Comment - Michelle Covell 2](#)

[Public Comment - Katie Somple](#)

[Public Comment - Ana Ramirez](#)

[Public Comment - Susan McWilliams](#)

[Public Comment - Daniel Hale](#)

[Public Comment - Wayne Leong 1](#)

[Public Comment - Wayne Leong 2](#)

[Public Comment - David Lattin](#)

[Public Comment - Saint Helena Neighborhood Association](#)

[Public Comment - Sonja Trauss YIMBY Law](#)

[Public Comment - Joshua Devore on behalf of Julie Dickson](#)

[Public Comment - Corey Smith, Housing Action Coalition](#)

[Public Comment - Richard Corsetti](#)

[Public Comment - Joshua Parke](#)

[Public Comment - Sarah Lenz](#)

[Public Comment - Linda Klein on behalf of City Ventures](#)

[Public Comment - Zari Consulting Group combined](#)

[Public Comment - CA Housing Defense Fund](#)

12. OLD BUSINESS

None.

13. NEW BUSINESS

Estimated start time: 8:00 p.m.

13.1. City of St. Helena Public Art Project 789 - 802

CEQA Determination: Not a CEQA project

Prepared By: Ashley Sylvester, Director of Community Services

Recommendation:

Receive direction from the City Council related to the public art project.

[Staff Report - Installation of Public Art - Pdf Presentation](#)

13.2. Consideration and proposed approval of a resolution for the City Council appointment of applicants to fill the Library Board of Trustees vacancy. 803 - 818

CEQA Determination: Exempt

Prepared By: Andrew Bradley, Program Manager

Recommendation:

Approve a resolution appointing one applicant to the Library Board of Trustees.

[Staff Report - Library Board of Trustees Appointment - February 2026 - Pdf](#)

14. CITY COUNCIL REPORTS:

14.1. A. Association of Bay Area Governments (ABAG) - Executive Board

B. Association of Bay Area Governments (ABAG) - General Assembly

C. Napa Valley Tourism Corporation (Umbrella for Napa County)

D. League of California Cities – North Bay Division

E. Napa County City Selection Committee

F. Napa County Flood Control and Water Conservation District

G. Napa County Local Agency Formation Commission (LAFCO)

H. Napa Valley Transportation Authority (NVTa)

I. Napa County Watershed Information Center & Conservancy (WICC)

J. Upper Valley Waste Management Agency

K. Napa County Groundwater Sustainability Plan Advisory Committee

L. Napa County Regional Climate Action Committee

M. Council Ad Hoc and Standing Committee Reports

15. ADJOURNMENT

The next Regular City Council meeting is scheduled for February 24, 2026 at 6:00 p.m.

This agenda was posted at City Hall, 1088 College Avenue, and at Vintage Hall, 465 Main Street, St. Helena, California on February 6, 2026.

Andrew Bradley, City Clerk

In Compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the City Clerk's Office (707) 967-2792. Notification 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

CHALLENGING DECISIONS OF CITY ENTITIES

The time limit within which to commence any lawsuit or legal challenge to any quasi-adjudicative decision made by the City of St. Helena is governed by Section 1094.6 of the Code of Civil Procedure, unless a shorter limitation period is specified by any other provision, including without limitation Government Code section 65009 applicable to many land use and zoning decisions, Government Code section 66499.37 applicable to the Subdivision Map Act, and Public Resources Code section 21167 applicable to the California Environmental Quality Act (CEQA). Under Section 1094.6, any lawsuit or legal challenge to any quasi-adjudicative decision made by the City must be filed no later than the 90th day following the date on which such decision becomes final. Any lawsuit or legal challenge, which is not filed within that 90-day period, will be barred. Government Code section 65009 and 66499.37, and Public Resources Code section 21167, impose shorter limitations periods and requirements, including timely service in addition to filing.

If a person wishes to challenge the above actions in court, they may be limited to raising only those issues they or someone else raised at the meeting described in this notice, or in written correspondence delivered to the City of St. Helena, at or prior to the meeting. In addition, judicial challenge may be limited or barred where the interested party has not sought and exhausted all available administrative remedies.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA

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

the City's web site at <https://sthelena.civicweb.net> and will be available for public review at the respective meeting.

MINUTES
City of St. Helena
Regular City Council Meeting
Tuesday, January 27, 2026 @ 6:00 PM
Vintage Hall Board Room - Second Floor
465 Main Street, St. Helena

A complete video recording of this meeting, except for closed session, can be found at <https://sthelena.civicweb.net/Portal/> or by calling the City Clerk at (707) 968-2742. The City Council video is the official record of the Council meeting.

Present: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

Absent: Council Member Kate Spadarotto and Council Member Billy Summers

1. CALL TO ORDER

Mayor Dohring called the meeting to order at 6:07 p.m.

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

Mayor Dohring led the Pledge of Allegiance.

4. ADOPTION OF THE AGENDA

City Clerk Andrew Bradley requested that certain agenda items be taken out of order, as they were not heard at the January 13, 2025, Regular City Council meeting, which was adjourned at 10:00 p.m. in accordance with Council protocols. Agenda Items 13.1, 13.2, and 13.3 will be heard prior to the Public Hearing and the remaining agenda items would be heard in regular order. Additionally, item 12.1 will be removed from the agenda to be heard at a date to be continued.

Council Member Aaron Barak moved to approve the amended agenda. The motion was seconded by Vice Mayor Michelle Deasy and on voice vote carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

5. ADOPTION OF MINUTES

5.1 Consideration and proposed approval of Regular Meeting Minutes of January 13, 2026.

Council Member Aaron Barak moved to approve the Regular Meeting minutes

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of January 13, 2026. The motion was seconded by Vice Mayor Michelle Deasy and on voice vote carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

6. PUBLIC FORUM:

Charles Covell, Tom Belt, and Michelle Covell addressed the City Council.

7. REPORTS BY STAFF AND CITY COUNCIL, FUTURE AGENDA ITEMS, and AB 1234 REPORTS:

City Attorney Ethan Walsh reported that there was no reportable action from the January 27, 2026, Special Closed Session Meeting.

Mayor Dohring made an AB1234 report regarding his attendance at the League of California Cities - Mayors and Council Members Academy.

8. PRESENTATIONS AND PUBLIC RECOGNITIONS

8.1 Recognition of Retirement: Director of Community Development Maya DeRosa

CEQA Determination: Exempt

Prepared By: Anil Comelo, City Manager

Mayor Dohring, Vice Mayor Deasy, Council Member Barak and City Manager Comelo recognized Director of Community Development, Maya DeRosa for her service to the City of St. Helena. Director DeRosa will be retiring on February 5, 2026.

9. STAFF BRIEFING & PRESENTATIONS

9.1 Provide status report of the Fiscal 2025-2026, Second Quarter for the City of St. Helena's Capital Improvement Plan (CIP).

CEQA Determination: Exempt

Prepared By: Joseph Leach, Assistant City Manager/Director of Public Works/City Engineer, Stephanie Killingsworth, Public Works Financial Analyst
Recommendation:

Receive the report and provide direction as appropriate. No Council action is required.

Assistant City Manager/Director of Public Works, Joe Leach, made a brief

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report.

10. CONSENT ITEMS

Members of the Council or the public may ask that any items be considered individually for purposes of considering alternative action, for extended discussion, or for public comment. Unless that is done, one motion may be used to adopt all recommended actions. (Roll Call Vote)

10.1 Water Supply and Forecasting - December 2025

CEQA Determination: Not a CEQA project

Prepared By: Ian Dale, Environmental Services Tech

Recommendation:

Receive and file.

10.2 Proposed approval of a Resolution approving an Employment Agreement with Ashley Sylvester, ratifying the City Manager's appointment to serve as the Director of Community Services, and authorizing organization structure changes within the Recreation Division of the Community Services Department.

CEQA Determination: Not a CEQA project

Prepared By: Mandy Kellogg, Administrative Services Director

Recommendation:

Staff recommends approval of the attached resolution.

Prior to the motion, City Attorney Ethan Walsh provided a verbal summary regarding a new Brown Act requirement that department head-level employment agreements be reported verbally. Item 10.2 concerns an employment agreement for the Director of Community Services, Ashley Sylvester. City Attorney Walsh provided the required verbal report.

Council Member Aaron Barak moved to approve items 10.1 and 10.2. The motion was seconded by Vice Mayor Michelle Deasy and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

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- 10.3 This item was pulled.
~~Approval of a Resolution Authorizing a Temporary Housing Allowance and Authorizing the City Manager to Execute a Side Letter with the St. Helena Employees Association (SHEA).~~
- 10.3 Approval of a Resolution Authorizing a Temporary Housing Allowance and Authorizing the City Manager to Execute a Side Letter with the St. Helena Employees Association (SHEA).

CEQA Determination: Not a CEQA project
Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Staff recommends approval of the attached resolution.

Director of Administrative Services, Mandy Kellogg gave a brief report on the item and noted that after a meet and confer with the bargaining group, staff would like to propose to amend the temporary housing allowance from \$1,000 to \$1,500.

Mayor Dohring opened the public comment; public comment was received by Clark McCormick and Tom Belt.

Vice Mayor Michelle Deasy moved to approve staff's recommendation and amend the temporary housing allowance to \$1,500. The motion was seconded by Council Member Aaron Barak and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak
NOES: None
ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers
ABSTAIN: None
RECUSE: None

13. NEW BUSINESS

- 13.1 Item was heard out of order
Consideration and proposed approval of a resolution approving a facility use agreement between the City of St. Helena and St. Helena Little League for the use of baseball and softball facilities located at Crane Park.

CEQA Determination: Not a CEQA project
Prepared By: Ashley Sylvester, Director of Community Services
Recommendation:
City Staff and the City Attorney recommend approving the proposed resolution.

Director of Community Services, Ashley Sylvester presented the item.

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Mayor Dohring opened up public comment; public comment was received from Vincent Georges, James Eyer, Ignacio Del Oro, Dan Wylie, Resident, Cameron Crebs, Boyd Dennington, Josh Devore and Michelle Covell.

The matter was returned to the Council for further deliberation.

Vice Mayor Michelle Deasy moved to direct staff to continue to meet with the Little League to work toward a mutually agreeable agreement with input from councilmembers. The motion was seconded by Council Member Aaron Barak and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

13.2 Item was heard out of order.

Consideration and approval of a Resolution providing approval to apply for a Land and Water Conservation Fund Grant to convert the Lower Reservoir properties into a public park.

CEQA Determination: Not a CEQA project

Prepared By: Andrew Bradley, Program Manager

Recommendation:

Consider and Approve the Resolution

Project Manager, Mario Traverso presented on the item.

Mayor Dohring opened public comment; Public comment was made by Donna McCormick and Deanna Griffin.

The discussion was opened to the Council, during which questions and comments were provided.

Council Member Aaron Barak moved to approve staff's recommendation. The motion was seconded by Vice Mayor Michelle Deasy and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

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ABSTAIN: None
RECUSE: None

Mayor Dohring called for a 10-minute recess at 8:07 p.m.

The meeting reconvened at 8:17 p.m.

Following the recess, Mayor Dohring announced that correspondence received from an attorney regarding Item 11.1 raised public safety questions and that he would like the City Attorney to respond to those letters without getting into further discussion about the item at the meeting.

City Attorney Walsh advised the Council that, due to limitations on the number of hearings, this meeting constituted the third hearing on the item. He further noted that the item is subject to a CEQA exemption and the Permit Streamlining Act, requiring Council action prior to March 10, or the item would be deemed approved.

City Attorney Walsh requested that the Council consider a motion to continue the item to the next meeting. As the item was agendaized and counted as the third hearing, the Council decided that public comment would be received on the item. Because the discussion was out of order from the agenda, the Council would hear the public comment when the item came up on the agenda.

- 13.3 Approval of a Resolution (Attachment 1) authorizing the City to 1. Contract with a retired annuitant to provide interim support services during a leave of absence pursuant to Government Code section 21221(g), effective February 7, 2026, through the date of retirement; and 2. Approve an Interim Support Services Agreement with James McCann, retired annuitant, for the provision of Director-level services during the leave of absence period.

Approval of a Resolution (Attachment 3) authorizing the City to 1. Ratify the City Manager's appointment of James McCann as Interim Director of Community Development pursuant to Government Code section 21221(h), effective April 4, 2026; and 2. Approve an Interim Employment Agreement with James McCann for service as Interim Director of Community Development following the retirement of the current Director.

CEQA Determination: Not a CEQA project
Prepared By: Mandy Kellogg, Administrative Services Director
Recommendation:
Staff recommends approval of the attached resolutions.

Administrative Services Director, Mandy Kellogg made the presentation.

Mayor Dohring opened the Public Comment; public comment was received by

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Jim McCann

Vice Mayor Michelle Deasy moved to approve the resolution authorizing the City to 1. Contract with a retired annuitant to provide interim support services during a leave of absence pursuant to Government Codes section 21221(g) effective February 7, 2026, through the date of retirement; and 2. Approve an Interim Support Services Agreement with James McCann, retire annuitant, for the provision of Director-level services during the leave of absence period. The motion was seconded by Council Member Aaron Barak and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

Vice Mayor Michelle Deasy moved to approve the resolution authorizing the City to 1. Ratify the City Manager's appointment of James McCann as Interim Director of Community Development pursuant to Government Code section 21221(h), effective April 4, 2026; and 2. Approve an Interim Employment Agreement with James McCann for service as Interim Director of Community Development following the retirement of the current Director. The motion was seconded by Council Member Aaron Barak and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, Council Member Aaron Barak

NOES:

ABSENT: Council Member Kate Spadarotto, Council Member Billy Summers

ABSTAIN:

RECUESE:

11. PUBLIC HEARINGS

- 11.1 Request by City Ventures, LLC for a Vesting Tentative Subdivision Map to subdivide three existing parcels totaling 2.53 acres into 42 lots, 41 for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one 0.1-acre lettered lot, Parcel A, to contain the riparian corridor not for development. The applicant also requests City Council authorization to pay the water neutrality in-lieu retrofit fee pursuant to SHMC Section 13.12.030. The two items currently before the City Council for review are a Vesting Tentative Subdivision Map and the Water Neutrality in-lieu retrofit fee request.

A Demolition Permit for three existing single-family residences located at 1447,

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1505, and 1515 Spring Street was approved by the Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025, Planning Commission meeting (**Attachment 4**). In addition, Minor Design Review of the project architecture, landscaping, and site improvements for the proposed 41 townhomes has been ministerially approved by the Community Development Director (**Attachment 8**).

CEQA Determination: Exempt

Prepared By: Mike Janusek, Contract Planner

Recommendation:

For the reasons described above, staff recommends that the City Council:

1. Adopt the attached Resolution (Attachment 1) authorizing the applicant to pay the Water Neutrality In-Lieu Retrofit Fee pursuant to SHMC 13.12.030; and
2. Adopt the attached Resolution (Attachment 2) approving, pursuant to a statutory exemption under PRC 21080.66, the requested Vesting Tentative Map No. TSM25-001, File #PL24-065 for the Spring Grove Project.

City Attorney Ethan Walsh clarified that a staff report had been prepared and was available should the Council wish to receive it. He noted that if the Council intended only to take public comment, it would be helpful to receive the public comment first and then provide staff with any further direction. The Council directed that only public comment be taken.

Mayor Dohring opened the public comment period. Public comments were received by Joshua Parke, Tamara Sorensen, Clark McCormick, Dan Hale, Wayne Leong.

At 9:00 p.m. Mayor Dohring asked for a motion to continue the meeting to 9:30 p.m. Vice Mayor Michelle Deasy moved to continue to the meeting to 9:30 p.m. The motion was seconded by Council Member Aaron Barak and on voice vote carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto, Council Member Billy Summers

ABSTAIN: None

RECUSE: None

Public comment resumed and comments were made by Resident not identified, Michelle Covell, Cameron Crebs, Pat Friday and Glenn Smith.

Following the close of public comment, the matter was returned to the Council for questions and discussion.

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Council Member Aaron Barak moved to continue to the item to the next City Council meeting of February 10, 2026. The motion was seconded by Vice Mayor Michelle Deasy and on roll call carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

12. OLD BUSINESS

12.1 This item will be continued to a date unknown.

~~Consideration and adoption of a Resolution authorizing: 1) Amendment #1 to St. Helena Contract FY 2024-055 with Dyett and Bhatia to prepare an Environmental Impact Report for the Downtown Specific Plan for an additional \$98,840 for a total contract amount not to exceed \$598,840; and 2) a budget increase in the amount of \$98,840 using General Fund Reserves.~~

CEQA Determination: Not a CEQA project

Prepared By: Maya DeRosa, Community Development Director

Recommendation:

Staff recommends Council approve the attached resolution.

13. NEW BUSINESS

13.4 Establishment of 2026 City Council assignments to various City and regional Committees, Boards, and Commissions.

CEQA Determination: Not a CEQA project

Prepared By: Andrew Bradley, Program Manager

Recommendation:

Attachment 1 provides a list of current intergovernmental appointments. Attachment 2 provides a list of Ad Hoc appointments available to fill. Staff recommends City Council review and provide affirmation or recommended changes to appointments.

Prior to hearing the item Vice Mayor Michelle Deasy move to continue the meeting to 9:45 p.m. The motion was seconded by Council Member Aaron Barak on voice-vote carried by the following vote:

AYES: Mayor Paul Dohring, Vice Mayor Michelle Deasy, and Council Member Aaron Barak

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NOES: None

ABSENT: Council Member Kate Spadarotto and Council Member Billy Summers

ABSTAIN: None

RECUSE: None

City Manager Anil Comelo introduced the item and noted that Council Member Summers would no longer serve on the Napa Valley Tourism Corporation Board. Mayor Dohring agreed to serve in his place and was appointed to the board. No other changes were made to the remaining Committees, Boards and Commissions.

14. CITY COUNCIL REPORTS:

Vice Mayor Deasy made a brief report regarding the Water and Wastewater Advisory Committee and the Napa County Regional Climate Action Committee.

14.1 A. Association of Bay Area Governments (ABAG) - Executive Board

B. Association of Bay Area Governments (ABAG) - General Assembly

C. Napa Valley Tourism Corporation (Umbrella for Napa County)

D. League of California Cities – North Bay Division

E. Napa County City Selection Committee

F. Napa County Flood Control and Water Conservation District

G. Napa County Local Agency Formation Commission (LAFCO)

H. Napa Valley Transportation Authority (NVTa)

I. Napa County Watershed Information Center & Conservancy (WICC)

J. Upper Valley Waste Management Agency

K. Napa County Groundwater Sustainability Plan Advisory Committee

L. Napa County Regional Climate Action Committee

M. Council Ad Hoc and Standing Committee Reports

15. ADJOURNMENT

Mayor Dohring adjourned the meeting at 9:32 p.m.

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CHALLENGING DECISIONS OF CITY ENTITIES

APPROVED:

ATTEST:

Paul Jamison Dohring, Mayor

Andrew Bradley, City Clerk



Public forum comment for next city council meeting.

From Michelle Covell <michelle@covellarchitects.com>
Date Sun 2/1/2026 9:00 AM
To Michelle Covell <michelle@covellarchitects.com>

February 1, 2026

Dear City Council,

This public forum comment builds on the remarks made by Charles Covell during the January 27, 2026 City Council meeting.

The consultant, Lisa Wise Consulting, was paid a significant amount of taxpayer money to rewrite the zoning code with the stated goals of making it more user-friendly, providing clarity, and streamlining the process. Instead, the revised code has created new problems that are now costing taxpayers even more money.

Applicants are encountering issues that did not exist under the former code, forcing them into additional design review processes and fees. At the same time, taxpayers are paying for increased staff time and legal counsel to review applications, present corrections to the Planning Commission and City Council, and fix mistakes that should never have been adopted in the first place.

The most recent Planning Commission meeting is a clear example. Two signage applicants appeared, and even the Planning Director questioned whether the consultant made an error, specifically the discrepancy between 15% and 50%. Was this change in policy intentional? Did the City Council ever request it?

As noted in the Grand Jury Report and in the City's own response, our town spends a significantly higher amount on legal counsel than comparable communities. We are reportedly paying fees similar to the City of Napa, which has a population roughly 13 times larger than ours. The City acknowledged the need to evaluate what is driving these costs and how to better control them.

This zoning code rewrite provides a very clear answer.

In 2023, residents repeatedly warned that adoption of the code was premature and urged the City to conduct a side-by-side analysis with the former code to ensure accuracy and avoid unintended consequences. Instead, the Council chose to rely on staff recommendations and move forward based on timeline concerns.

I previously submitted the words of Lester Hardy, who openly acknowledged that prioritizing schedule over substance and listening only to staff was a mistake. We are now seeing the consequences of that decision.

The zoning code rewrite has failed to meet its stated goals. It failed with the alcohol beverage distance requirements, rendering portions of downtown existing non-compliant. It failed with errors in the signage code. It created non-conforming conditions in parts of the Commercial Service / Mixed Use zone due to setback changes. The addition of the word "uncovered" would have made many existing homes non-compliant as well. I am sure more and more issues will be.... uncovered.

When a code change creates more confusion, more non-compliance, and more expense for the community, it is not a success it is a failure that must be examined honestly.

I urge the City Council to go back and read the actual public comments from 2023, not the staff summaries, but the original comments themselves, and to read them carefully. The concerns raised then are exactly the problems we are facing now.

Perhaps the application fees that residents are paying in order to deal with these mistakes should be reimbursed by the City and or Lisa Wise consulting. Like when you're at a restaurant, and you order a burger, but you get a hotdog, you can return it, and have them correct the order. We want to return the zoning code and have it corrected, on their dollar.

Sincerely,

Michelle Liu Covell

Spoken as a tax paying resident.

Please see my comments from 2023.

Not in any other role.



Public Comments

From Brittany Tran <btran@optimizedip.com>
Date Tue 2/10/2026 6:15 PM
To Public Comment <publiccomment@cityofsthelena.gov>

Hello,

I would like to submit this public comment to the City of St Helena Council:

Good evening, Mayor, Council Members and Staff. My name is Brittany and I'm with Optimized Investment Partners—a firm that works exclusively with municipalities including the Cities of Sonoma, Suisun City, and Cotati. Our preliminary analysis of your City of St Helenas's financials reveals that your City could generate additional interest income through optimized portfolio management. The City is budgeting for approximately \$340,000 in interest income in the current fiscal year. With our support, the City could budget for approximately \$1.3 million in the next 12 months. The increase in budget could solve some of the City's unfunded liabilities and budget deficits as well as help with long-term capital improvement plan needs.

We currently serve 27 California municipalities, where we've innovated the 40-year-old "cookie cutter" approach with truly customized comprehensive cash management. Our methods typically achieve 90-95% portfolio utilization compared to the industry standard of 50-60%, unlocking significant revenue potential.

The most common question we get is "How does OIP keep our money safe?" We understand that investments sound risky. Our 20+ years of municipal finance experience means we understand the realities you face and will create a transparent path to optimal portfolio management. Rest assured that OIP honors the California Government Code, seeking to improve safety, ensure liquidity, and optimize returns. With our 30-day termination clause, the City has little to lose.

Our ask is simple:

- Visit our website to learn more about our approach and review our client list to see who else has optimized their portfolio.*
- Then, encourage Director of Administrative Services Kellogg to schedule time to speak with us. My email will include a meeting request.*

Thank you for your time and we look forward to connecting with you soon.

Thank you,

Brittany Tran
 Marketing Director
btran@optimizedip.com
 (858) 777-9789



<https://optimizedip.com>

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To be removed from all future e-mails, please send your response to inquiries@optimizedip.com



Agenda Report to the City Council

Agenda Section: STAFF BRIEFING

Department: Public Works

DATE:	February 10, 2026
FROM:	Joseph Leach, Assistant City Manager/Director of Public Works/City Engineer
SUBJECT:	Streets Master Plan Public Review Period (January 22 - February 16, 2026)
RECOMMENDED ACTION:	Streets Master Plan Ready for Public Review
PREVIOUS COUNCIL ACTION:	
STATEMENT OF THE PURPOSE:	
FINANCIAL IMPACT:	



Agenda Report to the City Council

Agenda Section: CONSENT ITEMS

Department: Public Works

DATE:	February 10, 2026
FROM:	Mario Traverso, Project Manager
SUBJECT:	Adopt resolution to authorize issuance of Request For Bids on the W25-01 Napa Intertie Pipeline Replacement Project
RECOMMENDED ACTION:	Approve the Resolution
PREVIOUS COUNCIL ACTION:	The W25-01 Napa Intertie Pipeline Replacement Project is included in the City's FY 2024-2028 CIP which was approved by City Council on June 13, 2023 and again in the FY 2025-2029 CIP adopted by Council on September 24, 2024. Council authorized execution of a Professional Services Agreement with Kimley-Horn for engineering services on May 14, 2024 via Resolution 2024-062.
STATEMENT OF THE PURPOSE:	The purpose of this action is to approve the scope and design of CIP project W25-01 Napa Intertie Pipeline Replacement Project, in accordance with the municipal code in preparation for advertisement for bidding.
FINANCIAL IMPACT:	None. Project budget will be updated with the authorization to award a construction contract.

BACKGROUND:

The City of St. Helena provides water from three sources. The sources include Bell Canyon Reservoir, located on Crystal Springs Road, the Stonebridge Wells, located on College Avenue, and the City of Napa via a distribution system connection (intertie) located in Rutherford. A 12-inch steel pipeline delivers the Napa water from Rutherford to St. Helena. This pipeline was installed in the 1940's and has reached the end of it's useful life. The poor condition of the pipeline results in frequent ruptures and leaks. Additionally, due to the poor condition, the water delivery must operate at a reduced pressure which results in reduced delivery capacity. In 2009, 2500 linear feet of the pipeline was replaced from the booster station in Rutherford north to Mee Lane. The current project will replace the remainder of the pipeline which will be from Mee Lane to the Sulphur Creek Bridge.

DISCUSSION:

As mentioned, the pipeline has been in service since 1941 and delivers up to a third of the City's potable water. In 2019 a capital improvement project was developed to replace the pipeline. The design effort for the project began in June 2024. The engineering design firm, Kimley Horn, prepared the plans for the project. The plans can

be found as Attachment 2. Generally, the project involves a repeating sequence of excavating pits along the existing pipeline and pulling a new pipeline inside of the existing pipeline (i.e. this method of construction is called pipe bursting). Due to the location of the pipeline, extensive coordination efforts will be required including cooperation with Caltrans, the Wine Train, PG&E and all customers currently served from the existing pipeline. While the project is expected to be logistically challenging, the impacts are anticipated to be minimal. The plans and specifications for the project have been completed, Staff is requesting approval to post and solicit bids. If approved, Staff anticipates construction occurring in late summer.

ENVIRONMENTAL REVIEW: Exempt

GOAL:

Goal 2: Improve Infrastructure & Further Environmental Sustainability

Goal 3: Pursue Water Security & Sustainable Management of Water Resources

Goal 8: Implement Capital Improvement Plans (CIP) Projects Miscellaneous/Other

DOCUMENTS ATTACHMENTS:

[Attachment 1 - Resolution - PSE Approval](#)

[Attachment 2 - Plans](#)

[Attachment 3 - CIP Page W25-01](#)

CITY OF ST. HELENA

RESOLUTION No. 2026 -

FINDING THE W25-01 NAPA INTERTIE PIPELINE REPLACEMENT PROJECT EXEMPT FROM CEQA; APPROVING AND ADOPTING THE PROJECT PLANS; AND AUTHORIZING THE BID REQUEST FOR THE NAPA INTERTIE PIPELINE REPLACEMENT PROJECT.

RECITALS

- A. The City of St. Helena is responsible for maintenance of City owned utility infrastructure; and
- B. On September 24, 2024, City Council approved the FY 2025-2029 CIP which includes the W25-01; and
- C. The W25-01 Napa Intertie Pipeline Replacement Project scope was developed in accordance with the adopted Capital Improvement Program; and
- D. The Project Plans for the W25-01 Napa Intertie Pipeline Replacement Project have been prepared by Kimley – Horn consulting engineers, reviewed by the City Engineer, and presented for approval and authorization to bid.

RESOLUTION

The City Council of the City of St. Helena hereby resolves as follows:

- 1. The project is categorically exempt from the California Environmental Quality Act, pursuant to CEQA Guidelines section 15301, Existing Facilities Class 1 which exempts the operation, repair, maintenance, and permitting of existing facilities involving negligible or no expansion of use including publicly owned utilities; and
- 2. The Project Plans will be available on the City of St. Helena's website and for viewing at St. Helena Public Works, 1088 College Avenue, are hereby approved; and
- 3. The Public Works Director/City Engineer is authorized to solicit bids for the subject project.

Approved at a Regular Meeting of the St. Helena City Council on February 10, 2026, by the following vote:

Mayor Dohring: _____

Vice Mayor Deasy: _____

Council Member Barak: _____
Council Member Spadarotto: _____
Council Member Summers: _____

APPROVED:

ATTEST:

Paul Jamison Dohring, Mayor

Andrew Bradley, City Clerk

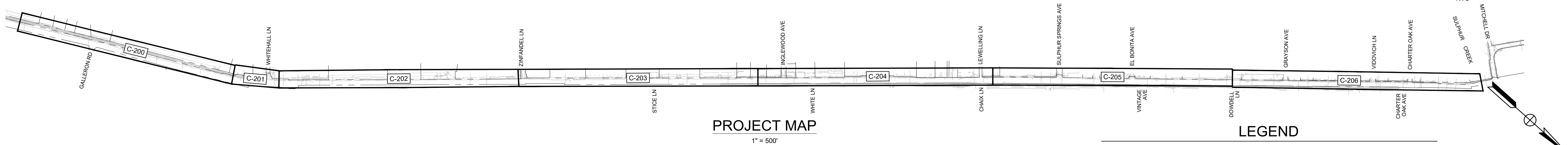
ST. HELENA WATERLINE REPLACEMENT

FROM BALE SLOUGH TO SULPHUR CREEK BRIDGE IN
THE CITY OF ST. HELENA, CA

100% PLANS
DECEMBER 2025



LOCATION MAP
NTS



SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-002	GENERAL NOTES
C-100	HORIZONTAL CONTROL
C-200	WATERLINE IMPROVEMENT STA 0+00.00 - 22+85.45
C-201	WATERLINE IMPROVEMENT STA 22+85.45 - 27+94.44
C-202	WATERLINE IMPROVEMENT STA 27+94.44 - 52+90.12
C-203	WATERLINE IMPROVEMENT STA 52+90.12 - 77+91.43
C-204	WATERLINE IMPROVEMENT STA 77+91.43 - 102+39.61
C-205	WATERLINE IMPROVEMENT STA 102+39.61 - 127+37.88
C-206	WATERLINE IMPROVEMENT STA 127+37.88 - 151+80.00
C-300	CONNECTION ENLARGEMENTS
C-301	CONNECTION ENLARGEMENTS
C-302	CONNECTION ENLARGEMENTS
C-303	CONNECTION ENLARGEMENTS
C-400	TYPICAL SECTIONS
C-500	CONSTRUCTION DETAILS
C-501	CONSTRUCTION DETAILS
C-502	CONSTRUCTION DETAILS

SURVEYOR NOTES

HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83) 2011 EPOCH BASED UPON G.P.S. OBSERVATIONS ON NETWORK UTILIZING CONTINUALLY OPERATING REFERENCE STATION (C.O.R.S.) INFORMATION FROM THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.).

VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

SURVEY CONTROL WAS ESTABLISHED PER GPS OBSERVATIONS PERFORMED FEBRUARY 2023 AND AUGUST THRU NOVEMBER 2016. A SITE CALIBRATION WAS PERFORMED FEBRUARY 2023. GROUND SURVEY CONTROL WAS ESTABLISHED USING THIS CALIBRATION.

CONTOURS ARE SHOWN EVERY ONE FOOT (1'). HIGHLIGHTED EVERY FIVE FEET (5').

ABBREVIATIONS

REFER TO 2023 CALTRANS STANDARD PLANS FOR ALL STANDARD ABBREVIATIONS.

AB	AGGREGATE BASE	SD	STORM DRAIN
ARV	AIR RELEASE VALVE	SHLD	SHOULDER
AVE	AVENUE	SL	STATE ROUTE
BFP	BACKFLOW PREVENTER	SR	STATE ROUTE
CAB	CABINET	SS	SANITARY SEWER
CATV	CABLE TELEVISION	SSMH	SANITARY SEWER MAINTENANCE HOLE
CONC	CONCRETE	ST	STREET
CRZ	CLEAR RECOVERY ZONE	STA	STATION
DCV	DIRECTIONAL CONTROL VALVE	STRM	STORM (DRAIN)
DI	DRAINAGE INLET	STRUC	STRUCTURE
DR	DRIVE	TELE	TELECOMMUNICATIONS
ELEC	ELECTRICAL	TS	TRAFFIC SIGNAL
ELEV	ELEVATION	TYP	TYPICAL
ES	EDGE OF SHOULDER	UTIL	UTILITY
ETW	EDGE OF TRAVELED WAY	VAR	VARIABLE, VARIES
EX/EXIST	EXISTING	VC	VERTICAL CURVE
FH	FIRE HYDRANT	VLT	VAULT
FL	FLOW LINE	WM	WATER METER
GV	GAS VALVE	WO	WHITE OAK
HMA	HOT MIX ASPHALT	WTR/W	WATER
ICV	IRRIGATION CONTROL VALVE	WV	WATER VALVE
JP	JOINT POLE	XING	CROSSING
JB	JUNCTION BOX		
LN	LANE		
MGS	MIDWEST GUARDRAIL SYSTEM		
MH	MAINTENANCE HOLE		
MOD	MODIFIED		
MPH	MILES PER HOUR		
OFF	OFFSET		
OH	OVERHEAD		
PB	PULLBOX		
PCC	PORTLAND CEMENT CONCRETE, POINT OF COMPOUND VERTICAL CURVE		
PG&E	PACIFIC GAS & ELECTRIC COMPANY		
PRC	POINT OF REVERSE CURVE		
PROP	PROPERTY		
PVC	POINT OF VERTICAL CURVE		
PVI	POINT OF VERTICAL INTERSECTION		
PVT	POINT OF VERTICAL TANGENCY		
RW	RIGHT OF WAY		
RD	ROAD		
RR	RAILROAD		

LEGEND

EXISTING

PROPOSED

PROPERTY LINE / RW

CENTER LINE

EASEMENT LINE

STORM DRAIN LINE

SANITARY SEWER

WATER LINE

GAS LINE

ELECTRIC LINE

TELECOM LINE

COMMUNICATION LINE

SURVEY MONUMENT

UTILITY DEMO

WATER METER

FIRE HYDRANT

WATER VALVE

PCC

TEE

DECORATIVE LANDSCAPE REPLACEMENT

AC PAVEMENT REPLACEMENT

SAWCUT

TRENCH LIMITS

REDUCER

PROJECT TEAM

CIVIL

KIMLEY-HORN AND ASSOCIATES
4637 CHABOT DR SUITE 300
PLEASANTON, CA 94588
TYLER WHALEY, PE
925-396-4840

SURVEY

RSA+
1515 FOURTH STREET
NAPA, CA 94559
707-252-3301

APPROVED BY:

JOSEPH LEACH — PUBLIC WORKS DIRECTOR/CITY ENGINEER

DATE

NAME NAME — TITLE

DATE

NAME NAME — TITLE

DATE

NAME NAME — TITLE

DATE

NAME NAME — TITLE

DATE

No.	REVISIONS	DATE	BY

Kimley»Horn

4637 CHABOT DRIVE, SUITE 300, PLEASANTON, CA 94588
PHONE: 925-398-4840
WWW.KIMLEY-HORN.COM

KHA PROJECT 097399003
DATE 12/19/2025
SCALE AS SHOWN
DESIGNED BY MT
DRAWN BY MT
CHECKED BY TW

NAPA INTERTIE PIPELINE
REPLACEMENT



COVER SHEET



DRAWING NUMBER

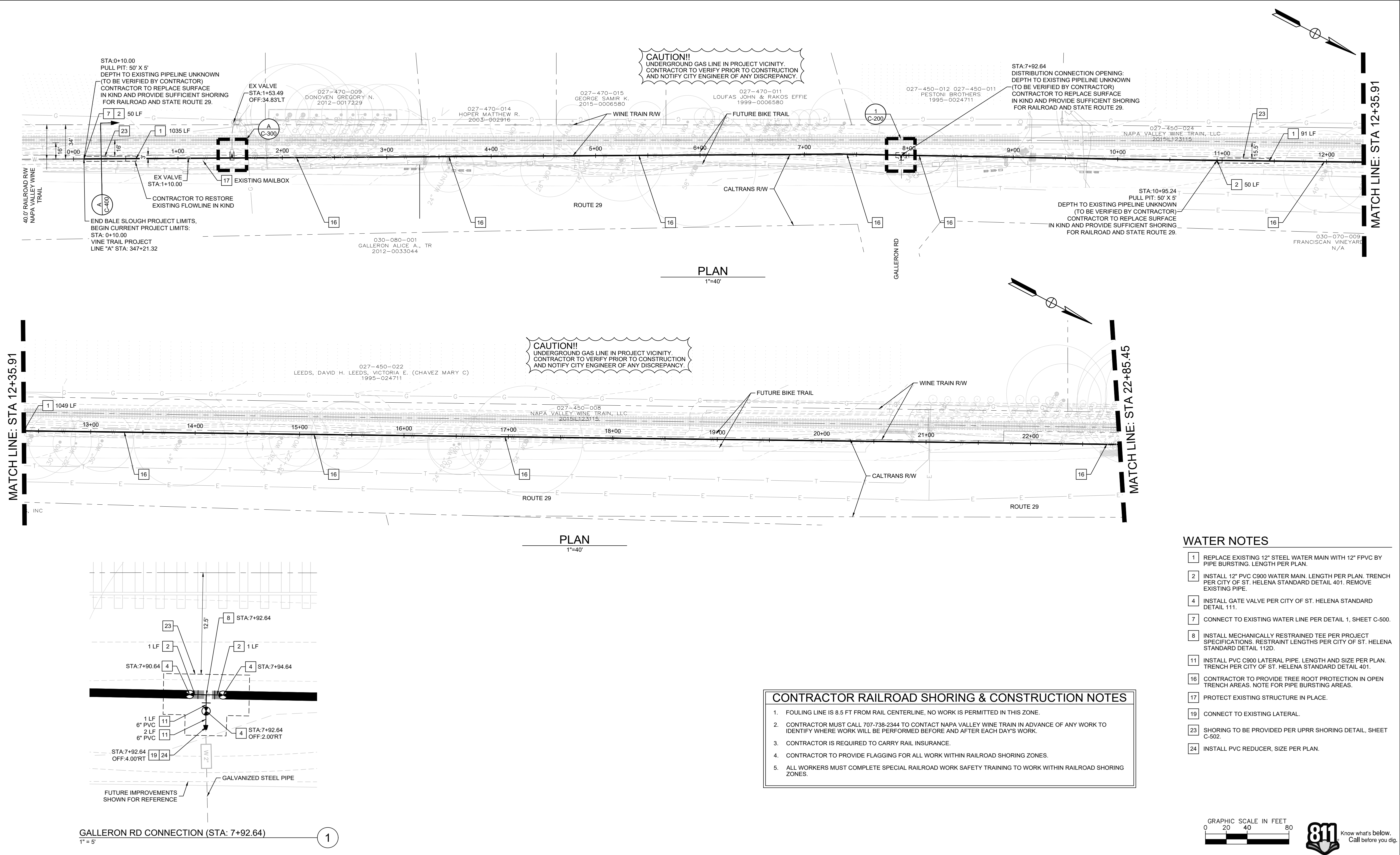
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SHEET NUMBER

1 OF 18

Agenda Item #10.1.

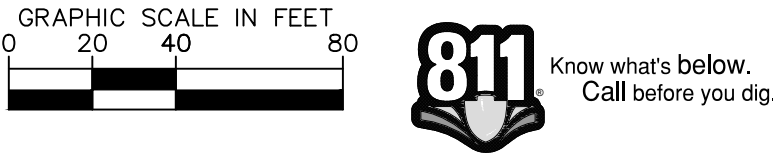
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CONTRACTOR RAILROAD SHORING & CONSTRUCTION NOTES

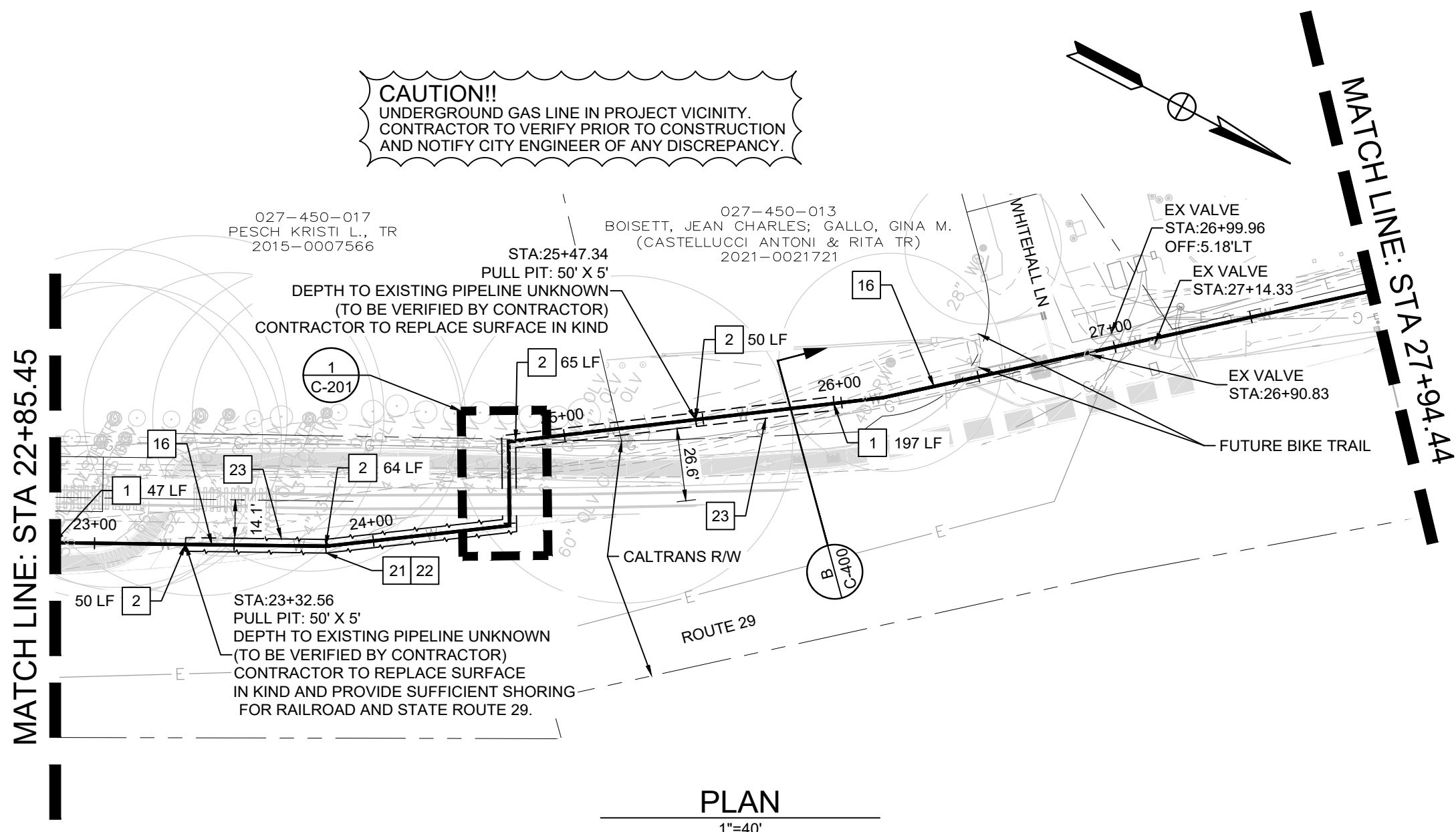
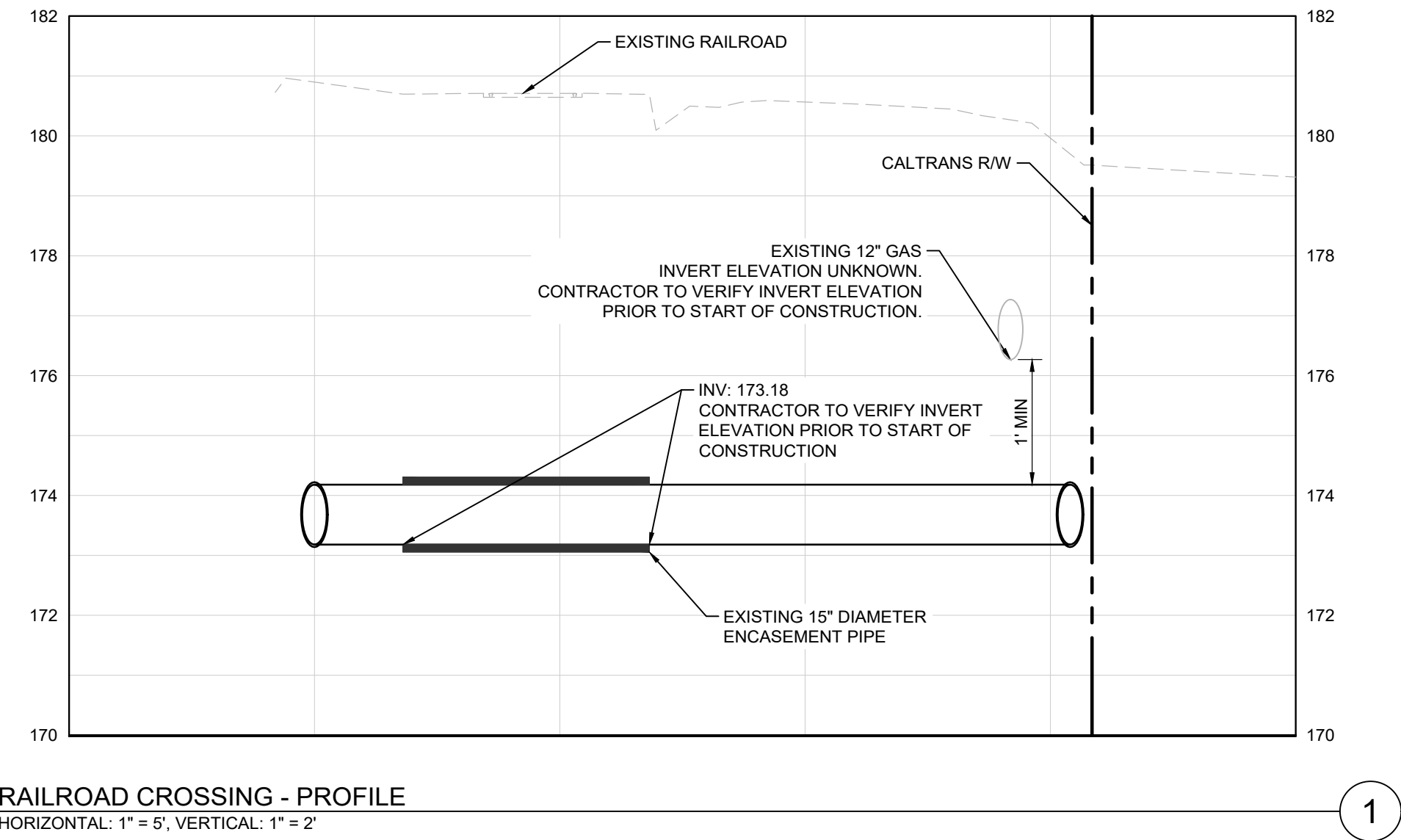
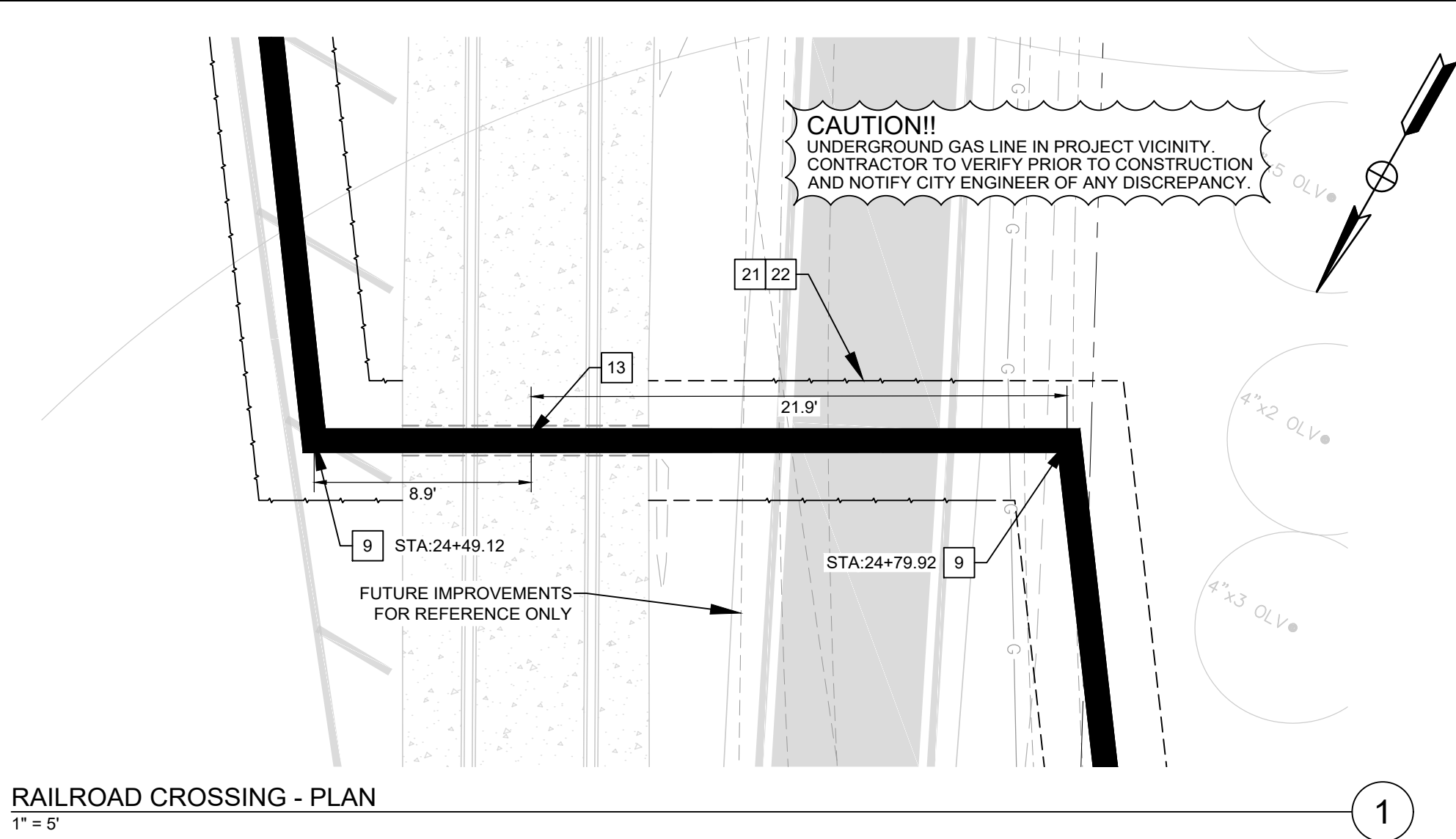
1. FOULING LINE IS 8.5 FT FROM RAIL CENTERLINE, NO WORK IS PERMITTED IN THIS ZONE.
2. CONTRACTOR MUST CALL 707-738-2344 TO CONTACT NAPA VALLEY WINE TRAIN IN ADVANCE OF ANY WORK TO IDENTIFY WHERE WORK WILL BE PERFORMED BEFORE AND AFTER EACH DAY'S WORK.
3. CONTRACTOR IS REQUIRED TO CARRY RAIL INSURANCE.
4. CONTRACTOR TO PROVIDE FLAGGING FOR ALL WORK WITHIN RAILROAD SHORING ZONES.
5. ALL WORKERS MUST COMPLETE SPECIAL RAILROAD WORK SAFETY TRAINING TO WORK WITHIN RAILROAD SHORING ZONES.

- WATER NOTES**
- 1 REPLACE EXISTING 12" STEEL WATER MAIN WITH 12" FPVC BY PIPE BURSTING. LENGTH PER PLAN.
 - 2 INSTALL 12" PVC C900 WATER MAIN. LENGTH PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. REMOVE EXISTING PIPE.
 - 4 INSTALL GATE VALVE PER CITY OF ST. HELENA STANDARD DETAIL 111.
 - 7 CONNECT TO EXISTING WATER LINE PER DETAIL 1, SHEET C-500.
 - 8 INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
 - 11 INSTALL PVC C900 LATERAL PIPE. LENGTH AND SIZE PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401.
 - 16 CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS.
 - 17 PROTECT EXISTING STRUCTURE IN PLACE.
 - 19 CONNECT TO EXISTING LATERAL.
 - 23 SHORING TO BE PROVIDED PER UPRR SHORING DETAIL, SHEET C-502.
 - 24 INSTALL PVC REDUCER. SIZE PER PLAN.



						KHA PROJECT 097399003 DATE 12/19/2025 SCALE AS SHOWN DESIGNED BY MT DRAWN BY MT CHECKED BY TW		NAPA INTERTIE PIPELINE REPLACEMENT			WATERLINE IMPROVEMENT STA 0+00.00 - 22+85.45		DRAWING NUMBER C-200		
				6637 CHABOT DRIVE, SUITE 300, PLEASANTON, CA 94588 PHONE: 925-398-4840 WWW.KIMLEY-HORN.COM							SHEET NUMBER 4 OF 18				
No.	REVISIONS			DATE	BY										

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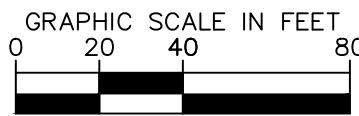


WATER NOTES

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- 2 INSTALL 12" PVC C900 WATER MAIN. LENGTH PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. REMOVE EXISTING PIPE.
- 9 INSTALL MECHANICALLY RESTRAINED 90 DEGREE BEND PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- 13 CONTRACTOR TO VERIFY EXISTING ENCASEMENT PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY. INSTALL 12" DUCTILE IRON PIPE WITHIN ENCASEMENT, PER CITY OF ST. HELENA STANDARD DETAIL 123.
- 16 CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS.
- 21 SAWCUT EXISTING PAVEMENT, JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500.
- 22 REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY.
- 23 SHORING TO BE PROVIDED PER UPRR SHORING DETAIL, SHEET C-502.

CONTRACTOR RAILROAD SHORING & CONSTRUCTION NOTES

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Know what's below.
Call before you dig.

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Kimley»Horn

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KHA PROJECT 097399003	DATE 12/19/2025
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NAPA INTERTIE PIPELINE REPLACEMENT

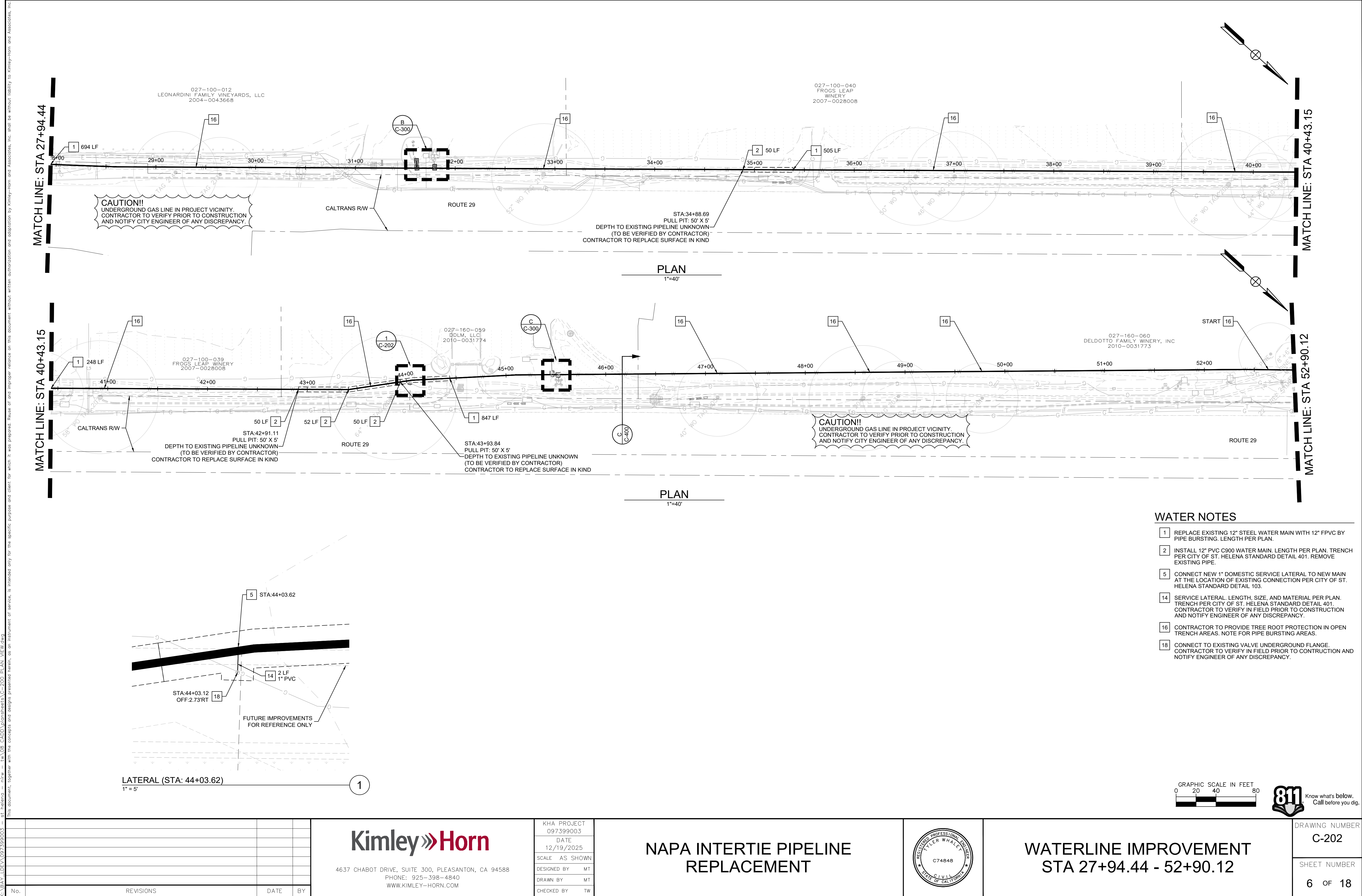


WATERLINE IMPROVEMENT STA 22+85.45 - 27+94.44

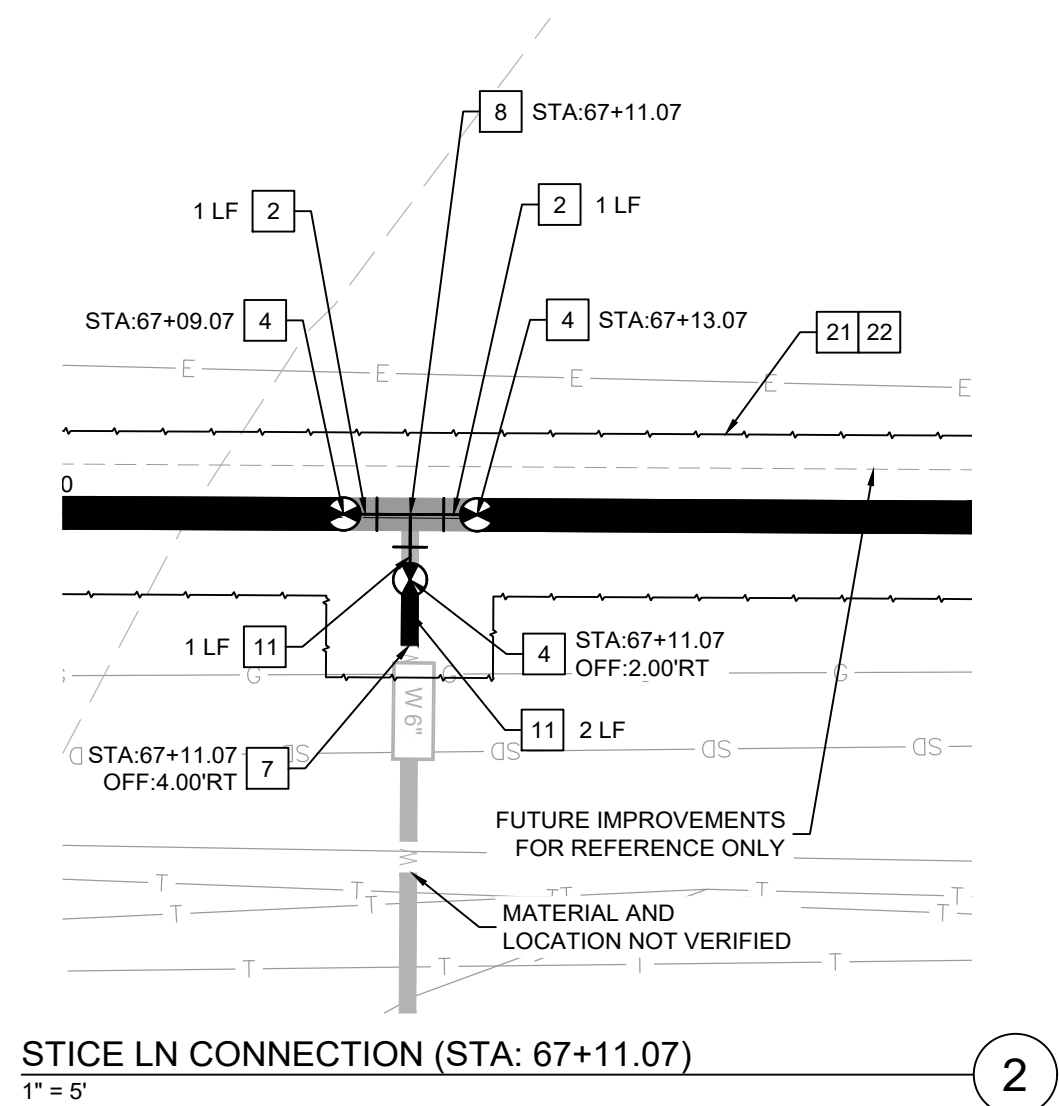
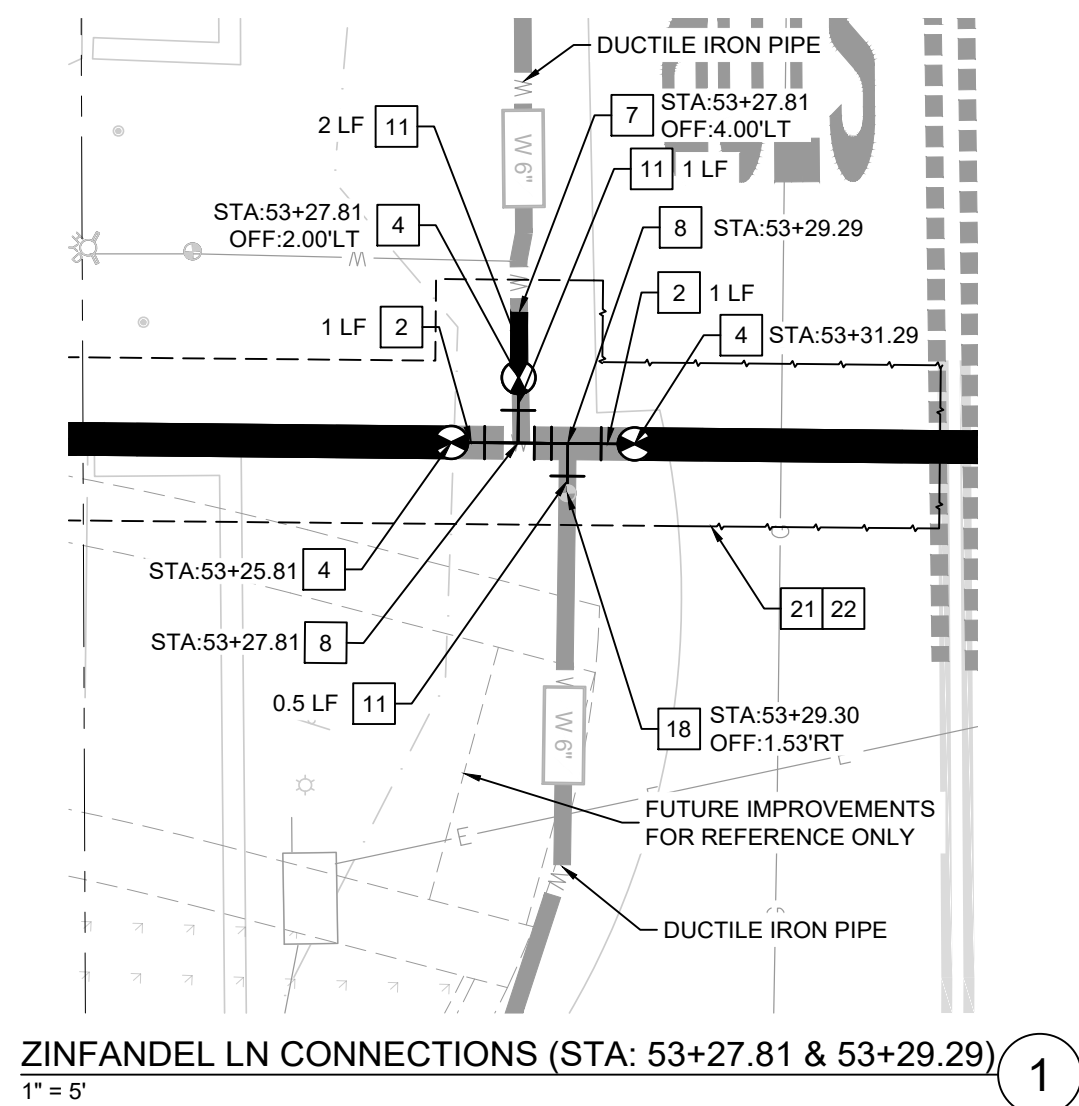
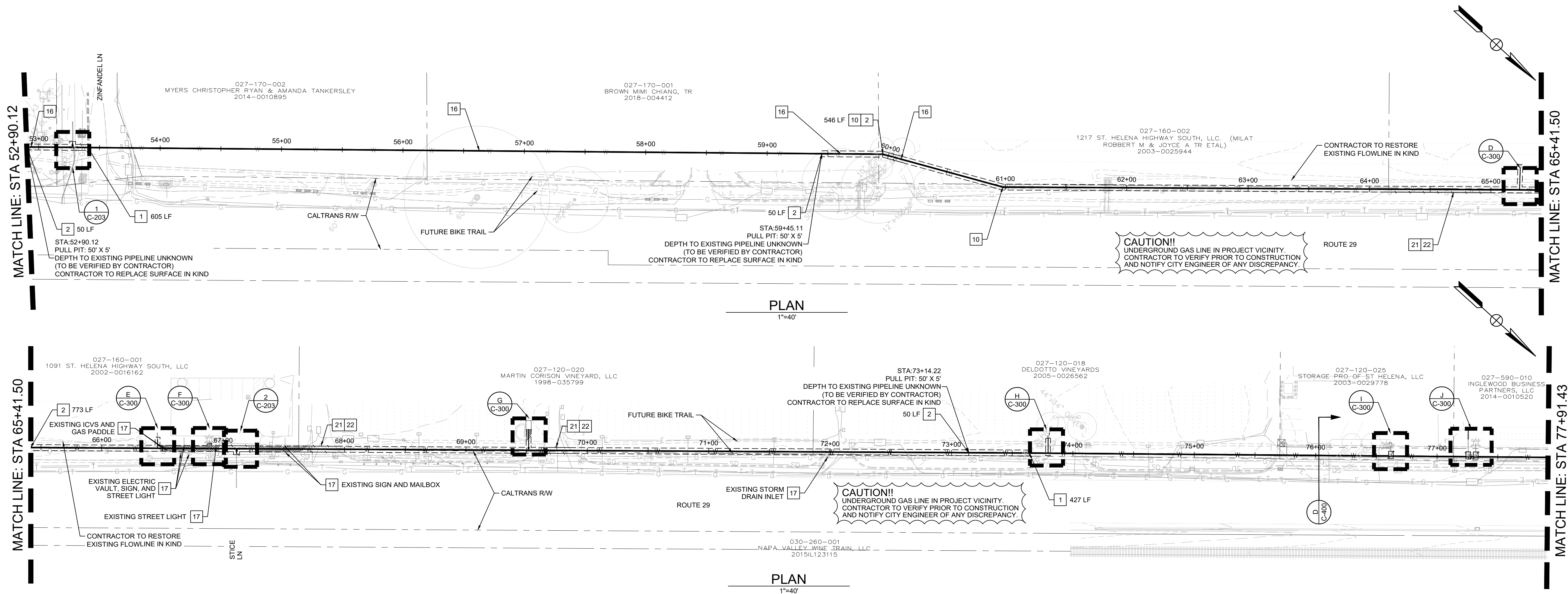
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C-201

SHEET NUMBER

5 OF 18

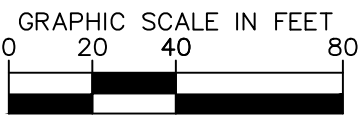


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WATER NOTES

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- 7 CONNECT TO EXISTING WATER LINE PER DETAIL 1, SHEET C-500.
- 8 INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- 10 INSTALL MECHANICALLY RESTRAINED 22.5 DEGREE BEND PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
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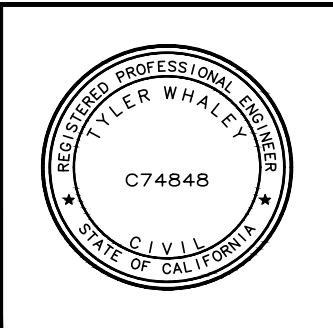


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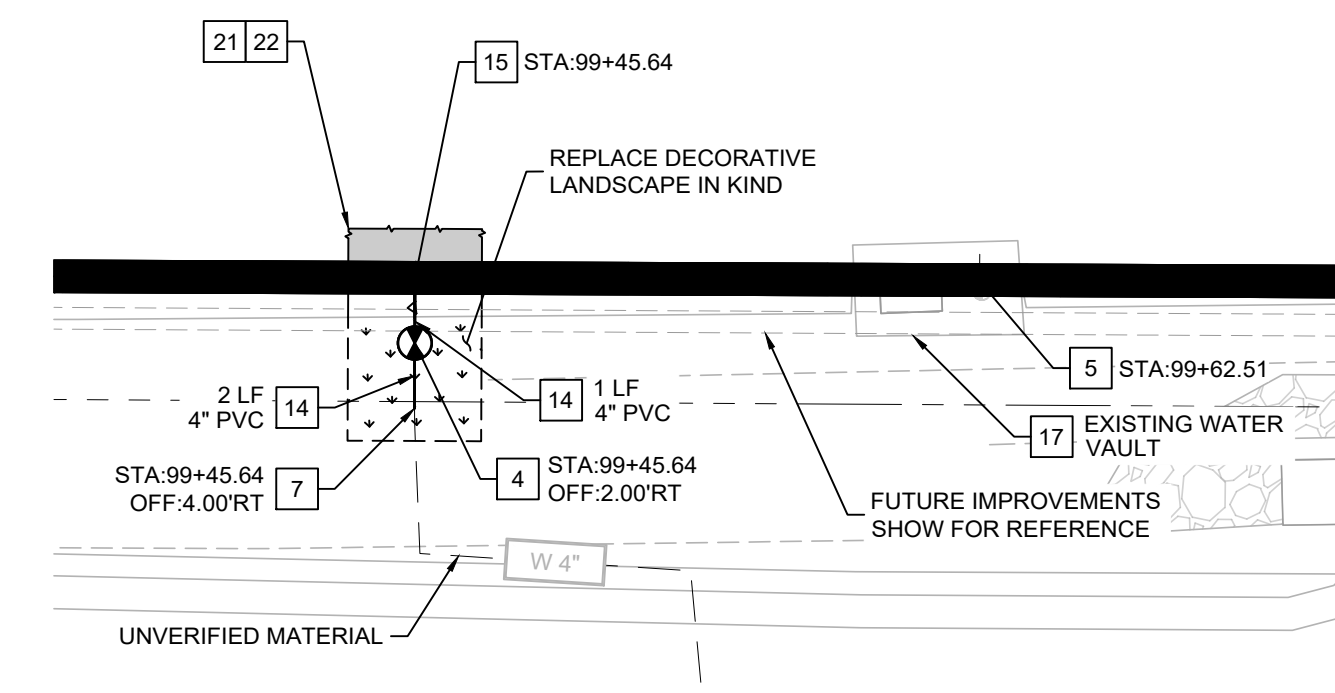
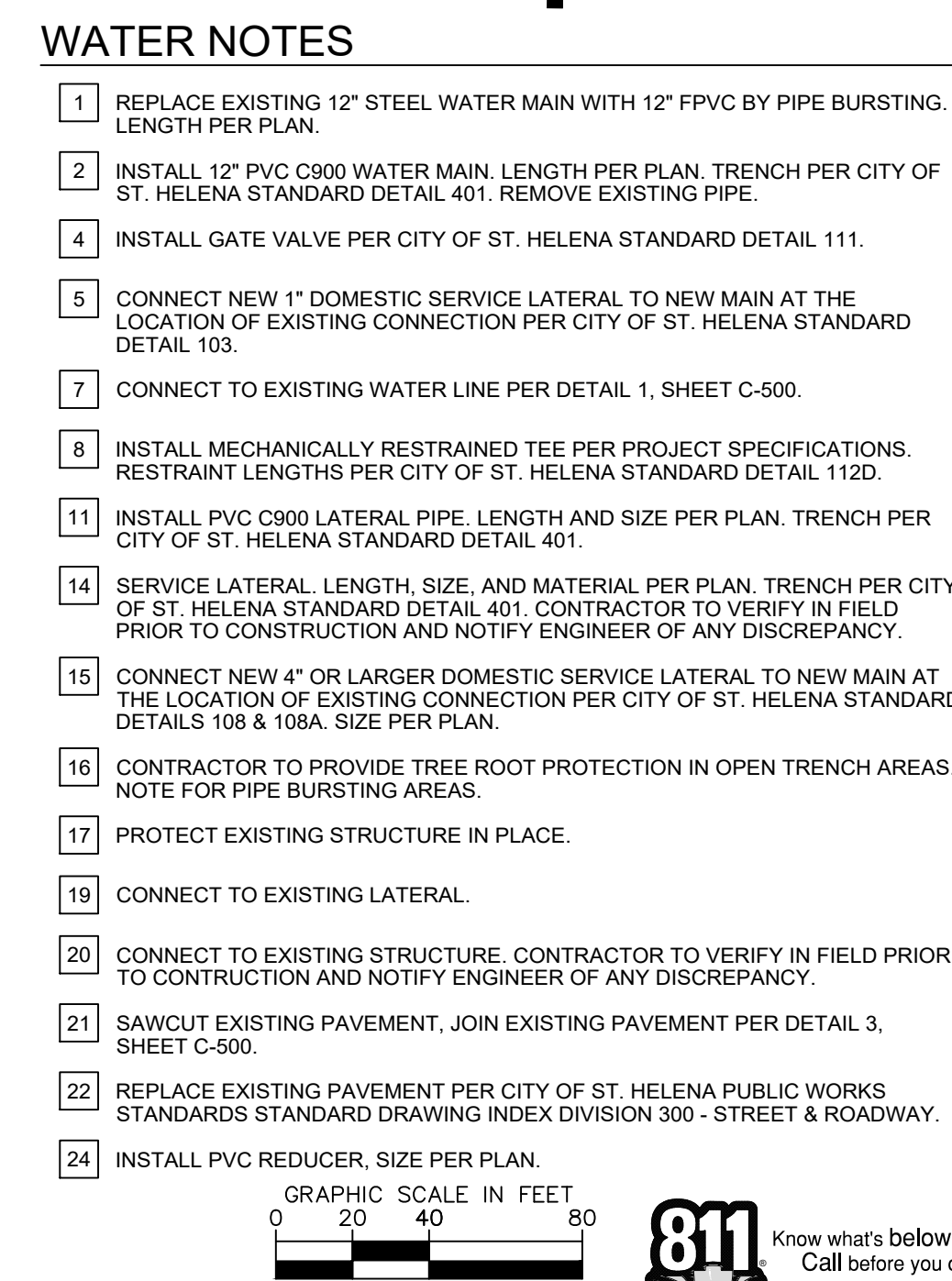
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097399003
DATE
12/19/2025
SCALE AS SHOWN
DESIGNED BY MT
DRAWN BY MT
CHECKED BY TW

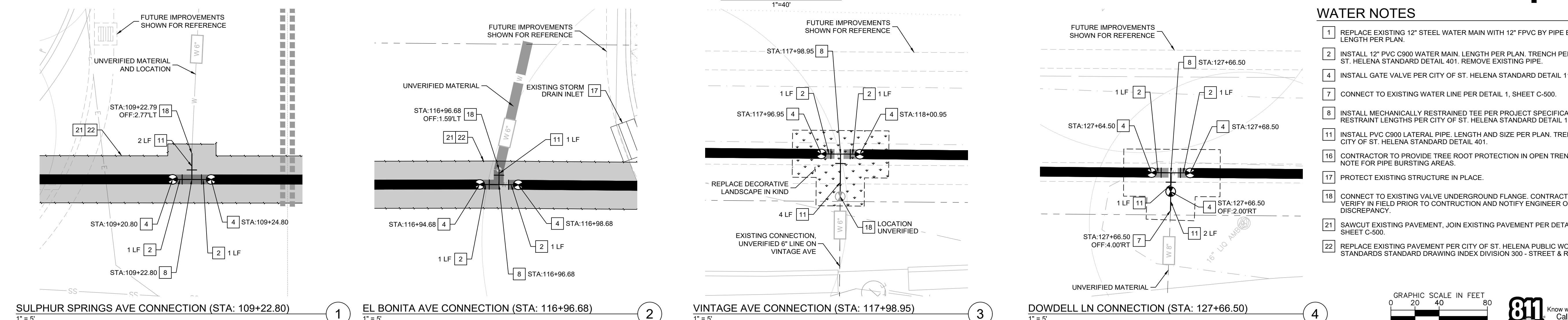
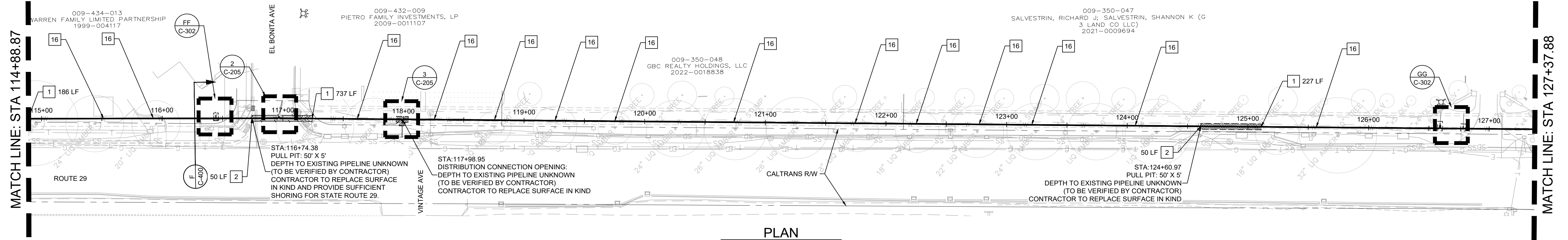
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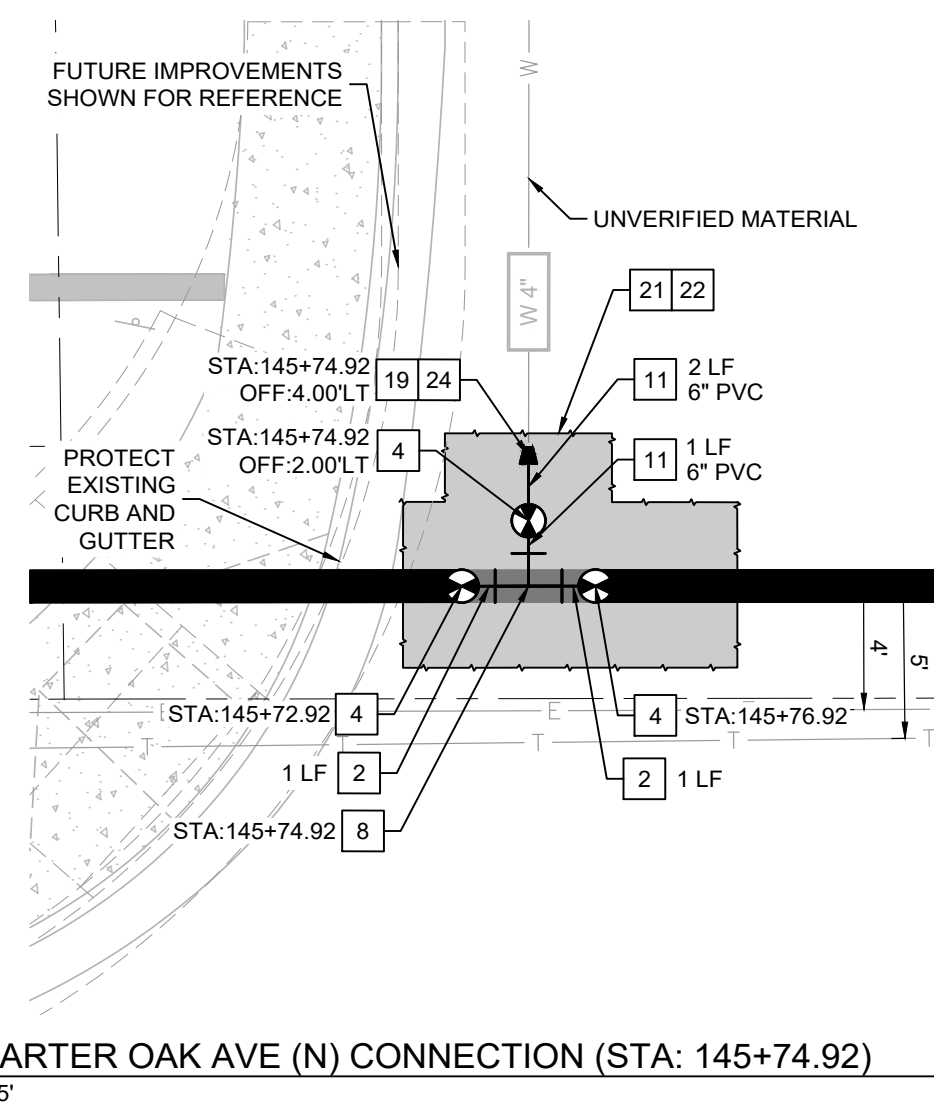
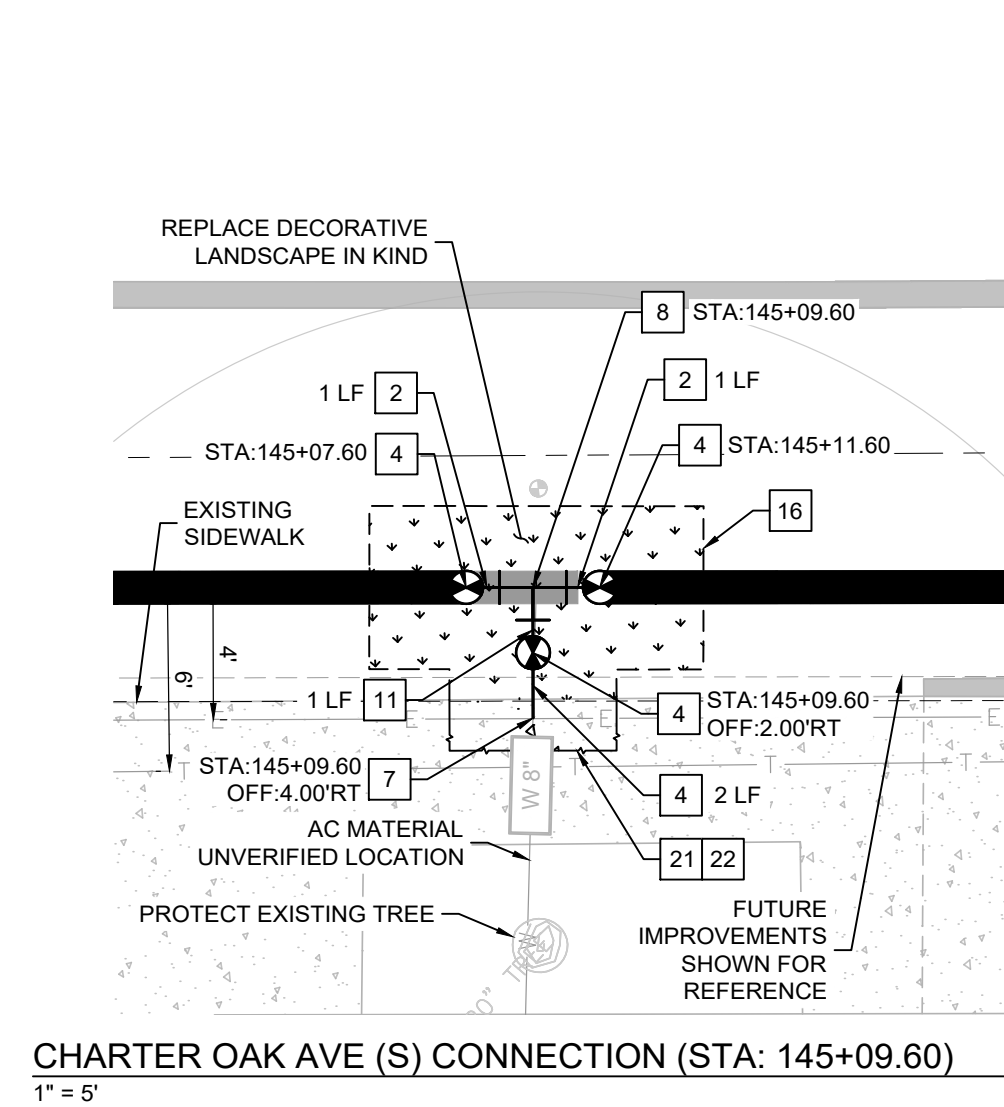
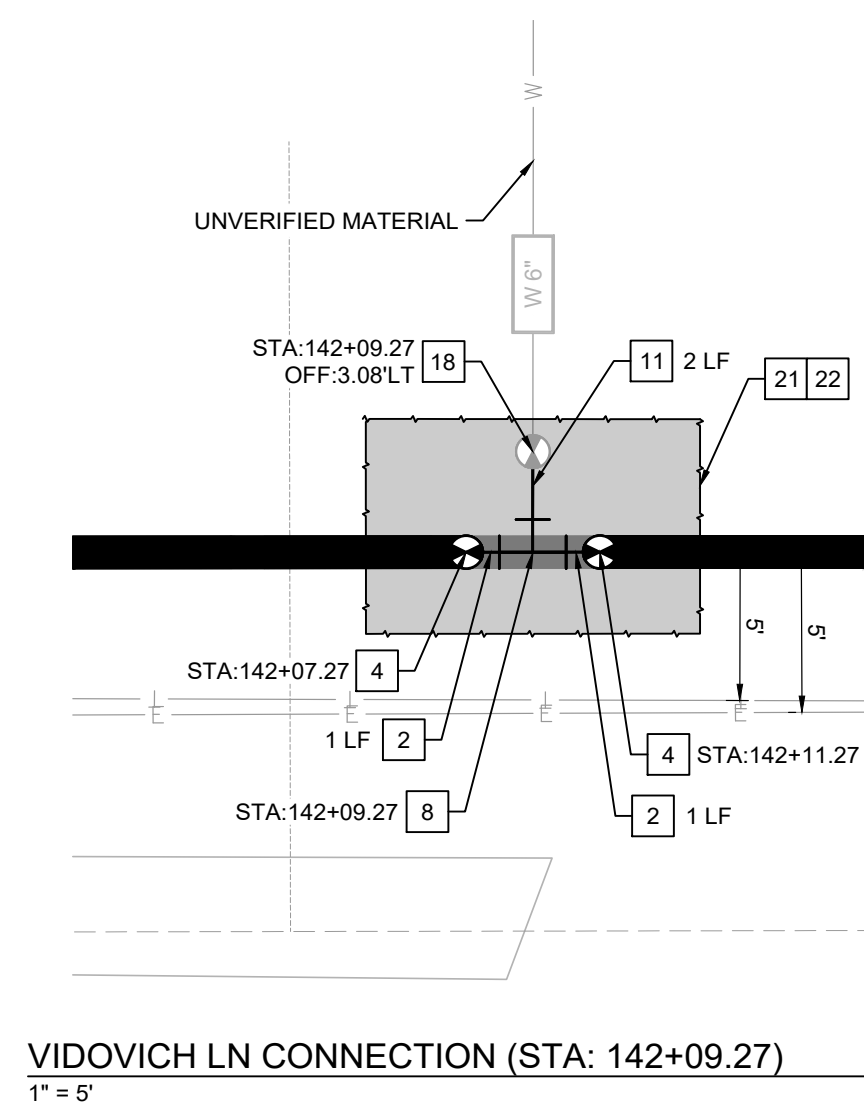
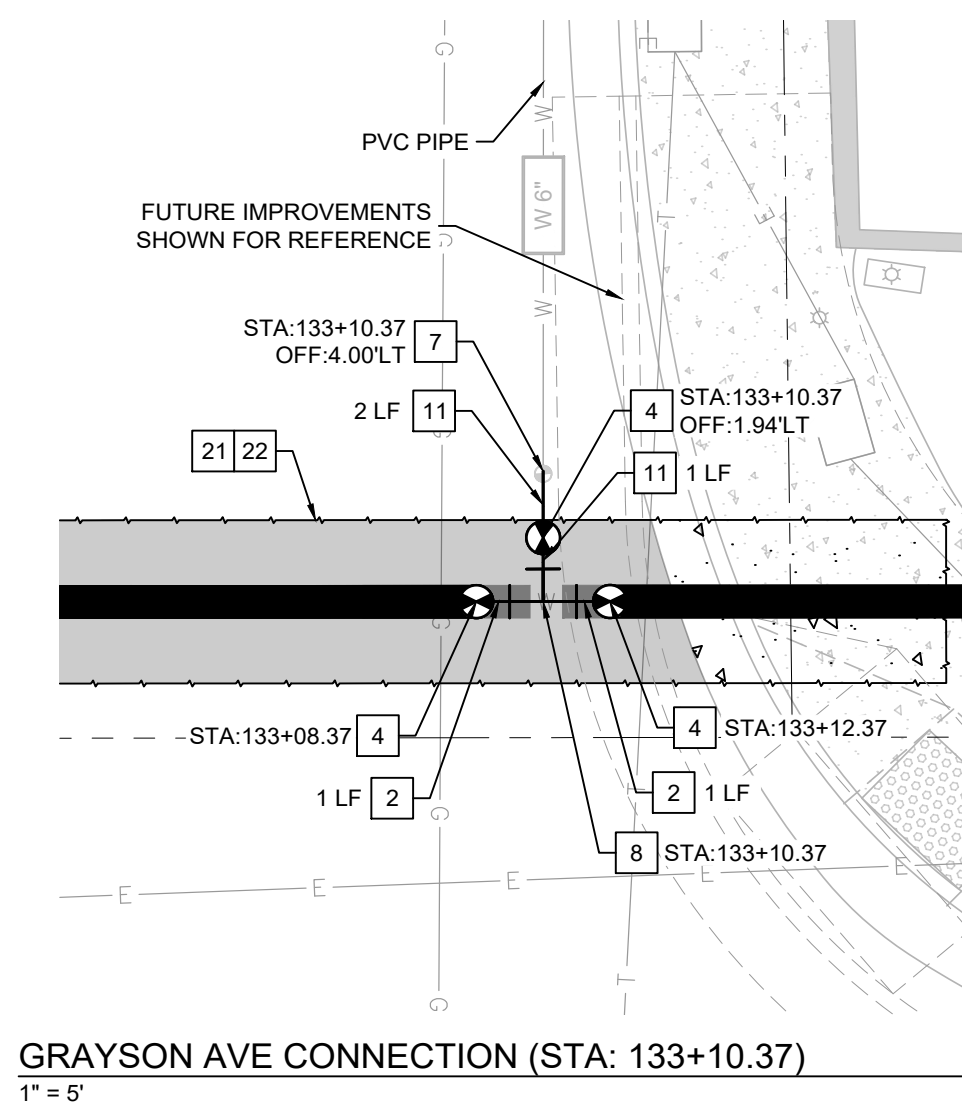
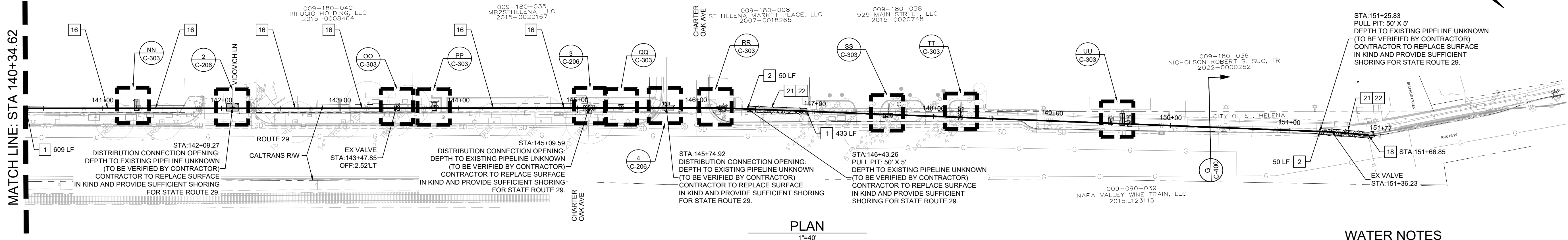


**WATERLINE IMPROVEMENT
STA 52+90.12 - 77+91.43**

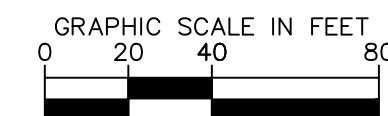
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SHEET NUMBER	7 OF 18



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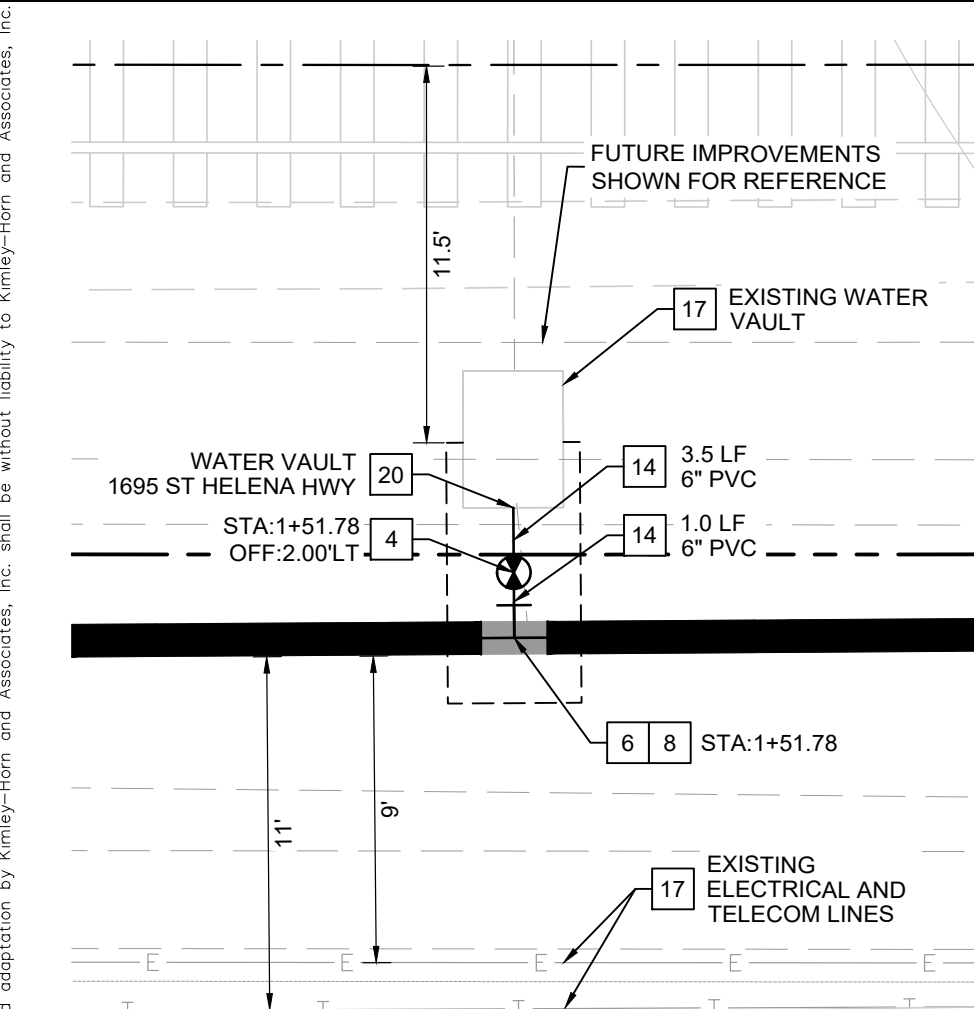


- # WATER NOTES
- | | |
|----|---|
| 1 | 1 REPLACE EXISTING 12" STEEL WATER MAIN WITH 12" FVPC BY PIPE BURSTING LENGTH PER PLAN. |
| 2 | 2 INSTALL 12" PVC C900 WATER MAIN, LENGTH PER PLAN, TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. REMOVE EXISTING PIPE. |
| 4 | 4 INSTALL GATE VALVE PER CITY OF ST. HELENA STANDARD DETAIL 111. |
| 7 | 7 CONNECT TO EXISTING WATER LINE PER DETAIL 1, SHEET C-500. |
| 8 | 8 INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D. |
| 11 | 11 INSTALL PVC C800 LATERAL PIPE, LENGTH AND SIZE PER PLAN, TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. |
| 16 | 16 CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS. |
| 18 | 18 CONNECT TO EXISTING VALVE UNDERGROUND FLOOR. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY. |
| 19 | 19 CONNECT TO EXISTING LATERAL. |
| 21 | 21 SAWCUT EXISTING PAVEMENT, JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500. |
| 22 | 22 REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY. |
| 24 | 24 INSTALL PVC REDUCER, SIZE PER PLAN. |



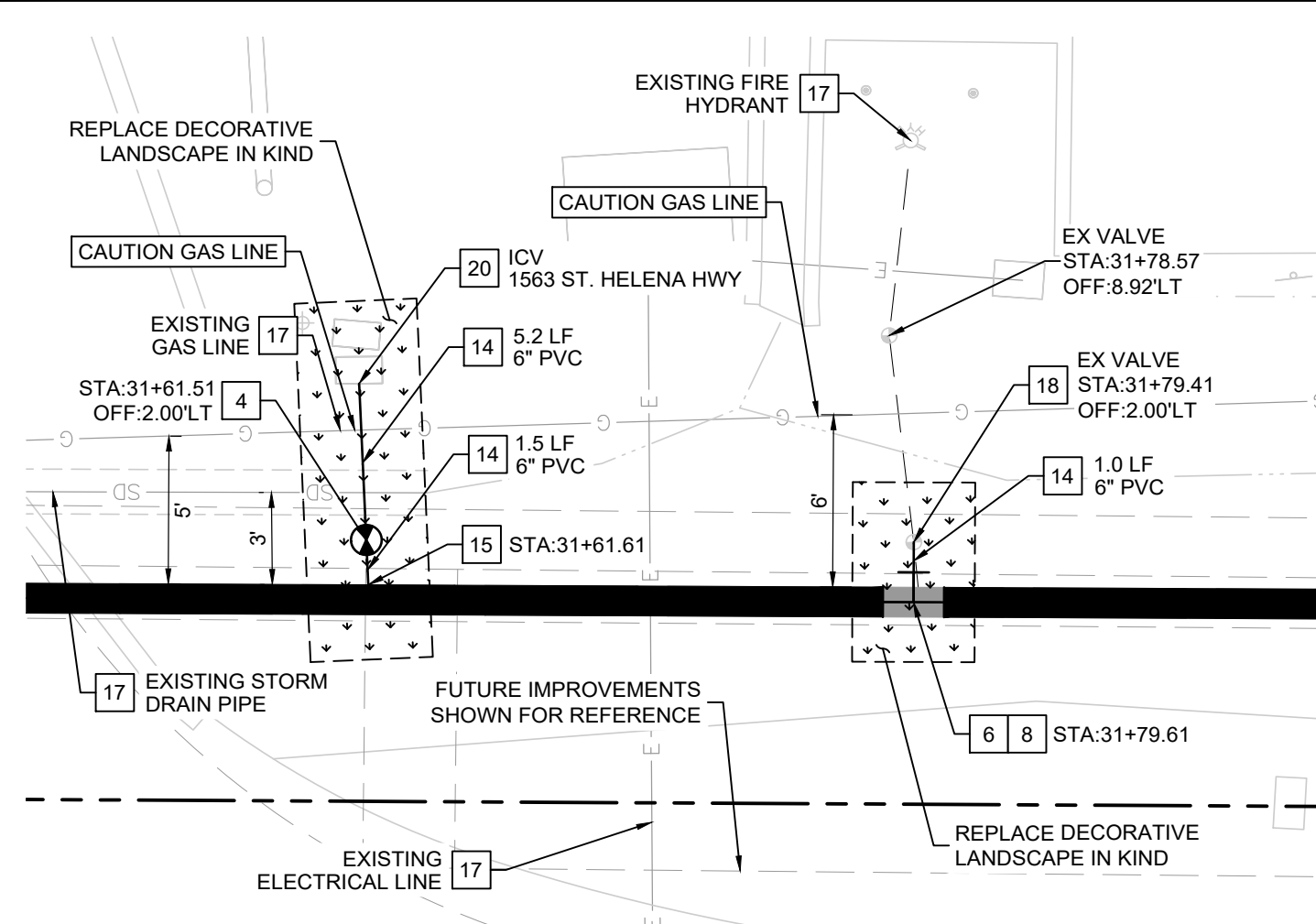
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C-206
SHEET NUMBER
10 OF 18

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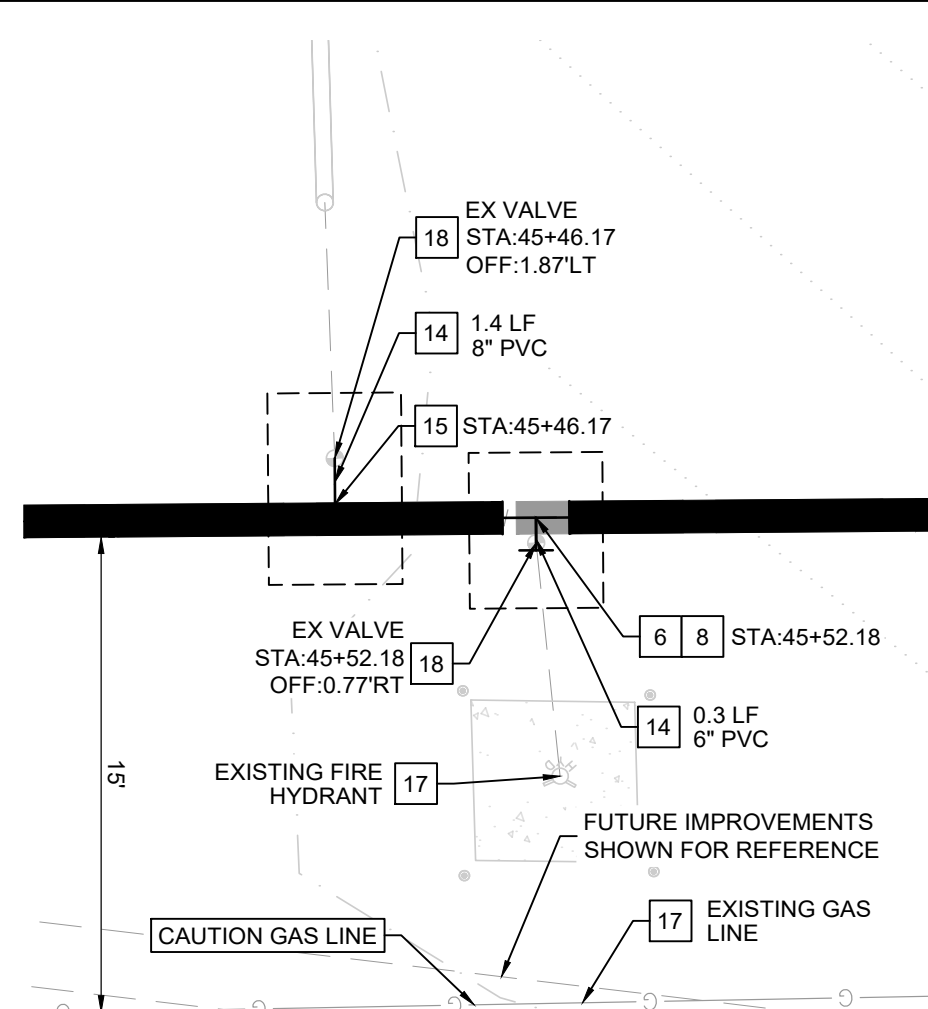
VAULT (STA: 1+51.78)
1" = 5'

(A)



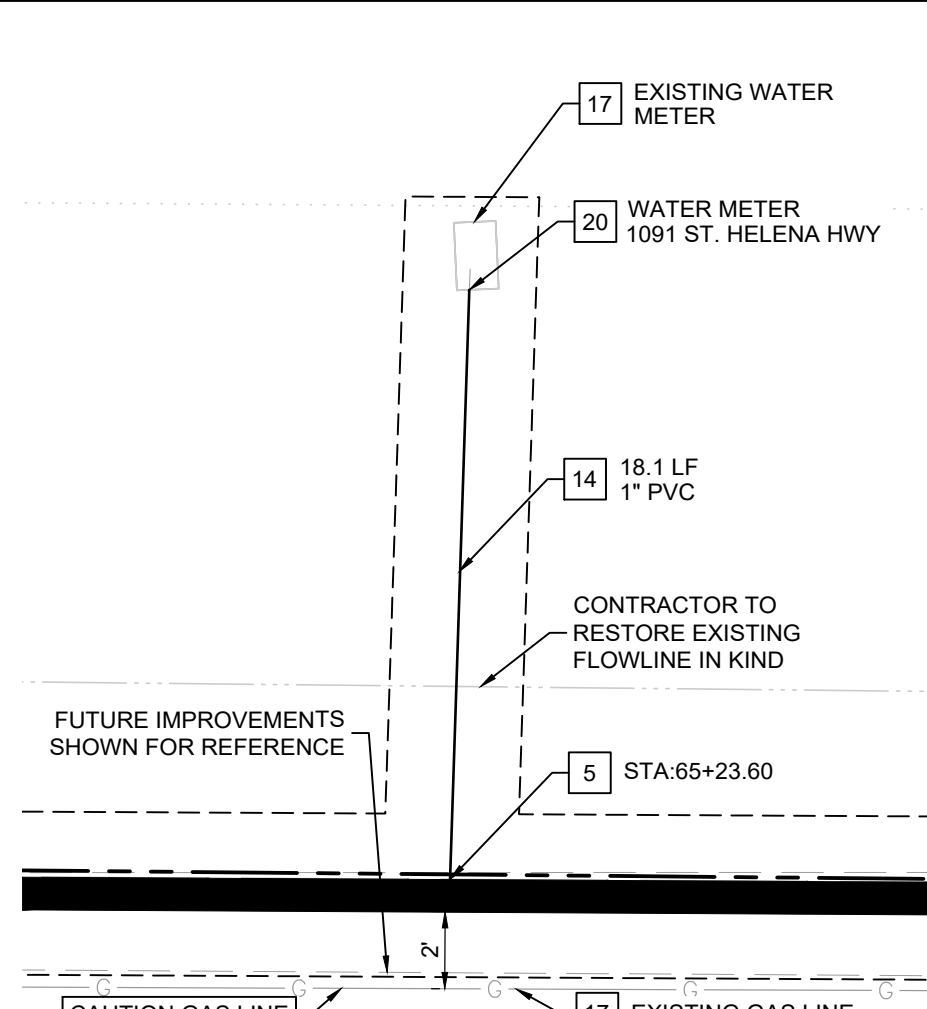
ICV (STA: 31+61.61) & HYDRANT (STA: 31+79.61)
1" = 5'

(B)



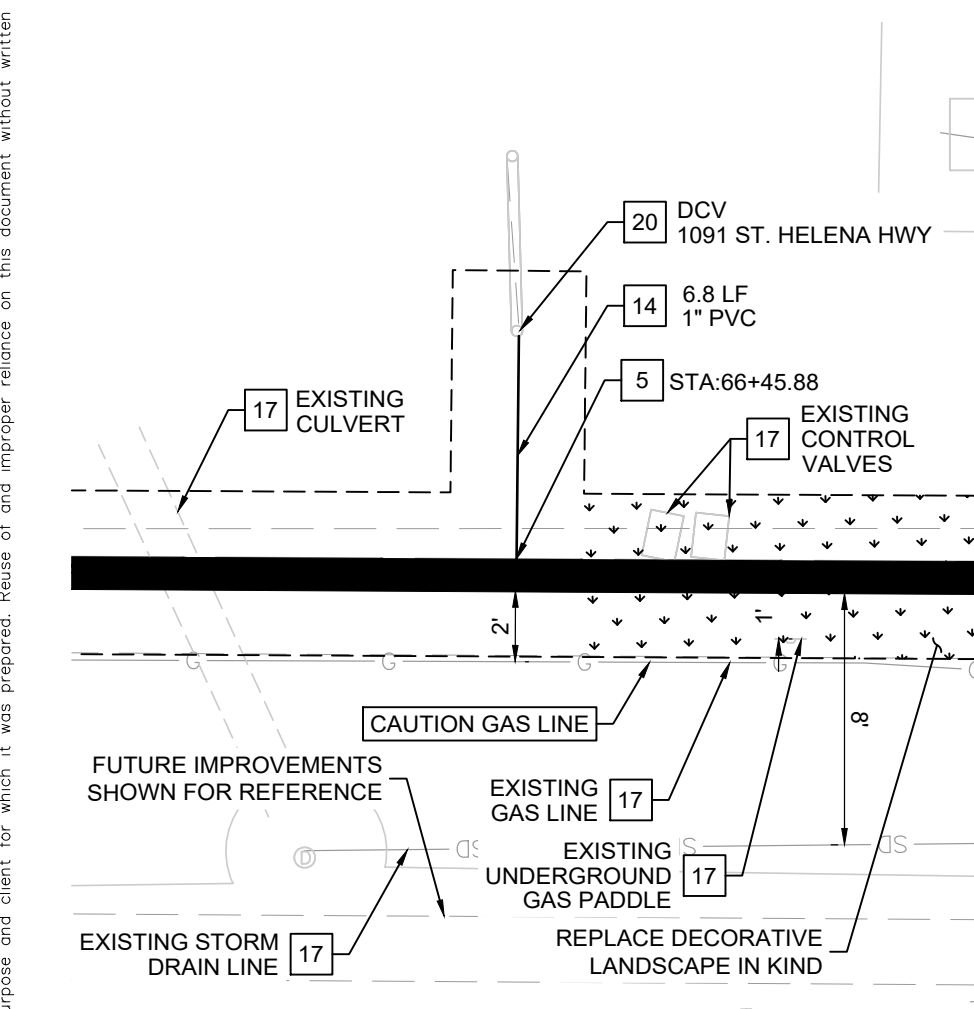
METER (45+46.17) & HYDRANT (STA: 45+52.18)
1" = 5'

(C)



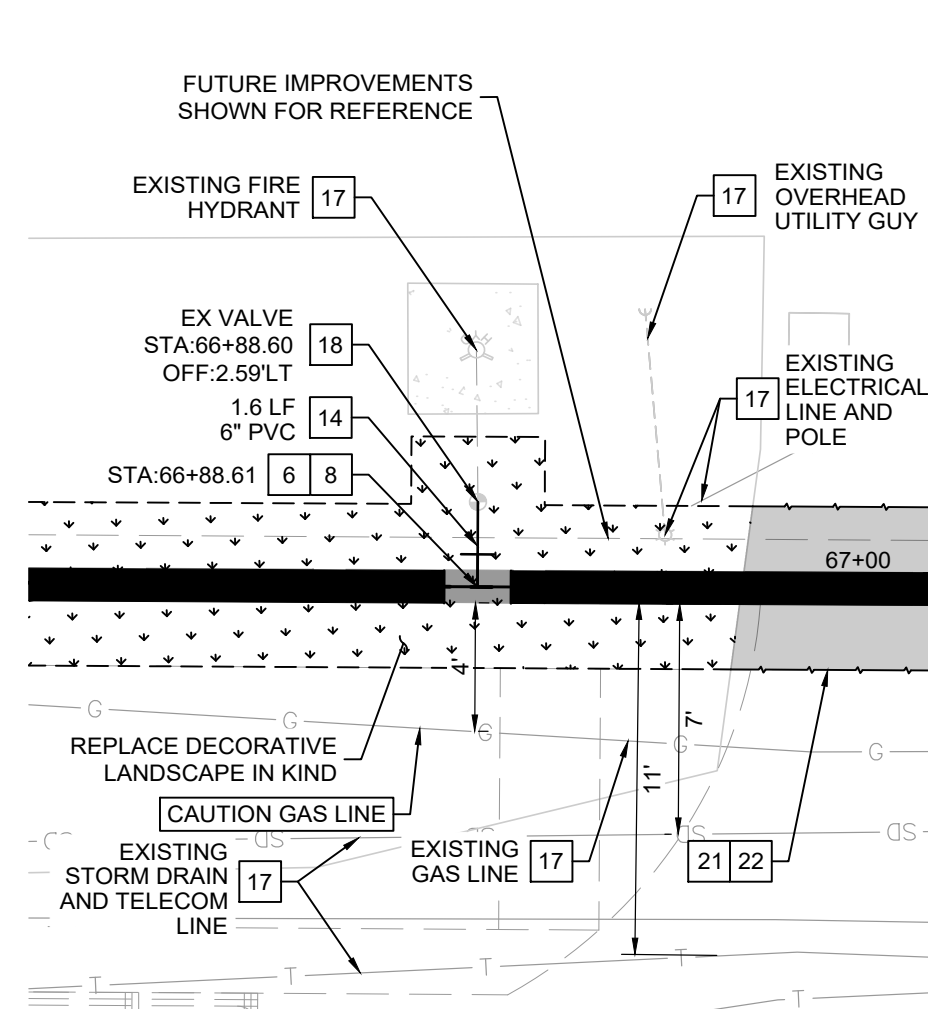
METER (STA: 65+23.60)
1" = 5'

(D)



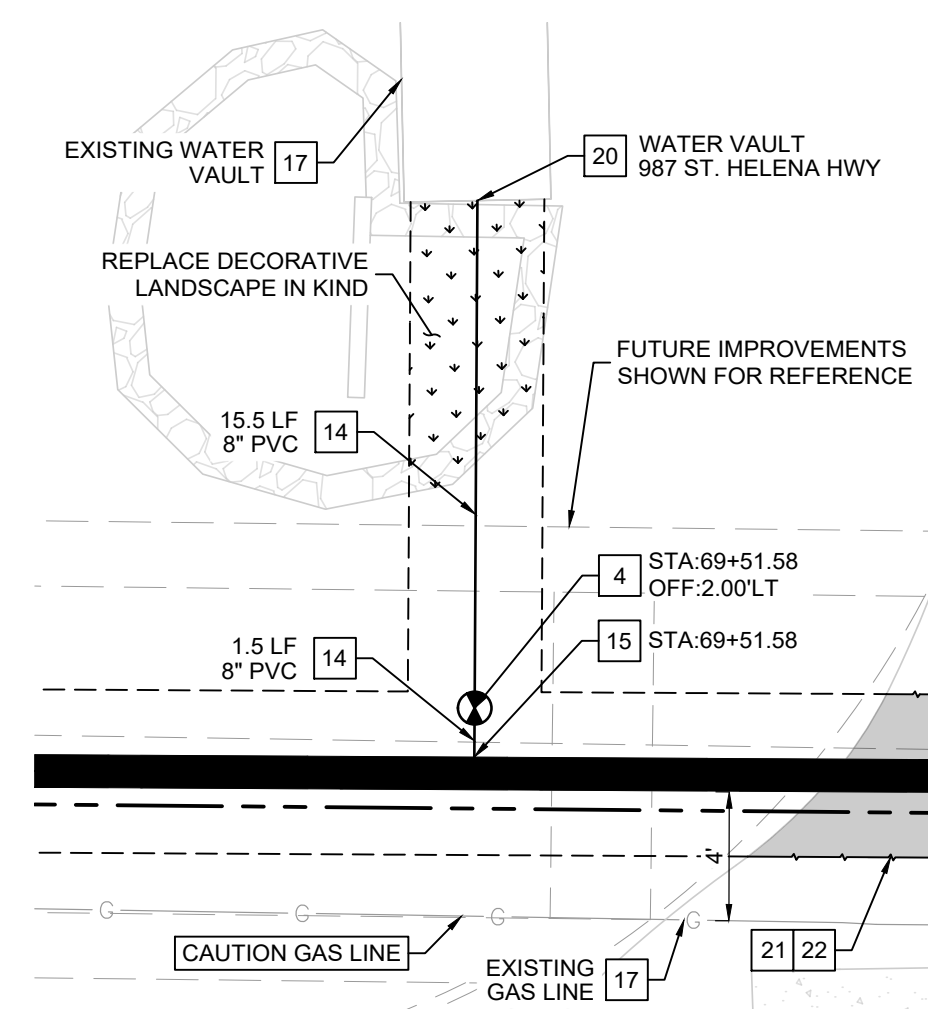
DCV (STA: 66+45.88)
1" = 5'

(E)



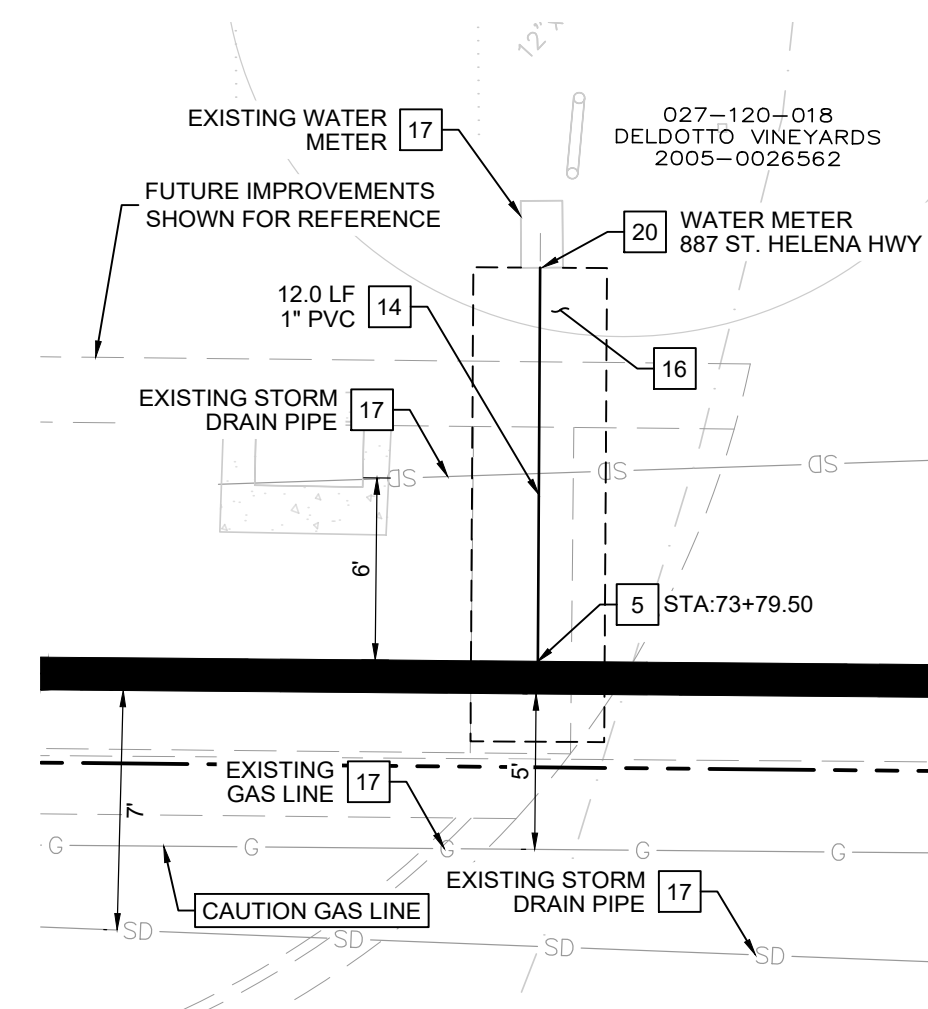
HYDRANT (STA: 66+88.61)
1" = 5'

(F)



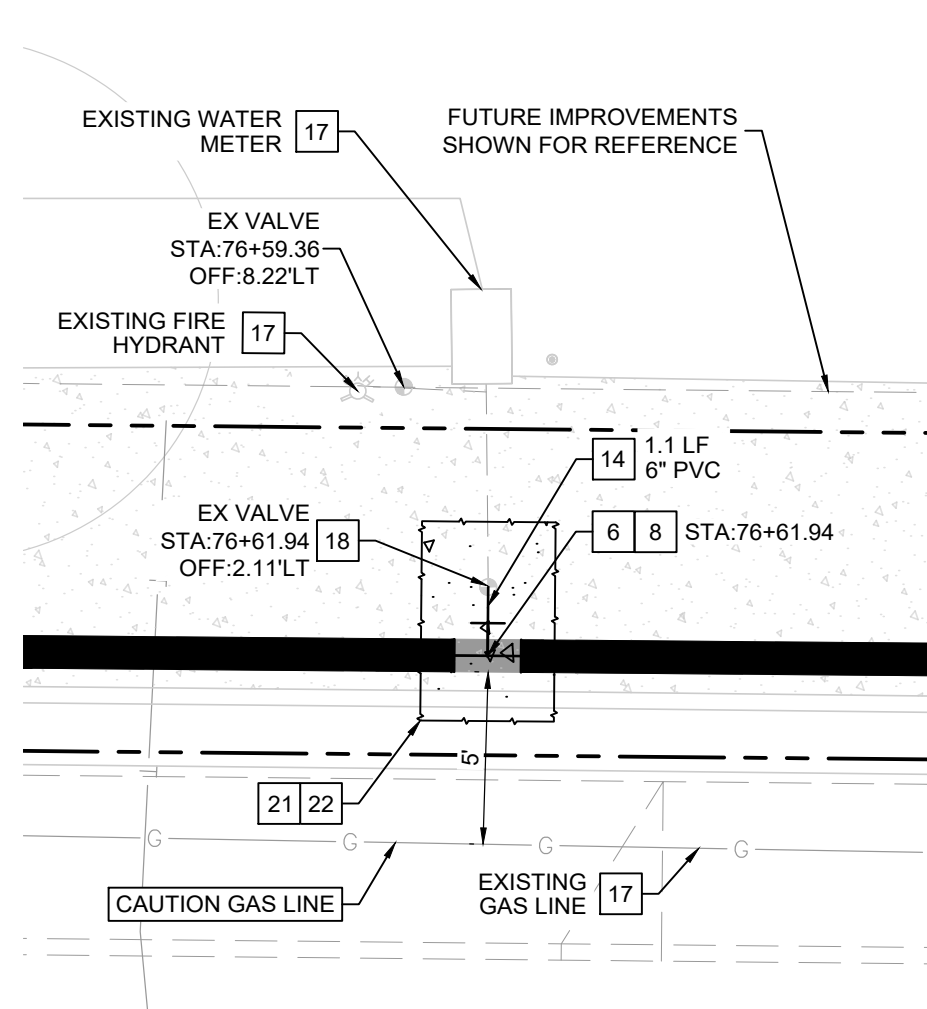
VAULT (STA: 69+51.58)
1" = 10'

(G)



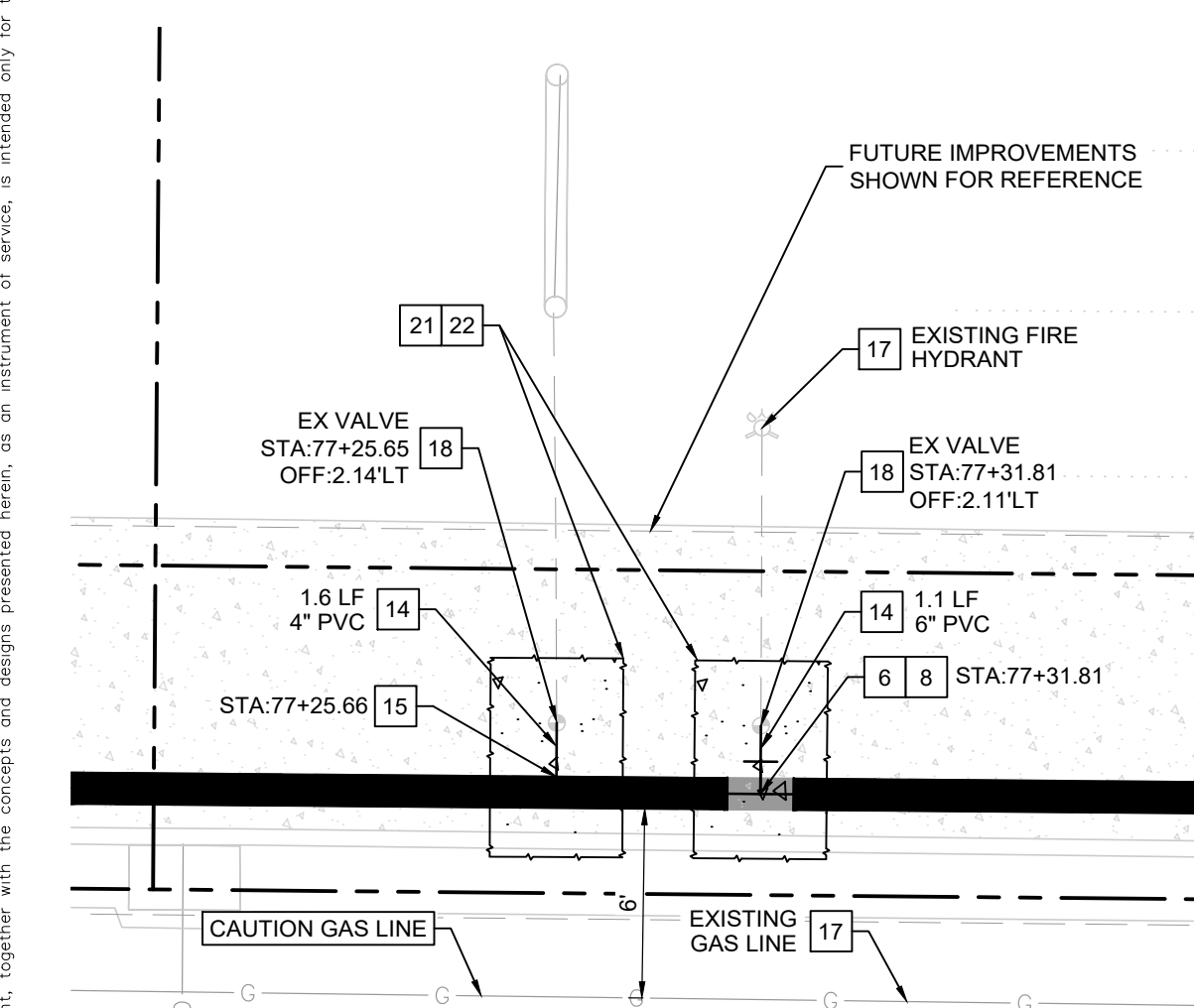
METER (STA: 73+79.50)
1" = 10'

(H)



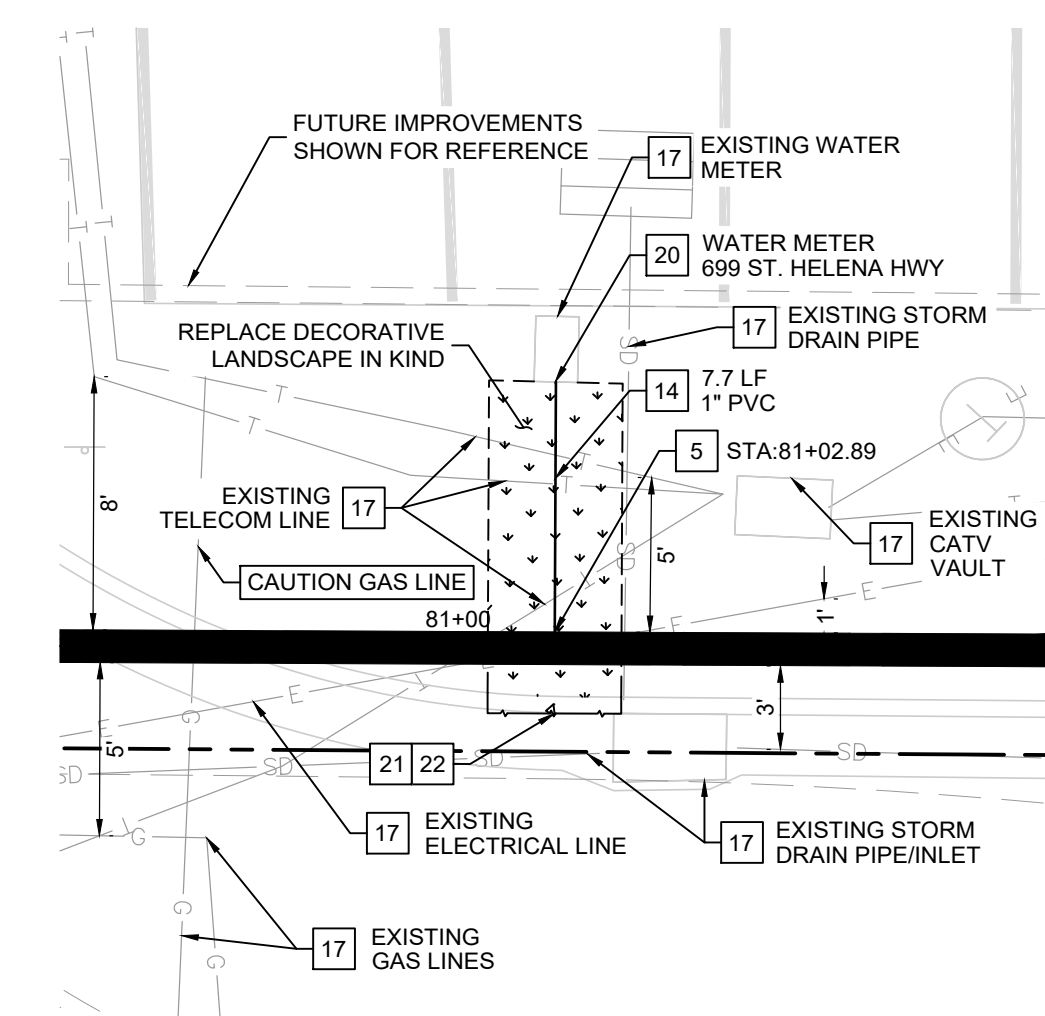
METER AND HYDRANT (STA: 76+61.94)
1" = 10'

(I)



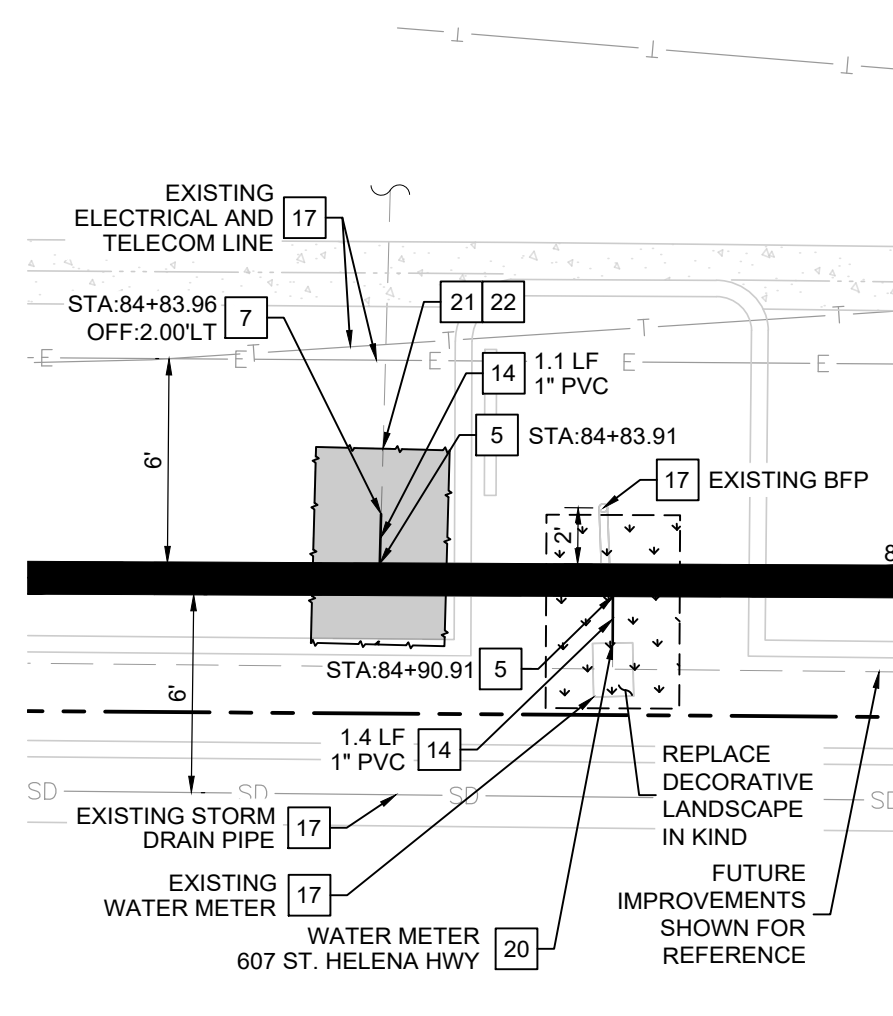
DCV (STA: 77+25.66) & HYDRANT (STA: 77+31.81)
1" = 10'

(J)



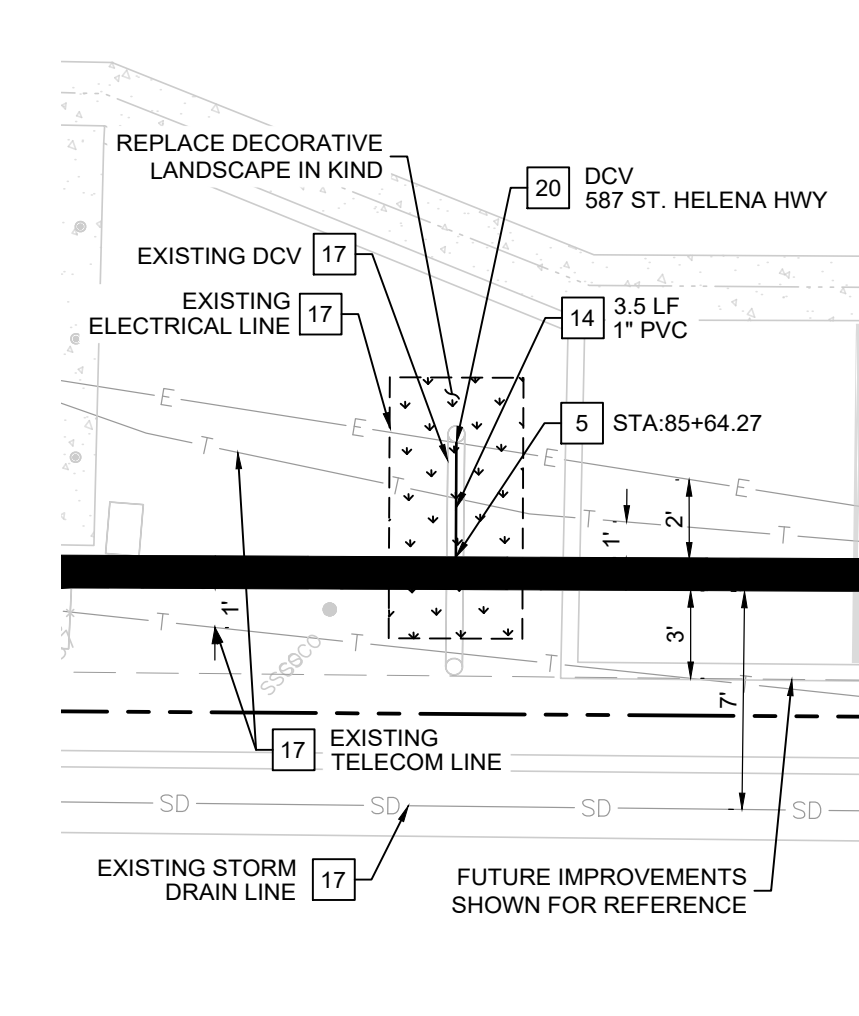
METER (STA: 81+02.89)
1" = 5'

(K)



LATERAL (STA: 84+83.91) METER (STA: 84+90.91)
1" = 5'

(L)



DCV (STA: 85+64.27)
1" = 5'

(M)

WATER NOTES

- INSTALL GATE VALVE PER CITY OF ST. HELENA STANDARD DETAIL 111.
- CONNECT NEW 1" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103.
- CONNECT NEW FIREWATER SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 102.
- CONNECT TO EXISTING WATER LINE PER DETAIL 1, SHEET C-500.
- INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- SERVICE LATERAL LENGTH, SIZE, AND MATERIAL PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT NEW 4" OR LARGER DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAILS 106 & 108A. SIZE PER PLAN.
- CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS.
- PROTECT EXISTING STRUCTURE IN PLACE.
- CONNECT TO EXISTING VALVE UNDERGROUND FLANGE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT TO EXISTING STRUCTURE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- SAWCUT EXISTING PAVEMENT. JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500.
- REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY.



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KHA PROJECT
097399003
DATE
12/19/2025
SCALE AS SHOWN
DESIGNED BY MT
DRAWN BY MT
CHECKED BY TW

NAPA INTERTIE PIPELINE REPLACEMENT



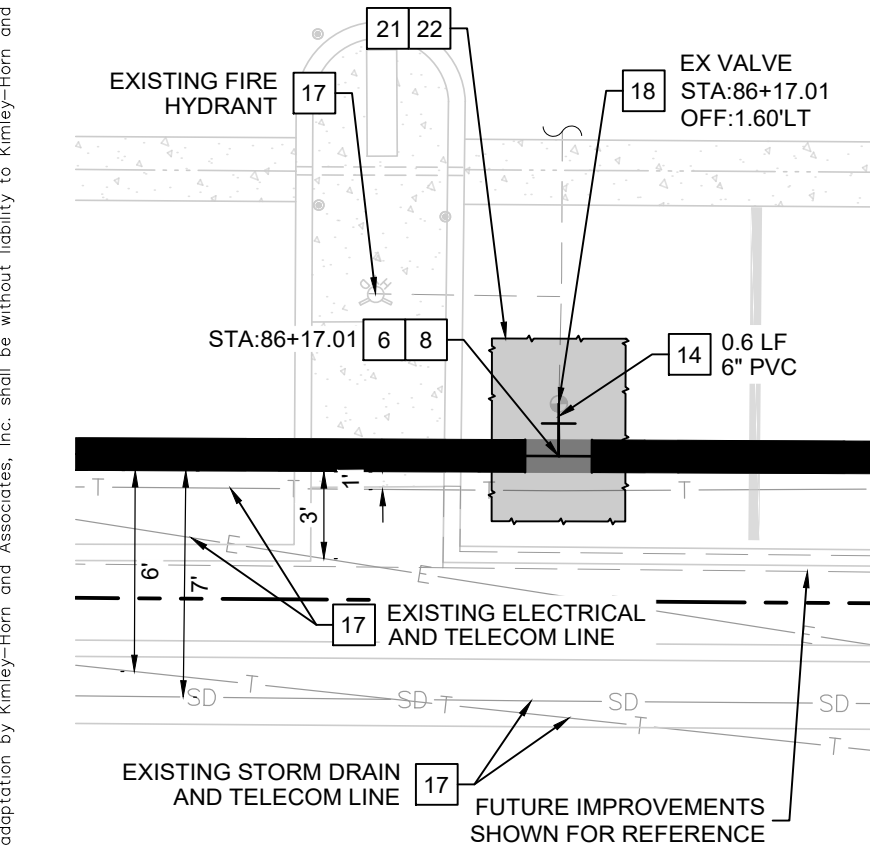
CONNECTION ENLARGEMENTS

DRAWING NUMBER
C-300

SHEET NUMBER

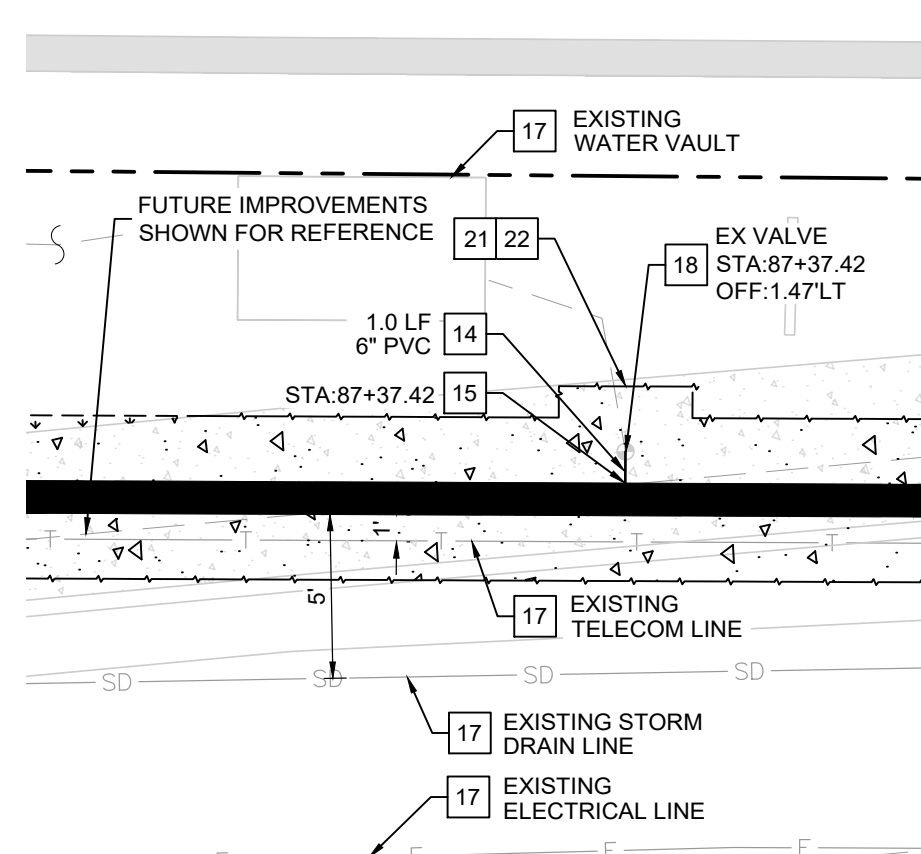
11 OF 18

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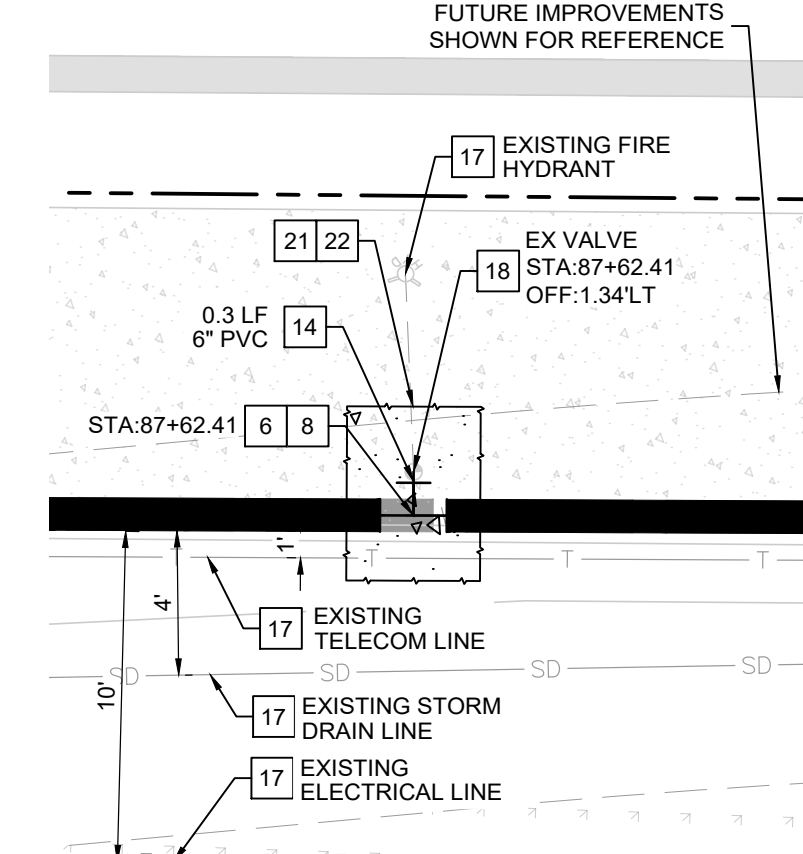
HYDRANT (STA: 86+17.01)
1" = 5'

N



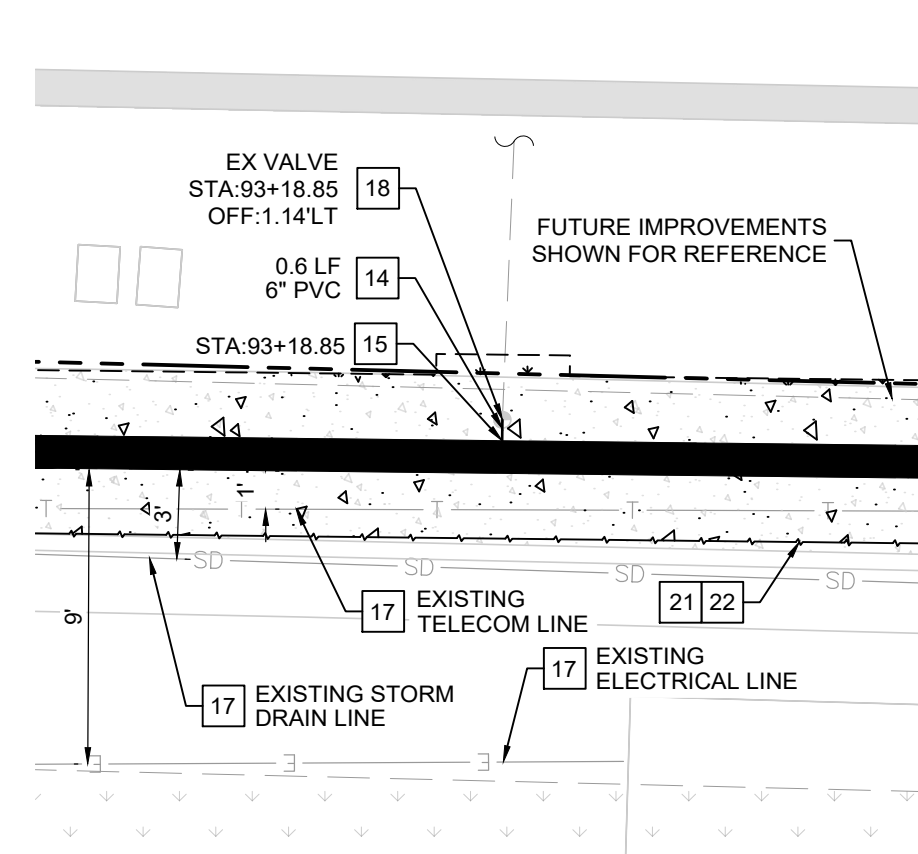
VAULT (STA: 87+37.42)
1" = 5'

O



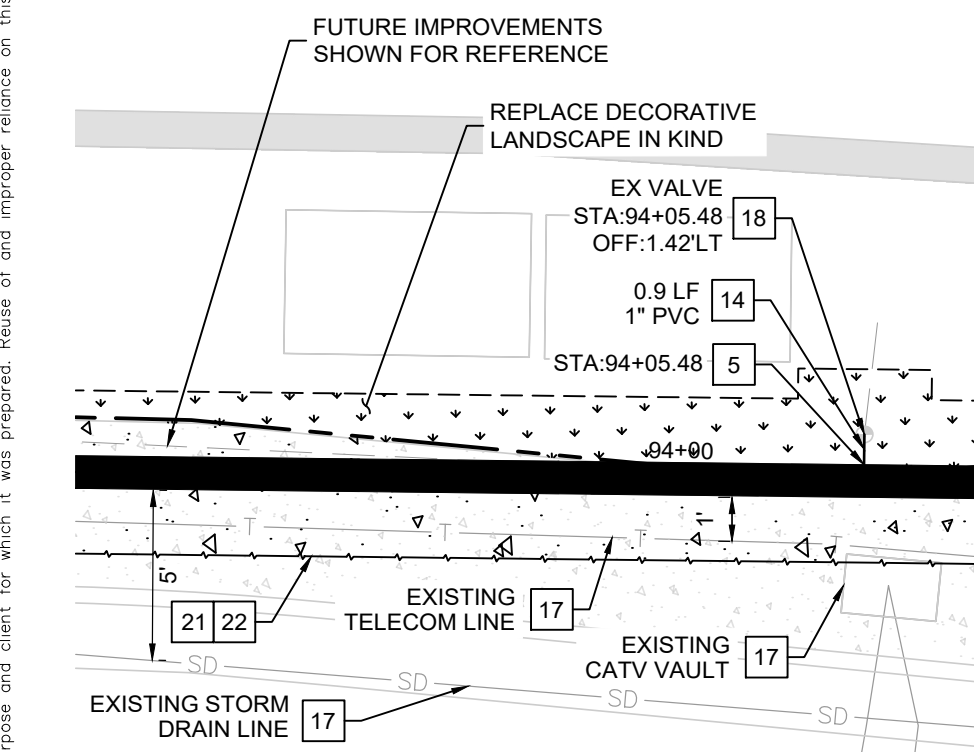
HYDRANT (STA: 87+62.41)
1" = 5'

P



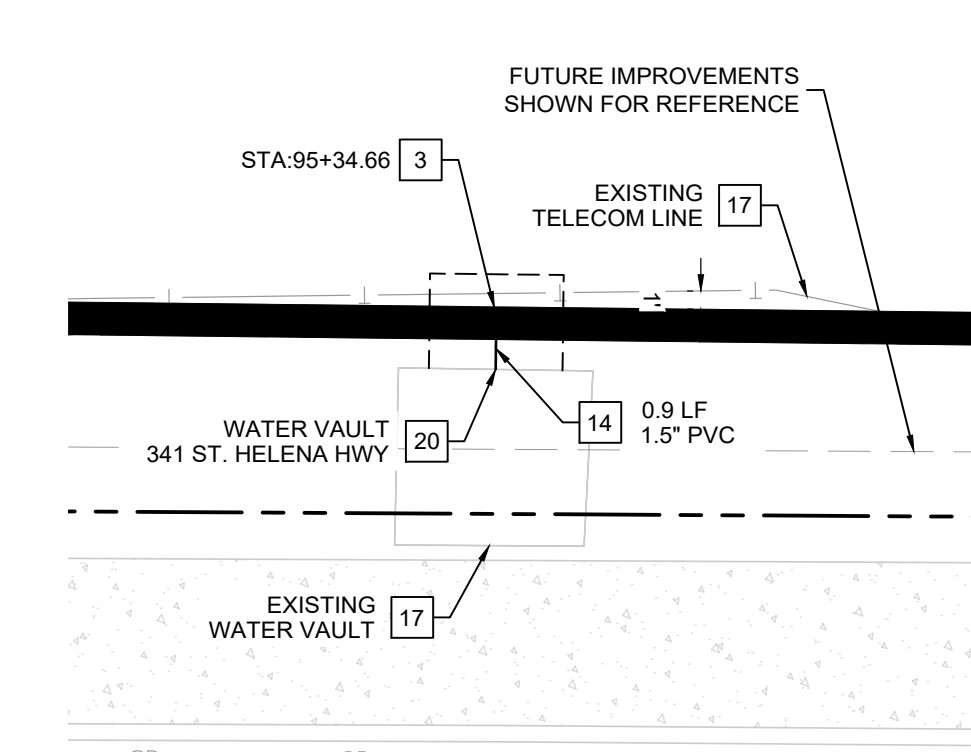
VAULT AND DCV (STA: 93+18.85)
1" = 5'

Q



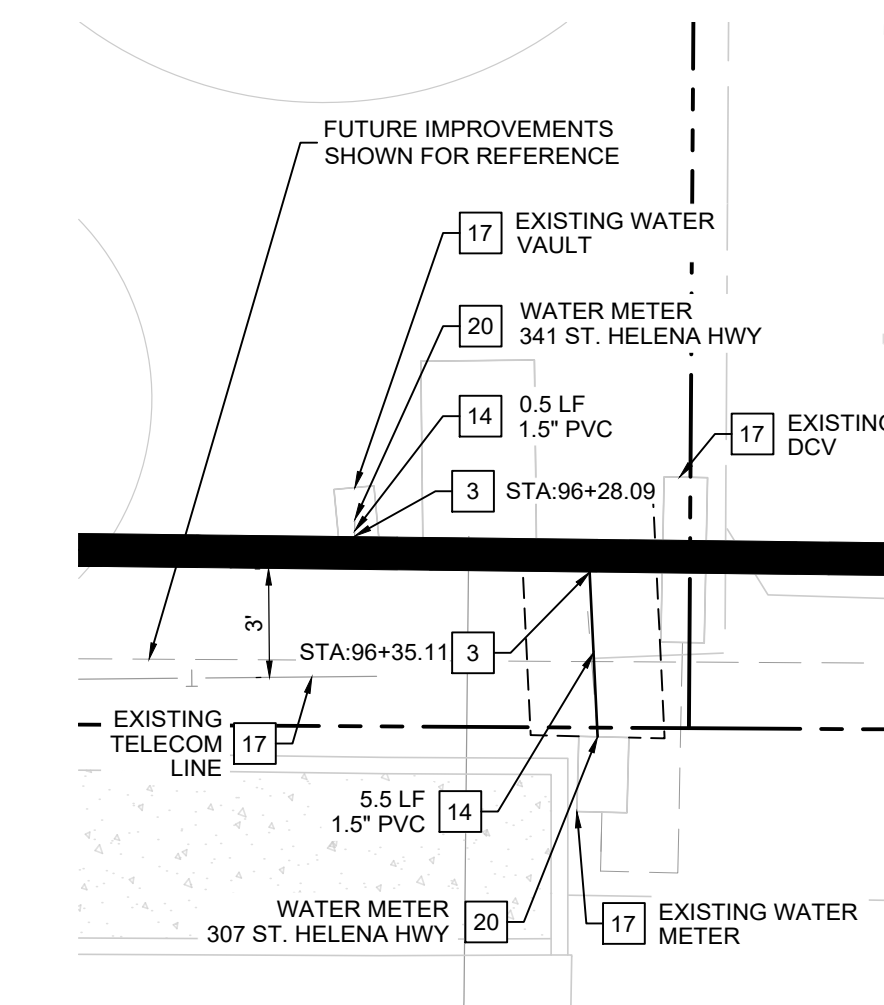
VAULT (LINE \"B\" STA: 94+05.48)
1" = 5'

R



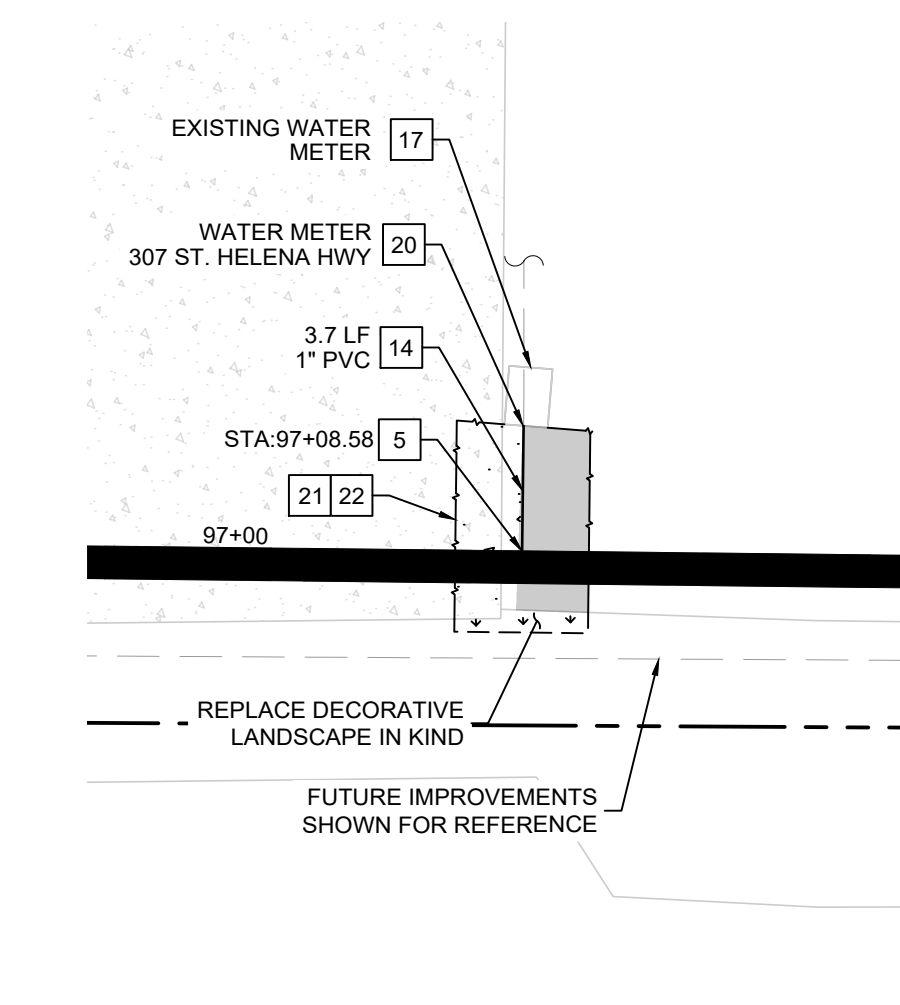
VAULT (STA: 95+34.66)
1" = 5'

S



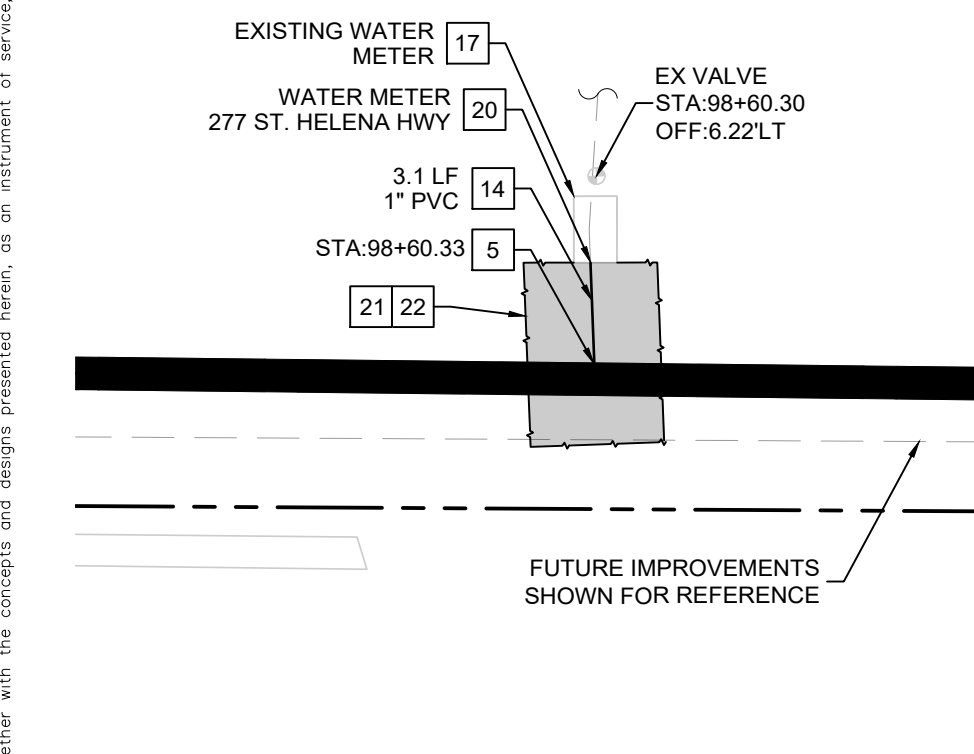
METERS (STA: 96+28.09 & 96+35.11)
1" = 5'

T



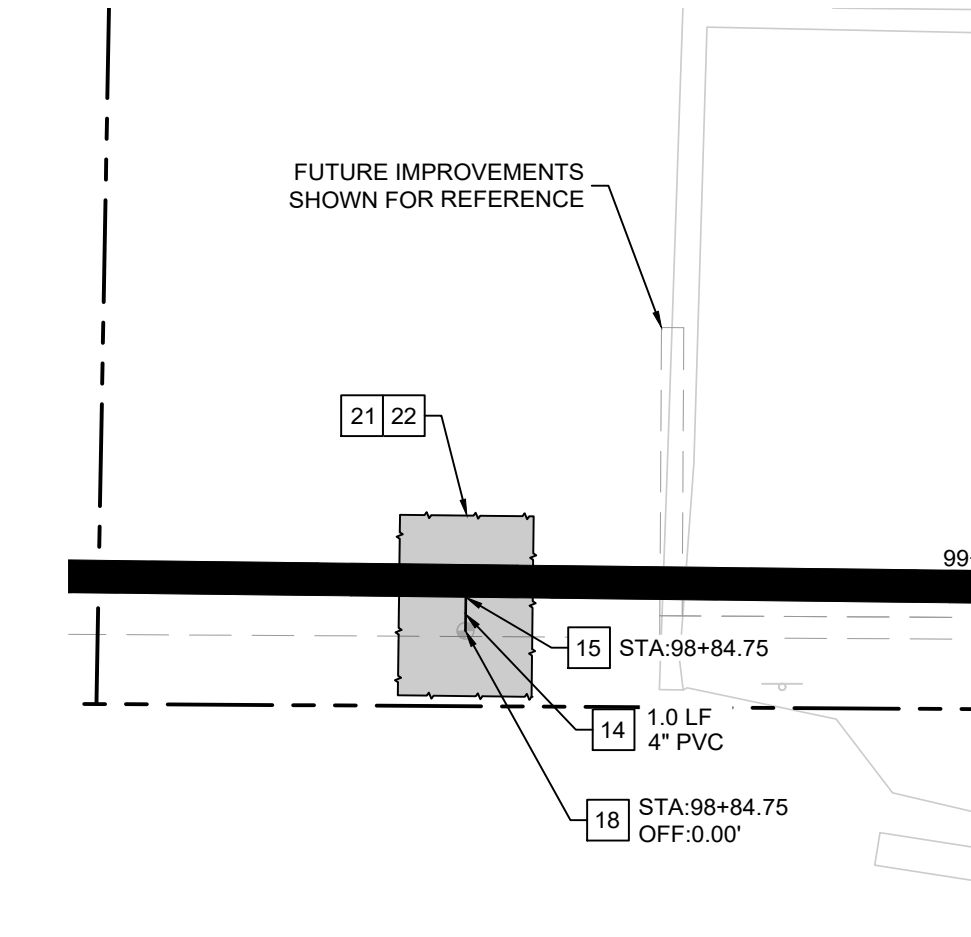
METER (STA: 97+08.58)
1" = 5'

U



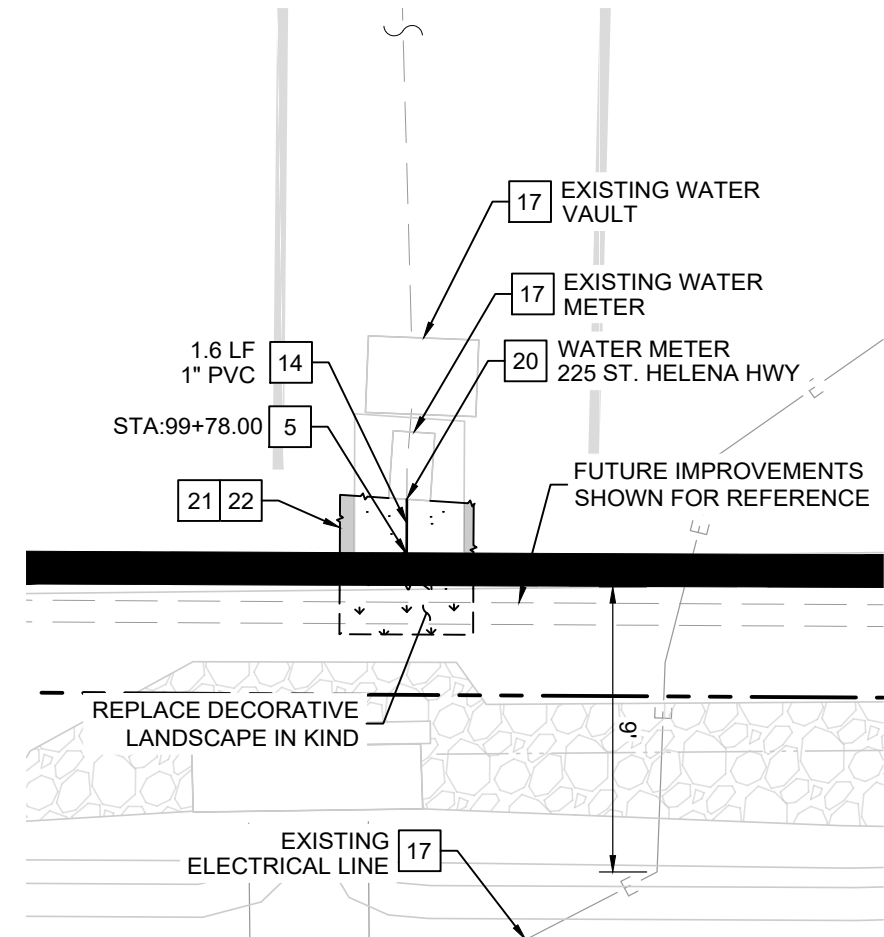
METER (STA: 98+60.33)
1" = 5'

V



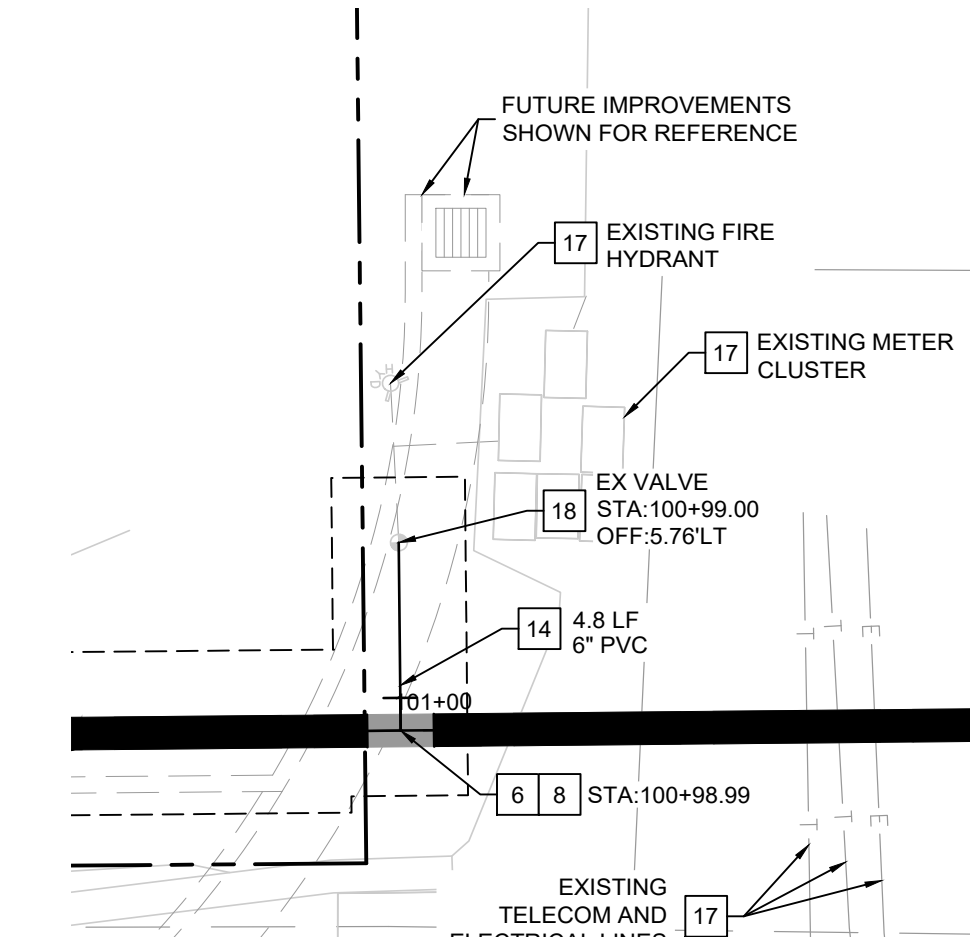
VALVE (STA: 98+84.75)
1" = 5'

W



METER AND VAULT (STA: 99+78.00)
1" = 5'

X



METER (STA: 100+98.99)
1" = 5'

Y

WATER NOTES

- CONNECT NEW 1.5" OR 2" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103A. SIZE PER PLAN.
- CONNECT NEW 1" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103.
- CONNECT NEW FIREWATER SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 102.
- INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS, RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- SERVICE LATERAL. LENGTH, SIZE, AND MATERIAL PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT NEW 4" OR LARGER DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAILS 108 & 108A. SIZE PER PLAN.
- PROTECT EXISTING STRUCTURE IN PLACE.
- CONNECT TO EXISTING VALVE UNDERGROUND FLANGE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT TO EXISTING STRUCTURE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- SAWCUT EXISTING PAVEMENT, JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500.
- REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY.



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KHA PROJECT
097399003
DATE
12/19/2025
SCALE AS SHOWN
DESIGNED BY MT
DRAWN BY MT
CHECKED BY TW

NAPA INTERTIE PIPELINE REPLACEMENT

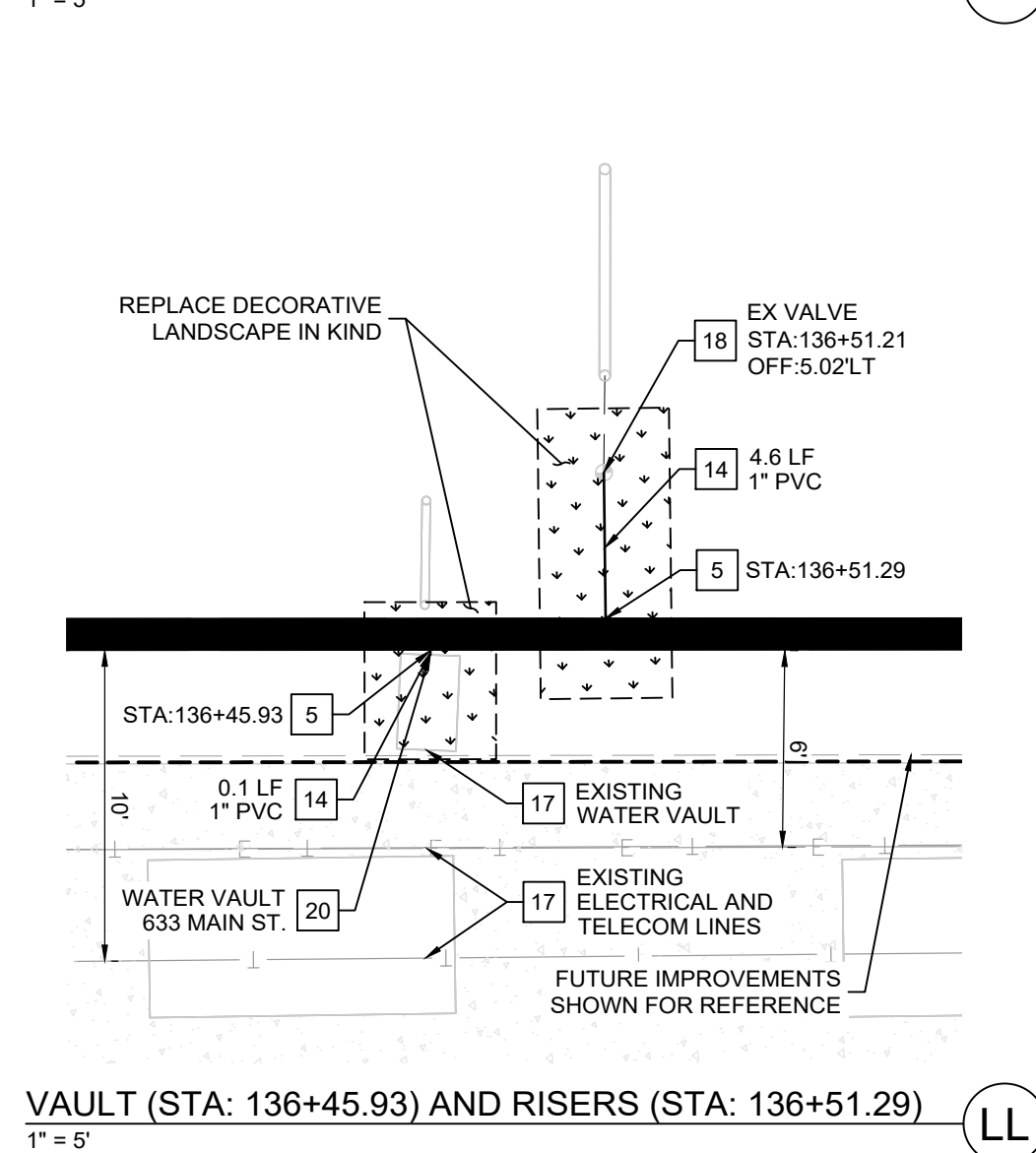
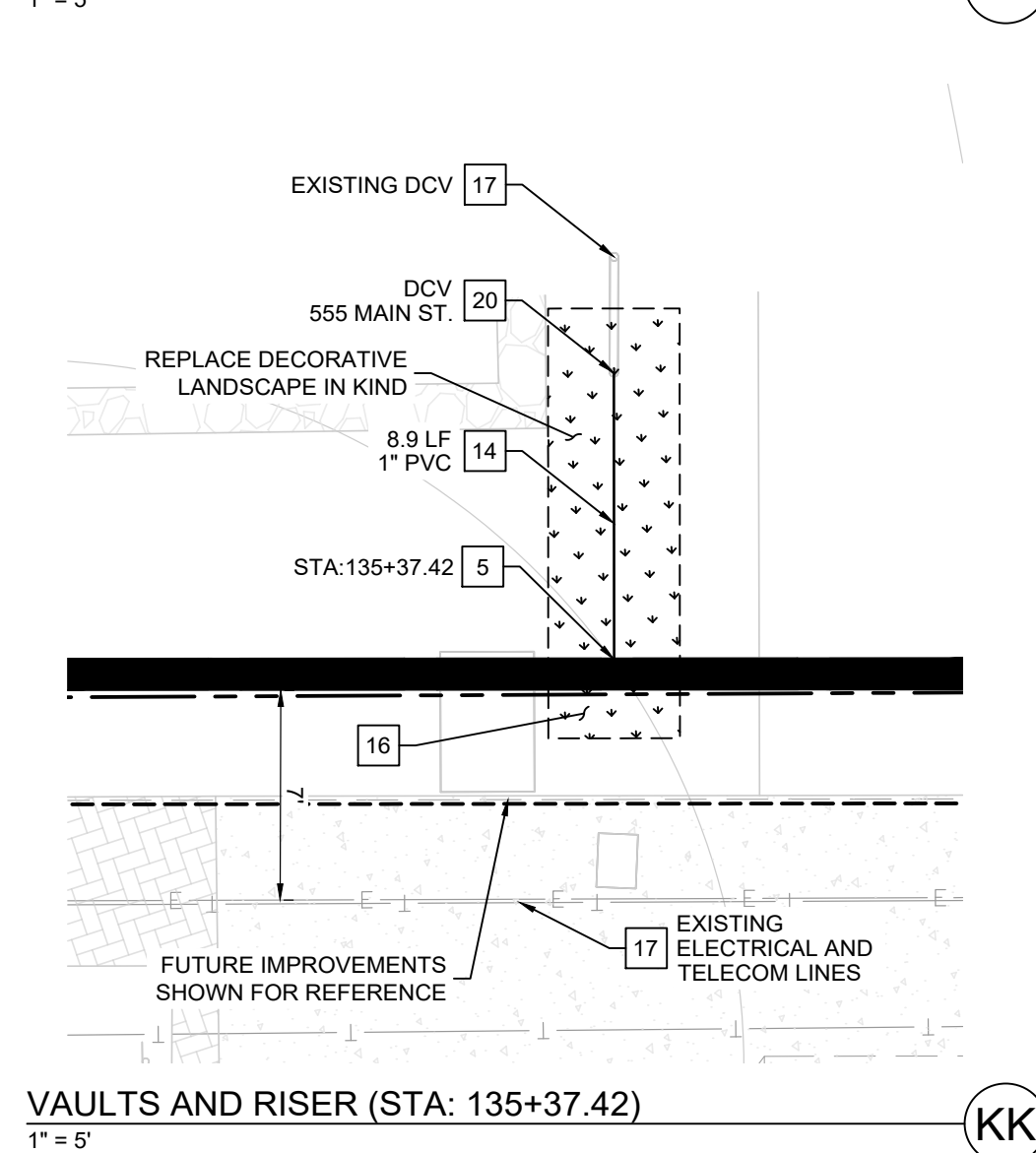
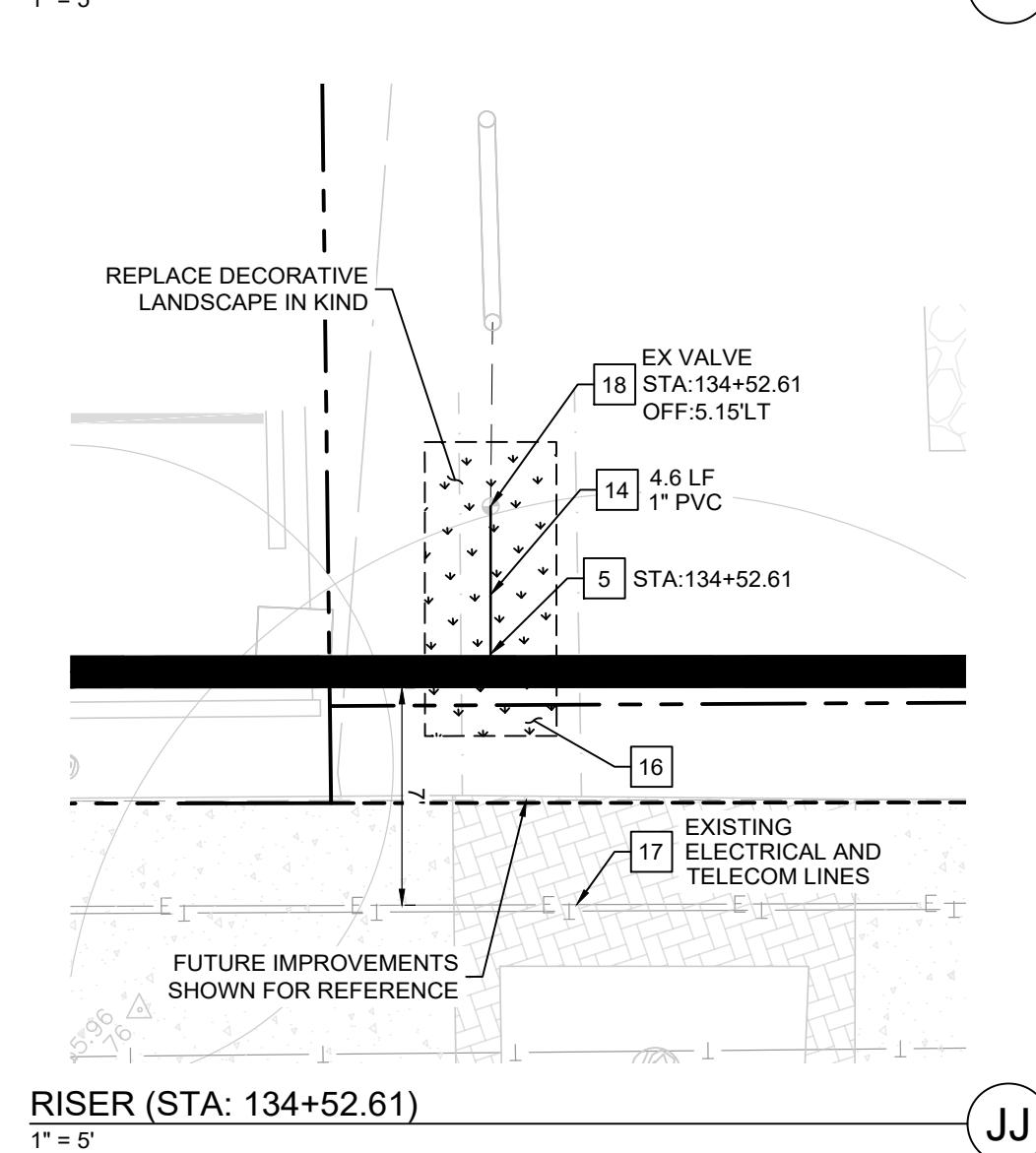
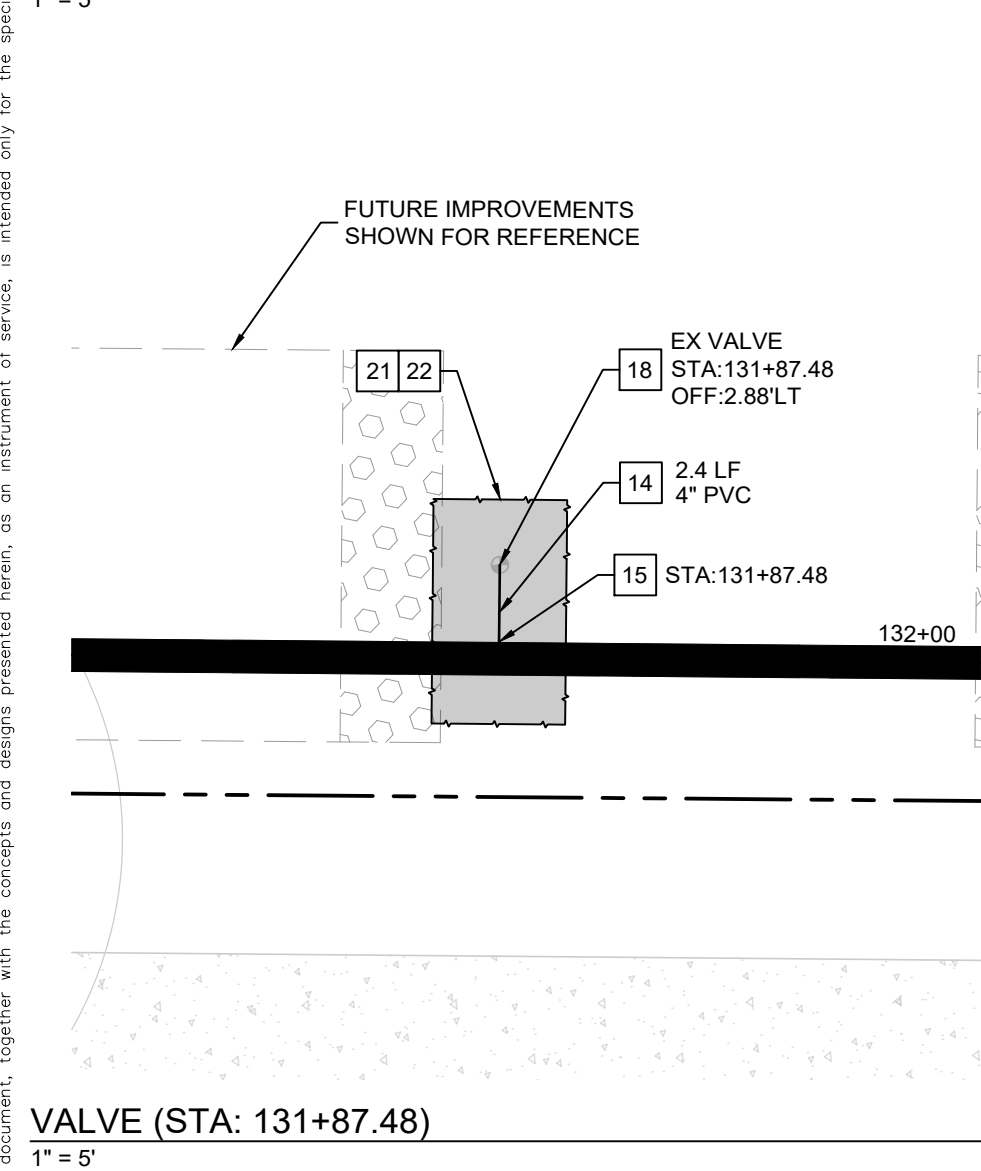
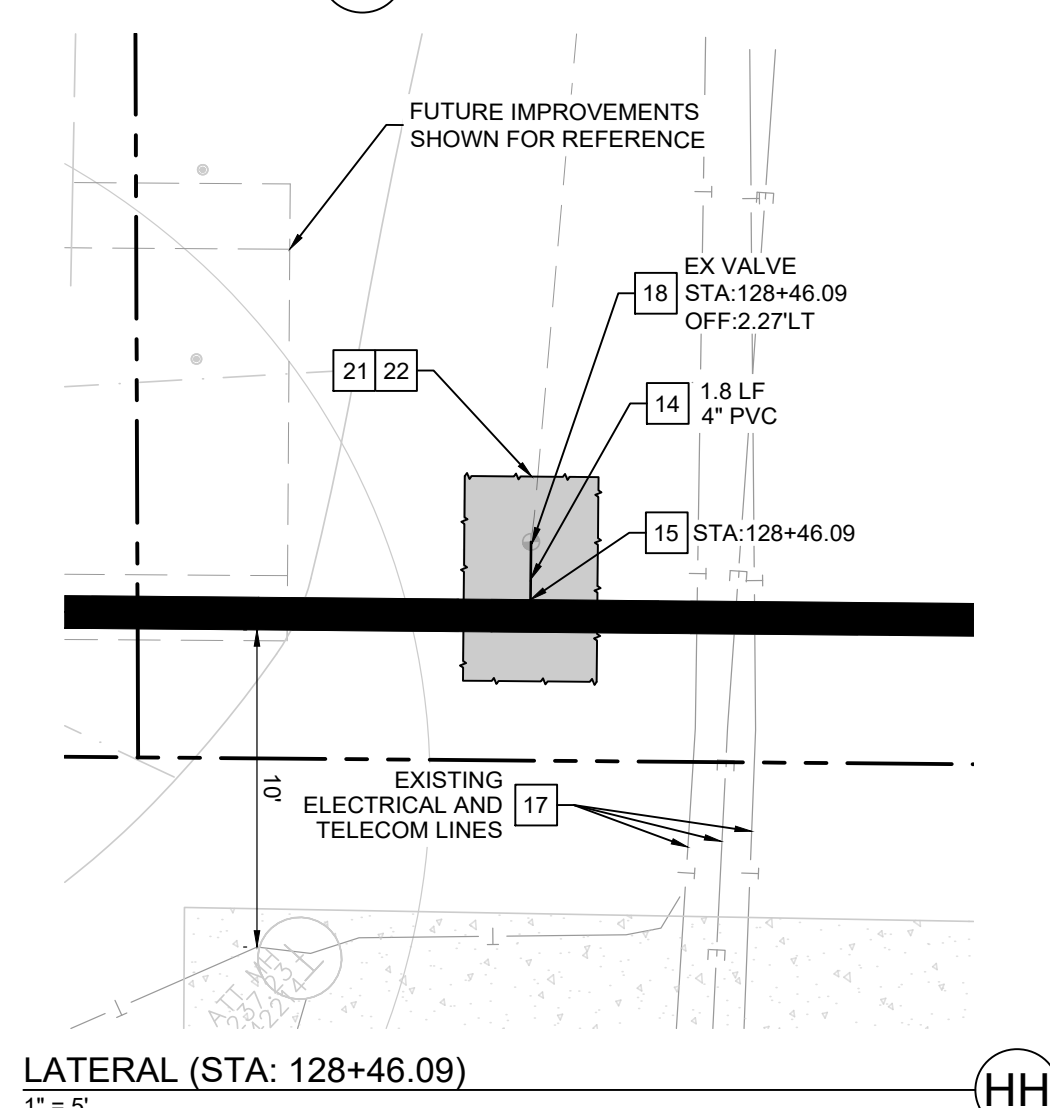
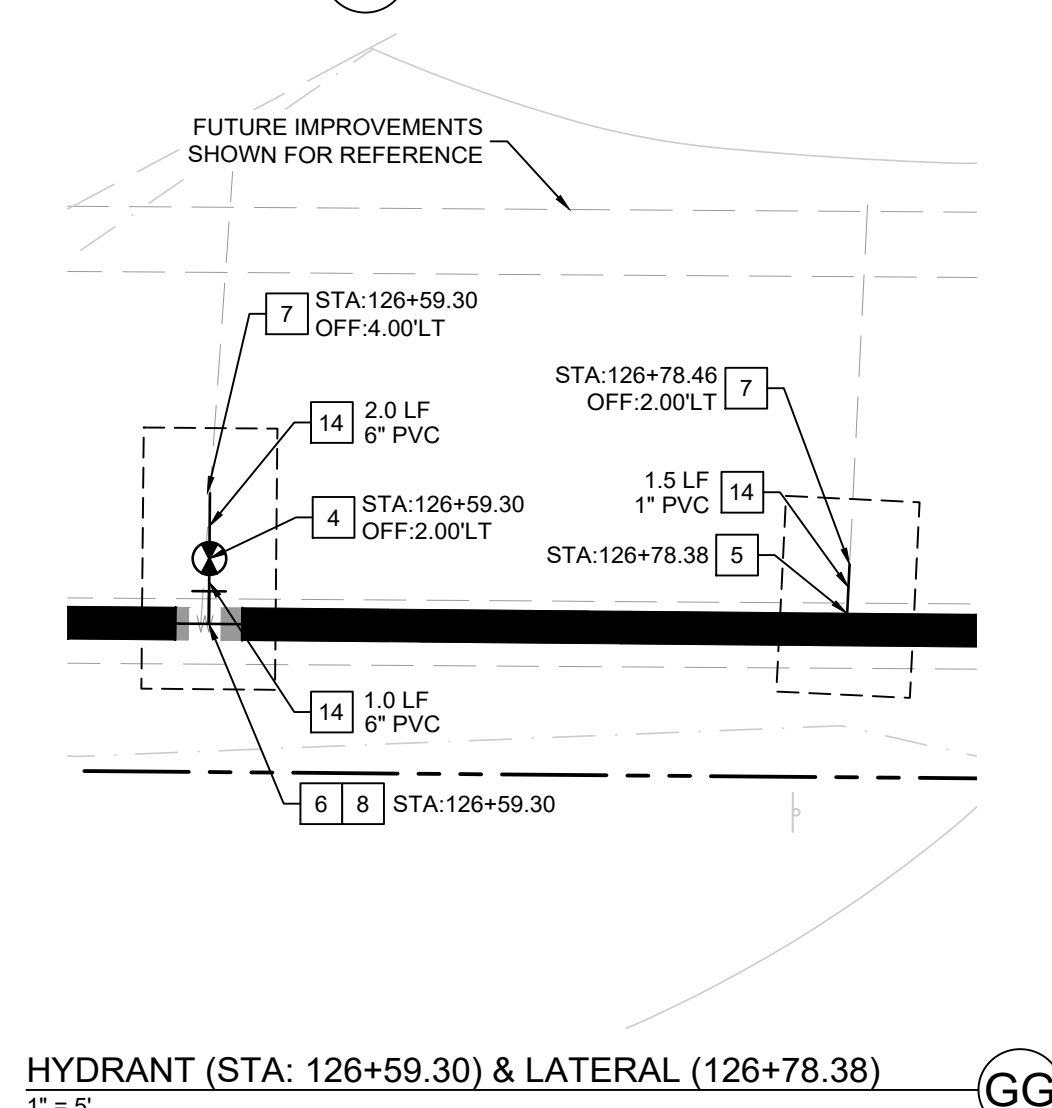
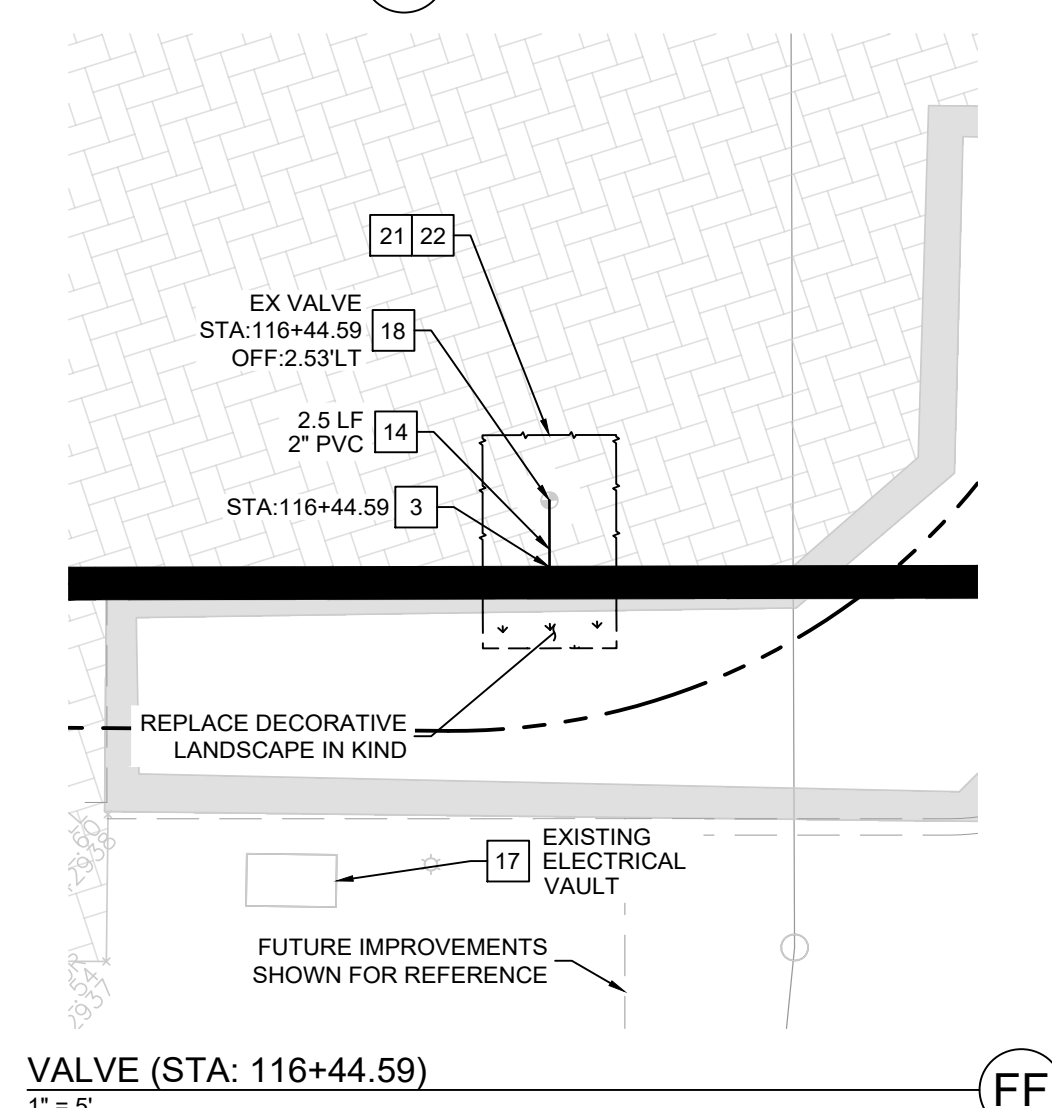
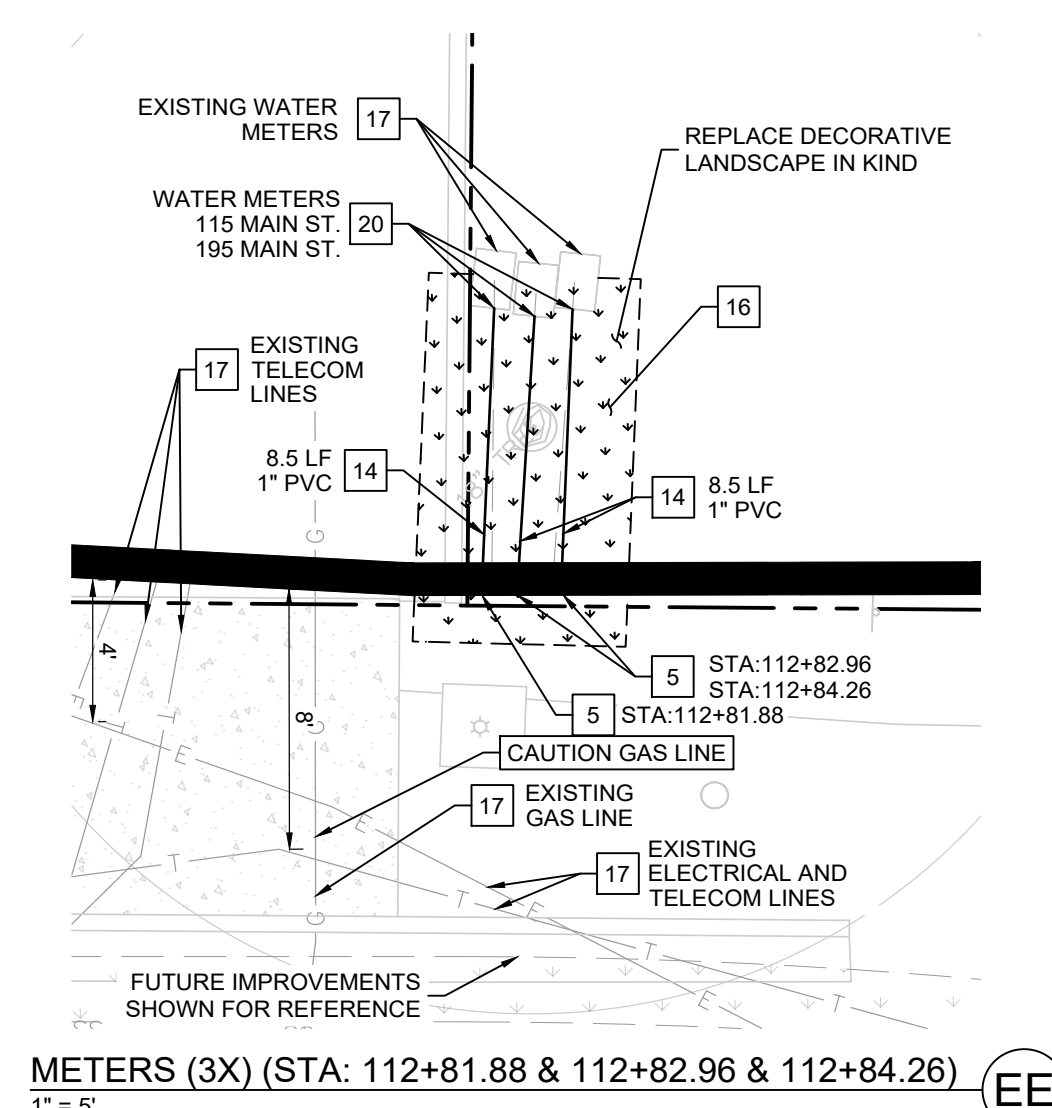
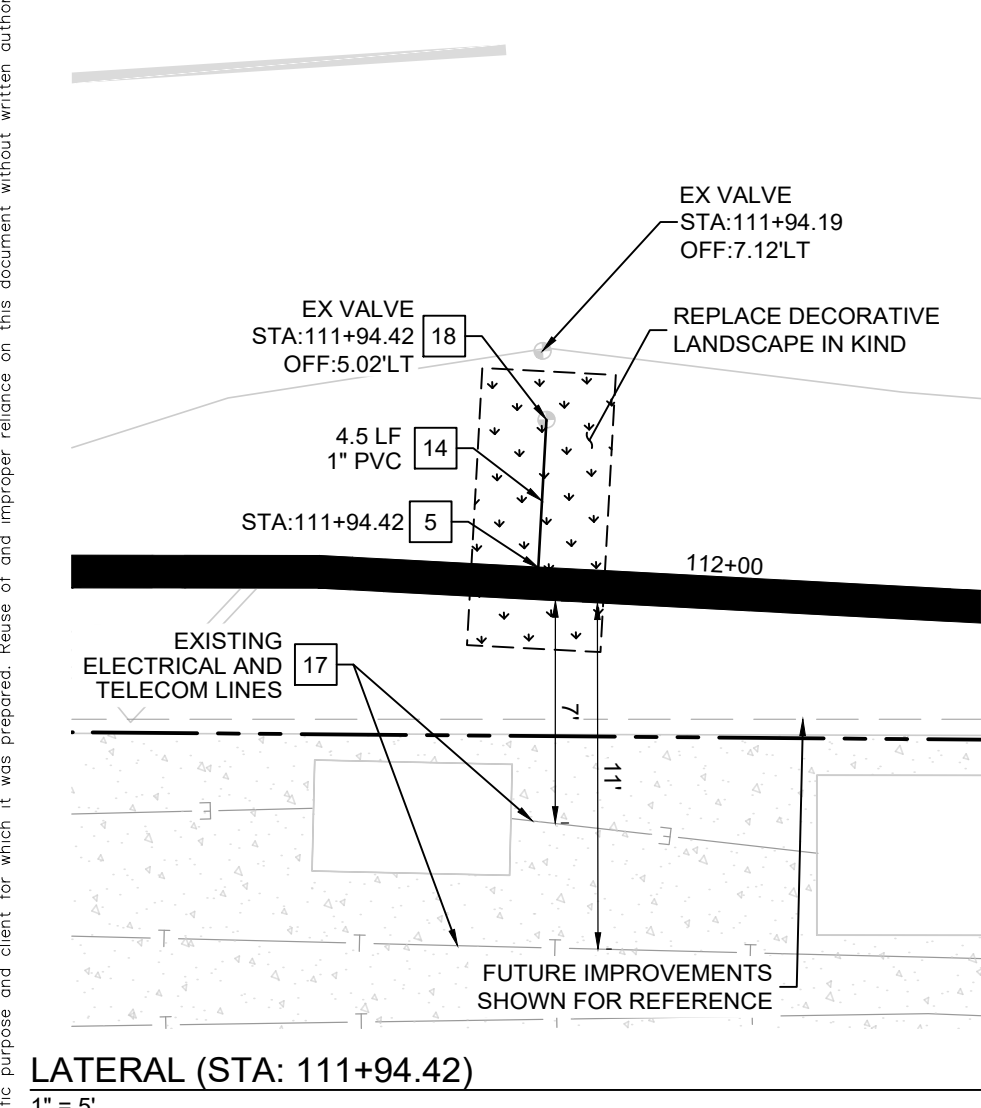
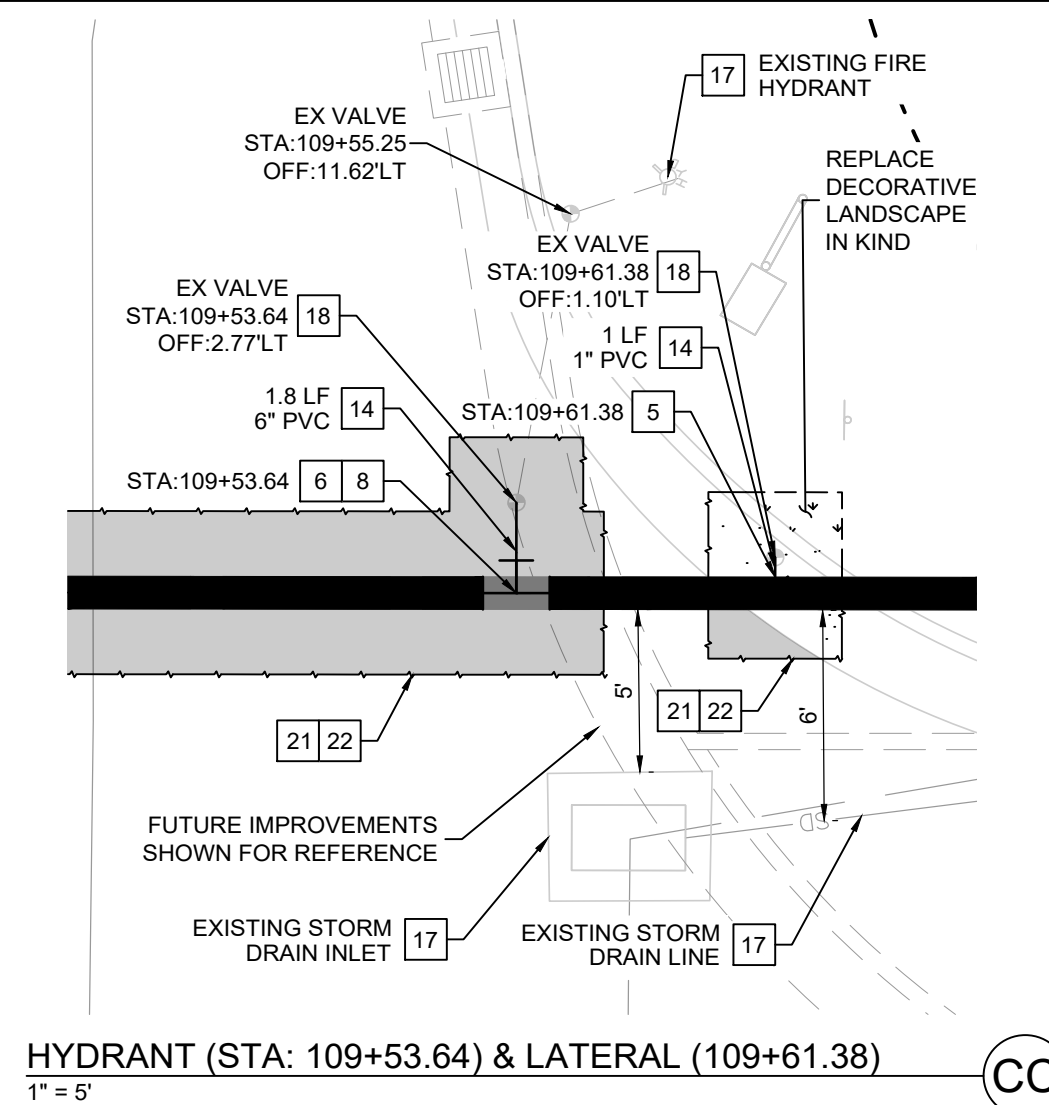
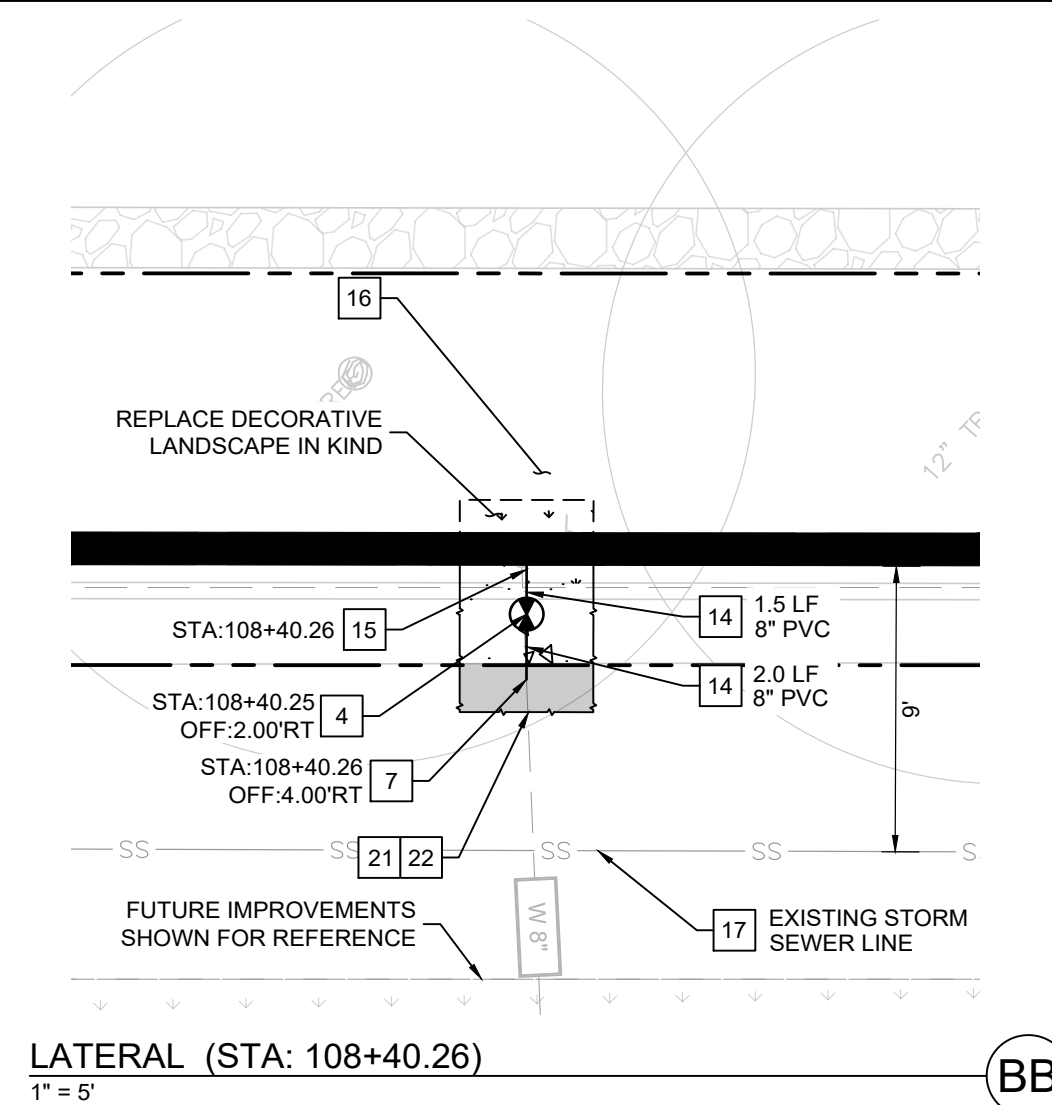
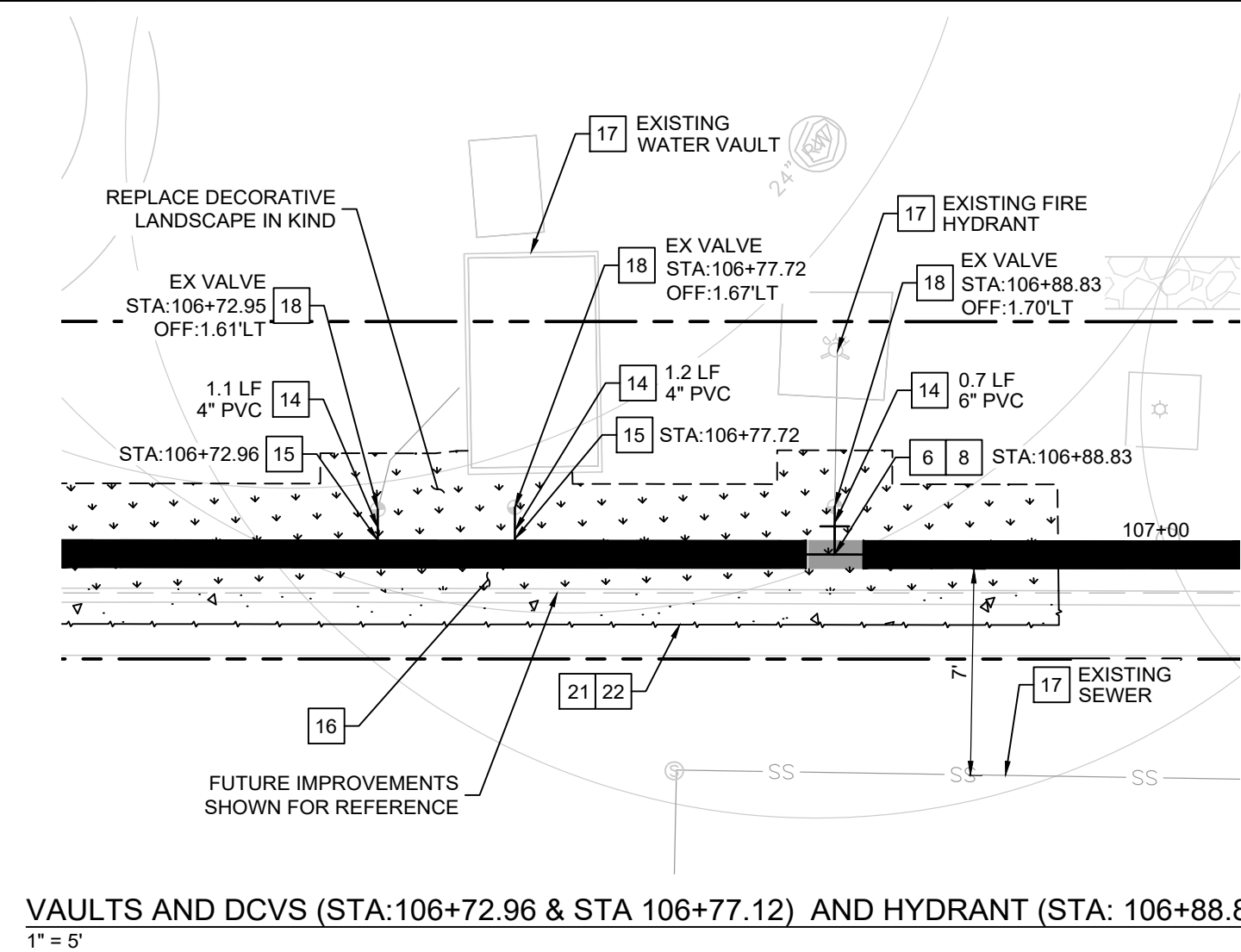
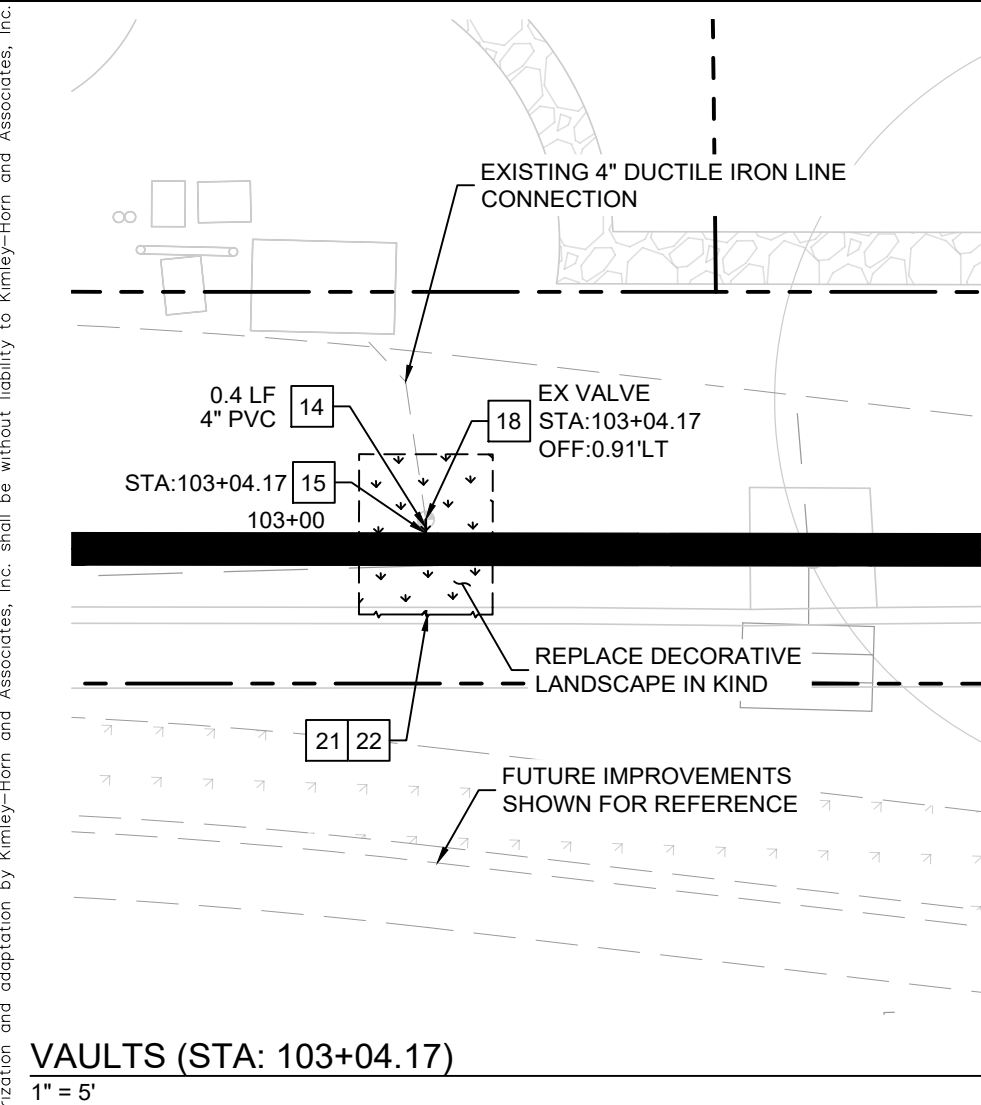


CONNECTION ENLARGEMENTS

DRAWING NUMBER
C-301

SHEET NUMBER
12 OF 18

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WATER NOTES

- CONNECT NEW 1.5" OR 2" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103A. SIZE PER PLAN.
- INSTALL GATE VALVE PER CITY OF ST. HELENA STANDARD DETAIL 111.
- CONNECT NEW 1" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103.
- CONNECT NEW FIREWATER SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 102.
- CONNECT TO EXISTING WATER LINE PER DETAIL 1, SHEET C-500.
- INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- SERVICE LATERAL. LENGTH, SIZE, AND MATERIAL PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT NEW 4" OR LARGER DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAILS 108 & 108A. SIZE PER PLAN.
- CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS.
- PROTECT EXISTING STRUCTURE IN PLACE.
- CONNECT TO EXISTING VALVE UNDERGROUND FLANGE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- CONNECT TO EXISTING STRUCTURE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- SAWCUT EXISTING PAVEMENT, JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500.
- REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY.

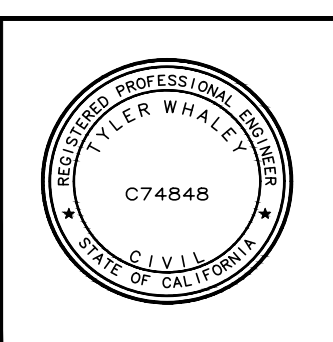


No.	REVISIONS	DATE	BY

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KHA PROJECT
097399003
DATE
12/19/2025
SCALE AS SHOWN
DESIGNED BY MT
DRAWN BY MT
CHECKED BY TW

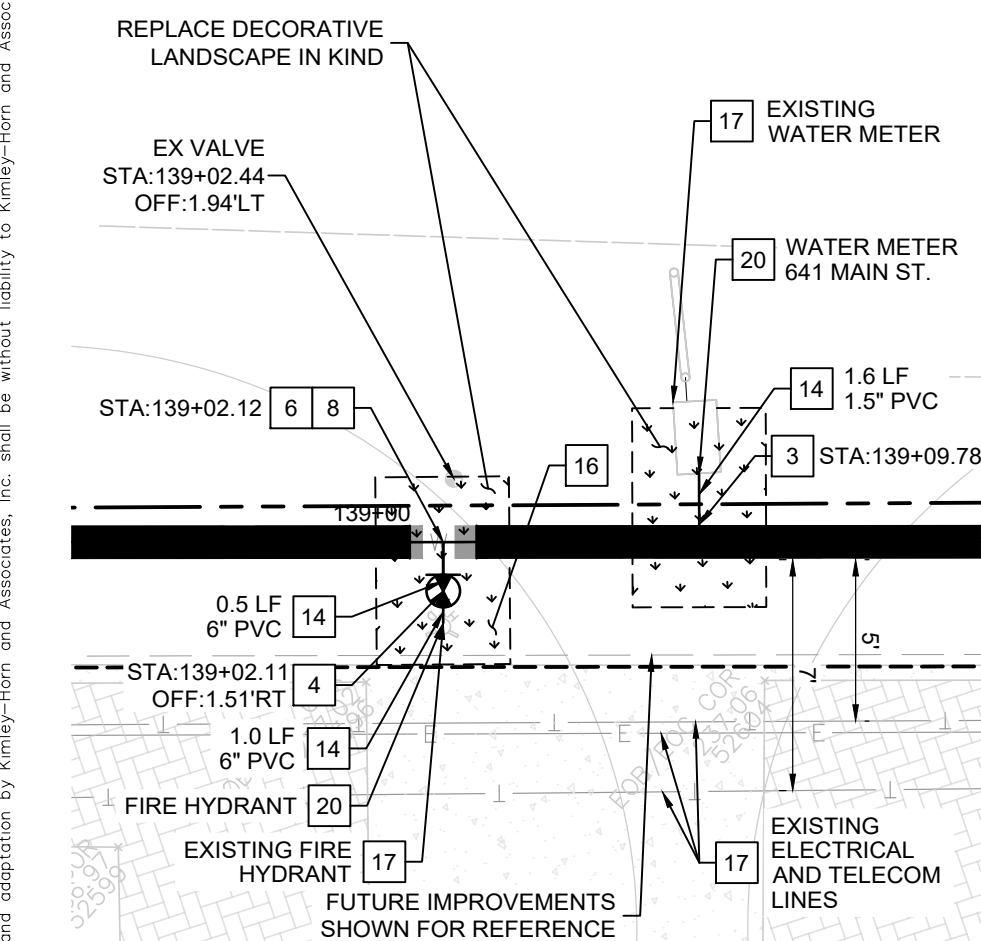
NAPA INTERTIE PIPELINE REPLACEMENT



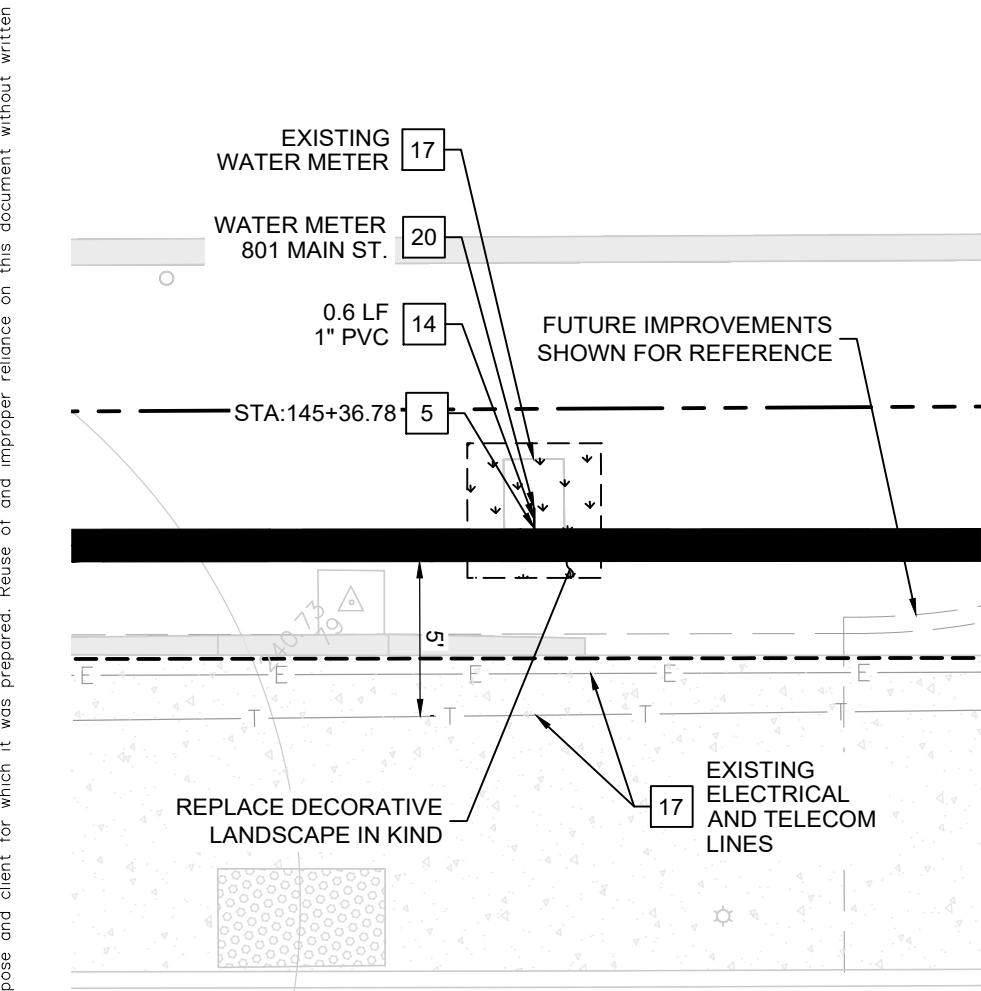
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DRAWING NUMBER	C-302
SHEET NUMBER	13 OF 18

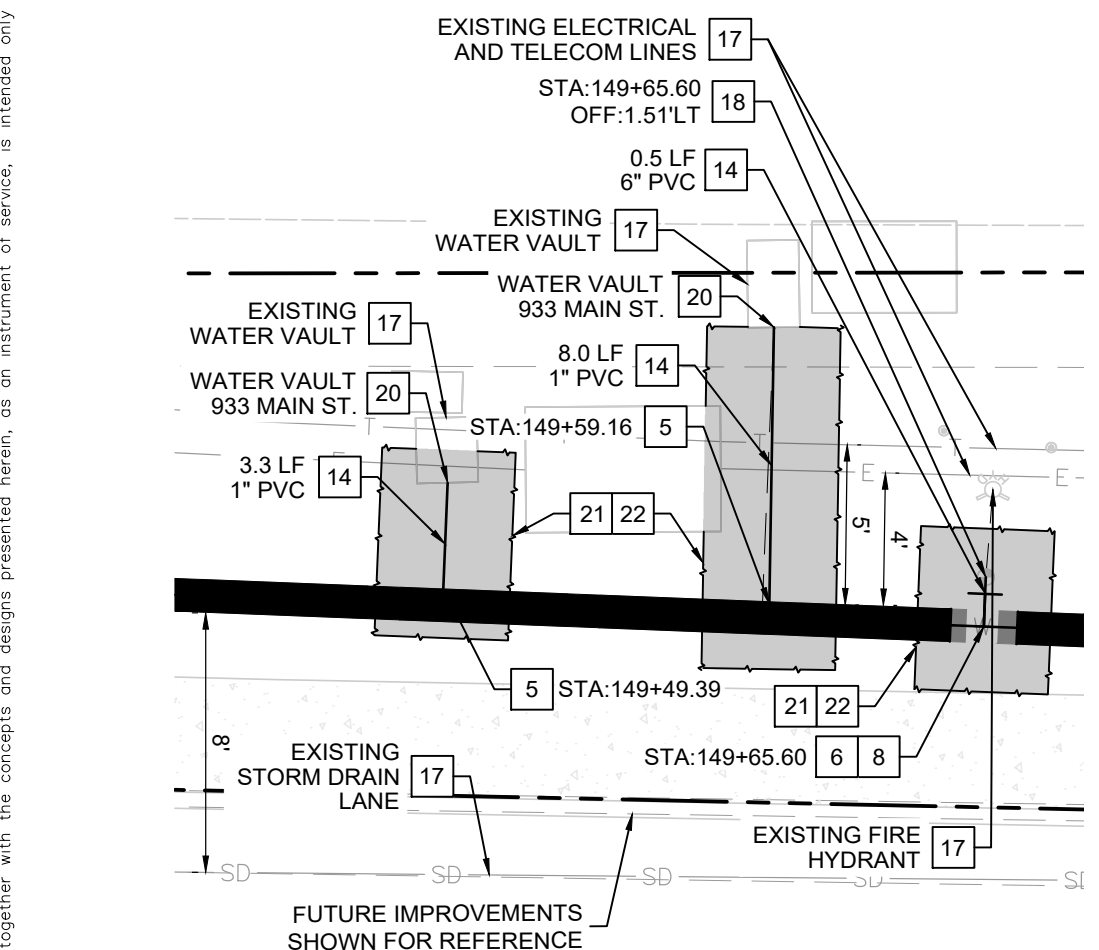
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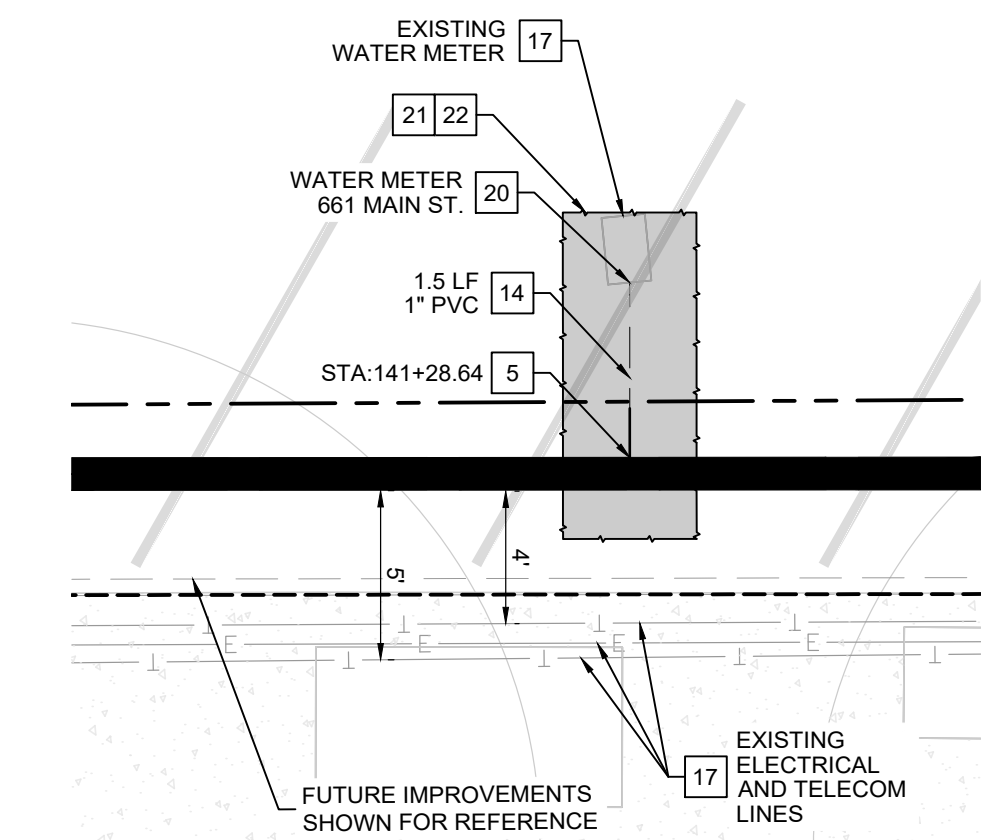
HYDRANT (STA: 139+02.11) & VAULT/DCV (STA: 139+09.78) MM
1" = 5'



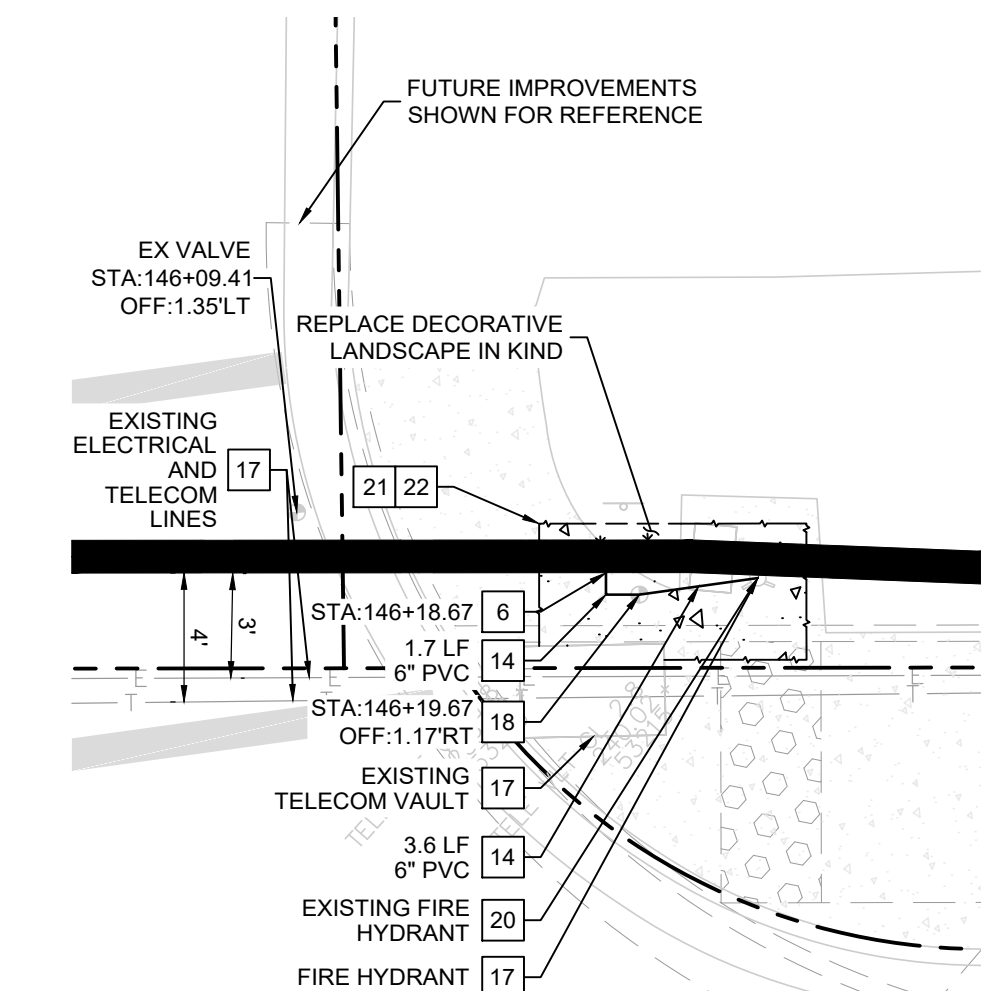
VAULT (STA: 145+36.81) QQ
1" = 5'



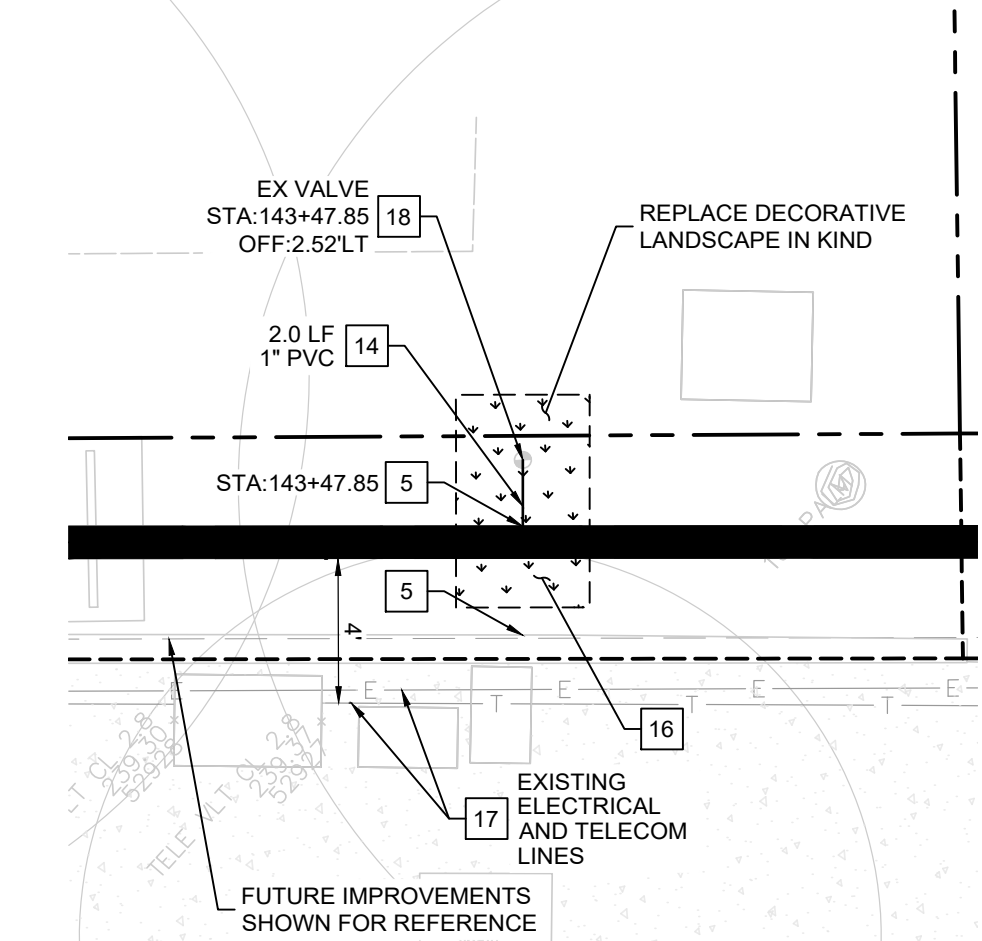
VAULTS (STA: 149+49.39 & 149+59.16) AND HYDRANT (STA: 149+65.50) UU
1" = 5'



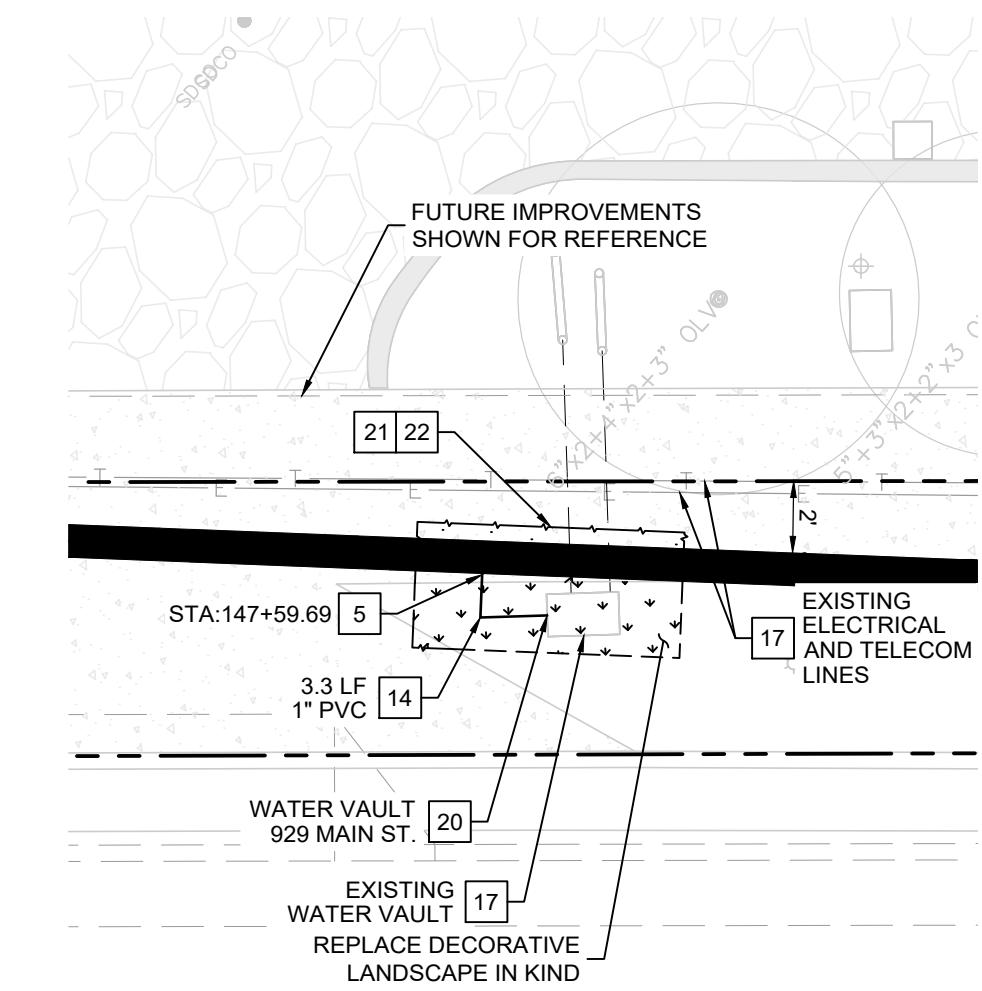
VAULT (STA: 141+28.64) NN
1" = 5'



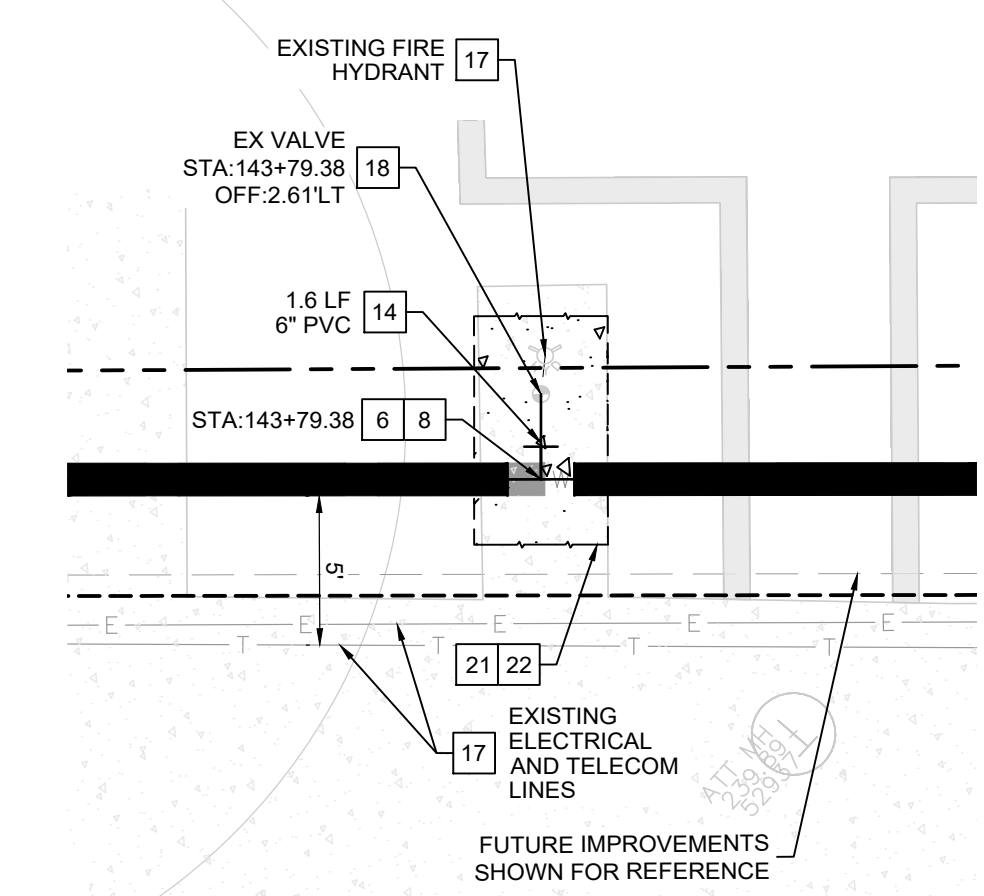
HYDRANT (STA: 146+18.67) RR
1" = 5'



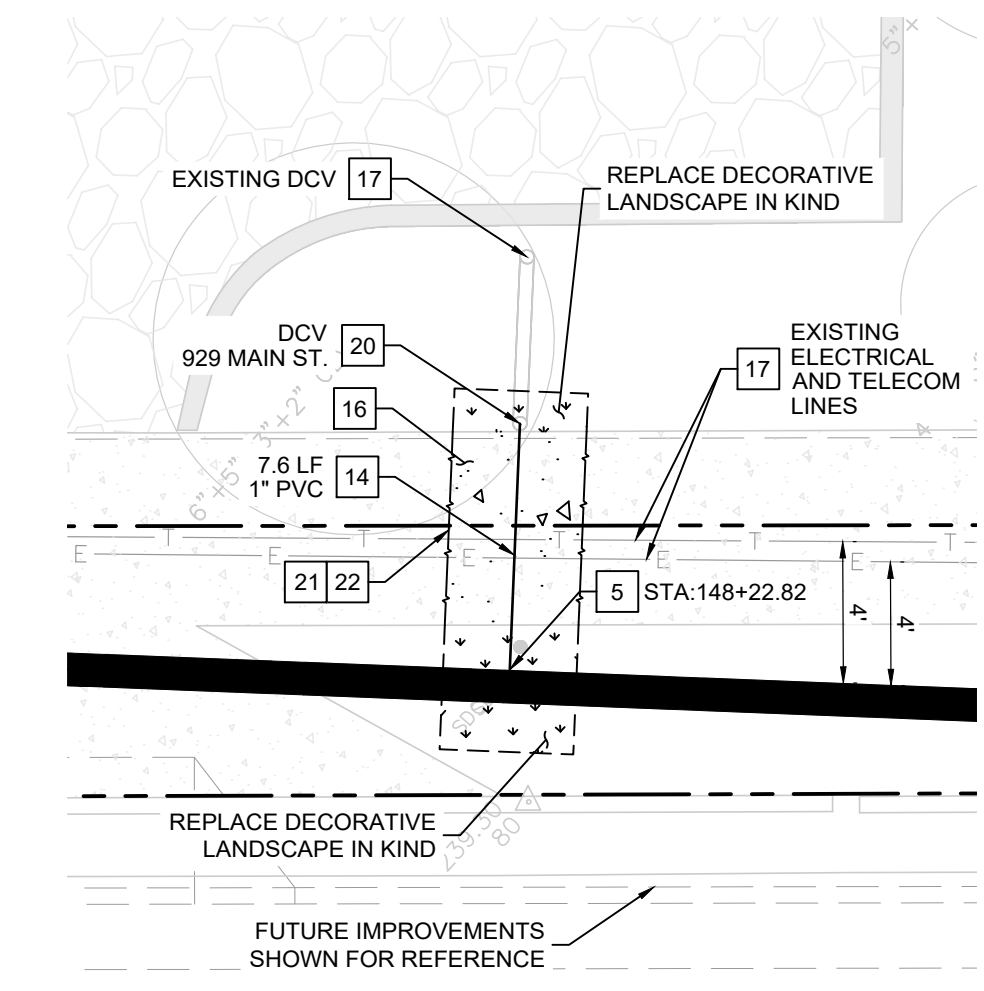
VALVE (STA: 143+47.85) OO
1" = 5'



VAULT AND RISER (STA: 147+59.69) SS
1" = 5'



HYDRANT (STA: 143+79.25) PP
1" = 5'



DCV (STA: 148+22.82) TT
1" = 5'

WATER NOTES

- 3 CONNECT NEW 1.5" OR 2" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103A. SIZE PER PLAN.
- 4 INSTALL GATE VALVE PER CITY OF ST. HELENA STANDARD DETAIL 111.
- 5 CONNECT NEW 1" DOMESTIC SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 103.
- 6 CONNECT NEW FIREWATER SERVICE LATERAL TO NEW MAIN AT THE LOCATION OF EXISTING CONNECTION PER CITY OF ST. HELENA STANDARD DETAIL 102.
- 8 INSTALL MECHANICALLY RESTRAINED TEE PER PROJECT SPECIFICATIONS. RESTRAINT LENGTHS PER CITY OF ST. HELENA STANDARD DETAIL 112D.
- 14 SERVICE LATERAL. LENGTH, SIZE, AND MATERIAL PER PLAN. TRENCH PER CITY OF ST. HELENA STANDARD DETAIL 401. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- 16 CONTRACTOR TO PROVIDE TREE ROOT PROTECTION IN OPEN TRENCH AREAS. NOTE FOR PIPE BURSTING AREAS.
- 17 PROTECT EXISTING STRUCTURE IN PLACE.
- 18 CONNECT TO EXISTING VALVE UNDERGROUND FLANGE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- 20 CONNECT TO EXISTING STRUCTURE. CONTRACTOR TO VERIFY IN FIELD PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY.
- 21 SAWCUT EXISTING PAVEMENT, JOIN EXISTING PAVEMENT PER DETAIL 3, SHEET C-500.
- 22 REPLACE EXISTING PAVEMENT PER CITY OF ST. HELENA PUBLIC WORKS STANDARDS STANDARD DRAWING INDEX DIVISION 300 - STREET & ROADWAY.



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KHA PROJECT	097399003
DATE	12/19/2025
SCALE	AS SHOWN
DESIGNED BY	MT
DRAWN BY	MT
CHECKED BY	TW

NAPA INTERTIE PIPELINE REPLACEMENT

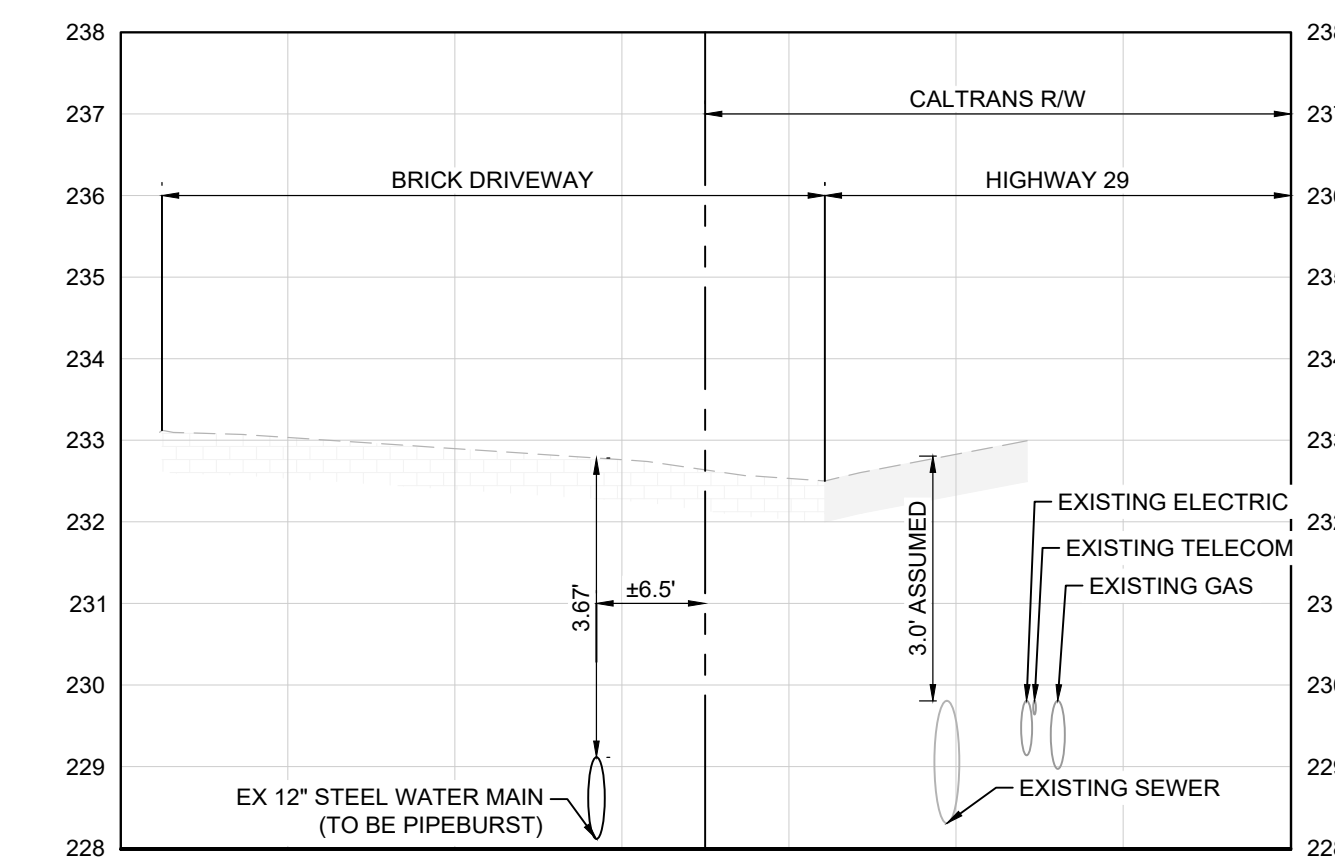
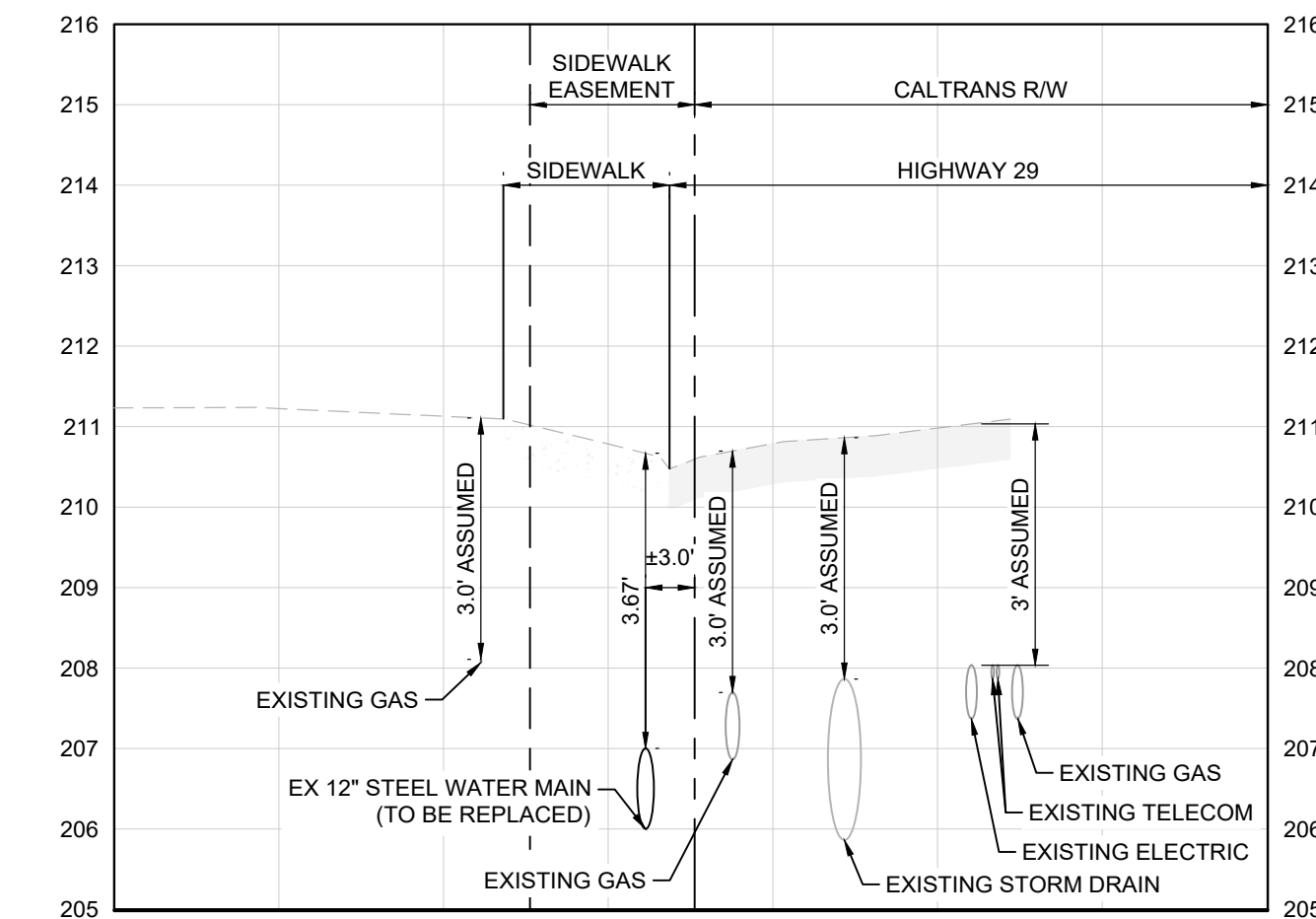
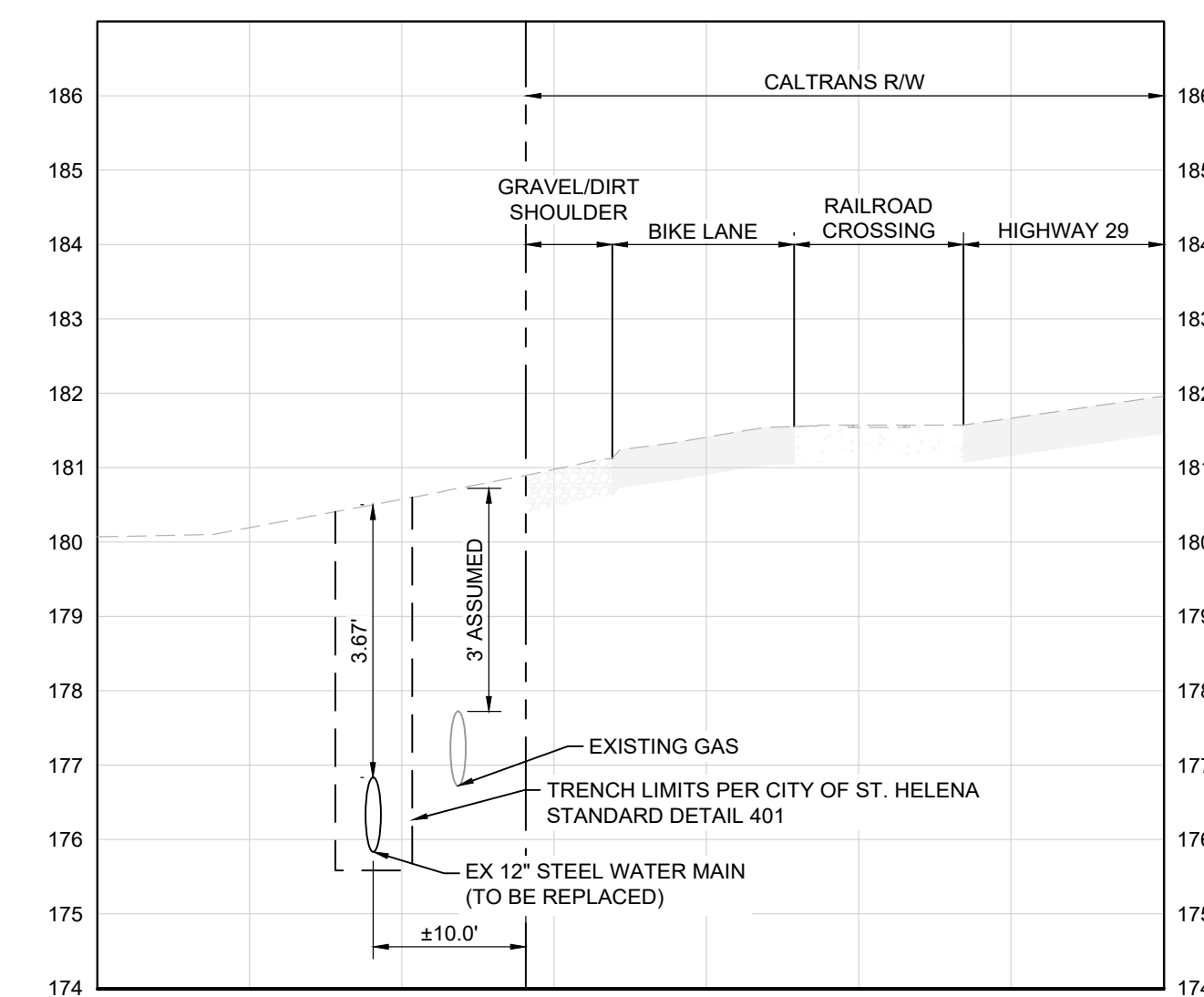
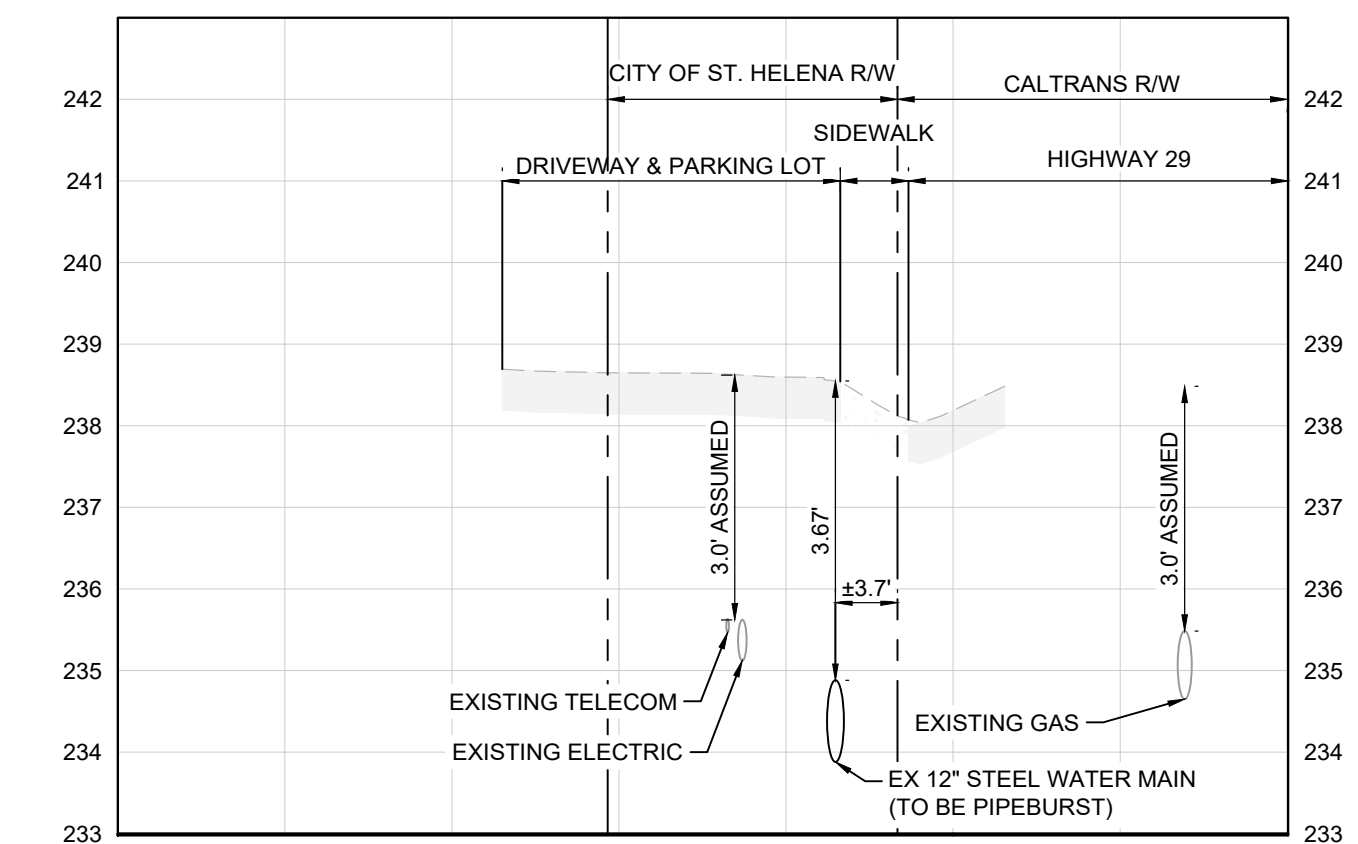
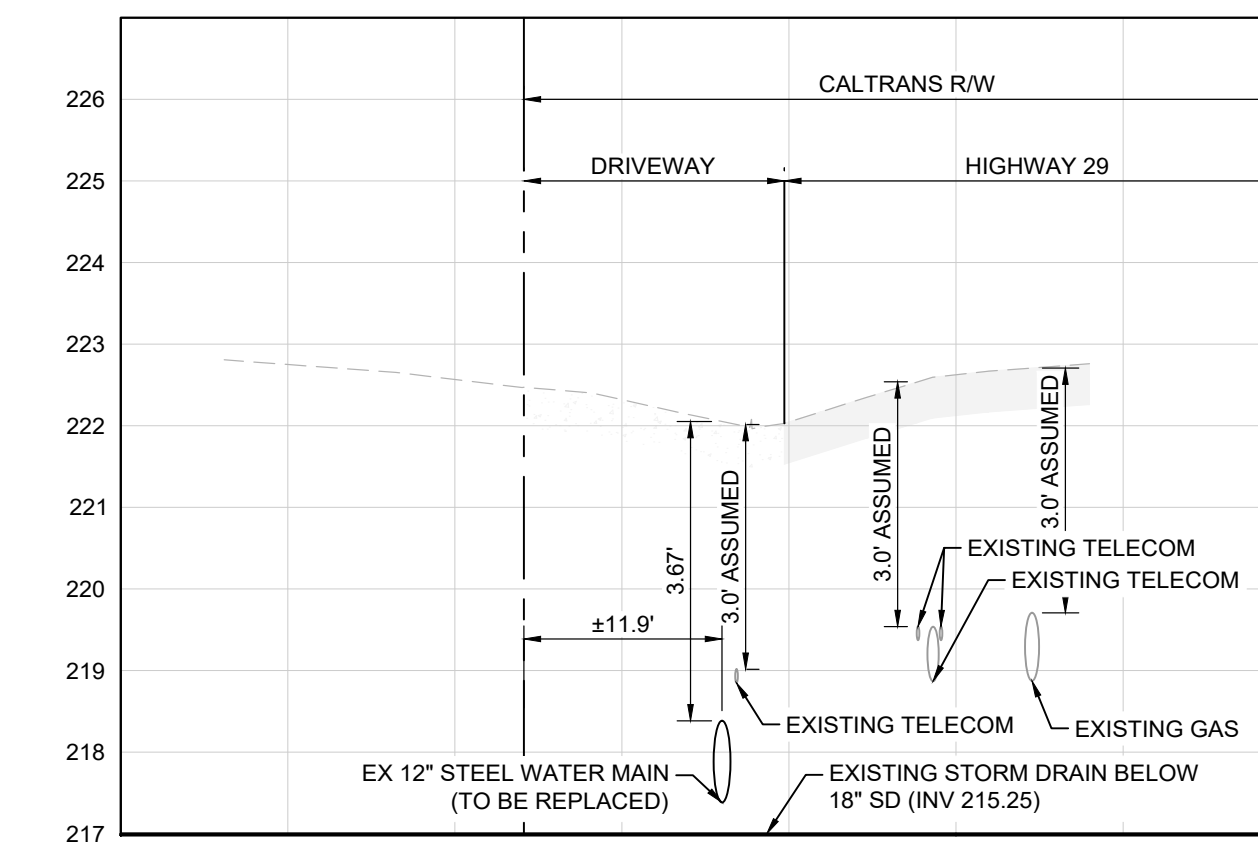
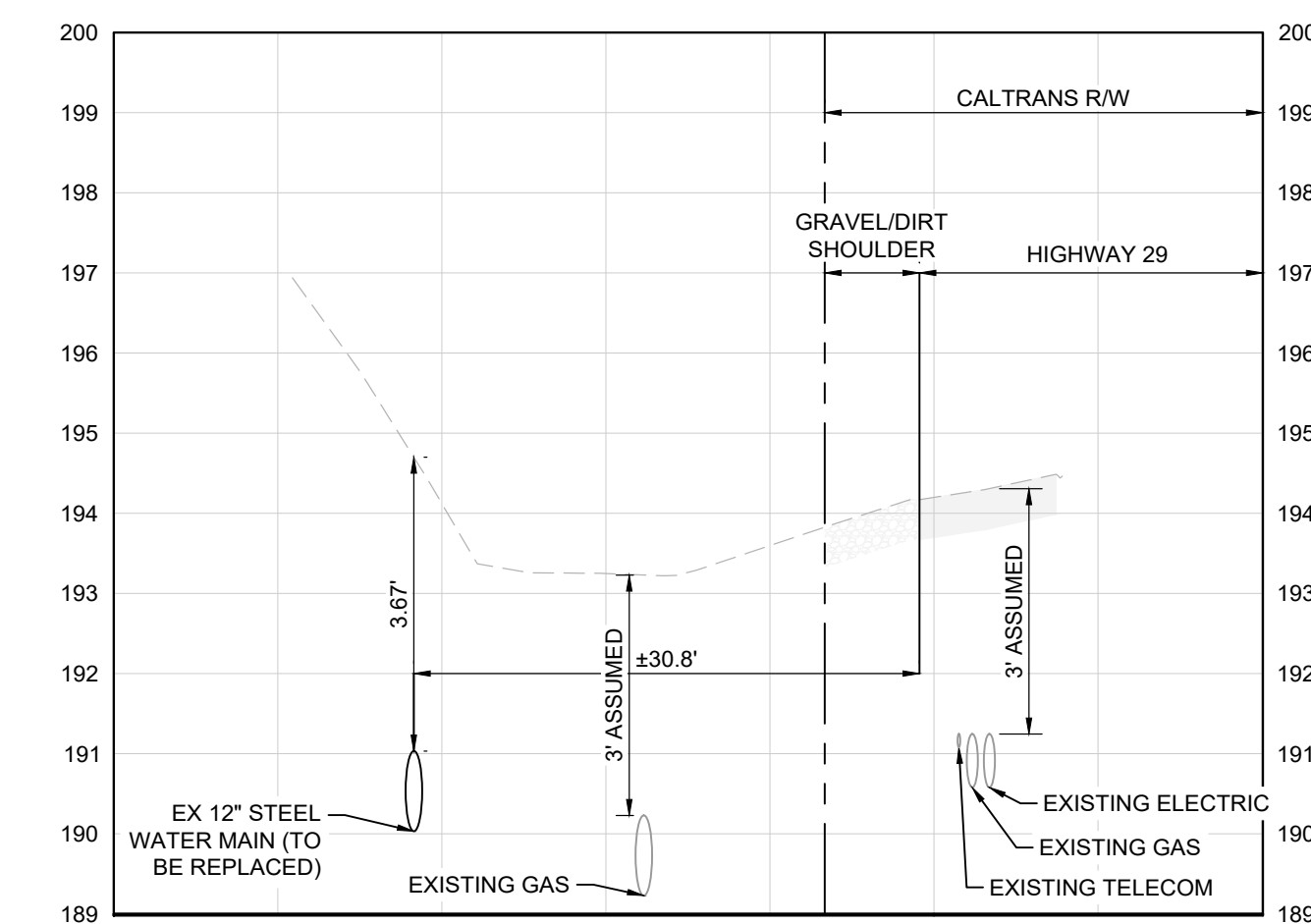
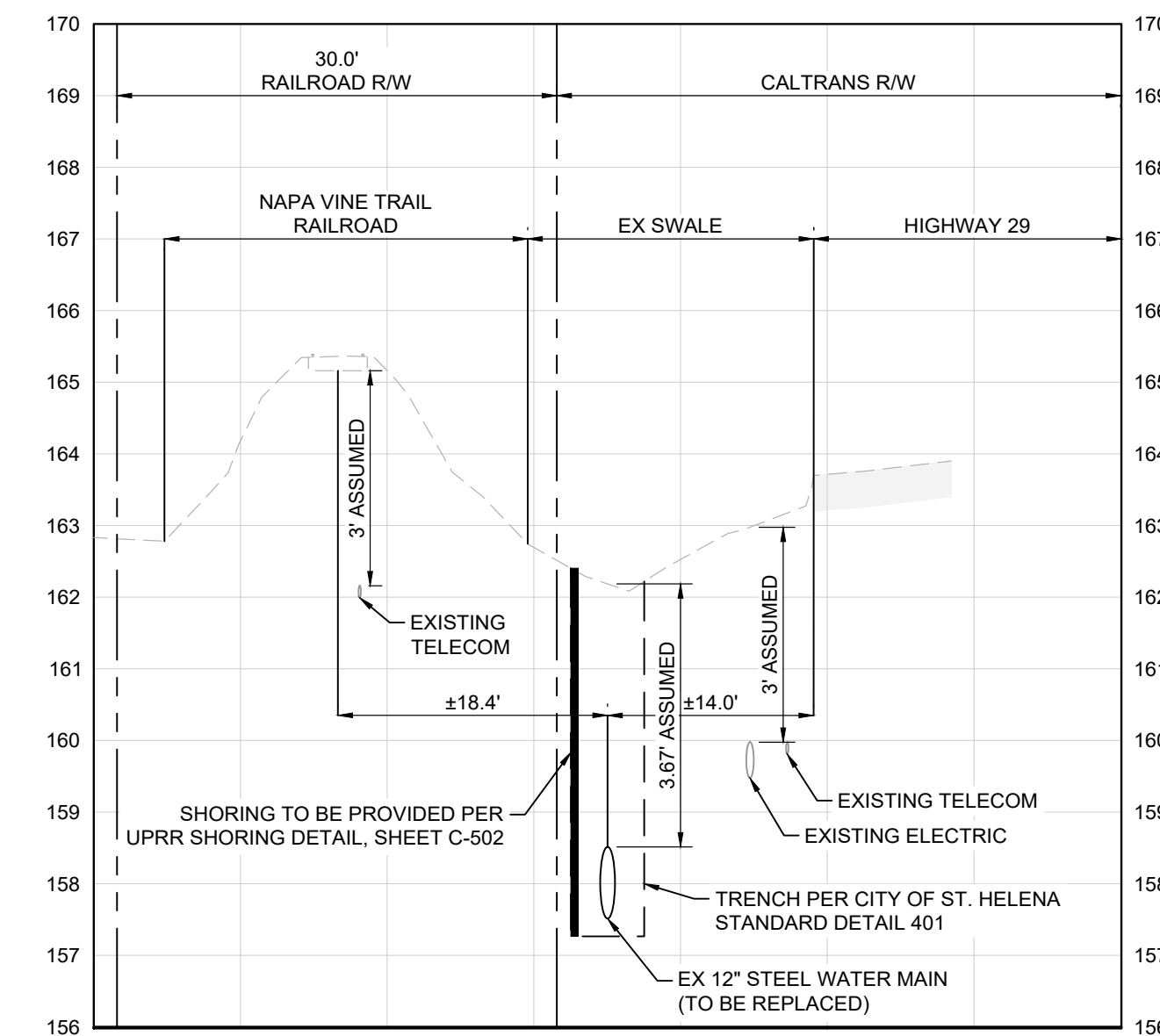


CONNECTION ENLARGEMENTS

DRAWING NUMBER
C-303

SHEET NUMBER

14 OF 18



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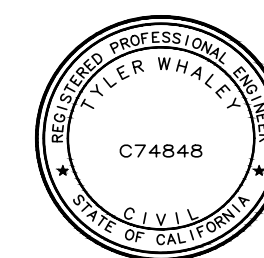
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No.	REVISIONS	DATE	BY



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DATE 12/19/2025	
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NAPA INTERTIE PIPELINE REPLACEMENT



TYPICAL SECTIONS



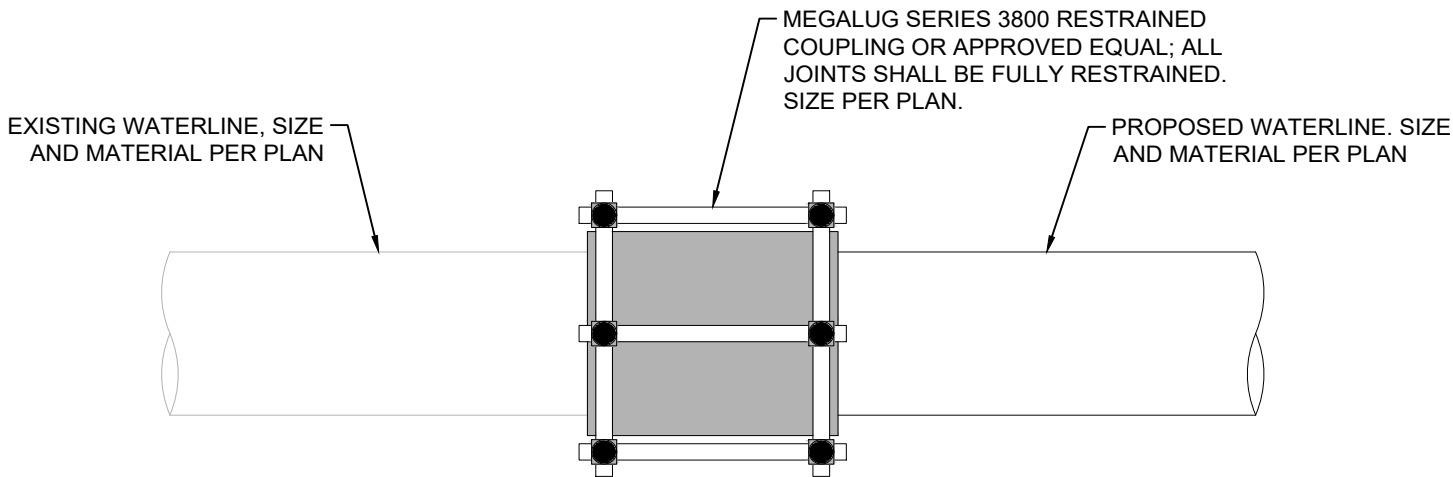
Know what's below.
Call before you dig.

DRAWING NUMBER
C-400

SHEET NUMBER

15 OF 18

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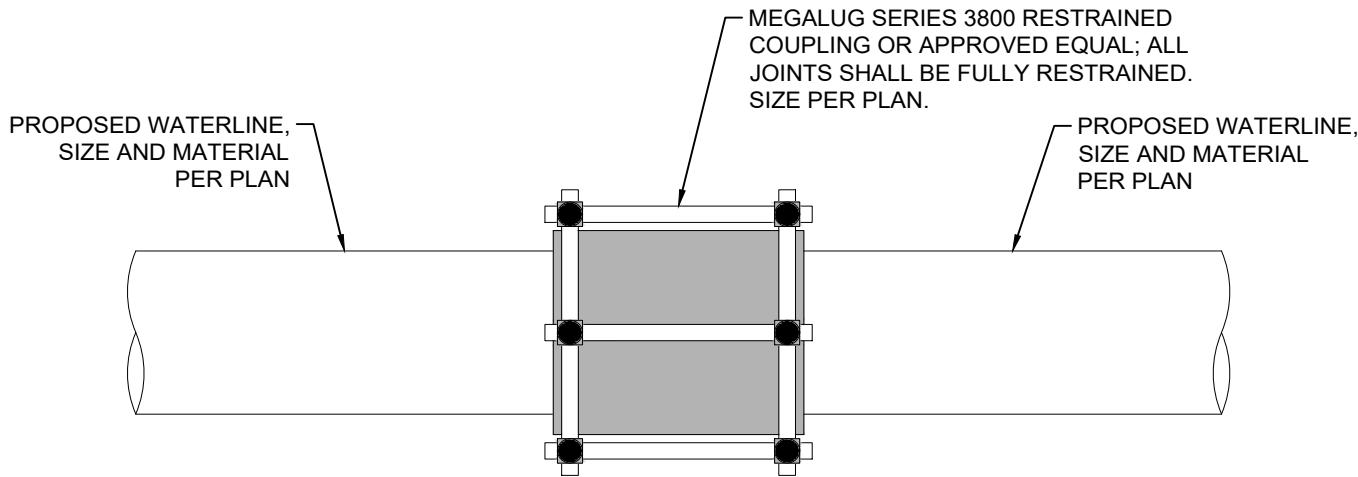


- NOTES:
- 1. THIS TYPE OF JOINT IS TO BE USED AT CONNECTIONS TO EXISTING STEEL AND FPVC PIPE.
 - 2. CONTRACTOR TO VERIFY OUTSIDE DIAMETER OF EXISTING PIPELINE.

EXISTING WATER MAIN CONNECTION JOINT

NTS

1

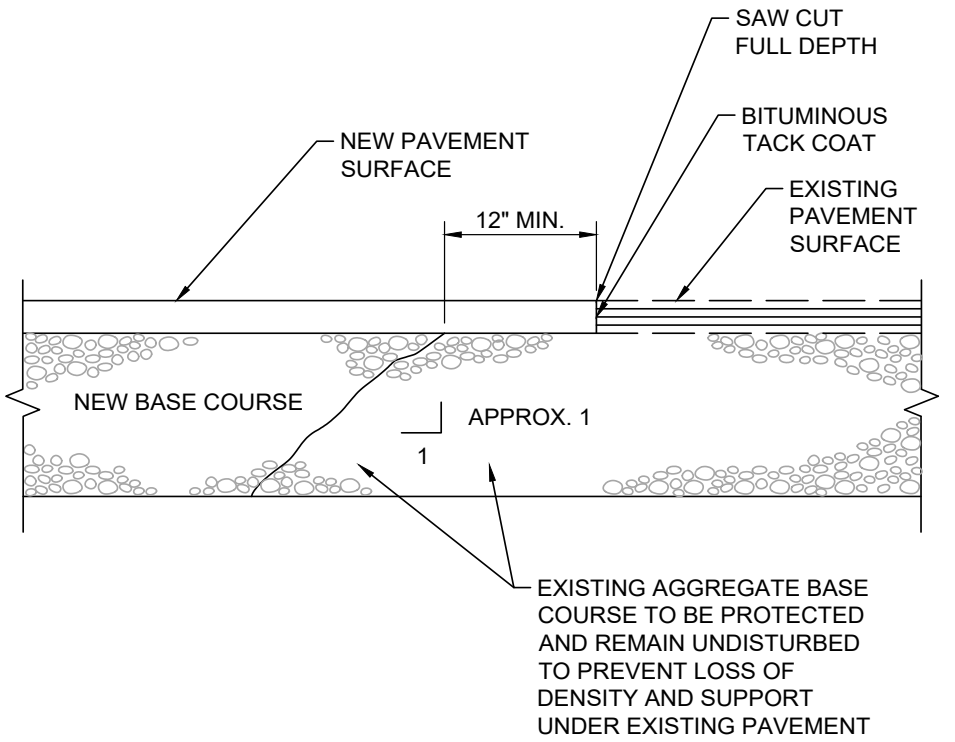


- NOTES:
- 1. THIS TYPE OF JOINT IS TO BE USED AT ALL UNWELDED JOINTS AT PULL OR INSERTION PITS

PROPOSED WATER MAIN CONNECTION JOINT

NTS

2



SAWCUT SECTION DETAIL

NTS

3



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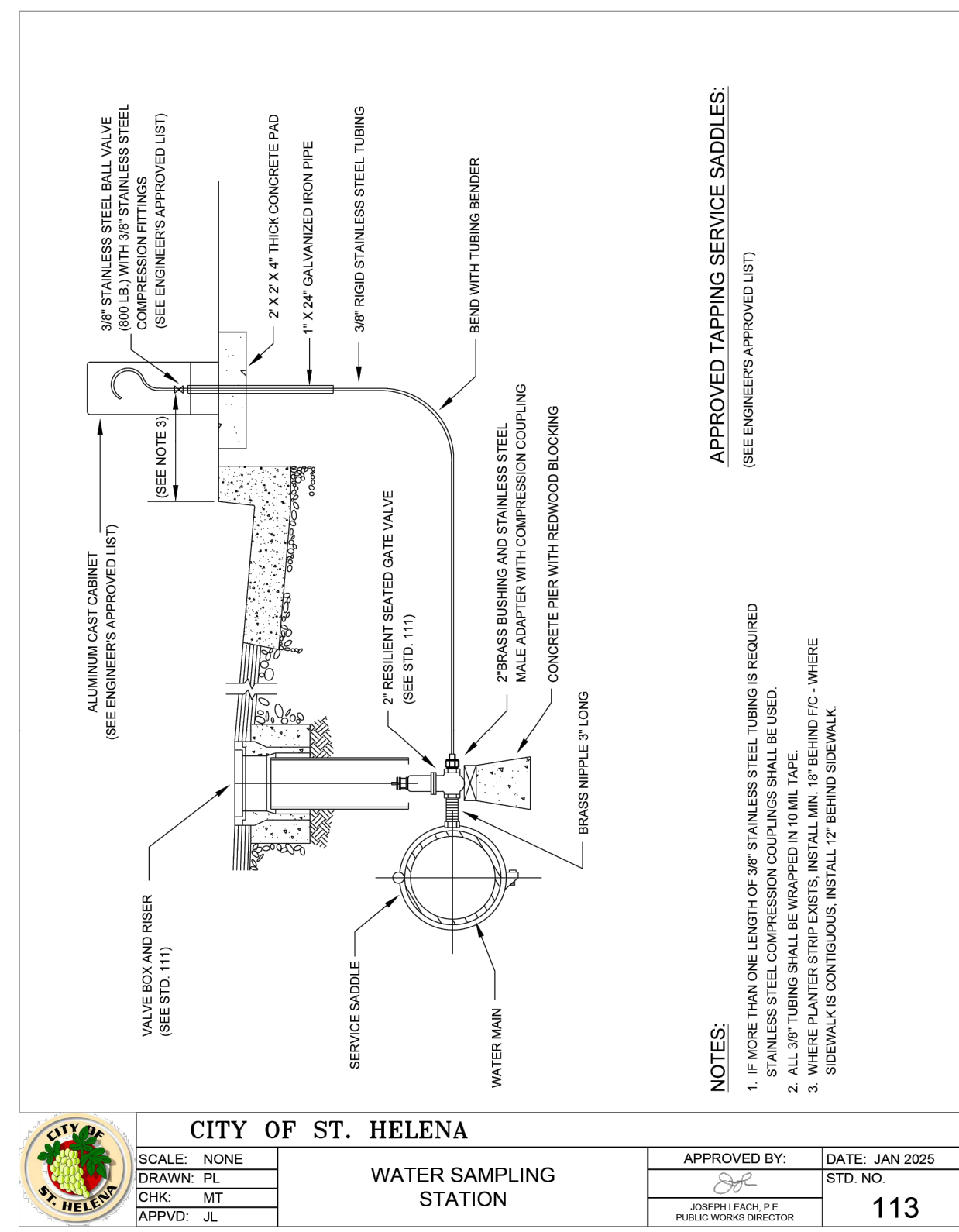
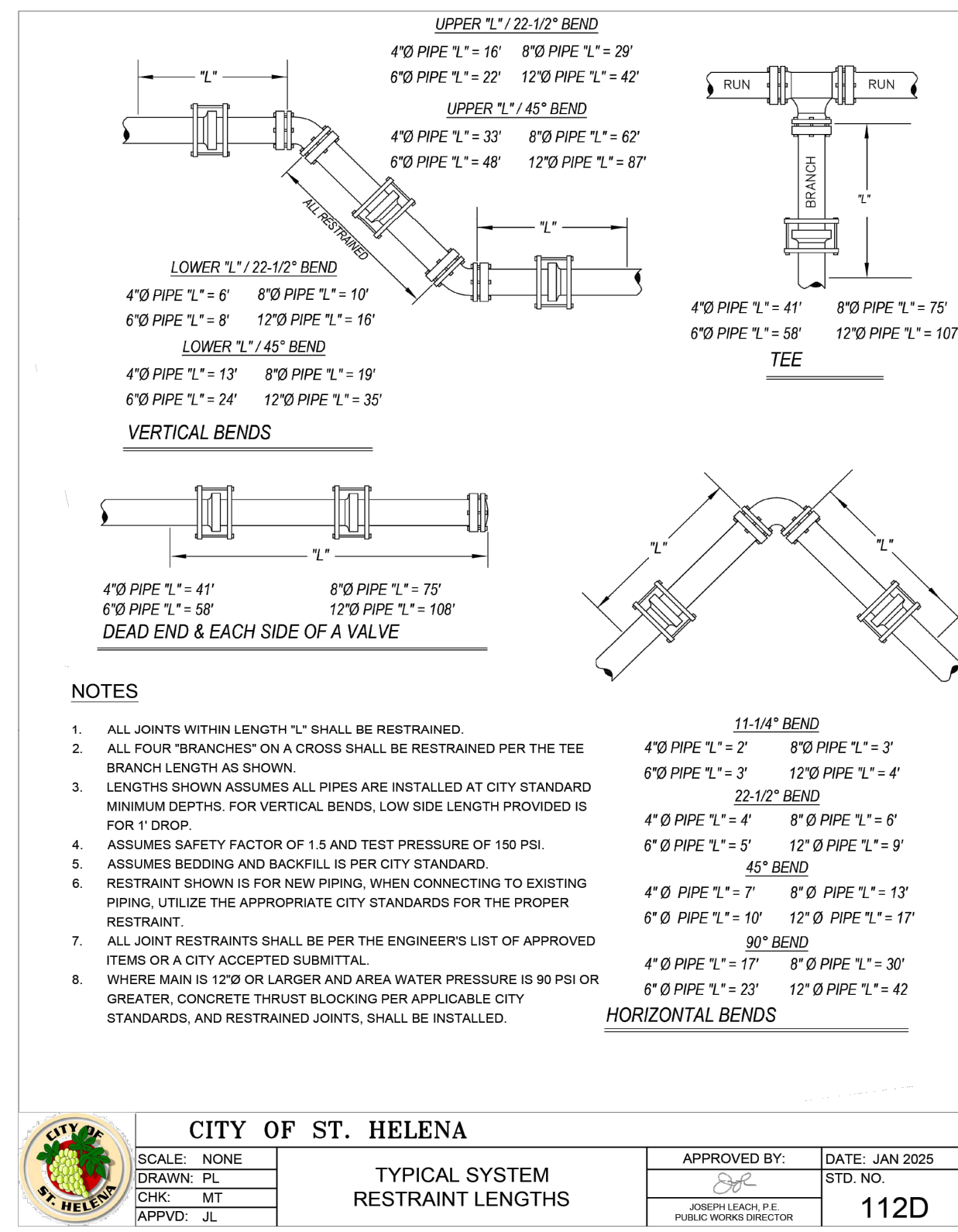
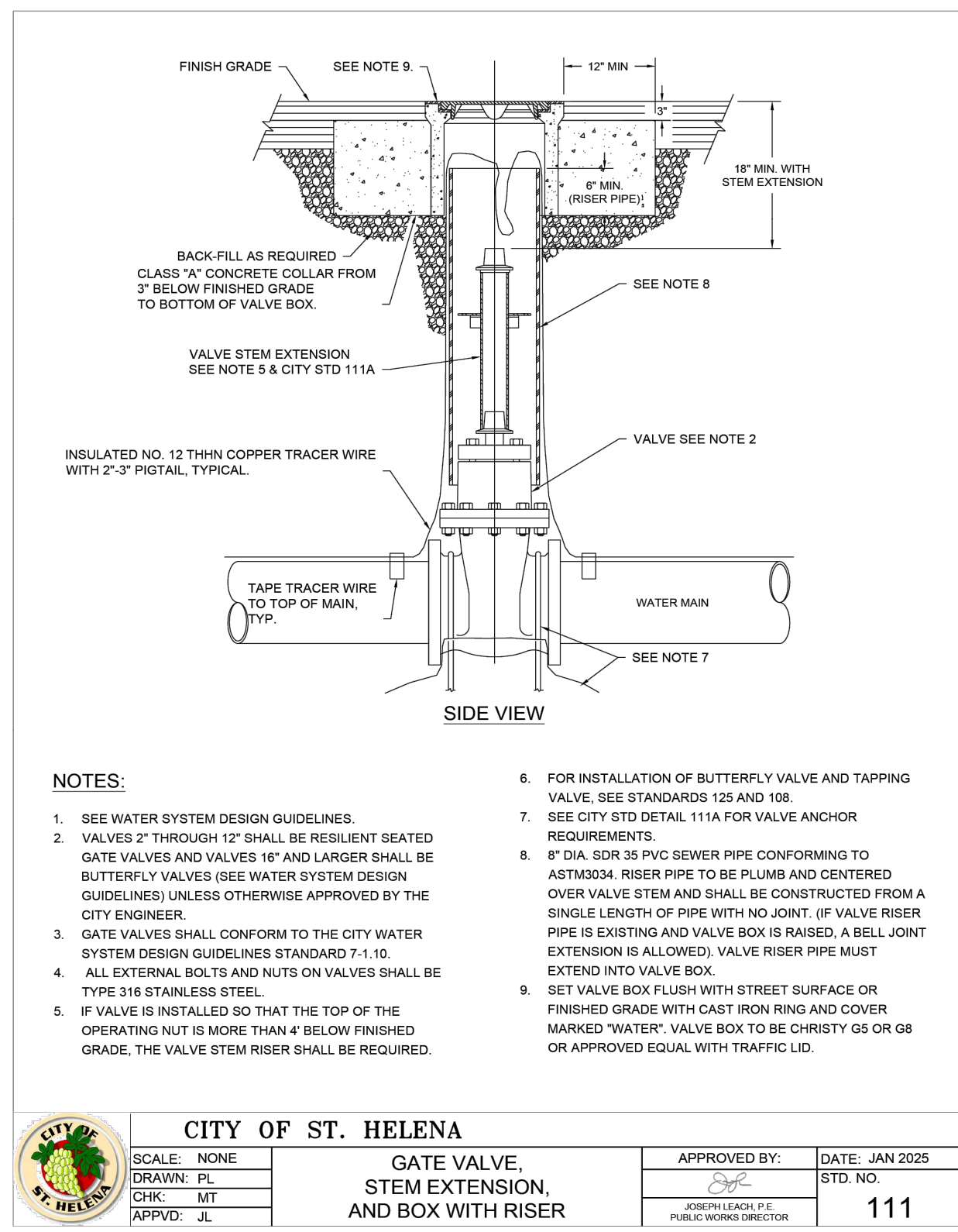
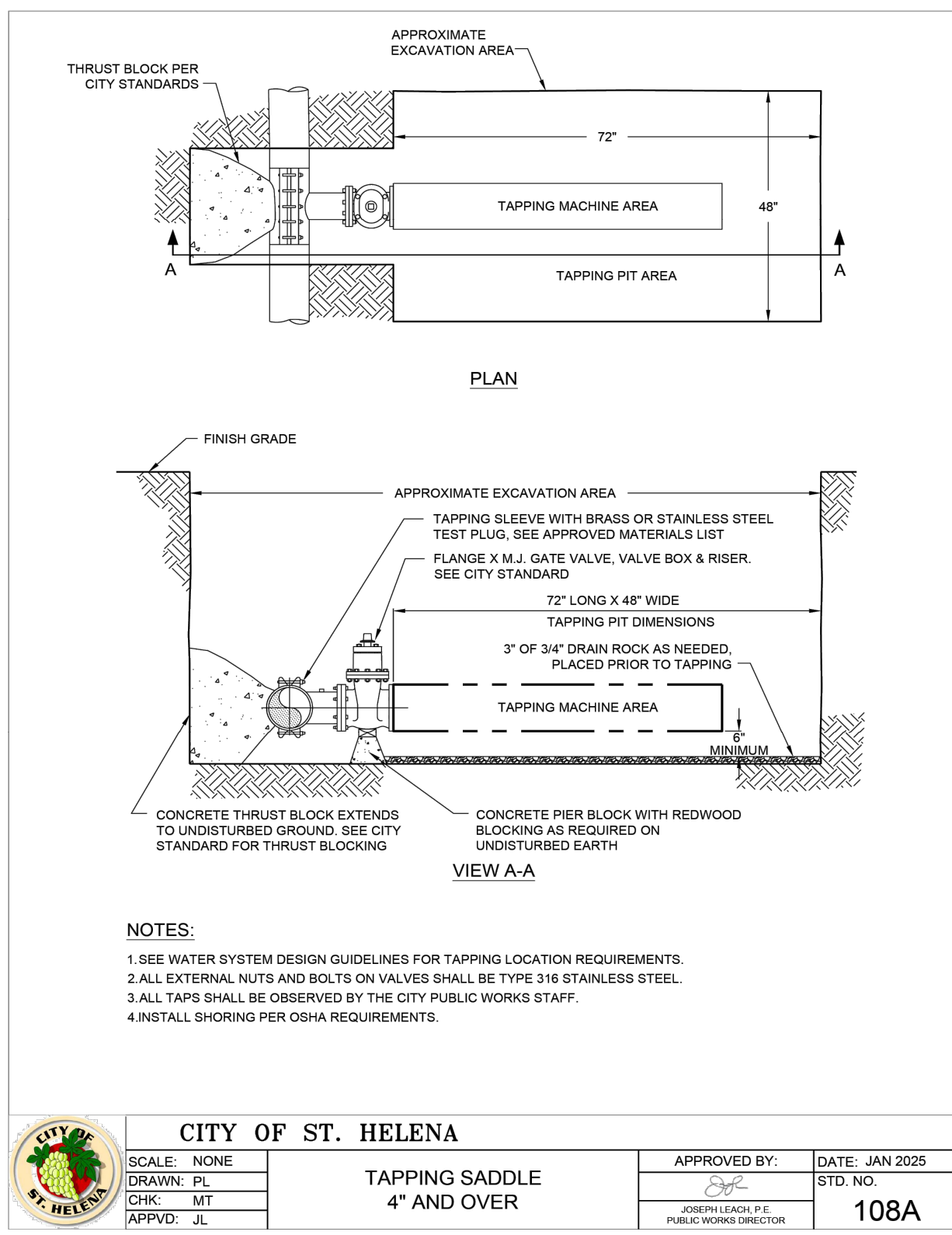
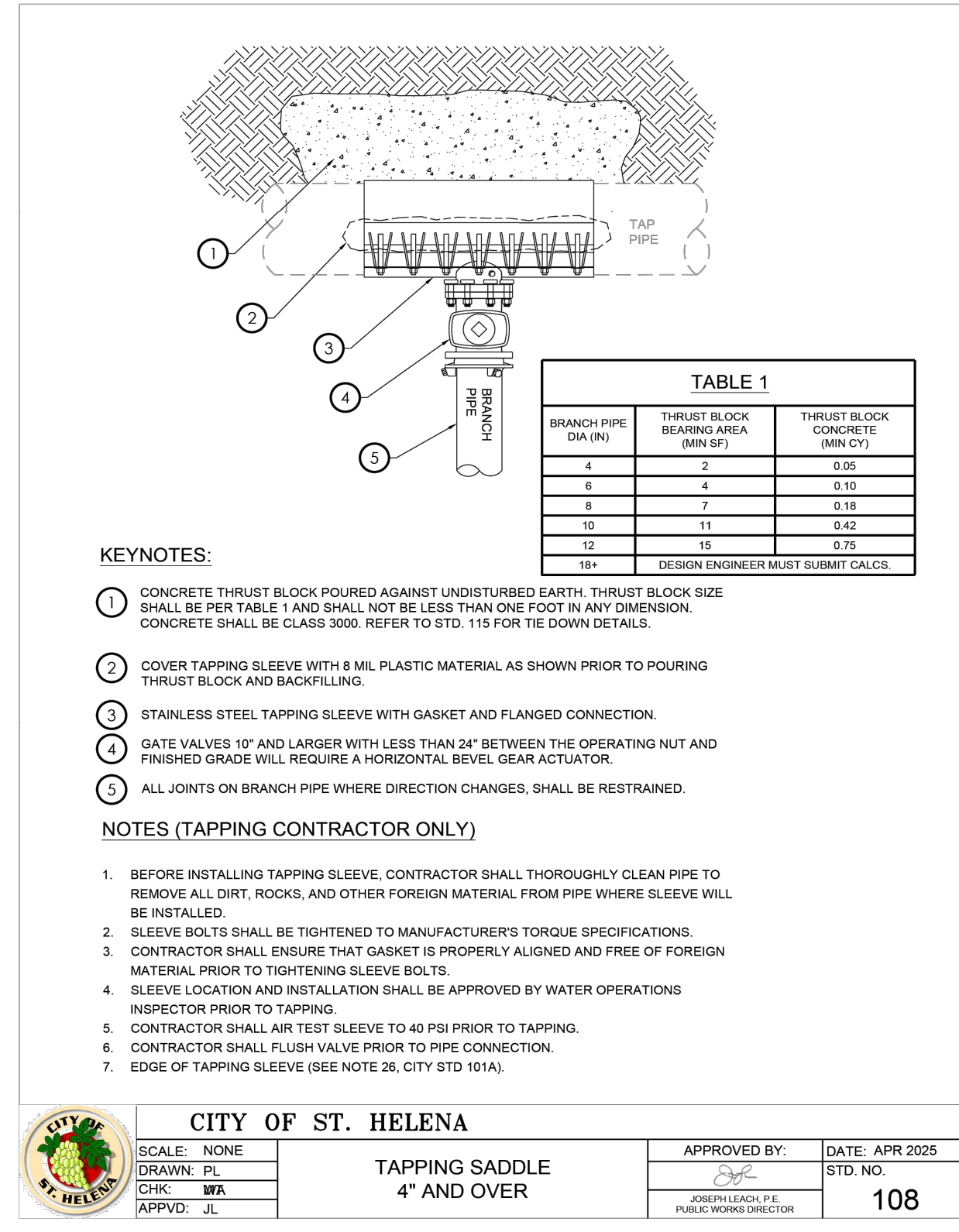
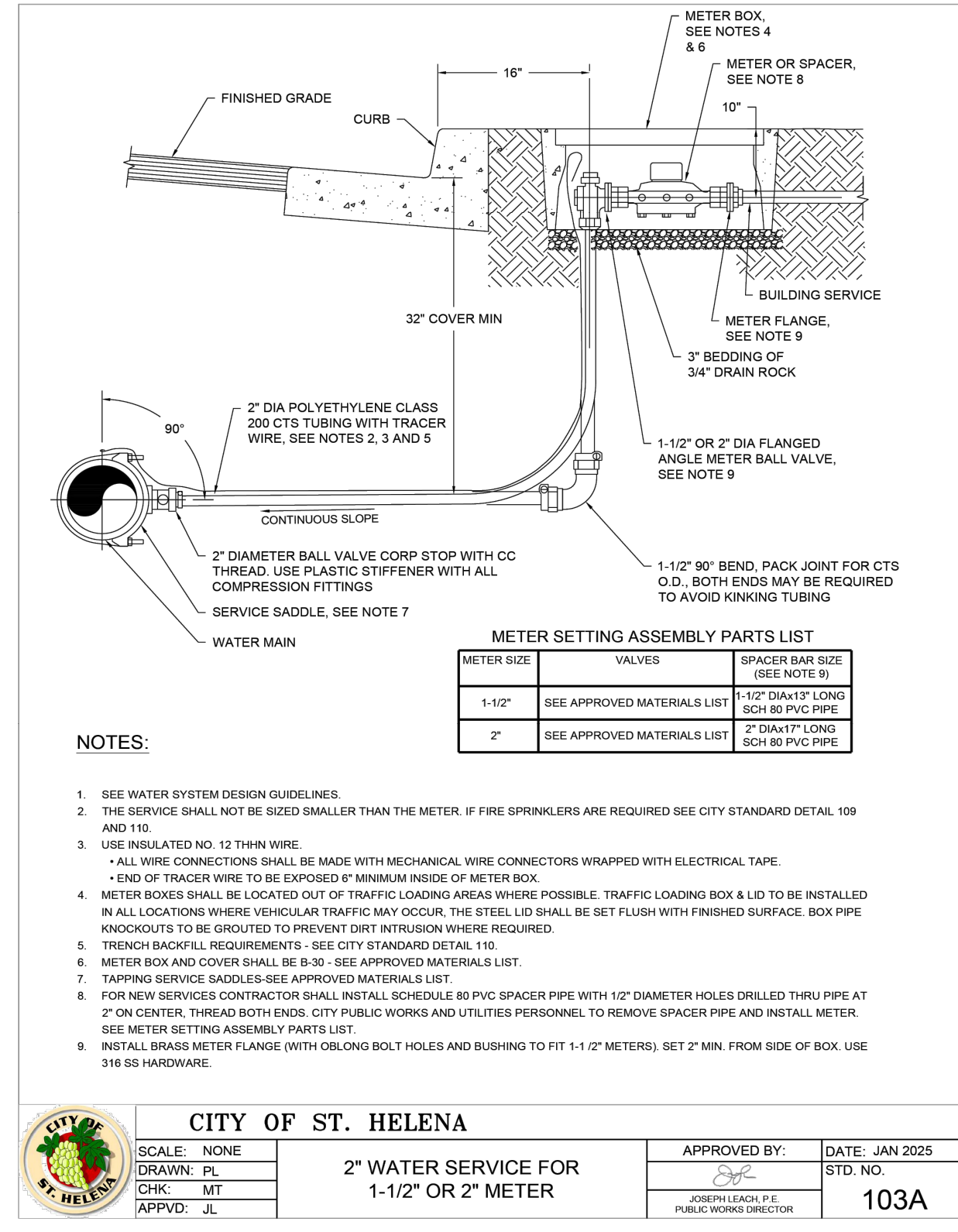
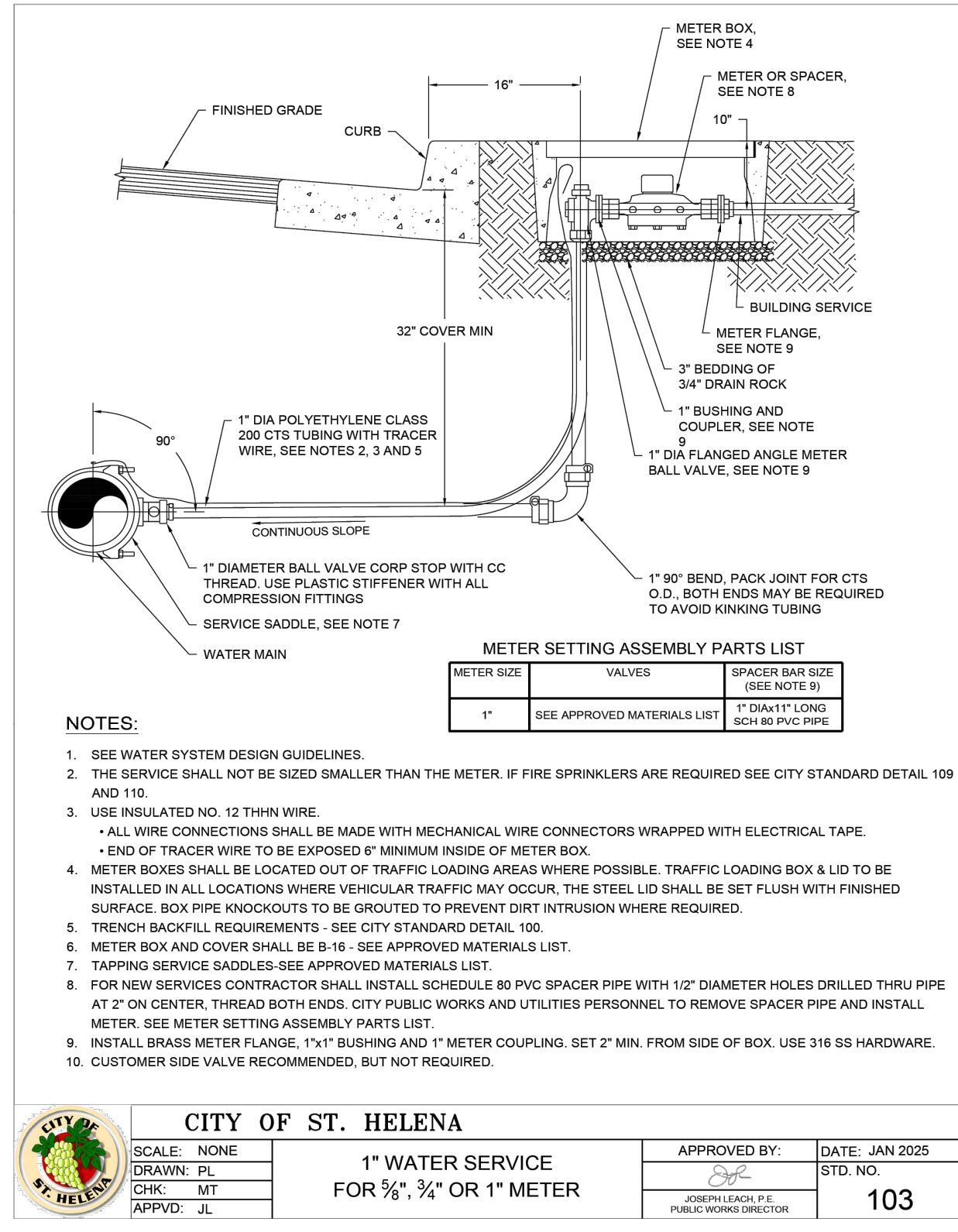
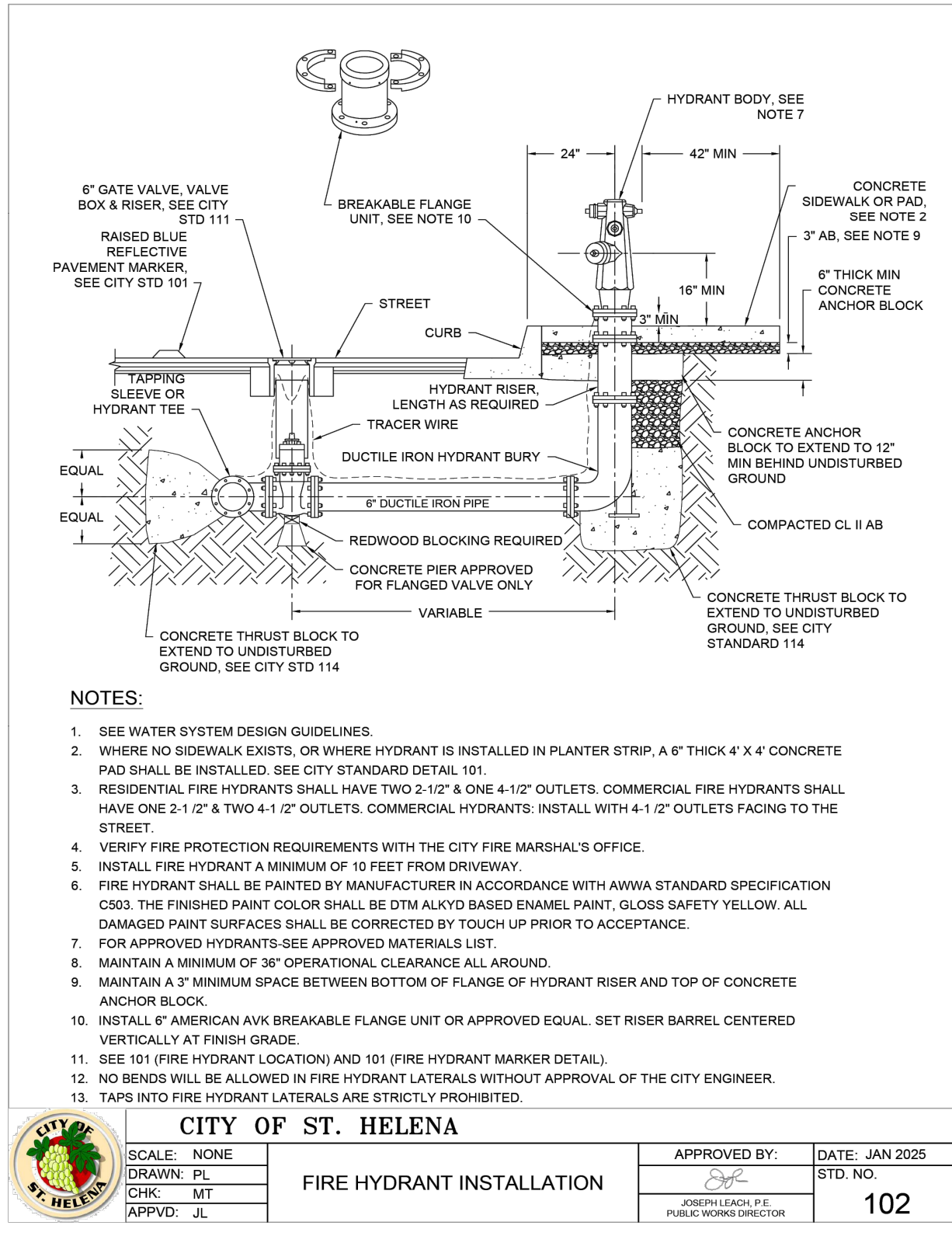
NAPA INTERTIE PIPELINE REPLACEMENT



CONSTRUCTION DETAILS

DRAWING NUMBER
C-500
SHEET NUMBER
16 OF 18

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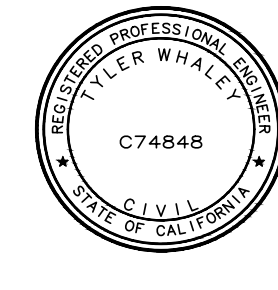


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KHA PROJECT 097399003	DATE 12/19/2025
SCALE AS SHOWN	DESIGNED BY MT
DRAWN BY MT	CHECKED BY TW

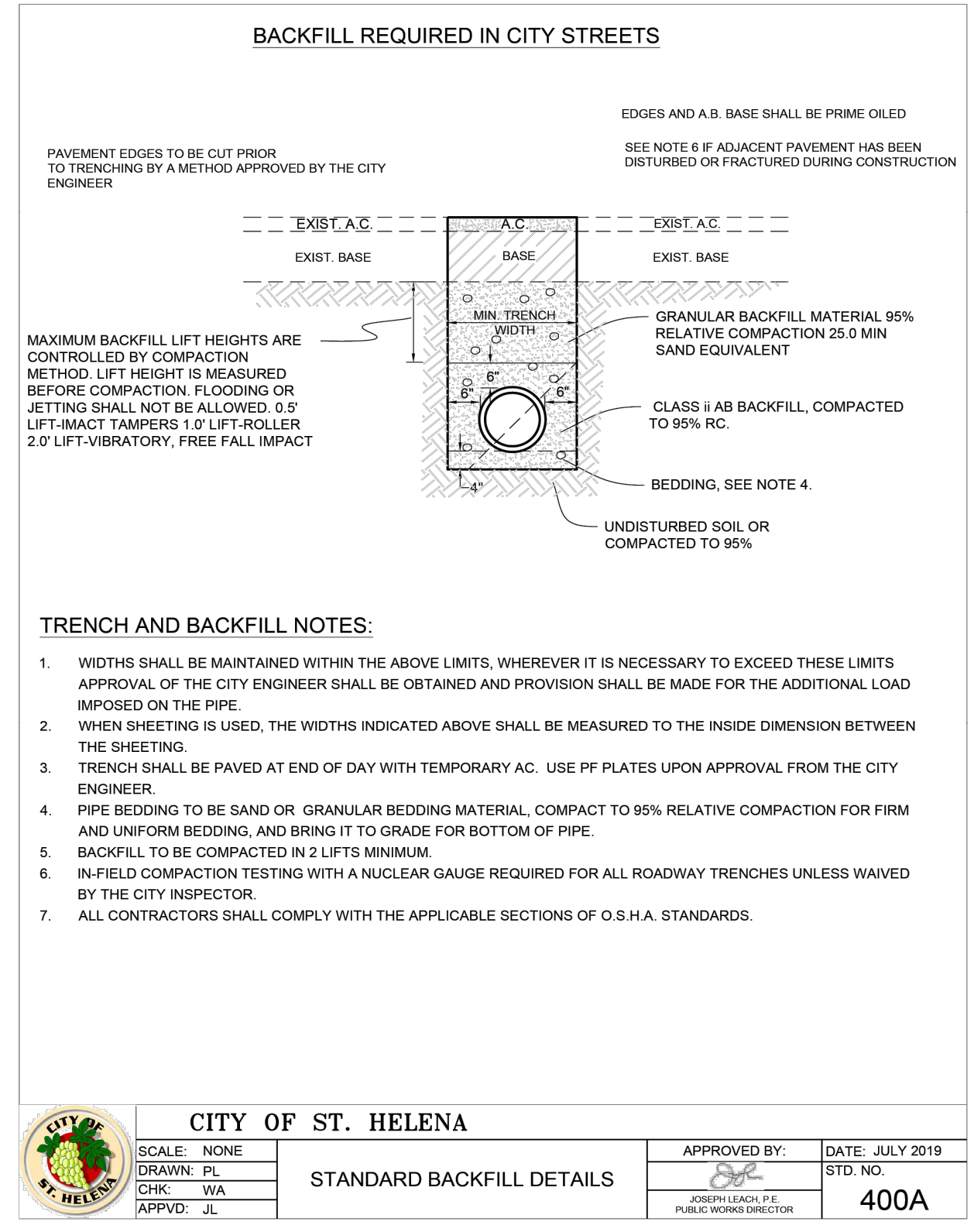
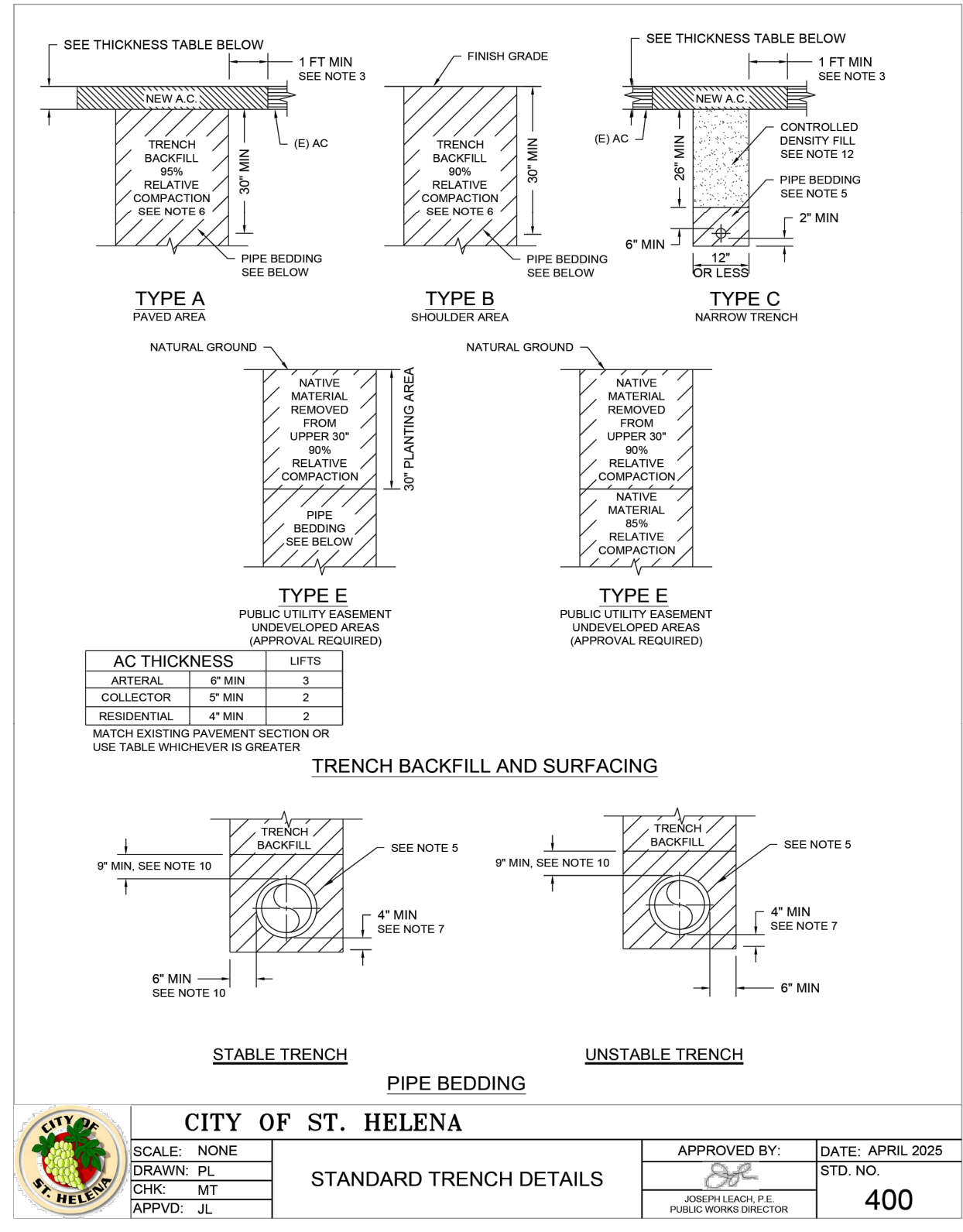
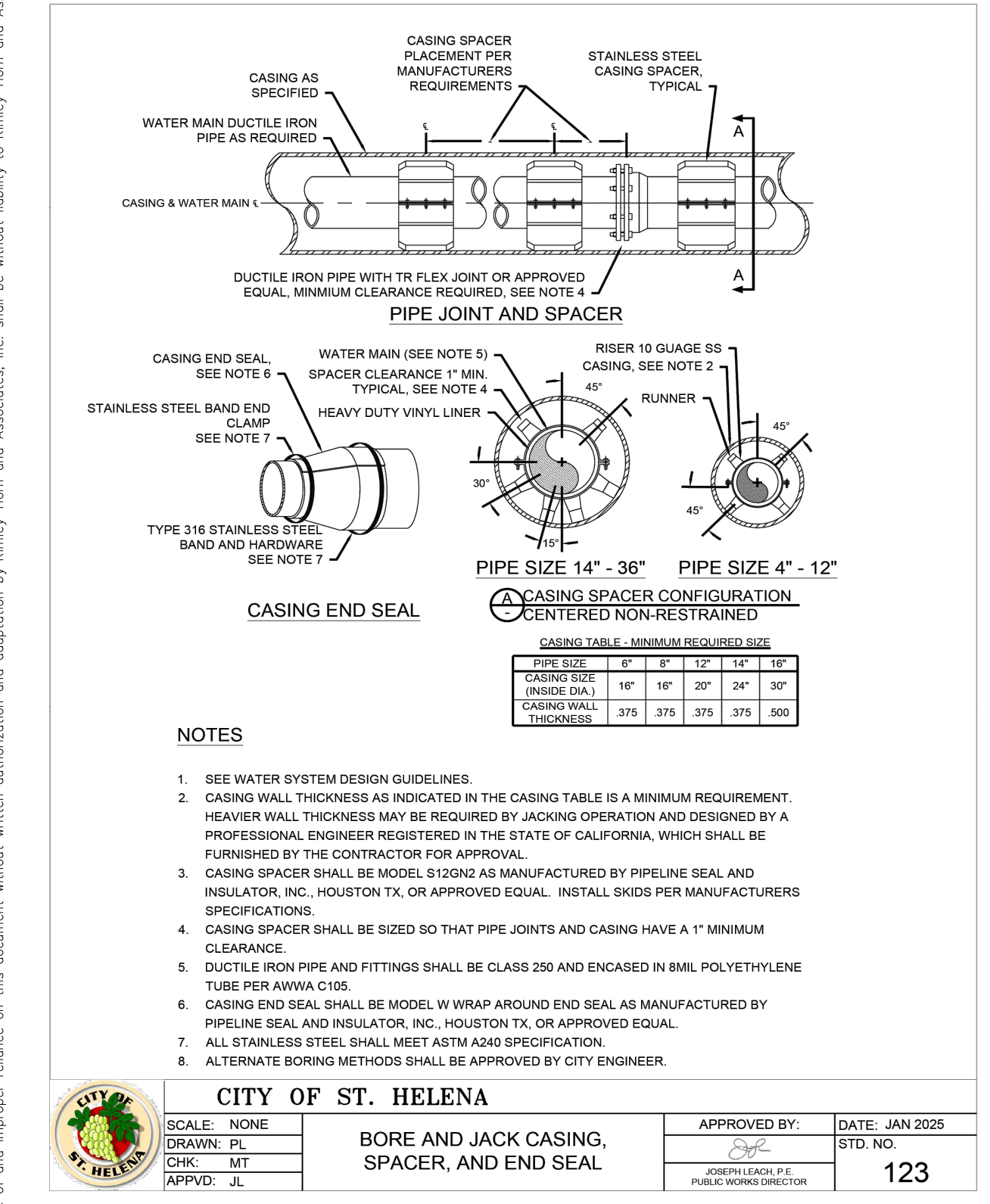
NAPA INTERTIE PIPELINE REPLACEMENT



CONSTRUCTION DETAILS

DRAWING NUMBER
C-501
SHEET NUMBER
17 OF 18

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GUIDELINES FOR TEMPORARY SHORING Published October 25, 2004

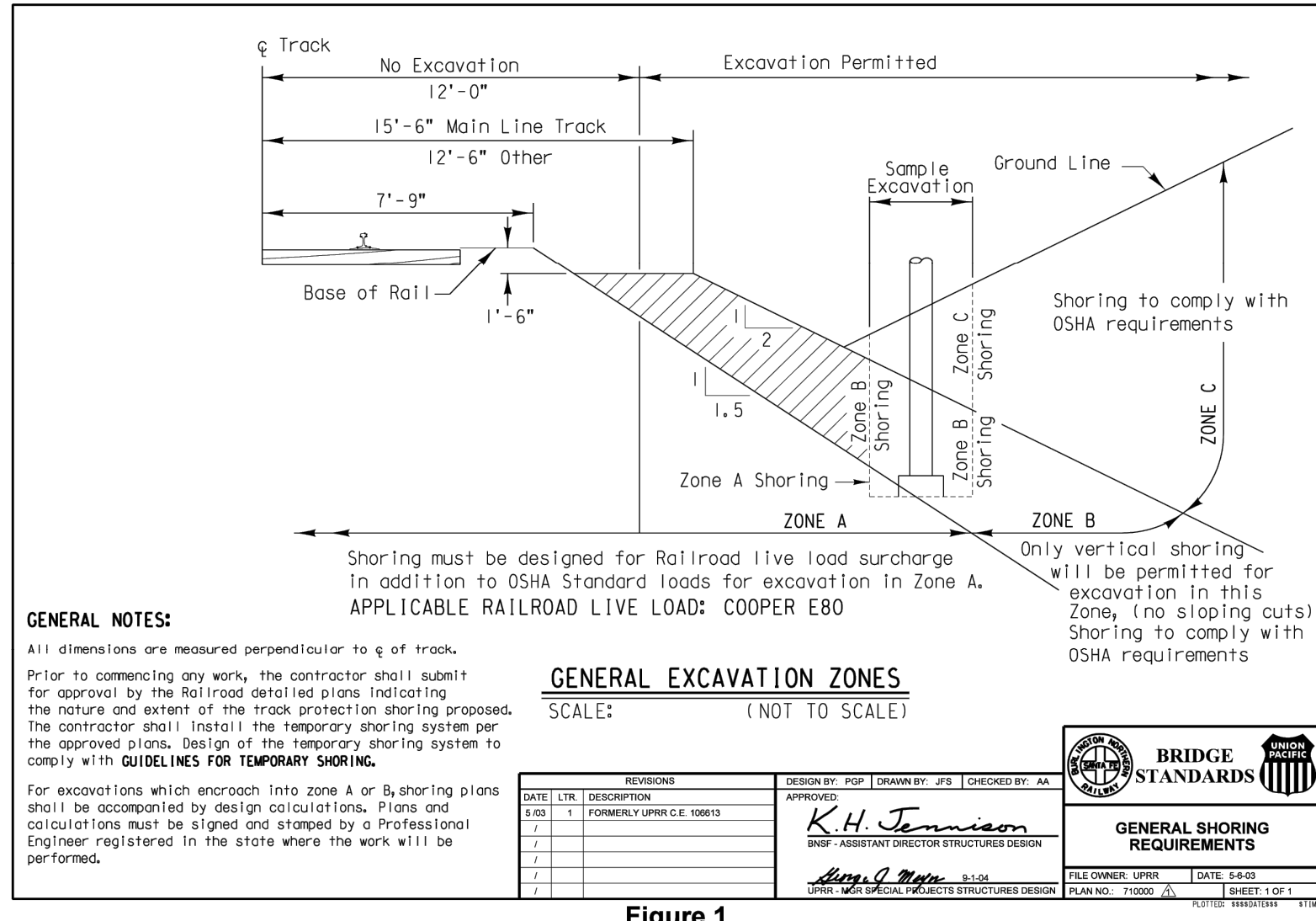


Figure 1



No.	REVISIONS	DATE	BY

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NAPA INTERTIE PIPELINE REPLACEMENT



CONSTRUCTION DETAILS

DRAWING NUMBER C-502
SHEET NUMBER 18 OF 18

FY 26 thru FY 30

Capital Improvement Plan

St Helena, CA

Project # W25-01
Project Name Napa Intertie Pipeline Replacement

Total Project Cost	\$6,538,469	Department	Public Works
Category	Water	Priority	High
Phase	Active	Status	Final Design
Project Location	SR29 (Mee Lane to Mitchell Dr)	Expenditure Account	763-5030-
Strategic Driver	Infrastructure		

Description

The Napa Intertie Pipeline Replacement Project involves the replacement of approximately 19,700 linear feet of aging 12-inch pipeline along the City's critical water transmission route near State Route 29. These replacements will occur from the Rutherford Pump Station (RPS) south of Mee Lane to the Mitchell Drive/Main Street Intersection, Per IUMP Project PWTM-1.

Notes

- FY24** - Per IUMP Appendix A (Project PWTM-1), pipeline initially scoped for replacement between RPS and SR29/Dowdell Lane.
- PSA executed per Resolution 2024-062 on May 14, 2024.
- FY25** - During preliminary design and field investigation, it was confirmed that the pipeline from RPS to Mee Lane was already replaced in 2010. Project limits revised to cover Mee Lane to Mitchell Drive/Main Street Intersection.
- Coordination with Vine Trail project consultant underway to align design near SR29.
- FY26** - Construction is anticipated to begin in FY26.

Expenditures	Prior	FY 26	FY 27	FY 28	FY 29	FY 30	Future	Total
3160 - Construction Contract	0	5,000,000	0	0	0	0	0	5,000,000
3150 - Construction Management	0	592,269	0	0	0	0	0	592,269
3170 - Contingency	0	500,000	0	0	0	0	0	500,000
3110 - Design	446,200	0	0	0	0	0	0	446,200
Total	446,200	6,092,269	0	0	0	0	0	6,538,469

Funding Sources	Prior	FY 26	FY 27	FY 28	FY 29	FY 30	Future	Total
763-Water Capital Improvement - Bond	446,200	6,092,269	0	0	0	0	0	6,538,469
Total	446,200	6,092,269	0	0	0	0	0	6,538,469



Agenda Report to the City Council

Agenda Section: CONSENT ITEMS

Department: Public Works

DATE:	February 10, 2026
FROM:	Mario Traverso, Project Manager
SUBJECT:	Consideration and proposed adoption of a Resolution (1) Awarding the Tank 2 Rehabilitation Project to Champion Painting Specialty Services. in the amount of \$1,194,310; (2) Authorizing the City Manager to execute the Construction Contract with Champion Painting Specialty Services; (3) Authorizing the Director of Public Works to approve Change Orders not-to-exceed 15% of the Contract price; and (4) Authorize the Recommended Budget Amendments/Transfers.
RECOMMENDED ACTION:	Approve the Resolution
PREVIOUS COUNCIL ACTION:	The W-101 Tank 2 Rehabilitation Project is included in the City's FY 2024-2028 CIP which was approved by City Council on June 13, 2023, the FY 2025-2029 CIP adopted by City Council on September 24, 2024 and the FY 2026-30 CIP adopted by City Council on May 27, 2025. Resolution 2025-121 was adopted by City Council on October 14, 2025 approving the plans and authorizing issuance of Request for Bids. The item was originally scheduled for City Council award at the December 9, 2025 but action was deferred, as described below.
STATEMENT OF THE PURPOSE:	To award construction of the W-101 Tank 2 Rehabilitation Project to Champion Painting Specialty Services in accordance with the City's approved Capital Improvement Plan (CIP).
FINANCIAL IMPACT:	The financial impact of this award and construction contract is \$1,194,310 in addition to possible change orders in the amount of \$179,147. The CIP Project W-101 includes \$869,000 in previously authorized Water Revenue Bond funding. To fully fund the construction phase and contingency, staff recommends increasing the use of Water Revenue Bonds by an additional \$564,457.

BACKGROUND:

A significant component of the City's drinking water distribution system are two large tanks which store treated water from the water treatment plant. *Tank 1* can store 1 million gallons of water and is located at the water treatment plant property. *Tank 2* can store 2.7 million gallons of water and is located near the lower reservoir on Spring Mountain Road. Together these tanks provide both storage and pressure for the City's water distribution system.

Tank 2 has been in service since 1992. In 2019 a Capital Improvement Project was developed to refurbish the tank. The refurbishment consists of draining the tank, cleaning and recoating the interior lining and exterior coating, replacing screens, replacing the corrosion protection system and upgrading the ventilation system. The project was resurrected by staff in 2024, and plans were recently completed by Oscar Larsen & Associates Consulting Engineers from Eureka, CA.

DISCUSSION:

A notice inviting bids was posted to the City of St. Helena's website and distributed to area construction plan rooms and exchanges on November 14, 2025. Bids were opened publicly at City Hall on December 5, 2025.

The bid results are as follows:

Cal Sierra Construction Inc.	\$1,168,500.00
Champion Painting Specialty Services	\$1,194,309.97
Euro Style Management	\$1,423,000.00
AMP United LLC	\$1,443,000.00
Resource Development Company, LLC	\$1,602,550.00
Polytech Industrial Incorporation	\$1,827,922.00
F.D. Thomas Inc.	\$1,978,458.00

Engineers Estimate: \$1,200,000

Cal Sierra Construction Inc. submitted the lowest bid but failed to include evidence of a necessary certification which was required as detailed in the bid solicitation. Cal Sierra was notified of the omission and failed to produce the required certification or comparable certification. A letter was sent to Cal Sierra Construction Inc. which detailed the City's decision to reject their bid. The City is proceeding to award the contract to the subsequent low bid proposal. Champion Painting Specialty Services bid is found to be responsive and complete, including providing evidence of the required certification. Champion Painting Specialty Services holds a valid Class C33 Contractor's License, No. 992697, with no enforcement actions listed. Their license expires 5/31/2026. Champion Painting Specialty Services has performed numerous similar projects for municipal water systems. City Staff has determined that Champion Painting Specialty Services satisfies the bidding requirements for the project and their licensing qualifies them to complete the project.

Once awarded, the project will begin early summer of 2026 beginning with the exterior components. The interior components of the project will occur during the fall of 2026.

ENVIRONMENTAL REVIEW: None

GOAL:

Goal 2: Improve Infrastructure & Further Environmental Sustainability

Goal 3: Pursue Water Security & Sustainable Management of Water Resources

Goal 5: Enhance Quality of Life

Goal 8: Implement Capital Improvement Plans (CIP) Projects Miscellaneous/Other

DOCUMENTS ATTACHMENTS:

[Bid Tabulation - Tank 2 Project](#)

[W-101 CIP Page](#)

[Resolution Awarding Contract](#)

BID RESULTS																			
Tank 2 Rehabilitation Project																			
				Engineer's Estimate		Polytech Industrial Incorporation		AMP United LLC		Cal Sierra Construction Inc.		Champion Panting Specialty Services		Euro Style Management		F.D. Thomas Inc.		Resource Development Company, LLC	
Bid Opening: December 5 2025 10AM																			
Mario Traverso																			
	DESCRIPTION	UNIT	QUANTITY	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$	UNIT COST, \$	ITEM TOTAL, \$
Bid Schedule																			
1	Mobilization	1	LS			\$199,792	\$199,792	\$100,000	\$100,000	\$110,000.00	\$110,000.00	\$37,754.51	\$37,754.51	\$50,000.00	\$50,000.00	\$60,220.00	\$60,220.00	\$65,000.00	\$65,000.00
2	Work Schedule	1	LS			\$2,500	\$2,500	\$15,000	\$15,000	\$15,000.00	\$15,000.00	\$1,468.46	\$1,468.46	\$2,000.00	\$2,000.00	\$750.00	\$750.00	\$15,000.00	\$15,000.00
3	Construction Pollution Control	1	LS			\$3,000	\$3,000	\$6,500	\$6,500	\$10,000.00	\$10,000.00	\$5,670.00	\$5,670.00	\$3,500.00	\$3,500.00	\$17,362.00	\$17,362.00	\$28,800.00	\$28,800.00
4	Interior Coating		1 LS			\$1,134,965	\$1,134,965	\$845,000	\$845,000	\$720,000.00	\$720,000.00	\$763,822.90	\$763,822.90	\$1,056,000.00	\$1,056,000.00	\$1,018,188.00	\$1,018,188.00	\$934,000.00	\$934,000.00
5	Exterior Coating	1	LS			\$330,711	\$330,711	\$395,000	\$395,000	\$226,000.00	\$226,000.00	\$234,349.28	\$234,349.28	\$212,000.00	\$212,000.00	\$707,489.00	\$707,489.00	\$415,000.00	\$415,000.00
6	Tank Disinfection and Testing	1	LS			\$22,358	\$22,358	\$10,000	\$10,000	\$10,000.00	\$10,000.00	\$5,873.86	\$5,873.86	\$7,000.00	\$7,000.00	\$17,205.00	\$17,205.00	\$10,500.00	\$10,500.00
7	Manway	1	LS			\$26,565	\$26,565	\$15,000	\$15,000	\$15,000.00	\$15,000.00	\$72,450.00	\$72,450.00	\$35,000.00	\$35,000.00	\$40,286.00	\$40,286.00	\$11,500.00	\$11,500.00
8	Vents	1	LS			\$1,800	\$1,800	\$4,000	\$4,000	\$9,000.00	\$9,000.00	\$1,575.00	\$1,575.00	\$1,500.00	\$1,500.00	\$21,809.00	\$21,809.00	\$20,300.00	\$20,300.00
9	Install Retaining Structure	1	LS			\$44,178	\$44,178	\$12,500	\$12,500	\$30,000.00	\$30,000.00	\$26,250.00	\$26,250.00	\$20,000.00	\$20,000.00	\$20,647.00	\$20,647.00	\$29,900.00	\$29,900.00
10	Tank Overflow Outlet	1	LS			\$14,160	\$14,160	\$18,750	\$18,750	\$10,000.00	\$10,000.00	\$12,390.00	\$12,390.00	\$2,500.00	\$2,500.00	\$35,587.00	\$35,587.00	\$10,200.00	\$10,200.00
11	Cathodic Protection	1	LS			\$46,393	\$46,393	\$18,125	\$18,125	\$10,500.00	\$10,500.00	\$31,237.50	\$31,237.50	\$32,000.00	\$32,000.00	\$34,900.00	\$34,900.00	\$57,600.00	\$57,600.00
12	Guy Wire Replacement		1 LS			\$1,500	\$1,500	\$3,125	\$3,125	\$3,000.00	\$3,000.00	\$1,468.46	\$1,468.46	\$1,500.00	\$1,500.00	\$4,015.00	\$4,015.00	\$4,750.00	\$4,750.00
BASE BID					\$1,200,000.00		\$1,827,922.10		\$1,443,000.00		\$1,168,500.00		\$1,194,309.97	\$1,423,000.00	\$1,423,000.00	\$1,978,458.00	\$1,978,458.00	\$1,602,550.00	\$1,602,550.00

FY 26 thru FY 30

Capital Improvement Plan

St Helena, CA



Project # W-101
Project Name Tank 2 Rehabilitation

Total Project Cost	\$ 1,610,266	Department	Public Works
Category	Water	Priority	High
Phase	Active	Status	Procurement
Project Location	APN 022-420-019	Expenditure Account	763-5030-
Strategic Driver	Infrastructure		

Description

The Tank 2 Rehabilitation Project involves critical maintenance of Tank 2 located at the Lower Reservoir to ensure its structural integrity, water quality performance, and regulatory compliance.

This project includes:

- Interior sandblasting and coating to restore corrosion protection.
 - Sanitization and disinfection of the tank to meet public health and drinking water standards.
 - Improvements that extend the operational lifespan of the tank and protect stored water from contamination.
- This rehabilitation was identified as a high-priority need in the Water Rate Study and Integrated Utility Master Plan.

Notes

- FY24** - Project included in the proposed Water Rate Study, with a scheduled delivery timeline for design and construction.
- Budget reflects updated cost estimates due to escalation.
- FY25** - City issue a Professional Services Agreement (PSA) in FY25 Q1 for design and preparation of construction bid documents.
- Construction tentatively scheduled for FY25 Q2-Q3, pending completion of design and environmental review.
- Exp/Enc expenditures reflect design work completed under the original project between FY16-FY22.
- FY26** - Construction is currently scheduled for FY26 Q2-Q3, based on adjusted delivery timelines and bond funding allocations.

Expenditures	Prior	FY 26	FY 27	FY 28	FY 29	FY 30	Future	Total
3160 - Construction Contract	686,000	508,310	0	0	0	0	0	1,194,310
3170 - Contingency	65,000	114,147	0	0	0	0	0	179,147
3110 - Design	176,809	0	0	0	0	0	0	176,809
3150 - Construction Management	118,000	-58,000	0	0	0	0	0	60,000
Total	1,045,809	564,457	0	0	0	0	0	1,610,266

Funding Sources	Prior	FY 26	FY 27	FY 28	FY 29	FY 30	Future	Total
763-Water Capital Improvement - Bond	987,000	564,457	0	0	0	0	0	1,551,457
561-Water Rate Revenues	56,109	0	0	0	0	0	0	56,109
764-Water Impact Fees	2,700	0	0	0	0	0	0	2,700
Total	1,045,809	564,457	0	0	0	0	0	1,610,266

CITY OF ST. HELENA
RESOLUTION NO. 2026-__

**RESOLUTION AWARDING THE CONSTRUCTION CONTRACT FOR
W-101 TANK 2 REHABILITATION PROJECT TO CHAMPION
PAINTING SPECIALTY SERVICES, AUTHORIZING RELATED
ACTIONS, AND APPROVING BUDGET AMENDMENTS**

RECITALS

- A. On October 14, 2025 the City Council adopted Resolution 2025-121, approving the plans and specifications and authorizing the solicitation of bids for the Tank 2 Rehabilitation Project; and
- B. On November 14, 2025 a Notice Inviting Bids for the Tank 2 Rehabilitation Project was posted and, on December 5, 2025, seven (7) bids were received and publicly opened; and
- C. The proposal submitted by the apparent low bidder, Cal Sierra Construction Inc. of Carmichael, California was determined to be non-responsive due to the omission of evidence of the required certification; and
- D. A notice was sent to Cal Sierra Construction Inc. detailing the City's intention to reject the proposal and award the contract to the subsequent low bidder; and
- E. The subsequent low bidder is Champion Painting Specialty Services of Lincoln, California; and
- F. Champion Painting Specialty Services possess the necessary licenses and certifications required to perform the work and their bid package has been determined to be responsive and complete; and
- G. A budget reallocation is necessary to properly allocate funding for the projects identified in the Capital Improvement Plan (CIP); and
- H. The project is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to Class 1 Existing Facilities.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

1. Awards the construction contract for the Tank 2 Rehabilitation Project to Champion Painting Specialty Services in an amount not-to-exceed \$1,194,310; and
2. Authorizes the City Manager to execute the construction contract with Champion Painting Specialty Services; and
3. Authorizes the Director of Public Works to approve construction change orders not to exceed 15%; and
4. Budget Amendments are as follows:

Description	Fund	GL Account	Amount
W-101 Construction Management	763 – Water Revenue Bond	763-50-30-31-50	(\$58,000)
W-101 Construction Contract	763 – Water Revenue Bond	763-50-30-31-60	\$508,310
W-101 Contingency	763 – Water Revenue Bond	763-50-30-31-70	\$114,147

5. Funding is as follows:

Description	Fund	GL Account	Amount
W-101 Construction Management	763 – Water Revenue Bond	763-50-30-31-50	\$60,000
W-101 Construction Contract	763 – Water Revenue Bond	763-50-30-31-60	\$1,194,310
W-101 Contingency	763 – Water Revenue Bond	763-50-30-31-70	\$179,147

Approved at a Regular Meeting of the St. Helena City Council on February 10, 2026, by the following vote:

Mayor Dohring:

Vice Mayor Deasy:

Council Member Barak:

Council Member Spadarotto:

Council Member Summers:

APPROVED:

ATTEST:

Paul Jamison Dohring, Mayor

Andrew Bradley, City Clerk



Agenda Report to the City Council

Agenda Section: CONSENT ITEMS

Department: Recreation

DATE:	February 10, 2026
FROM:	Ashley Sylvester, Director of Community Services
SUBJECT:	Consideration and proposed approval of a resolution authorizing the City of St. Helena Sesquicentennial parade on Main Street and authorizing City staff to assist with traffic control before, during, and after the parade.
RECOMMENDED ACTION:	Staff recommends the City Council adopt the resolution authorizing the City of St. Helena Sesquicentennial parade on Main Street authorizing City staff to seek Caltrans approval for the limited closure, and to provide traffic control before, during, and after the parade.
PREVIOUS COUNCIL ACTION:	N/A
STATEMENT OF THE PURPOSE:	To seek Council authorization to close a portion of Main Street for the Sesquicentennial Celebration parade.
FINANCIAL IMPACT:	The City will provide staff to assist with pre-planning, setup, and tear down of "no parking" and traffic control, and traffic control during the event. This will require approximately 15 hours of Public Works Department staff time, 4 hours from Fire Department staff and approximately 4 hours from Police Department staff.

BACKGROUND: About once each year a portion of Main Street is closed for a parade to a local celebration/activity. Since the city's main street is also a state highway (Hwy 29), permission needs to be sought from Caltrans. This authorization from the city council will not only provide authorization for city staff to undertake a variety of actions, but will also serve as a basis for the city to seek authorization from Caltrans.

DISCUSSION:

The City of St. Helena requests approval from the City Council to hold the Sesquicentennial parade on Main Street. The parade will take place on Saturday, April 25, 2026, starting at 1:00 p.m. Participants will stage on Grayson Avenue and Charter Oak at noon and then proceed north on Main Street ending at Lyman Park. City staff from a variety of departments along with volunteers will assist with various aspects of the parade including coordinating, controlling, and rerouting traffic during the parade festivities. The City of St. Helena will obtain an encroachment permit from Caltrans for the route traveled on Hwy 29.

ENVIRONMENTAL REVIEW: N/A

GOAL:

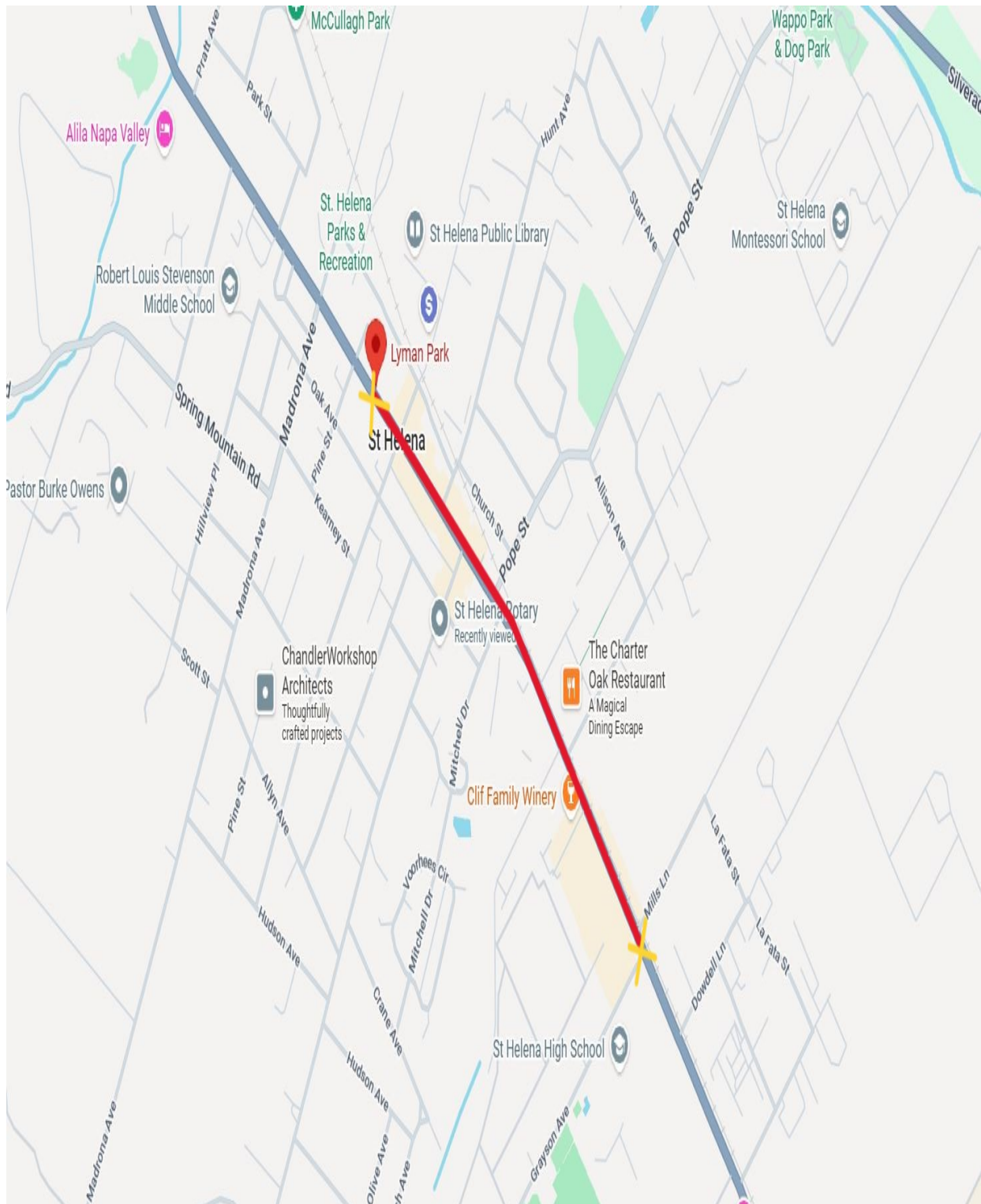
Goal 4: Provide Effective Community Information & Opportunities for Engagement

Goal 5: Enhance Quality of Life

DOCUMENTS ATTACHMENTS:

[Parade Route](#)

[2026 Sesquicentennial Parade Road Closure](#)



CITY OF ST. HELENA

RESOLUTION NO. 2026-XXX

**AUTHORIZING THE CITY OF ST. HELENA SESQUICENTENNIAL PARADE ON
MAIN STREET AND AUTHORIZING CITY STAFF TO ASSIST WITH TRAFFIC
CONTROL BEFORE, DURING, AND AFTER THE PARADE.**

RECITALS

A. The City of St. Helena requests approval from the City Council to hold the Sesquicentennial parade on Main Street. The parade will take place on Saturday, April 25, 2026, starting at 1:00 p.m.; and

B. The parade shall start at the intersection of Main Street and Grayson Avenue and proceed north onto Main Street, ending at the intersection of Main Street and Madrona Avenue; and

C. City staff is able to provide the necessary controlling and detouring of traffic on Highway 29, Railroad Avenue, and the parade route; and

D. City staff is requesting the prohibition of parking on Main Street before and during the parade; and

E. Section 21101 (e) of the California Vehicle Code provides that local authorities may, by resolution, temporarily close a portion of any street for celebrations, parades, local special events, and other purposes when, in the opinion of local authorities having jurisdiction or a public officer of employee that the local authority designated by resolution, the closing is necessary for the safety and protection of persons who are to use that portion of the street during the temporary closing.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

1. The City Council hereby approves the City of St. Helena's request for a Sesquicentennial Parade on Main Street on Saturday, April 25, 2026, starting at 1:00 p.m.

2. The City Council finds that the benefits derived from authorizing the City of St. Helena Sesquicentennial Parade, starting from the intersection of Main Street and Grayson Ave and ending at the intersection of Main Street and Madrona Avenue, outweigh the anticipated inconvenience to the businesses and citizens generally.

3. City staff is directed to provide necessary traffic control for the safety and protection of persons who are to use the portion of Main Street during the Sesquicentennial Parade.

4. Parking on Main Street is prohibited on Saturday, April 25, 2026 from 12:00 p.m. to 4:00p.m. for the Sesquicentennial Parade.

Approved at a Regular Meeting of the St. Helena City Council on February 10,2026 by the following vote:

Mayor Dohring:

Vice Mayor Deasy:

Council Member Barak:

Council Member Spadarotto:

Council Member Summers:

APPROVED:

ATTEST:

Paul Jamison Dohring, Mayor

Erika Opp, Acting City Clerk



Agenda Report to the City Council

Agenda Section: CONSENT ITEMS

Department: Public Works

DATE:	February 10, 2026
FROM:	Stephanie Killingsworth, Public Works Financial Analyst
SUBJECT:	Consideration and Proposed Adoption of a Resolution (1) Authorizing the City Manager to Execute a Construction Contract with Marine Industrial Tank, Inc. in an Amount Not-To-Exceed \$83,281 for Interior Relining of Filters 5-8 at Stonebridge Wells; (2) Authorizing the Director of Public Works to Approve Change Orders up to 15%; and (3) Authorizing Appropriation of Water Enterprise Fund Balance.
RECOMMENDED ACTION:	Staff recommends approval of the attached Resolution.
PREVIOUS COUNCIL ACTION:	On September 23, 2025, the City Council authorized a construction contract with ERS Industrial Services, Inc. for removal and replacement of filter media at the Stonebridge Wells. The authorization addressed filter media performance and included a sole source finding specific to ERS's proprietary expertise and familiarity with the City's filter systems for media replacement services. The action did not include full interior abrasive blasting or relining of the steel pressure vessels.
STATEMENT OF THE PURPOSE:	To request City Council authorization to enter into a construction contract for interior relining of Filters 5-8 at Stonebridge Wells following inspection findings that identified significant coating deterioration not included in the previously approved filter media replacement project.
FINANCIAL IMPACT:	The total financial impact is an amount not-to-exceed \$95,773, which includes the base construction contract of \$83,281.25 and a 15% contingency (\$12,492) for potential change orders. Because this interior rehabilitation was not anticipated in the adopted budget, sufficient appropriations are not currently included within the Water Enterprise operating budget. Staff recommends funding the project through the Water Enterprise Fund balance.

BACKGROUND:

The Stonebridge Wells plays a critical role in meeting peak summer water demand. Council previously authorized replacement of aging filter media to address reduced effectiveness in removing naturally occurring constituents such as iron and manganese.

During January 2026 field work associated with media removal, ERS performed interior inspections of filters 1-8 with filters 1-4 required minor coating touch-ups.

DISCUSSION:

During January 2026 field work associated with media removal, ERS performed interior inspections of Filters 1-8. When the vessels were drained and the media was removed in January 2026, ERS and staff were able to see the interior steel surfaces for the first time in several years. During this inspection, significant deterioration of the interior coating system was identified in Filters 5-8. The inspection documented:

- Blistering and pinholes
- Corrosion of the steel substrate
- Delamination of man-way lids
- Areas requiring full abrasive blast and recoating.

These conditions were **not** visible prior to media removal and were not part of the original Council authorization.

The newly identified work involves full interior rehabilitation of the steel vessels, including abrasive blasting and application of a new NSF-61 potable water-approved lining system. This is a separate scope of work from filter media replacement.

Because interior tank relining and coatings application is a service provided by multiple qualified contractors, staff sought competitive pricing to ensure the City receives the best value. ERS submitted a proposal for interior rehabilitation in the amount of \$149,810. Marine Industrial Tank, Inc. (MIT) submitted a proposal for full abrasive blasting and relining of the same vessels in the amount of \$83,281.25. The MIT proposal is approximately \$66,500 lower than the ERS proposal for comparable rehabilitation services.

Addressing the coating deterioration now is both practical and fiscally responsible. The vessels are already offline due to the media replacement work, which avoids future mobilization costs and operational disruption. If left unaddressed, continued corrosion could lead to more significant structural damage and higher long-term capital replacement costs.

By completing the interior relining at this time, the City:

- Protects the structural integrity of the pressure vessels
- Extends the useful life of the filters
- Reduces long-term maintenance costs

- Maximizes the value of the current project timing

Staff recommends award to the lowest responsive and responsible proposer to ensure long-term system reliability and responsible stewardship of Water Enterprise Funds.

ENVIRONMENTAL REVIEW: This project is exempt from CEQA under Section 15301, Class 1 (Existing Facilities), as it involves repair and maintenance of existing public utility systems without expansion of capacity or use.

GOAL:

Goal 2: Improve Infrastructure & Further Environmental Sustainability

Goal 3: Pursue Water Security & Sustainable Management of Water Resources

DOCUMENTS ATTACHMENTS:

[Resolution SBW Relining](#)

[St. Helena \(Stone Bridge\) Inspections Report](#)

[ERS Proposal](#)

[MIT Proposal](#)

[2024 Short Form Construction Contract Template](#)

CITY OF ST. HELENA

RESOLUTION NO. 2026-__

RESOLUTION AUTHORIZING (1) THE CITY MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH MARINE INDUSTRIAL TANK, INC. IN AN AMOUNT NOT-TO-EXCEED \$83,281. FOR INTERIOR RELINING OF FILTERS 5-8 AT STONEBRIDGE WELLS; (2) AUTHORIZING THE DIRECTOR OF PUBLIC WORKS TO APPROVE CHANGE ORDERS UP TO 15%; AND (3) AUTHORIZING APPROPRIATION OF WATER ENTERPRISE FUND BALANCE.

RECITALS

- A. The City relies on the Stonebridge Wells to supplement its potable water supply, particularly during high-demand summer months; and
- B. On September 23, 2025, the City Council authorized a construction contract with ERS Industrial Services, Inc. for removal and replacement of filter media at the Stonebridge Wells; and
- C. During January 2026 field work associated with media removal, interior inspections of Filters 1-8 were conducted, and significant coating deterioration was identified in Filters 5-8; and
- D. The deterioration included blistering, corrosion, delamination, and interior steel exposure requiring full abrasive blasting and relining; and
- E. The required interior rehabilitation constitutes a separate scope of work from filter media replacement; and
- F. Staff obtained competitive pricing for the interior relining work, and Marine Industrial Tank, Inc. submitted the lowest responsive and responsible proposal in the amount of \$83,281; and
- G. Funding for this unanticipated rehabilitation will be provided through the Water Enterprise Fund balance.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

1. Authorizes the City Manager to execute a Construction Contract with Marine Industrial Tank, Inc. in the amount of \$83,281 for interior relining of Filters 5-8 at the Stonebridge Water Treatment Plant; and
2. Authorizes The Director of Public Works to approve change orders not-to-exceed fifteen percent (15%) of the base contract amount, or \$12,492, for a total not-to-exceed project authorization of \$95,773; and
3. Authorizes the use of Water Enterprise Fund Balance as the funding source for this appropriation.
4. Funding is as follows:

Description	Fund/Funding Source	Expense GL Account	Amount
Increase to Budget Water Treatment Capital Improvement Equipment	561 – Water Enterprise	561-5034-2670	\$95,773

Approved at a Regular Meeting of the St. Helena City Council on February 10, 2026, by the following vote:

Mayor Dohring:

Vice Mayor Deasy:

Council Member Barak:

Council Member Spadarotto:

Council Member Summers:

APPROVED:

ATTEST:

Paul Jamison Dohring, Mayor

Andrew Bradley, City Clerk

City of St. Helena

REPORT FOR

Stone Bridge WTP

PERFORMED & PREPARED

By:

ERS INDUSTRIAL SERVICES, INC.

ERS INDUSTRIAL SERVICES, INC.

2120 Warm Springs Ct.

510-770-0202 phone

510-490-3024 fax

January 27, 2026

St Helena, City of
99 Pope Street.
St. Helena, Ca 94574

ATTENTION: MICHELE FERRELL

REFERENCE: FILTERS 1-8 AT THE STONE BRIDGE WTP

Hi Michele:

The week of January 26- 30 2026, a crew from ERS Industrial Services, Inc. visited the Stone Bridge Water Treatment Plant located at 99 Pope Street. St. Helena, Ca 94574. The plant is owned and operated by The City of St. Helena. The purpose of this visit was to replace all filter media and perform inspections on eight 34 sq. foot Pressure Vessel Filters operated at the plant.

The following report includes the field notes that document the observations and inspections.

Page 2 of 3
Filters: 1-8 Report
January 28, 2026

GENERAL NOTES: Filters: 1-8

- Filters: 1-4
 - After pressure washing the filter interior, minor areas were noted that require touch ups repair.
 - Touch up repairs will be tracked on Time and Materials.
 - Man-way lids will require full blast and coat, due to delamination of the existing coating.

- Filters: 5-8
 - After pressure washing the filter interior, blistering, pinholes and corrosion were noted throughout the filter shell.
 - The filters will require full abrasive blast and coating of all interior steel including man-way lids and overlapping coatings onto concrete floor 3-4 inches.
 - All PVC piping in each filter will get removed, inspected, stored for re-use.

COATINGS CONDITION FILTERS 5-8

ERS INDUSTRIAL SERVICES, INC.

2120 Warm Springs Ct.

510-770-0202 phone

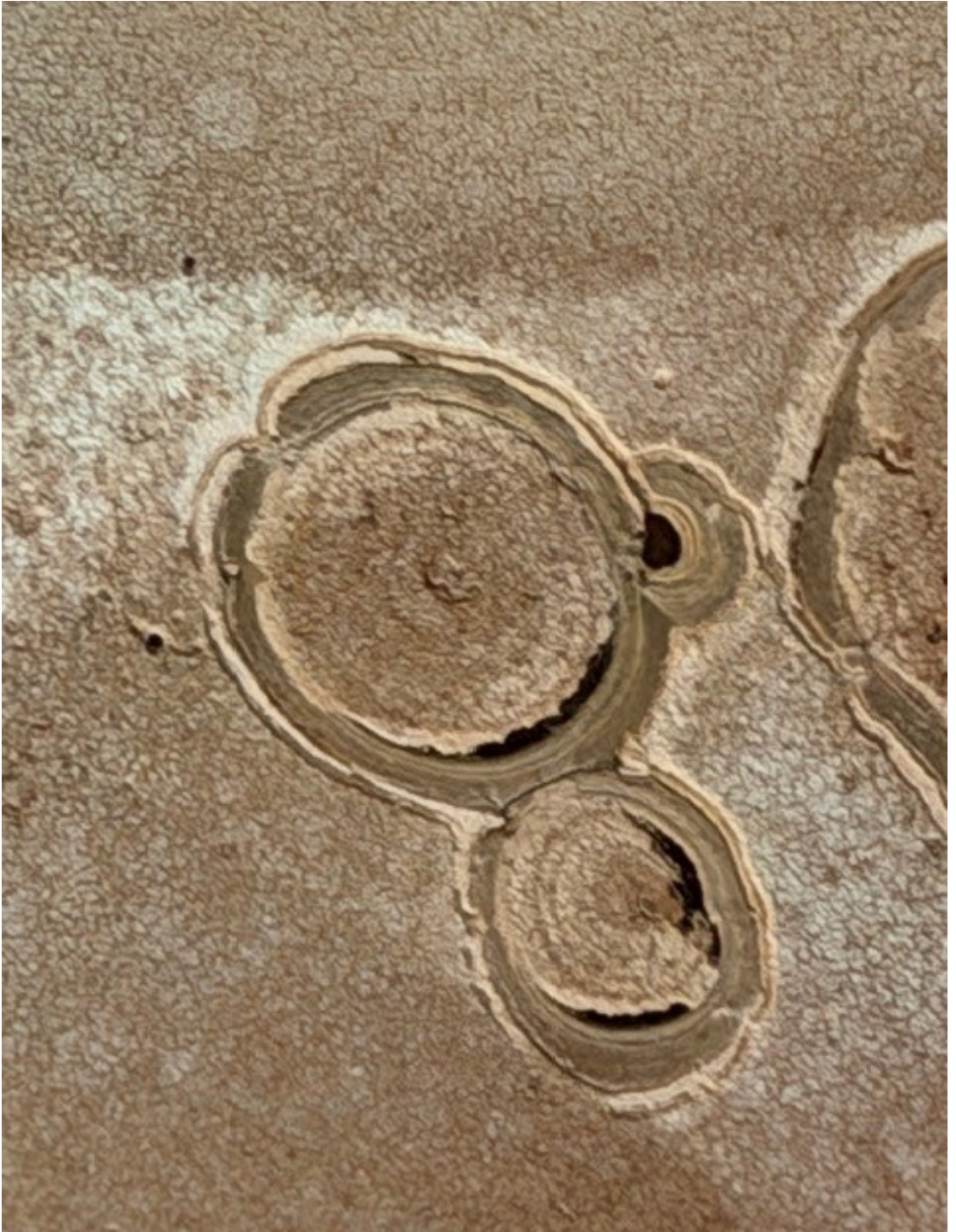
510-490-3024 fax

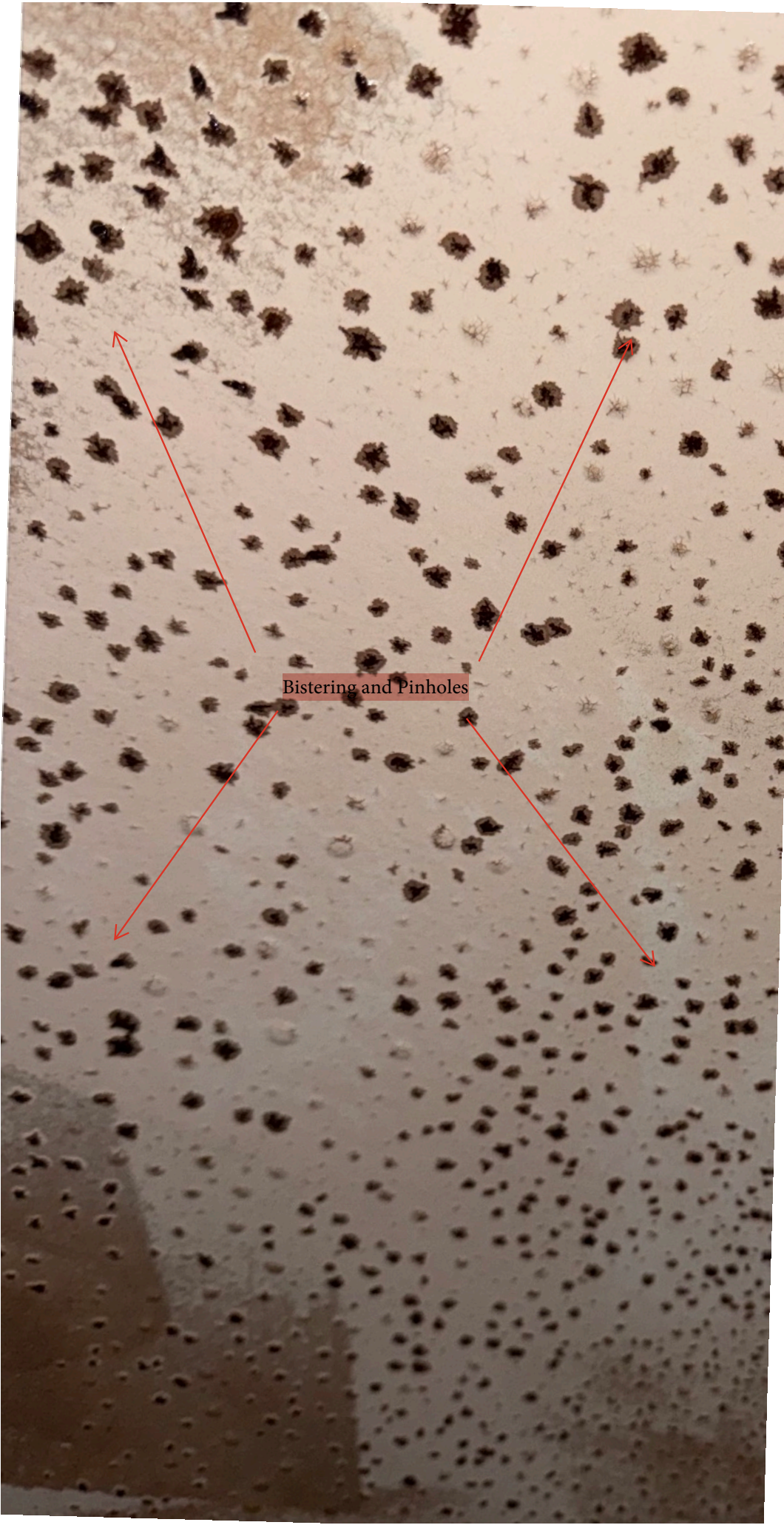






















January 28, 2026

Michele Ferrell
St. Helena, City of
99 Pope Street.
St. Helena, Ca 94574

QUOTE #: SHCPCO3-1QIC

PHONE #: 707-815-3936

EMAIL ADDRESS: mferrell@cityofsthelena.gov

Dear Michele:

ERS is pleased to submit its proposal for our service for new coatings on your four (4) 6.5' x 8' vertical pressure vessel filters (5-8) at the Stone Bridge WTP, located in St. Helena, Ca.

Scope of Supply:

Filters: 5-8

- Removal, packaging, and storage of all PVC parts for reuse.
- All (8) filter manway lids will get blasted and coated.
- Coatings – Filter Interior:
 - Full containment, environmental control, and protection of piping throughout the coatings process.
 - Surface preparation of steel substrate in accordance with SSPC-SP 10/NACE 2: 3-5Mil profile per manufactures recommendations.
 - Heated plural spray application (one coat) of NSF-61/600, 100% Solids, Endura-flex 1988 Elastomeric Polyurethane (off White) @ 50-60 mil DFT.
 - Holiday detection and inspection in accordance with SSPC-PA 2.
- Coatings – Filter Exterior:
 - None.
- Reinstallation of existing PVC piping.

Clarifications:

- Any extra work/repairs outside of scope will be tracked on T&M.

*Price **does not** include bonding.*

Price does not include any valves, instruments, or controls.

ERS will require a media sample for Disposal Testing prior to scheduling the project.

ERS will also repair or replace existing underdrains as needed, on a time and materials basis.

Class A, C33 CSLB License #724233

Registered DIR Public Works Contractor

#1000003275

2120 WARM SPRINGS COURT FREMONT, CALIFORNIA 94539 | P: 510.770.0202 | E:
SALES@ERSFILTER.COM



Disposal testing and transport to be executed in compliance with RCRA Subtitles C & D.

Standard Provisions:

1. Insurance
 - a. Pollution Liability \$3,000,000.00
 - b. Professional Liability \$3,000,000.00
2. Qualified manpower:
 - a. Onsite Supervisor/Environmental Technician/Hole Watch.
 - b. Certifications in Forklift/Reach Lift, Crane Operator, Confined Space & Rescue, and First Aid/CPR/AED.
3. Equipment and PPE:
 - a. High-power industrial vacuum system.
 - b. Ventilation fan for air circulation.
 - c. Four gas monitors for pre-entry and continuous LEL testing.
 - d. Air-purifying respirators (supplied air respirators available if required).
4. Safety Regulations:
 - a. Confined Space:
 - i. Tripod/winch for emergency evacuation.
 - ii. Fall arrest harnesses with safety lanyards for all men.
 - iii. Permit-required confined space entry permits as applicable.
 - iv. Daily monitoring log.
 - b. 2-Way radios for communication with in-tank personnel.
 - c. Cellular phone as an emergency response tool.
5. New media as follows:
 - a. None.

Additional Coatings Provisions:

1. Quality Control:
 - i. Perform and document hold-point inspections in accordance with specifications.
 - ii. Provide final inspection and approval of coatings application.
 - iii. Produce Daily Inspection Reports confirming coatings operations are in conformance with applicable standards.
2. Equipment and PPE:
 - a. Environmentally controlled trailer with heated plural component spray equipment and specialized equipment technician
 - b. 24-hour continuous environmental control with dehumidification and monitoring of blasting and coating area.

Class A, C33 CSLB License #724233

Registered DIR Public Works Contractor

#1000003275

2120 WARM SPRINGS COURT FREMONT, CALIFORNIA 94539 | P: 510.770.0202 | E:
SALES@ERSFILTER.COM



PRICING: \$149,810.00

Quote Valid for 30 days.

Our time and materials work are billed at \$246.00 per man-hour, straight time, plus materials with a 25% margin. Price includes all applicable sales tax.

Please feel free to contact me should you need further information or any clarification. My contact information is: phone – cell (510) 552-3285; office (510) 770-0202; email – nradonich@ersfilter.com

If quote is accepted, please answer questions below, sign and return to Nradonich@ersfilter.com

Sincerely,

Nik Radonich
Sales/Engineering Manager

Is this project subject to PREVAILING WAGE? Yes ☐ No ☐

Is this project deemed PUBLIC WORK and therefore subject to the rules and regulations of the California Department of Industrial Relations (DIR)? Yes ☐ No ☐

If the answers are “NO”, please mark as such and refer to the paragraph at the end of this document

PO or Contract #

DIR Project #

Authorized Representative — Name & Signature

Title

(hereinafter “Contracting Party”) has represented in writing and to ERS and does hereby reaffirm in writing to ERS (hereinafter “Contractor”) that neither the project which is the subject matter of this Agreement nor the requested work to be performed on the project by Contractor are “public work” as defined by federal law, Chapter 1, Part 7 of Division 2 of the California Labor Code (governing “Public Works and Public

Class A, C33 CSLB License #724233

Registered DIR Public Works Contractor

#1000003275

2120 WARM SPRINGS COURT FREMONT, CALIFORNIA 94539 | P: 510.770.0202 | E:
SALES@ERSFILTER.COM



Agencies"), or any other federal, state or local statute, ordinance, regulation, or administrative and/or judicial decision. Based on the foregoing representation, Contractor has calculated its bid for the subject project based on certain wage rates and benefits. Contracting Party will specifically verify, prior to allowing Contractor to submit a proposal on the project or work to be performed on the project, that project is not deemed to be a public works project and that there are no requirements for prevailing wages or other unique bid requirements. In the event that Contracting Party has made any misrepresentation regarding the foregoing whether intentionally or negligently, Contracting Party specifically agrees to indemnify, reimburse, and hold Contractor harmless from and against any and all claims, penalties, fines or assessments that may arise from Contracting Party's failure to properly report and describe the project to Contractor. Contracting Party shall reimburse any and all attorney's fees and all costs associated with defending or enforcing this projection to Contractor.

Class A, C33 CSLB License #724233

Registered DIR Public Works Contractor

#1000003275

2120 WARM SPRINGS COURT FREMONT, CALIFORNIA 94539 | P: 510.770.0202 | E:
SALES@ERSFILTER.COM



CITY OF ST HELENA
STONE BRIDGE WTP
RELINING PROPOSAL
(4) 6.5' x 8' VERTICAL
PRESSURE VESSEL
FILTERS (5-8)



Business Address:

3324 Kee Ln
Modesto CA, 95355
Office: (209) 382-9155
Mobile: (209) 702-1233
chris@mitdivingcoating.com
Fax:(408) 707-1490

January 29th, 2026
Michele Ferrell
Water Treatment Plant
City of St Helena
Public Works Department
1572 Rail Road Ave
St Helena, CA 94574
mferrell@cityofsthenela.gov

38.51009, -122.4531

Stone Bridge

4 6.5'D x 8'H

Steel welded filter

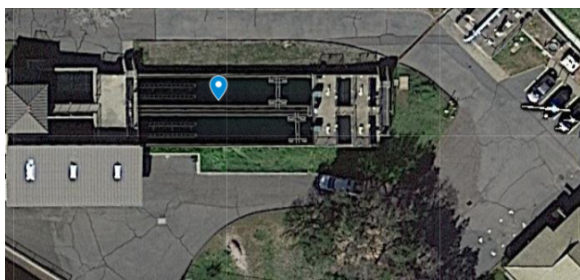
vessels Interior

Relining

Dear Mrs. Ferrell

We are pleased to quote the following for the above referenced tanks. We will provide equipment, materials, labor, and insurance. This will be for the complete interior preparations and relining of four 6.5'D x 8'H steel welded tank vessels.

- Safety - Confined Space, Constant Atmospheric Air/Gas Monitoring, Fall protection, and OSHA 30 trained work crew, NACE Level 2
- Provide entry permit, testing and gas monitoring of atmosphere in tank as required for the safety of crew on the interior at all times.
- Provide scaffold to access complete interior of tank.
- Provide all needed oil-free, Air compressors- Verify oil free air- by way of "Blotter Test".
- Blasters to wear proper PPE- Ear Plugs, Fresh Air supplied Blast Helmets, Coveralls, Chaps, Fall protection (Harness, Lanyard and Lifeline), leather blast glove
- Provide Abrasive-blast, using Kleen-Blast 16/30 grit-or Garnet to achieve, a 3-4 mil profile near white blast as required by coating manufacturer. SSPC SP-10.
- Verify results of anchor pattern/profile, by use of Testex Press-O-Film Replica Tape and a Surface profile comparator. (X-course).



Scope of Work | (1) Tank Interior Relining



POLYEURO® 5502-PW
*Two Component Aromatic
 Polyurea Protective Coating
 Technical Data Sheet*

Interior Lining System
 Polyeuro® 5502-PW or
 Sherplate pw

SSPC-SP 10/NACE No. 2 abrasive blast

DESCRIPTION

ANSI/NSF 61 approved for direct contact with potable water. It is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502-PW offers a tack free time of less than forty-five seconds and exhibits 450% elongation upon curing with 50 Shore D hardness.

FEATURES

- ANSI/NSF 61 Approved for Potable Water
- Zero VOC (100% Solids)
- Seamless
- Excellent Thermal Stability Odorless
- Low Temperature Flexibility Meets USDA Criteria
- Good Chemical Resistance No Toxic Vapors
- Coat Pipe 9" In Diameter or Greater
- Suitable for 5 Gallon Tanks and Larger
- Coats Carbon or Mild Steel Metals without Primer Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

Potable Water Tanks - Concrete or Metal

Total includes removing the sediment from interior ceiling, walls and floor. Resurfacing and relining tank interior floors and walls and ceiling.

Total: \$ \$83,281.25

Any additional fabrication not listed above will be added as a second line item on final invoice.

The proposal pricing listed above is good for 15 days. Once approved the contract is valid for one calendar year upon acceptance.

All workmanship and materials will meet or exceed the American water works association. D-102-10 standards for tank coatings.

All workmanship will be guaranteed for a two-year period from the date of completion.

If you have any questions or comments, please do not hesitate to contact our office.

Payment Terms

50% upfront 50% upon completion

1% Ten Days, Net 30 Days. 2.5% interest per month on all accounts past 30 days. Proposal does not include Sales or Use Taxes, Registration fees, or licenses unless listed above in proposal. If Marine Industrial Tank Inc is liable for any additional fees requested or required by the customer and are not noted in proposal, the fees will be billed on the final invoice.

Insurance

Marine Industrial Tank Inc has a minimum of \$1,000,000 liability and \$2,000,000 aggregate insurance policy

Conditions of Re-coating Rates

Marine Industrial Tank Inc will clean up area and remove all materials, equipment and trash upon completion, maintaining an orderly and clean work area daily and throughout the project. Any Fabrication needed that is not listed above will be added as a second line item if needed. Total does not include any hazardous lead paint abatement or a temporary water system if needed.

Initial Here _____

Chris Christophersen, Lead Estimator

Date: January 29th, 2026

To accept, please sign and date proposal. Please fax pages to (844) 360-9309.

Printed Name and Title

Date

Signature



POLYEURO® 5502-NSF
*Two Component Aromatic
 Polyurea Protective Coating
 Technical Data Sheet*

DESCRIPTION

Polyeuro® 5502-NSF is ANSI/NSF 61 compliance by an ANSI accredited lab, approved for direct contact with potable water. It is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502-NSF offers a tack free time of less than forty-five seconds and exhibits 450% elongation upon curing with 50 Shore D hardness.

FEATURES

- ❖ ANSI/NSF 61 Approved for Potable Water
- ❖ Zero VOC (100% Solids) ❖ Seamless
- ❖ Excellent Thermal Stability ❖ Odorless
- ❖ Low Temperature Flexibility ❖ Meets USDA Criteria
- ❖ Good Chemical Resistance ❖ No Toxic Vapors
- ❖ Coat Pipe 9" In Diameter or Greater
- ❖ Suitable for 5 Gallon Tanks and Larger
- ❖ Coats Carbon or Mild Steel Metals without Primer
- ❖ Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- ❖ Potable Water Tanks - Concrete or Metal
- ❖ Potable Water Pipes

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5502-NSF may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating

TECHNICAL DATA

Mix Ratio by Volume.....	1A : 1B
Pot Life @ 150°F	3 - 5 secs
Tack Free Time (thickness & substrate temperature dependent) ...	30 - 45 secs
Recoat Time at 20°C.....	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	50 ± 20 cps
Part-B	50 ± 20 cps
Density (Side A & B Combined)	1.05 kg/litre
Flash Point.....	> 93°C (200°F)
Hardness, ASTM D-2240	50 ± 5 D
Tensile, ASTM D-412*	3500 ± 200 psi
Elongation, ASTM D-412*	450% ± 50%
Tear, Die "C" ASTM D-412*.....	± 50 pli
Service Temperature - Dry	-40°F to 120°F
Service Temperature - Wet.....	40°F to 120°F
Water Vapor Permeability ASTM E-96	0.361 perm-inch
VOC Content.....	0%
Recommended Applied Thickness	> 2mm
Return to Service:	
Foot Traffic.....	1-4 hours
Full Service (dependent on substrate and ambient temperatures).....	> 24 hours
Taber Abrasion Resistance, ASTM D-4060 (CS17 wheel, 1000 cycles, 1 kg load) (maximum).....	6 mg loss
Water Absorption, ASTM D471 (max 23°C, 24 hrs)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C	> 200 lbs
Pull-Off Strength (minimum), ASTM D-4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blast profile), substrate failure occurred > 500 psi	
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (75-100 micron blast profile)	> 900 psi
Lineal Shrinkage.....	1 - 2%
Flexibility 1/8" (3mm) Mandrel Bend Test, ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-3000 hrs exposure).....	No cracking or blistering. Color change, gloss reduction & chalking are noted.
Potable Water Certification - US, ANSI NSF-61	Pass
Potable Water Certification - Australian Water Quality Centre, AS/NZS 4020 (certificate number 4007/92.1060)	Pass

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

system, regardless of the surface preparation. Polycoat other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete

ASTM D4259 - Standard practice for abrading concrete

ASTM D4260 - Standard practice for etching concrete

ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete

ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyureo® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:

An adhesion test is recommended prior to starting the project.

MIXING

Polyureo® 5502-NSF may not be diluted under any circumstances. Thoroughly mix Polyureo® 5502-NSF Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyureo® 5502-NSF should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyureo® 5502-NSF should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Polyureo® 5502-NSF has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

LIMITED WARRANTY

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests, accurately represent all environments.

CITY OF ST. HELENA
CONSTRUCTION CONTRACT

[PROJECT NAME]

1. PARTIES AND DATE.

This Contract is made and entered into this [] day of [], 2023 by and between the City of St. Helena, a public agency of the State of California ("City") and [Contractor Name], a [Entity Type] with its principal place of business at [Contractor Address] ("Contractor"). City and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Contract.

2. RECITALS.

2.1 City. City is a public agency organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose.

2.2 Contractor. Contractor desires to perform and assume responsibility for the provision of certain construction services required by the City on the terms and conditions set forth in this Contract. Contractor represents that it is duly licensed and experienced in providing [Insert Services Provided], that it and its employees or subcontractors have all necessary licenses and permits to perform the services in the State of California, and that it is familiar with the plans of City. The following license classifications are required for this Project: [].

2.3 Project. City desires to engage Contractor to render such services for the [Project Name] ("Project") as set forth in this Contract.

2.4 Project Documents & Certifications. Contractor has obtained, and delivers concurrently herewith, a performance bond, a payment bond, and all insurance documentation, as required by the Contract.

3. TERMS

3.1 Incorporation of Documents. This Contract includes and hereby incorporates in full by reference the following documents, including all exhibits, drawings, specifications and documents therein, and attachments and addenda thereto:

- Services/Schedule (Exhibit "A")
- Plans and Specifications (Exhibit "B")
- Special Conditions (Exhibit "C")
- Contractor's Certificate Regarding Workers' Compensation (Exhibit "D")
- Public Works Contractor Registration Certification (Exhibit "E")
- Payment Bond (Exhibit "F")
- Fleet Compliance Certification. (Exhibit "G")
- Addenda
- Change Orders executed by the City

3.2 Contractor's Basic Obligation; Scope of Work. Contractor promises and agrees, at its own cost and expense, to furnish to the City all labor, materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately complete the

Project, including all structures and facilities necessary for the Project or described in the Contract (hereinafter sometimes referred to as the "Work"), for a Total Contract Price as specified pursuant to this Contract. All Work shall be subject to, and performed in accordance with the above referenced documents, as well as the exhibits attached hereto and incorporated herein by reference. The plans and specifications for the Work are further described in Exhibit "B" attached hereto and incorporated herein by this reference. Special Conditions, if any, relating to the Work are described in Exhibit "C" attached hereto and incorporated herein by this reference.

3.2.1 Change in Scope of Work. Any change in the scope of the Work, method of performance, nature of materials or price thereof, or any other matter materially affecting the performance or nature of the Work shall not be paid for or accepted unless such change, addition or deletion is approved in writing by a valid change order executed by the City. Should Contractor request a change order due to unforeseen circumstances affecting the performance of the Work, such request shall be made within five (5) business days of the date such circumstances are discovered or shall waive its right to request a change order due to such circumstances. If the Parties cannot agree on any change in price required by such change in the Work, the City may direct the Contractor to proceed with the performance of the change on a time and materials basis.

3.2.2 Substitutions/"Or Equal". Pursuant to Public Contract Code Section 3400(b), the City may make a finding that designates certain products, things, or services by specific brand or trade name. Unless specifically designated in this Contract, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal."

Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in this Contract. However, the City may have adopted certain uniform standards for certain materials, processes and articles. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of "or equal" requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed "or equal" substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with Contractor.

The City has the complete and sole discretion to determine if a material, process or article is an "or equal" material, process or article that may be substituted. Data required to substantiate requests for substitutions of an "or equal" material, process or article data shall include a signed affidavit from Contractor stating that, and describing how, the substituted "or equal" material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted "or equal" material, process or article, and substantiates that it is an "or equal" to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted "or equal" material, process or article. Failure to

submit all the required substantiating data, including the signed affidavit, to the City in a timely fashion will result in the rejection of the proposed substitution.

Contractor shall bear all of the City's costs associated with the review of substitution requests. Contractor shall be responsible for all costs related to a substituted "or equal" material, process or article. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

3.3 Period of Performance.

3.3.1 Contract Time. Contractor shall perform and complete all Work under this Contract within *****INSERT NUMBER OF CALENDAR OR WORKING DAYS***** days, beginning the effective date of the Notice to Proceed ("Contract Time"). Contractor shall perform its Work in strict accordance with any completion schedule, construction schedule or project milestones developed by the City. Such schedules or milestones may be included as part of Exhibits "A" or "B" attached hereto, or may be provided separately in writing to Contractor. Contractor agrees that if such Work is not completed within the aforementioned Contract Time and/or pursuant to any such completion schedule, construction schedule or project milestones developed pursuant to provisions of the Contract, it is understood, acknowledged and agreed that the City will suffer damage.

3.3.2 Force Majeure. Neither City nor Contractor shall be considered in default of this Contract for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Contract, such circumstances include but are not limited to, abnormal weather conditions; floods; earthquakes; fire; pandemics or epidemics; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint. Should such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Contract. Contractor's exclusive remedy in the event of delay covered under this section shall be a non-compensable extension of the Contract Time.

3.3.3 Liquidated Damages. Pursuant to Government Code Section 53069.85, Contractor shall pay to the City as fixed and liquidated damages the sum of Five Hundred (\$500) per day for each and every calendar day of delay beyond the Contract Time or beyond any completion schedule, construction schedule or Project milestones established pursuant to the Contract.

3.4 Standard of Performance; Performance of Employees. Contractor shall perform all Work under this Contract in a skillful and workmanlike manner, and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Contractor represents and maintains that it is skilled in the professional calling necessary to perform the Work. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them. Finally, Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Work, including any required business license, and that such licenses and approvals shall be maintained throughout the term of this Contract. As provided for in the indemnification provisions of this Contract, Contractor shall perform, at its own cost and expense and without reimbursement from the City, any work necessary to correct errors or omissions which are caused by Contractor's failure to comply with the standard of care provided for herein. Any employee who is determined by the City to be uncooperative, incompetent, a threat to the safety

of persons or the Work, or any employee who fails or refuses to perform the Work in a manner acceptable to the City, shall be promptly removed from the Project by Contractor and shall not be re-employed on the Work.

3.5 Control and Payment of Subordinates; Contractual Relationship. City retains Contractor on an independent contractor basis and Contractor is not an employee of City. Any additional personnel performing the work governed by this Contract on behalf of Contractor shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance under this Contract and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance.

3.6 City's Basic Obligation. City agrees to engage and does hereby engage Contractor as an independent contractor to furnish all materials and to perform all Work according to the terms and conditions herein contained for the sum set forth above. Except as otherwise provided in the Contract, the City shall pay to Contractor, as full consideration for the satisfactory performance by Contractor of the services and obligations required by this Contract, the below-referenced compensation in accordance with compensation provisions set forth in the Contract.

3.7 Compensation and Payment.

3.7.1 Amount of Compensation. As consideration for performance of the Work required herein, City agrees to pay Contractor the Total Contract Price of *****INSERT PRICE***** ("Total Contract Price") provided that such amount shall be subject to adjustment pursuant to the applicable terms of this Contract or written change orders approved and signed in advance by the City.

3.7.2 Payment of Compensation. If the Work is scheduled for completion in thirty (30) or less calendar days, City will arrange for payment of the Total Contract Price upon completion and approval by City of the Work. If the Work is scheduled for completion in more than thirty (30) calendar days, City will pay Contractor on a monthly basis as provided for herein. On or before the fifth (5th) day of each month, Contractor shall submit to the City an itemized application for payment in the format supplied by the City indicating the amount of Work completed since commencement of the Work or since the last progress payment. These applications shall be supported by evidence which is required by this Contract and such other documentation as the City may require. The Contractor shall certify that the Work for which payment is requested has been done and that the materials listed are stored where indicated. Contractor may be required to furnish a detailed schedule of values upon request of the City and in such detail and form as the City shall request, showing the quantities, unit prices, overhead, profit, and all other expenses involved in order to provide a basis for determining the amount of progress payments.

3.7.3 Prompt Payment. City shall review and pay all progress payment requests in accordance with the provisions set forth in Section 20104.50 of the California Public Contract Code. However, no progress payments will be made for Work not completed in accordance with this Contract. Contractor shall comply with all applicable laws, rules and regulations relating to the proper payment of its employees, subcontractors, suppliers or others.

3.7.4 Contract Retentions. From each approved progress estimate, five percent (5%) will be deducted and retained by the City, and the remainder will be paid to Contractor. All

Contract retention shall be released and paid to Contractor and subcontractors pursuant to California Public Contract Code Section 7107.

3.7.5 Other Retentions. In addition to Contract retentions, the City may deduct from each progress payment an amount necessary to protect City from loss because of: (1) liquidated damages which have accrued as of the date of the application for payment; (2) any sums expended by the City in performing any of Contractor's obligations under the Contract which Contractor has failed to perform or has performed inadequately; (3) defective Work not remedied; (4) stop notices as allowed by state law; (5) reasonable doubt that the Work can be completed for the unpaid balance of the Total Contract Price or within the scheduled completion date; (6) unsatisfactory prosecution of the Work by Contractor; (7) unauthorized deviations from the Contract; (8) failure of Contractor to maintain or submit on a timely basis proper and sufficient documentation as required by the Contract or by City during the prosecution of the Work; (9) erroneous or false estimates by Contractor of the value of the Work performed; (10) any sums representing expenses, losses, or damages as determined by the City, incurred by the City for which Contractor is liable under the Contract; and (11) any other sums which the City is entitled to recover from Contractor under the terms of the Contract or pursuant to state law, including Section 1727 of the California Labor Code. The failure by the City to deduct any of these sums from a progress payment shall not constitute a waiver of the City's right to such sums.

3.7.6 Substitutions for Contract Retentions. In accordance with California Public Contract Code Section 22300, the City will permit the substitution of securities for any monies withheld by the City to ensure performance under the Contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the City, or with a state or federally chartered bank in California as the escrow agent, and thereafter the City shall then pay such monies to Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to Contractor. For purposes of this Section and Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" shall mean the time the City has issued written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of this Contract. Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon. The escrow agreement used for the purposes of this Section shall be in the form provided by the City.

3.7.7 Title to Work. As security for partial, progress, or other payments, title to Work for which such payments are made shall pass to the City at the time of payment. To the extent that title has not previously been vested in the City by reason of payments, full title shall pass to the City at delivery of the Work at the destination and time specified in this Contract. Such transferred title shall in each case be good, free and clear from any and all security interests, liens, or other encumbrances. Contractor promises and agrees that it will not pledge, hypothecate, or otherwise encumber the items in any manner that would result in any lien, security interest, charge, or claim upon or against said items. Such transfer of title shall not imply acceptance by the City, nor relieve Contractor from the responsibility to strictly comply with the Contract, and shall not relieve Contractor of responsibility for any loss of or damage to items.

3.7.8 Labor and Material Releases. Contractor shall furnish City with labor and material releases from all subcontractors performing work on, or furnishing materials for, the Work governed by this Contract prior to final payment by City.

3.7.9 Prevailing Wages. Contractor is aware of the requirements of California Labor Code Section 1720 et seq., and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. City shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at Contractor's principal place of business and at the project site. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. Contractor and any subcontractor shall forfeit a penalty of up to \$200 per calendar day or portion thereof for each worker paid less than the prevailing wage rates.

3.7.10 Apprenticeable Crafts. When Contractor employs workmen in an apprenticeable craft or trade, Contractor shall comply with the provisions of Section 1777.5 of the California Labor Code with respect to the employment of properly registered apprentices upon public works. The primary responsibility for compliance with said section for all apprenticeable occupations shall be with Contractor. The Contractor or any subcontractor that is determined by the Labor Commissioner to have knowingly violated Section 1777.5 shall forfeit as a civil penalty an amount not exceeding \$100 for each full calendar day of noncompliance, or such greater amount as provided by law.

3.7.11 Hours of Work. Contractor is advised that eight (8) hours labor constitutes a legal day's work. Pursuant to Section 1813 of the California Labor Code, Contractor shall forfeit a penalty of \$25.00 per worker for each day that each worker is permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except when payment for overtime is made at not less than one and one-half (1-1/2) times the basic rate for that worker.

3.7.12 Payroll Records. Contractor and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. The payroll records shall be certified and shall be available for inspection at all reasonable hours at the principal office of Contractor in the manner provided in Labor Code section 1776. In the event of noncompliance with the requirements of this section, Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with this section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to City, forfeit not more than \$100.00 for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. The amount of the forfeiture is to be determined by the Labor Commissioner. A contractor who is found to have violated the provisions of law regarding wages on Public Works with the intent to defraud shall be ineligible to bid on Public Works contracts for a period of one to three years as determined by the Labor Commissioner. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this section is on Contractor. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4

shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

3.7.13 Contractor and Subcontractor Registration. Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor is directed to review, fill out and execute the Public Works Contractor Registration Certification attached hereto as Exhibit "E" prior to contract execution. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

3.7.14 Labor Compliance; Stop Orders. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be the Contractor's sole responsibility to evaluate and pay the cost of complying with all labor compliance requirements under this Contract and applicable law. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the City. Contractor shall defend, indemnify and hold the City, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.

3.8 Performance of Work; Jobsite Obligations.

3.8.1 Water Quality Management and Compliance.

3.8.1.1 Water Quality Management and Compliance. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §§ 1300); the California Porter-Cologne Water Quality Control Act (Cal Water Code §§ 13000-14950); local ordinances regulating discharges of storm water; and any and all regulations, policies, or permits issued pursuant to any such authority regulating the discharge of pollutants, as that term is used in the Porter-Cologne Water Quality Control Act, to any ground or surface water in the State.

3.8.1.2 Compliance with the Statewide Construction General Permit. Contractor shall comply with all conditions of the most recent iteration of the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity, issued by the California State Water Resources Control Board ("Permit"). It shall be Contractor's sole responsibility to file a Notice of Intent and procure coverage under the Permit for all construction activity which results in the disturbance of more than one acre of total land area or which is part of a larger common area of development or sale. Prior to initiating work, Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) as required by the Permit. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, and monitoring and reporting

requirements as required by the Permit. The Permit requires the SWPPP to be a “living document” that changes as necessary to meet the conditions and requirements of the job site as it progresses through different phases of construction and is subject to different weather conditions. It shall be Contractor’s sole responsibility to update the SWPPP as necessary to address conditions at the project site.

3.8.1.3 Other Water Quality Rules Regulations and Policies. Contractor shall comply with the lawful requirements of any applicable municipality, drainage City, or local agency regarding discharges of storm water to separate storm drain systems or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

3.8.1.4 Cost of Compliance. Storm, surface, nuisance, or other waters may be encountered at various times during construction of The Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

3.8.1.5 Liability for Non-Compliance. Failure to comply with the Permit is a violation of federal and state law. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to defend, indemnify and hold harmless the City and its officials, officers, employees, volunteers and agents for any alleged violations. In addition, City may seek damages from Contractor for any delay in completing the Work in accordance with the Contract, if such delay is caused by or related to Contractor’s failure to comply with the Permit.

3.8.1.6 Reservation of Right to Defend. City reserves the right to defend any enforcement action brought against the City for Contractor’s failure to comply with the Permit or any other relevant water quality law, regulation, or policy. Pursuant to the indemnification provisions of this Contract, Contractor hereby agrees to be bound by, and to reimburse the City for the costs (including the City’s attorney’s fees) associated with, any settlement reached between the City and the relevant enforcement entity.

3.8.1.7 Training. In addition to the standard of performance requirements set forth in paragraph 3.4, Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Work assigned to them without impacting water quality in violation of the laws, regulations and policies described in paragraph 3.8.1. Contractor further warrants that it, its employees and subcontractors will receive adequate training, as determined by City, regarding the requirements of the laws, regulations and policies described in paragraph 3.8.1 as they may relate to the Work provided under this Contract. Upon request, City will provide the Contractor with a list of training programs that meet the requirements of this paragraph.

3.8.2 Safety. Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. Contractor shall comply with the requirements of the specifications relating to safety measures applicable in particular operations or kinds of work. In carrying out its Work, Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the Work and the conditions under which the Work is to be performed. Safety precautions as applicable shall include, but shall not be limited to, adequate life protection and lifesaving equipment; adequate illumination for underground and night operations; instructions in accident prevention for all employees, such as machinery guards, safe walkways, scaffolds, ladders, bridges, gang planks, confined space

procedures, trenching and shoring, fall protection and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and adequate facilities for the proper inspection and maintenance of all safety measures. Furthermore, Contractor shall prominently display the names and telephone numbers of at least two medical doctors practicing in the vicinity of the Project, as well as the telephone number of the local ambulance service, adjacent to all telephones at the Project site.

3.8.3 Laws and Regulations. Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Contract or the Work, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Work. If Contractor observes that the drawings or specifications are at variance with any law, rule or regulation, it shall promptly notify the City in writing. Any necessary changes shall be made by written change order. If Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the City, Contractor shall be solely responsible for all costs arising therefrom. City is a public entity of the State of California subject to certain provisions of the Health & Safety Code, Government Code, Public Contract Code, and Labor Code of the State. It is stipulated and agreed that all provisions of the law applicable to the public contracts of a municipality are a part of this Contract to the same extent as though set forth herein and will be complied with. Contractor shall defend, indemnify and hold City, its officials, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Contract, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.8.4 Permits and Licenses. Contractor shall be responsible for securing City permits and licenses necessary to perform the Work described herein, including, but not limited to, any required business license. While Contractor will not be charged a fee for any City permits, Contractor shall pay the City's business license fee, if any. Any ineligible contractor or subcontractor pursuant to Labor Code Sections 1777.1 and 1777.7 may not perform work on this Project.

3.8.5 Trenching Work. If the Total Contract Price exceeds \$25,000 and if the Work governed by this Contract entails excavation of any trench or trenches five (5) feet or more in depth, Contractor shall comply with all applicable provisions of the California Labor Code, including Section 6705. To this end, Contractor shall submit for City's review and approval a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

3.8.6 Hazardous Materials and Differing Conditions. As required by California Public Contract Code Section 7104, if this Contract involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall promptly, and prior to disturbance of any conditions, notify City of: (1) any material discovered in excavation that Contractor believes to be a hazardous waste that is required to be removed to a Class I, Class II or Class III disposal site; (2) subsurface or latent physical conditions at the site differing from those indicated by City; and (3) unknown physical conditions of an unusual nature at the site, significantly different from those ordinarily encountered in such contract work. Upon notification, City shall promptly investigate the conditions to determine whether a change order is appropriate. In the event of a dispute, Contractor shall not be excused from any scheduled completion date and shall proceed with all Work to be performed under the Contract, but shall retain all rights provided by the Contract or by law for making protests and resolving the dispute.

3.8.7 Underground Utility Facilities. To the extent required by Section 4215 of the California Government Code, City shall compensate Contractor for the costs of: (1) locating and repairing damage to underground utility facilities not caused by the failure of Contractor to exercise reasonable care; (2) removing or relocating underground utility facilities not indicated in the construction drawings; and (3) equipment necessarily idled during such work. Contractor shall not be assessed liquidated damages for delay caused by failure of City to provide for removal or relocation of such utility facilities.

3.8.8 Air Quality.

Contractor shall fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the Bay Area Air Quality Management District (Air District) and/or California Air Resources Board (CARB). Although the Air District and CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by Air District and CARB to include any item of equipment with a fuel-powered engine.

Contractor shall comply, and shall ensure all subcontractors comply, with all applicable requirements of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments ("Regulation").

Throughout the Project, and for three (3) years thereafter, Contractor shall make available for inspection and copying any and all documents or information associated with Contractor's and any subcontractors' fleet including, without limitation, all Certificates of Reported Compliance, fuel/refueling records, maintenance records, emissions records, and any other information the Contractor is required to produce, keep or maintain pursuant to the Regulation upon two (2) calendar days' notice from the City.

Contractor shall indemnify District against any fines or penalties imposed by Air District, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in this Agreement.

3.8.9 State Recycling Mandates. Contractor shall comply with State Recycling Mandates. Any recyclable materials/debris collected by the contractor that can be feasibly diverted via reuse or recycling must be hauled by the appropriate handler for reuse or recycling.

3.9 Completion of Work. When Contractor determines that it has completed the Work required herein, Contractor shall so notify City in writing and shall furnish all labor and material releases required by this Contract. City shall thereupon inspect the Work. If the Work is not acceptable to the City, the City shall indicate to Contractor in writing the specific portions or items of Work which are unsatisfactory or incomplete. Once Contractor determines that it has completed the incomplete or unsatisfactory Work, Contractor may request a reinspection by the City. Once the Work is acceptable to City, City shall pay to Contractor the Total Contract Price remaining to be paid, less any amount which City may be authorized or directed by law to retain. Payment of retention proceeds due to Contractor shall be made in accordance with Section 7107 of the California Public Contract Code.

3.10 Claims; Government Code Claim Compliance.

3.10.1 Intent. Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Section is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Section shall be construed to be consistent with said statutes.

3.10.2 Claims. For purposes of this Section, "Claim" means a separate demand by the Contractor, after a change order duly requested in accordance with the terms of this Contract has been denied by the City, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the City. A "Claim" does not include any demand for payment for which the Contractor has failed to provide notice, request a change order, or otherwise failed to follow any procedures contained in the Contract Documents. Claims governed by this Section may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the change order procedures contained herein, and Contractor's request for a change has been denied in whole or in part. Claims governed by this Section must be filed no later than fourteen (14) days after a request for change has been denied in whole or in part or after any other event giving rise to the Claim. The Claim shall be submitted in writing to the City and shall include on its first page the following in 16 point capital font: "THIS IS A CLAIM." Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing in this Section is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.

3.10.3 Supporting Documentation. The Contractor shall submit all claims in the following format:

3.10.3.1 Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made

3.10.3.2 List of documents relating to claim:

- (A) Specifications
- (B) Drawings
- (C) Clarifications (Requests for Information)
- (D) Schedules
- (E) Other

3.10.3.3 Chronology of events and correspondence

3.10.3.4 Analysis of claim merit

3.10.3.5 Analysis of claim cost

3.10.3.6 Time impact analysis in CPM format

3.10.3.7 If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

3.10.3.8 Cover letter and certification of validity of the claim, including any claims from subcontractors of any tier, in accordance with Government Code section 12650 *et seq.*

3.10.4 City's Response. Upon receipt of a claim pursuant to this Section, City shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 days after the public entity issues its written statement.

3.10.4.1 If City needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, City shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

3.10.4.2 Within 30 days of receipt of a claim, City may request in writing additional documentation supporting the claim or relating to defenses or claims City may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of City and the Contractor.

3.10.4.3 City's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days (if the claim is less than \$50,000, within 15 days) after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

3.10.5 Meet and Confer. If the Contractor disputes City's written response, or City fails to respond within the time prescribed, the Contractor may so notify City, in writing, either within 15 days of receipt of City's response or within 15 days of City's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, City shall schedule a meet and confer conference within 30 days for settlement of the dispute.

3.10.6 Mediation. Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, City shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after City issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with City and the Contractor sharing the associated costs equally. City and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.

3.10.6.1 If the Parties cannot agree upon a mediator, each Party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each Party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

3.10.6.2 For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the Parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

3.10.6.3 Unless otherwise agreed to by City and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

3.10.6.4 The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.

3.10.7 Procedures After Mediation. If following the mediation, the claim or any portion remains in dispute, the Contractor must file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference or mediation.

3.10.8 Civil Actions. The following procedures are established for all civil actions filed to resolve claims subject to this Section:

3.10.8.1 Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of these procedures.. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

3.10.8.2 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

3.10.8.3 In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

3.10.9 Government Code Claims. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work, disputed work, claims and/or changed conditions, Contractor must comply with the claim procedures set forth in Government Code sections 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if any prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the City. A Government Code claim must be filed no earlier than the date the work is completed or the date the Contractor last performs work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.

3.10.10 Non-Waiver. City's failure to respond to a claim from the Contractor within the time periods described in this Section or to otherwise meet the time requirements of this Section shall result in the claim being deemed rejected in its entirety. City's failure to respond shall not waive City's rights to any subsequent procedures for the resolution of disputed claims.

3.11 Loss and Damage. Except as may otherwise be limited by law, Contractor shall be responsible for all loss and damage which may arise out of the nature of the Work agreed to herein, or from the action of the elements, or from any unforeseen difficulties which may arise or be encountered in the prosecution of the Work until the same is fully completed and accepted by City. In the event of damage proximately caused by an Act of God, as defined by Section 7105 of the Public Contract Code, the City may terminate this Contract pursuant to Section 3.17.3; provided, however, that the City needs to provide Contractor with only one (1) day advanced written notice.

3.12 Indemnification.

3.12.1 Scope of Indemnity. To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the City, its officials, employees, agents and authorized volunteers free and harmless from any and all claims, demands, causes of action, suits, actions, proceedings, costs, expenses, liability, judgments, awards, decrees, settlements, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, (collectively, "Claims") in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, consultants or agents in connection with the performance of the Contractor's services, the Project or this Contract, including without limitation the payment of all consequential damages, expert witness fees and attorneys' fees and other related costs and expenses. Notwithstanding the foregoing, to the extent required by Civil Code section 2782, Contractor's indemnity obligation shall not apply to liability for damages for death or bodily injury to persons, injury to property, or any other loss, damage or expense arising from the sole or active negligence or willful misconduct of the City or the City's agents, servants, or independent contractors who are directly responsible to the City, or for defects in design furnished by those persons.

3.12.2 Additional Indemnity Obligations. Contractor shall defend, with counsel of City's choosing and at Contractor's own cost, expense and risk, any and all Claims covered by this section that may be brought or instituted against City or its officials, employees,

agents and authorized volunteers. In addition, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City or its officials, employees, agents and authorized volunteers as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse City for the cost of any settlement paid by City or its officials, employees, agents and authorized volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for City's attorney's fees and costs, including expert witness fees. Contractor shall reimburse City and its officials, employees, agents and authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City, its officials, employees, agents and authorized volunteers.

3.13 Insurance.

3.13.1 Time for Compliance. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the City that it has secured all insurance required under this section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the City that the subcontractor has secured all insurance required under this section. Failure to provide and maintain all required insurance shall be grounds for the City to terminate this Contract for cause.

3.13.2 Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

3.13.2.1 Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 00 01) OR Insurance Services Office Owners and Contractors Protective Liability Coverage Form (CG 00 09 11 88) (coverage for operations of designated contractor); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage form number CA 00 01, code 1 (any auto); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance. Policies shall not contain exclusions contrary to this Contract.

3.13.2.2 Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) *General Liability*: \$2,000,000 per occurrence and \$4,000,000 aggregate for bodily injury, personal injury and property damage; (2) *Automobile Liability*: \$2,000,000 per accident for bodily injury and property damage; and (3) *Workers' Compensation and Employer's Liability*: Workers' compensation limits as required by the Labor Code of the State of California. Employer's Liability limits of \$1,000,000 each accident, policy limit bodily injury or disease, and each employee bodily injury or disease. Defense costs shall be available in addition to the limits. Notwithstanding the minimum limits specified herein, any available coverage shall be provided to the parties required to be named as additional insureds pursuant to this Contract.

3.13.3 Insurance Endorsements. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements (amendments) on forms supplied or approved by the City to add the following provisions to the insurance policies:

3.13.3.1 General Liability. (1) Such policy shall give the City, its officials, employees, agents and authorized volunteers additional insured status using ISO endorsements CG20 10 10 01 plus CG20 37 10 01, or endorsements providing the exact same coverage, with respect to the Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such work; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the City, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the City, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it.

3.13.3.2 Automobile Liability. (1) Such policy shall give the City, its officials, employees, agents and authorized volunteers additional insured status with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by Contractor or for which Contractor is responsible; (2) all policies shall waive or shall permit Contractor to waive all rights of subrogation which may be obtained by the Contractor or any insurer by virtue of payment of any loss or any coverage provided to any person named as an additional insured pursuant to this Contract, and Contractor agrees to waive all such rights of subrogation; and (3) the insurance coverage shall be primary insurance as respects the City, its officials, employees, agents and authorized volunteers, or if excess, shall stand in an unbroken chain of coverage excess of Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the City, its officials, employees, agents and authorized volunteers shall be excess of Contractor's insurance and shall not be called upon to contribute with it in any way.

3.13.3.3 Workers' Compensation and Employer's Liability Coverage. The insurer shall agree to waive all rights of subrogation against the City, its officials, employees, agents and authorized volunteers for losses paid under the terms of the insurance policy which arise from work performed by Contractor.

3.13.3.4 All Coverages. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officials, employees, agents and authorized volunteers.

3.13.4 Separation of Insureds; No Special Limitations. All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the City, its officials, employees, agents and authorized volunteers.

3.13.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the City. Contractor shall guarantee that, at the option of the City, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees, agents and authorized volunteers; or (2) the Contractor shall procure a bond or other financial guarantee

acceptable to the City guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.13.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A-VII, licensed to do business in California, and satisfactory to the City. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

3.13.7 Verification of Coverage. Contractor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to the City. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the City. All certificates and endorsements must be received and approved by the City before work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.13.8 Subcontractors. All subcontractors shall meet the requirements of this Section before commencing Work. Contractor shall furnish separate certificates and endorsements for each subcontractor. Subcontractor policies of General Liability insurance shall name the City, its officials, employees, agents and authorized volunteers as additional insureds using form ISO 20 38 04 13 or endorsements providing the exact same coverage. All coverages for subcontractors shall be subject to all of the requirements stated herein except as otherwise agreed to by the City in writing.

3.13.9 Reporting of Claims. Contractor shall report to the City, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Work under this Contract.

3.14 Bond Requirements.

3.14.1 Payment Bond. If required by law or otherwise specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Contract a Payment Bond in an amount required by the City and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the City.

3.14.2 Performance Bond. If specifically requested by City in Exhibit "C" attached hereto and incorporated herein by reference, Contractor shall execute and provide to City concurrently with this Contract a Performance Bond in an amount required by the City and in a form provided or approved by the City. If such bond is required, no payment will be made to Contractor until the bond has been received and approved by the City.

3.14.3 Bond Provisions. Should, in City's sole opinion, any bond become insufficient or any surety be found to be unsatisfactory, Contractor shall renew or replace the effected bond within (ten) 10 days of receiving notice from City. In the event the surety or Contractor intends to reduce or cancel any required bond, at least thirty (30) days prior written notice shall be given to the City, and Contractor shall post acceptable replacement bonds at least ten (10) days prior to expiration of the original bonds. No further payments shall be deemed due or will be made under this Contract until any replacement bonds required by this Section are accepted by the City. To the extent, if any, that the Total Contract Price is increased in accordance with the Contract, Contractor shall, upon request of the City, cause the amount of the bond to be increased accordingly and shall promptly deliver satisfactory evidence of such

increase to the City. If Contractor fails to furnish any required bond, the City may terminate the Contract for cause.

3.14.4 Surety Qualifications. Only bonds executed by an admitted surety insurer, as defined in California Code of Civil Procedure Section 995.120, shall be accepted. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure, and proof of such is provided to the City.

3.15 Warranty. Contractor warrants all Work under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the Work) to be of good quality and free from any defective or faulty material and workmanship. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by the City of any defect in the Work or non-conformance of the Work to the Contract, commence and prosecute with due diligence all Work necessary to fulfill the terms of the warranty at its sole cost and expense. Contractor shall act sooner as requested by the City in response to an emergency. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the Work (or work of other contractors) damaged by its defective Work or which becomes damaged in the course of repairing or replacing defective Work. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected Work. Contractor shall perform such tests as the City may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of Contractor. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the Work, whether express or implied, are deemed to be obtained by Contractor for the benefit of the City, regardless of whether or not such warranties and guarantees have been transferred or assigned to the City by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of the City. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of the City, the City shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the City for any expenses incurred hereunder upon demand.

3.16 Employee/Labor Certifications.

3.16.1 Contractor's Labor Certification. By its signature hereunder, Contractor certifies that he is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Work. A certification form for this purpose, which is attached to this Contract as Exhibit "D" and incorporated herein by reference, shall be executed simultaneously with this Contract.

3.16.2 Equal Opportunity Employment. Contractor represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for

employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

3.16.3 Verification of Employment Eligibility. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors and sub-subcontractors to comply with the same.

3.17 General Provisions.

3.17.1 City's Representative. The City hereby designates *****INSERT TITLE*****, or his or her designee, to act as its representative for the performance of this Contract ("City's Representative"). City's Representative shall have the power to act on behalf of the City for all purposes under this Contract. Contractor shall not accept direction or orders from any person other than the City's Representative or his or her designee.

3.17.2 Contractor's Representative. Before starting the Work, Contractor shall submit in writing the name, qualifications and experience of its proposed representative who shall be subject to the review and approval of the City ("Contractor's Representative"). Following approval by the City, Contractor's Representative shall have full authority to represent and act on behalf of Contractor for all purposes under this Contract. Contractor's Representative shall supervise and direct the Work, using his best skill and attention, and shall be responsible for all construction means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Work under this Contract. Contractor's Representative shall devote full time to the Project and either he or his designee, who shall be acceptable to the City, shall be present at the Work site at all times that any Work is in progress and at any time that any employee or subcontractor of Contractor is present at the Work site. Arrangements for responsible supervision, acceptable to the City, shall be made for emergency Work which may be required. Should Contractor desire to change its Contractor's Representative, Contractor shall provide the information specified above and obtain the City's written approval.

3.17.3 Termination. This Contract may be terminated by City at any time, either with or without cause, by giving Contractor three (3) days advance written notice. In the event of termination by City for any reason other than the fault of Contractor, City shall pay Contractor for all Work performed up to that time as provided herein. In the event of breach of the Contract by Contractor, City may terminate the Contract immediately without notice, may reduce payment to Contractor in the amount necessary to offset City's resulting damages, and may pursue any other available recourse against Contractor. Contractor may not terminate this Contract except for cause. In the event this Contract is terminated in whole or in part as provided, City may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated. Further, if this Contract is terminated as provided, City may require Contractor to provide all finished or unfinished documents, data, diagrams, drawings, materials or other matter prepared or built by Contractor in connection with its performance of this Contract. City shall not be liable for any costs other than the charges or portions thereof which are specified herein. Contractor shall not be entitled to payment for unperformed Work including, without limitation, any overhead and profit on the portion of the Work that is terminated and shall not be entitled to damages or compensation of any kind or nature for termination of Work.

3.17.4 Contract Interpretation. Should any question arise regarding the meaning or import of any of the provisions of this Contract or written or oral instructions from City, the matter shall be referred to City's Representative, whose decision shall be binding upon Contractor.

3.17.5 Anti-Trust Claims. This provision shall be operative if this Contract is applicable to California Public Contract Code Section 7103.5. In entering into this Contract to supply goods, services or materials, Contractor hereby offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tender final payment to Contractor, without further acknowledgment by the Parties.

3.17.6 Notices. All notices hereunder and communications regarding interpretation of the terms of the Contract or changes thereto shall be provided by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

CONTRACTOR:

[Contractor Name]
 [***INSERT CONTRACTOR ADDRESS***]
 Attn: [***INSERT CONTRACTOR REP. NAME AND TITLE***]

CITY:

City of St. Helena
 [***INSERT CITY ADDRESS***]
 Attn: [***INSERT CITY REP. NAME AND TITLE***]

Any notice so given shall be considered received by the other Party three (3) days after deposit in the U.S. Mail as stated above and addressed to the Party at the above address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.17.7 Time of Essence. Time is of the essence in the performance of this Contract.

3.17.8 Assignment Forbidden. Contractor shall not, either voluntarily or by action of law, assign or transfer this Contract or any obligation, right, title or interest assumed by Contractor herein without the prior written consent of City. If Contractor attempts an assignment or transfer of this Contract or any obligation, right, title or interest herein, City may, at its option, terminate and revoke the Contract and shall thereupon be relieved from any and all obligations to Contractor or its assignee or transferee.

3.17.9 No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

3.17.10 Laws and Venue. This Contract shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Contract, the action shall be brought in the Superior Court of California for the County of Napa.

3.17.11 Counterparts. This Contract may be executed in counterparts, each of which shall constitute an original.

3.17.12 Successors. The Parties do for themselves, their heirs, executors, administrators, successors, and assigns agree to the full performance of all of the provisions contained in this Contract.

3.17.13 [Reserved]

3.17.14 Solicitation. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, City shall have the right to terminate this Contract without liability.

3.17.15 Conflict of Interest. Contractor maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Agreement. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, City shall have the right to rescind this Contract without liability. For the term of this Contract, no official, officer or employee of City, during the term of his or her service with City, shall have any direct interest in this Contract, or obtain any present or anticipated material benefit arising therefrom. In addition, Contractor agrees to file, or to cause its employees or subcontractors to file, a Statement of Economic Interest with the City's Filing Officer as required under state law in the performance of the Work.

3.17.16 Certification of License.

3.17.16.1 Contractor certifies that as of the date of execution of this Contract, Contractor has a current contractor's license of the classification indicated below under Contractor's signature.

3.17.16.2 Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

3.17.17 Authority to Enter Contract. Each Party warrants that the individuals who have signed this Contract have the legal power, right and authority to make this Contract and bind each respective Party.

3.17.18 Entire Contract; Modification. This Contract contains the entire agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Contract may only be modified by a writing signed by both Parties.

3.17.19 Non-Waiver. None of the provisions of this Contract shall be considered waived by either party, unless such waiver is specifically specified in writing.

3.17.20 City's Right to Employ Other Contractors. City reserves right to employ other contractors in connection with this Project or other projects.

[SIGNATURES ON NEXT PAGE]

**SIGNATURE PAGE FOR CONSTRUCTION CONTRACT
BETWEEN THE CITY OF ST. HELENA
AND [CONTRACTOR NAME]**

IN WITNESS WHEREOF, the Parties have entered into this Contract as of the
[**INSERT DAY**] day of [**INSERT MONTH**], [**INSERT YEAR**].

City of St. Helena [CONTRACTOR NAME]

By: _____
[INSERT NAME]
[INSERT TITLE]

By: _____

Its: _____

Printed Name: _____

EXHIBIT "A"
SERVICES / SCHEDULE

[INSERT SCOPE OF SERVICES]

EXHIBIT “B”

PLANS AND SPECIFICATIONS

[INSERT ALL PLANS AND SPECS]

EXHIBIT "C"**SPECIAL CONDITIONS****ARTICLE 1. BONDS**

Within ten (10) calendar days from the date the Contractor is notified of award of the Contract, the Contractor shall deliver to the City four identical counterparts of Payment Bond on the form supplied by the City and included as Exhibit "F" to the Contract. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the City. The Payment Bond shall be for one hundred percent (100%) of the Total Contract Price.

ARTICLE 2. Reverse Liquidated Damages Due to Unreasonable City Delay.

In compliance with the provisions of California Public Contract Code § 7102, the Contractor will be compensated for damages incurred due to delays in completing the Work due solely to the fault of the City, where such delay is unreasonable under the circumstances and not contemplated by the parties and such delay is not the result of Additional Work. The Contractor and City agree that determining actual damages is impracticable and extremely difficult. As such, the Contractor shall be entitled to the appropriate time extension and to payment of liquidated damages in the sum of \$400 per Day of delay in excess of the time specified for the completion of the Work. Such amount shall constitute the only payment allowed and shall necessarily include all overhead (direct or indirect), all profit, all administrative costs, all bond costs, all labor, materials, equipment and rental costs, and any other costs, expenses and fees incurred or sustained as a result of such delay. The Contractor expressly agrees to be limited solely to the liquidated damages for all such delays as defined in this subsection.

EXHIBIT "D"

**CERTIFICATION
LABOR CODE - SECTION 1861**

I, the undersigned Contractor, am aware of the provisions of Section 3700, et seq., of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I, the undersigned Contractor, agree to and will comply with such provisions before commencing the performance of the Work on this Contract.

[Contractor Name]

By: _____
Signature

Name (Print)

Title (Print)

EXHIBIT “E”**PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION**

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Contractor hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.¹

Name of Contractor: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Small Project Exemption: _____ Yes or _____ No

Unless Contractor is exempt pursuant to the small project exemption, Contractor further acknowledges:

- Contractor shall maintain a current DIR registration for the duration of the project.
- Contractor shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
- Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Contractor _____

Signature _____

Name and Title _____

Dated _____

¹ If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark “Yes” in response to “Small Project Exemption.”

EXHIBIT "F"
PAYMENT BOND

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of St. Helena (hereinafter designated as the "City"), by action taken or a resolution passed _____, 20____ has awarded to [Contractor Name] hereinafter designated as the "Principal," a contract for the work described as follows:

_____ (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated _____ ("Contract Documents"), the terms and conditions of which are expressly incorporated by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions

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precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned and the provisions of sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20__.

(Corporate Seal)

Contractor/ Principal

By _____

Title _____

(Corporate Seal)

Surety

By _____

Attorney-in-Fact

Title _____

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

NOTE: A copy of the Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

Notary Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally

appeared _____, who proved to me on the basis of satisfactory

evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public _____

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- ☐ Individual
☐ Corporate Officer

Title(s)
☐ Partner(s) ☐ Limited
 ☐ General
☐ Attorney-In-Fact
☐ Trustee(s)
☐ Guardian/Conservator
☐ Other:
Signer is representing:
Name Of Person(s) Or Entity(ies)

Title or Type of Document

Number of Pages

Date of Document

Signer(s) Other Than Named Above

Exhibit G
Fleet Compliance Certification.

Bidder hereby acknowledges that they have reviewed the California Air Resources Board's policies, rules and regulations and are familiar with the requirements of Title 13, California Code of Regulations, Division 3, Chapter 9, effective on January 1, 2024 (the "Regulation"). Bidder hereby certifies, subject to penalty for perjury, that the option checked below relating to the Bidder's fleet, and/or that of their subcontractor(s) ("Fleet") is true and correct:

- ☐ The Fleet is subject to the requirements of the Regulation, and the appropriate Certificate(s) of Reported Compliance have been attached hereto.
- ☐ The Fleet is exempt from the Regulation under section 2449.1(f)(2), and a signed description of the subject vehicles, and reasoning for exemption has been attached hereto.
- ☐ Bidder and/or their subcontractor is unable to procure R99 or R100 renewable diesel fuel as defined in the Regulation pursuant to section 2449.1(f)(3). Bidder shall keep detailed records describing the normal refueling methods, their attempts to procure renewable diesel fuel and proof that shows they were not able to procure renewable diesel (i.e. third party correspondence or vendor bids).
- ☐ The Fleet is exempt from the requirements of the Regulation pursuant to section 2449(i)(4) because this Project has been deemed an Emergency, as defined under section 2449(c)(18). Bidder shall only operate the exempted vehicles in the emergency situation and records of the exempted vehicles must be maintained, pursuant to section 2449(i)(4).
- ☐ The Fleet does not fall under the Regulation or are otherwise exempted and a detailed reasoning is attached hereto.

Name of Bidder: _____

Signature: _____

Name: _____

Title: _____

Date: _____



Agenda Report to the City Council

Agenda Section: PUBLIC HEARINGS

Department: Planning

DATE:	February 10, 2026
FROM:	Mike Janusek, Contract Planner
SUBJECT:	Request by City Ventures, LLC for a Vesting Tentative Subdivision Map to subdivide three existing parcels totaling 2.53 acres into 42 lots, 41 for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one 0.1-acre lettered lot, Parcel A, to contain the riparian corridor not for development. The applicant also requests City Council authorization to pay the water neutrality in-lieu retrofit fee pursuant to SHMC Section 13.12.030. The two items currently before the City Council for review are a Vesting Tentative Subdivision Map and the Water Neutrality in-lieu retrofit fee request. A Demolition Permit for three existing single-family residences located at 1447, 1505, and 1515 Spring Street was approved by the Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025, Planning Commission meeting (Attachment 4). In addition, Minor Design Review of the project architecture, landscaping, and site improvements for the proposed 41 townhomes has been ministerially approved by the Community Development Director (Attachment 8).
RECOMMENDED ACTION:	For the reasons described above, staff recommends that the City Council: 1. Adopt the attached Resolution (Attachment 1) authorizing the applicant to pay the Water Neutrality In-Lieu Retrofit Fee pursuant to SHMC 13.12.030; and 2. Adopt the attached Resolution (Attachment 2) approving, pursuant to a statutory exemption under PRC 21080.66, the requested Vesting Tentative Map No. TSM25-001, File #PL24-065 for the Spring Grove Project.
PREVIOUS COUNCIL ACTION:	On January 13, 2026, the City Council held first public hearing, received public comment and continued it to the January 27, 2026 meeting. A second City Council public hearing was held on January 27th and after public

	comment was received, it was continued to the February 10, 2026 meeting.
STATEMENT OF THE PURPOSE:	To consider request to approve a Vesting Tentative Subdivision Map and pay the in lieu water retrofit fee.
FINANCIAL IMPACT:	There is no direct fiscal impact to the General Fund resulting from the approval of the Tentative Parcel Map. Future development of the project site could increase the property tax and impact fee revenues.

BACKGROUND:

On January 13, 2026, the City Council held a public hearing on the proposed request from City Ventures. As a result of a hard stop at 10 pm to close the City Council meeting and also a request from the City Council for staff to prepare responses to the comments and issues from the City Council and public (**Attachment 12**), the item was continued to the January 27, 2026 meeting.

As part of the record of the January 27, 2026 public hearing, the City received received numerous comments, including some which the City Council requested written responses before any action would be taken. In response, staff have prepared specific concise responses in a FAQ document (**Attachment 13**) and the City Attorney has prepared responses to the Joshua Devore letter (**Attachment 14**), as well as responses to the Mark Wolfe letter (**Attachment 15**) . Additionally the Fire Department has reviewed the third party report by Zari and prepared responses concluding there are no public safety impacts from the project design (**Attachment 16**). **Other than the new Attachments 13-16, the remainder of the staff report below remains unchanged from the staff report published for the January 27, 2026 meeting.**

The following is a discussion of the proposed 41 dwelling unit project's setting and background.

2023-2031 Housing Element

The currently adopted and certified 2023-2023 Housing Element Update identifies 1447 and 1515 Spring Street (APN 009-590-003, -010) as housing opportunity site 9. The site was selected because it is underutilized based on the additional density, floor area, height, and lot coverage available in the High Density Residential zone. In addition, the site is surrounded by single- and multi-family development and sites zoned High Density Residential.

The entire 2.4-acre site is able to be redeveloped. Based on allowed density under High Density Residential, which ranges from 16.1 to 28 units/acre, a maximum of 68 units would be permitted. However, a total of 48 units, 24 lower income units and 24 above moderate income units, is assumed by the Housing Element in order to accommodate site circulation improvements and adequate off-street parking capacity.

The site is currently underutilized and does not meet the minimum density of the High Density Residential Zone (16.1 units/acre) with a current density of 0.83 units/acre. The site has three existing housing units, which equals approximately three percent of the total allowed capacity of the site (68 units). The existing building lot coverage is approximately eight percent and the maximum allowed lot coverage is 45 percent. While Housing Element Program H-ZZ would incentivize lot consolidation at the time the property is developed, future development of the site is not dependent upon lot consolidation as all three parcels are under the same ownership.

General Plan

The Project site is designated High Density Residential (1447 Spring Street and 1515 Spring Street) and Medium Density Residential (1505 Spring Street) by the 2040 General Plan, adopted June 2019. The High Density Residential land use designation is described as follows:

The HDR land use designation can accommodate single-family and multi-family residential housing, apartments, and group quarters. This designation permits residential densities between 16.1 and 28.0 dwelling units per gross acre.

The Medium Density Residential land use designation is described as follows:

The MDR designation provides for single-family detached and attached homes, secondary residential units, public and semi-public uses, and similar and compatible uses. Residential densities shall be in the range of 5.1 to 16.0 dwelling units per gross acre. The MDR designation is the predominant residential designation, occurring throughout large areas of the City. The wide distribution of this designation is intended to maintain a development pattern in newly developing areas that is consistent with historic development patterns.

A discussion of the proposed subdivision's consistency with the General Plan is included in Attachment 7.

Zoning

The zoning for the site, as shown on the City's Zoning Map, is High Density Residential (HR) (1447 Spring Street and 1515 Spring Street) and Medium Density Residential (MR) (1505 Spring Street).

Per St. Helena Municipal Code (SHMC) Section 17.16.010, the purpose of the HR zone is to provide for multifamily residential units, group quarters and compatible uses. Residential densities are from 16.1 to 28 dwelling units per acre. This zone implements the high density residential general plan land use designation. Per SHMC Section 17.16.010, the purpose of the MR zone is to protect existing patterns of development for a range of residential development types, accessory dwelling units, and compatible uses in areas. Types of dwelling units include attached and detached single-unit dwellings, duplexes, and triplexes. Residential densities are from 5.1 to 16 dwelling

units per acre. This zone implements the medium density residential general plan land use designation. Multifamily dwellings are permitted uses in both the HR and MR zoning districts.

The Project does not propose any changes to the zoning for the site. Instead, the larger of the parcels resulting from the Vesting Tentative Subdivision Map will have split zoning of both HR for the portions the parcel that are currently made up of the 1447 Spring Street parcel and the 1515 Spring Street parcel and MR for the portion of the parcel that is currently 1505 Spring Street.

Housing Accountability Act

The Project has been submitted under Senate Bill 330 – The Housing Crisis Act (SB 330). SB 330, which amends California's Housing Accountability Act (HAA), allows an applicant to submit a Preliminary Application for any qualifying housing development project, defined as a project that includes two or more units and is at least two-thirds residential by floor area. By submitting a Preliminary Application and complying with the timelines outlined in the bill, applicants can vest the ordinances, policies, and standards in effect at the time of application. SB 330 also shortens the required permit review timeframes and limits the number of public hearings for housing projects to five public hearings, including continuances and most appeal hearings. The public hearing limit does not include optional meetings. The applicant voluntarily participated in a Pre-Submittal Planning Commission Meeting on January 21, 2025, which does not count against the five hearing limit. The December 2, 2025 Planning Commission hearing was the first required public meeting for the Project to count against the SB 330 limit, and the January 13, 2026 City Council public hearing is the second.

The HAA prohibits a local government from disapproving^[1] or reducing the density of qualifying housing development projects that are consistent with objective local development standards, absent written findings that the project would have a specific, adverse impact on health or safety that cannot be satisfactorily mitigated or avoided. (Gov. Code, § 65589.5(d) and (j)(1).) “Specific, adverse impact” is defined in Section 65589.5(d)(2) as “a significant, quantifiable, direct, and unavoidable impact based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. Moreover, *in enacting SB 330 it was the intent of the Legislature that a finding of “specific, adverse impact upon the public health... arise infrequently.”* (Gov. Code, § 65589.5(a)(3).) In addition, State Density Bonus eligibility or density bonus incentives, concessions, or waivers (discussed below) do not provide a valid basis to find a qualifying housing development project not in compliance with applicable standards. (Gov. Code, § 65589.5(j)(3).)^[2]

^[1] Disapproval of the housing development includes any entitlement votes on a projects application that is not granted. (Gov. Code §65589.5(h)(6)(A)).

^[2] California Department of Housing and Community Development Division of Housing Policy, “Housing Accountability Act Technical Assistance Advisory (Gov. Code §65589.5). September 15, 2020.

State Density Bonus Law

A project that provides at least 10% of the total number of proposed dwelling units as affordable units is eligible for concessions and waivers authorized by the State Density Bonus Law (SDBL) (Gov. Code, § 65915). Projects deemed eligible are allowed up to four concessions, depending on the percentage of affordable units included in the project, for development standards that result in identifiable cost reductions, and an unlimited number of waiver of development standards that would physically preclude the construction of the development at the proposed density. Like the HAA, a local jurisdiction's authority to deny a waiver or concession is extremely limited.

Pursuant to California Government Code § 65915(d)(1), a concession can only be denied if written findings are made based on substantial evidence that the concession would not result in identifiable and actual cost reductions, would have a specific, adverse impact upon public health and safety or on any real property listed in the California Register of Historical Resources, or would be contrary to state or federal law.

California Government Code § 65915(e)(1) requires that a waiver be approved unless written findings can be made based upon substantial evidence that the waiver would have a specific, adverse impact upon public health and safety or on any real property listed in the California Register of Historical Resources or because the waiver would be contrary to state or federal law.

The Project is eligible for a 14% density bonus because 19% of the 41 total units would be available for sale to Moderate Income households. (Gov. Code, § 65915(b)(1)(D).) Accordingly, in compliance with SDBL, the Project is eligible for one concessions and unlimited waivers of any standard that would physically preclude the construction of the development at the density proposed. (Gov. Code, § 65915(d)(2)(B).)

The applicant has requested no Density Bonus units, no Density Bonus concessions, and 11 Density Bonus waivers as outlined in the Density Bonus Eligibility Letter, Exhibit A in **Attachment 8**.

PROJECT HISTORY

The Project was deemed to have submitted a complete SB 330 Preliminary Application on November 21, 2024, and subsequently filed its development application ("Project") for a Vesting Tentative Subdivision Map and associated entitlements on November 22, 2024, within the required 180-day timeframe for vesting purposes.

Required Entitlements

Necessary entitlements include:

- Vesting Tentative Subdivision Map with City Council as the final review authority
- Demolition Permit (approved by Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025 Planning Commission meeting)

- Minor Design Review with Density Bonus (ministerially approved by the Community Development Director on November 21, 2025)

Currently with the City Council review of the Vesting Tentative Map, the applicant requests authorization to pay the Water Neutrality in-lieu retrofit fee. Future City Council actions will include approval of a Final Map and an Affordable Housing Agreement.

January 2025 Planning Commission Pre-Submittal Public Meeting

The Project applicant, City Ventures, LLC, requested a Pre-Submittal Review at the January 21, 2025 Planning Commission meeting to receive early feedback from the Planning Commission, City staff, and the community before addressing comments for submittal of their formal development application.

During the January 21, 2025 public meeting, 16 members of the public provided public comments expressing concerns regarding community character, noise, site layout, fire access, affordability, building height, tree removal, traffic, stormwater management, architecture, neighborhood outreach, flooding, and preservation of the riparian corridor.

The Planning Commission provided feedback to the developer on the following topics: screening the Project from surrounding residential uses, neighborhood outreach, circulation, fire access, preventing off-site glare, providing smaller units, and providing community gardens in the common open space. See Attachment 10, which is a summary of how the applicant has addressed these topics through Project revisions.

December 2, 2025 Planning Commission Hearing

At the December 2, 2025 regularly scheduled Planning Commission meeting, the applicant requested Planning Commission's recommendation to City Council for approval of the Vesting Tentative Map (TSM25-001) and Planning Commission's approval of the Demolition Permit (DP25-002). During the meeting, eight members of the public provided testimony expressing concerns regarding calculation of density, stormwater management, fire access, tree removal, water neutrality, affordability levels, flooding, public participation during previous Housing Element cycles, habitat protection, completion of the project, and historic preservation.

Planning Commission voted unanimously 4-0 to recommend to City Council approval of the Vesting Tentative Map (**Attachment 3**) and 4-0 to approve the Demolition Permit (**Attachment 4**).

DISCUSSION:

PROJECT DESCRIPTION

The two action items that require City Council review at this time are a Vesting Tentative Subdivision Map and Water Neutrality in-lieu retrofit fee request.

Vesting Tentative Subdivision Map

Three existing parcels under single ownership totaling 2.53 acres would be subdivided in the central area of the city, on the south side of Spring Street in between St. James Drive and Stockton Street. The proposed subdivision would create 41 lots for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one lettered lot: 0.1 acres designated as parcel "A" to contain the riparian corridor not for development. The proposed Vesting Tentative Subdivision Map is included as Sheet 7.0 in **Attachment 5** to this report.

The Project would create a subdivision of 41 lots, which is the minimum number of homes that can be built on the site per its existing General Plan and Zoning designations and minimum density requirements. All 41 units would be 3-story, townhome-style condominiums across six buildings. The Project buildings and site plan improvements are subject to Minor Design Review, which was reviewed and approved ministerially in the Minor Design Review Notice of Action (**Attachment 8**).

The purpose of the Vesting Tentative Subdivision Map is to create individual "airspace" lots for each unit in order for the units to be for-sale townhouses. One lot for common areas to be owned by the future homeowners' association would total 2.43 acres. The lettered parcel, Parcel A, for purposes of containing the riparian corridor is not buildable, and, therefore, not subject to development standards. As described above in the background section on zoning, the 2.43 acre resulting parcel will have split zoning with the majority of the site being HR and the portion that is currently 1505 Spring Street remaining MR. Parcel A will retain the HR zoning.

The allowable density of the site is calculated using a weighted average to account for the fact that the projects crosses zones. To compute that allowable density, the MR density of 5.1 to 16 dwelling units per acre relative to 0.14 acres (5.5% of the total project site) is blended with the HR density of 16.1 to 28 dwelling units per acre relative to the remaining 2.39 acres of the site (94.5% of the total project site). This provides an allowable density of 15.5 to 27.3 dwelling units per acre for the site.

The overall residential density of the Project is 16.2 units per acres (41 dwelling units / 2.53 gross acres = 16.2 dwelling units per acre), which is on the low end of the 15.5 to 27.3 dwelling units per acre allowed. The project's density is calculated based on the gross area, which is consistent with the SHMC Chapter 17.32 definition of "Residential Density," which specifically states it is "based on the gross lot area prior to the dedication of any rights of way, public parks, or other public areas."

The Vesting Tentative Map would propose the following private streets and private utilities to support development of the Project as shown on Sheets C3.0-C5.0 in Attachment 5. All private improvements would be privately maintained by the future homeowners' association. The Project would be conditioned to file all easements with Public Works for review prior to Final Map approval and recordation.

- A 28-foot-wide private driveway providing access to Spring Street (Street A)
- Two 28-foot-wide private drive aisles would provide double-loaded garage access at the interior of the site (Streets B and C)
- A minimum 26-foot-wide Fire access lane with Fire turnarounds to be placed in an Emergency Vehicle Access Easement
- An 8-inch private Fire water line and 4-inch private domestic water line within Street A, Street B, and Street C
- A 6-inch private sanitary sewer line with 6-inch private sanitary sewer laterals to each unit
- A stormwater system consisting of 4-, 6-, 8-, and 12-inch private storm drains, private bioretention facilities, and a private lift station designed to convey all stormwater to the 18-inch public storm drain in Spring Street
- Private site improvements including common open space and a contiguous network of pedestrian walkways to be owned and maintained by the future homeowners' association
- A remaining 0.1-acre parcel, Parcel A, would contain on-site portions of the riparian corridor with no plans for future development

The Project would be conditioned to comply with City standards where private streets and private utilities connect to public infrastructure at the Spring Street frontage including but not limited to, connection points to public utilities, curb, gutter, public sidewalk, and bike lane.

If the proposed Vesting Tentative Map is approved by City Council (contingent upon City Council authorization of the Water Neutrality In-Lieu Retrofit Fee), prior to any construction occurring, the Project will also require approvals by the City Council of a Final Map and an Affordable Housing Agreement. Public meeting notices will be sent for all future hearings. The Final Map and Affordable Housing Agreement are not being considered at this time but will be submitted and reviewed at a future date.

Demolition Permit (Not under City Council Purview)

The Project site consists of three existing parcels 009-590-003 (1447 Spring St.), 009-590-005 (1505 Spring St.), and 009-590-010 (1515 Spring St.), each of which contain an existing single-family residence. The existing three homes are proposed for demolition to accommodate the proposed 41-unit townhome-style development. The home located at 1447 Spring Street, which is accessed via an approximately 170-foot-long driveway extending from Spring Street, is approximately 2,091 square feet, contains 3 bedrooms, and was constructed circa 1880. The home located at 1505 Spring Street, directly fronts Spring Street, is approximately 1,006 square feet, contains 2 bedrooms, and was constructed in 1955. The home located at 1515 Spring Street, is accessed via an approximately 280-foot-long driveway extending from Spring Street, is approximately 1,824 square feet, contains 4 bedrooms, and was constructed in 1955. None of the existing residences are listed on the Historic Overlay zone/Local Register of Historic Properties, nor are they on the National Register of Historic Places or the California Register of Historical Resources.

The Project received a Demolition Permit pursuant to SHMC Section 17.05.030, approved by Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025 Planning Commission meeting (**Attachment 4**). No appeal was filed and the Demolition Permit approval is final.

Minor Design Review (Not under City Council Purview)

The Minor Design Review for site plan layout, architecture, parking, and landscaping has been reviewed, found to be consistent with the objective design standards, and approved by the Community Development Director. Accordingly, the following discussion of Minor Design Review is provided for informational purposes:

The Project proposes development of a 41-unit multifamily development consisting of six three-story buildings on a 2.53-acre site. Each unit would be a 3-bedroom townhome-style condominium, with some unit types including the option for a fourth bedroom. Units would range from 1,480 square feet to 1,810 square feet and provide an attached two-car garage. Building exteriors would include a variety of neutral-toned stucco and board and batten fiber cement siding, with gabled roof elements characteristic of a Farmhouse architectural style. On-site parking (93 spaces) would be provided through a combination of attached two-car garages for each unit and 11 perpendicular parking stalls along Street A. Access would be via a 28-foot-wide private street (Street A) from Spring Street. Additional site improvements include landscaping with 59 trees, common usable open space including a picnic area and seating, continuous pedestrian walkways, and bioretention facilities. Each unit would be all-electric and include solar panels, private patios and/or balconies, and EV-ready garage.

Pursuant to SHMC Section 17.05.080.B.2, new multifamily development consistent with the applicable development and design standards provided in SHMC Section 17.16.040 (objective design standards) are subject to Minor Design Review by the Community Development Director. The Minor Design Review for site plan layout, architecture, parking, and landscaping has been reviewed and found to be consistent with the objective design standards and ministerially approved by the Community Development Director. The administrative Notice of Action is included in **Attachment 8**. No appeal was filed and the Minor Design Review approval is final.

Density Bonus (Not under City Council Purview)

A project that provides at least 10% of the total number of proposed dwelling units as affordable units is eligible for concessions and waivers authorized by the State Density Bonus Law (SDBL) (Gov. Code, § 65915). Pursuant to the City's Inclusionary Housing Ordinance, SHMC Section 17.30.030, the Project will provide at least 20% affordable units. Per SHMC Section 17.30.030.G.1, for owner-occupied affordable units, at least half of the required affordable units shall be available to households earning less than 100% of annual median income (AMI).

The Project proposes a 41-unit, 19% affordable, multifamily development for moderate income households earning 120% or less of AMI, with four units available to households earning less than 100% AMI and four units available to households earning less than 120% AMI.^[3] The determination of the adequacy of the Density Bonus application by Staff is provided in Exhibit A, Attachment 8.

In accordance with CA Gov't Code § 65915, subd. (a)(3) (D)(i), the Project is eligible for a 14% State Density Bonus pursuant to CA Gov't Code § 65915, subd. (f)(4), one concession, and unlimited waivers. The Project does not request any Density Bonus units, as the Project is within the allowable density range per the General Plan land use designation, does not request any concessions, and requests 11 waivers to development standards.

^[3] Pursuant to SHMC Section 17.30.030(A), the developer will pay the housing in-lieu fee for the remaining 0.2 fractional units of affordable to achieve the 20% minimum requirement of the Inclusionary Housing Ordinance.

ANALYSIS

Pursuant to SHMC Section 16.080.050, Vesting Tentative Maps are processed in accordance with the procedures and regulations governing non-vesting tentative maps, except as specifically set forth in SHMC Title 16 (Subdivisions) where more detailed grading, utility, and architectural plans may be required by the Community Development Director.

2040 General Plan Conformance

An analysis of the Project's conformance with applicable policies of the currently adopted 2040 General Plan is included as **Attachment 7**. Based on staff's analysis, the Project is consistent with applicable policies, including the proposed type and density of residential density proposed.

Zoning Consistency with Development Standards

SHMC Section 16.32.050 requires new lots created by subdivisions to meet minimum lot dimensions and building setbacks of the base zone. SHMC Table 17.16.030 (Development Standards) establishes the standards for residential lots. As shown in **Table 1**, the proposed Vesting Tentative Map complies with the applicable development standards of the HR zoning district.

TABLE 1 – COMPLIANCE WITH HR ZONE DEVELOPMENT STANDARDS		
Standard	Required	Proposed
Density	15.5-27.3 du/gross acre*	16.2 du/gross acre
Minimum Lot Area	7,000 square feet	110,207 square feet (2.53 acres)
Minimum Lot Width	45 feet	66 feet
Building Setbacks		

TABLE 1 – COMPLIANCE WITH HR ZONE DEVELOPMENT STANDARDS		
Front	15 feet; 25 feet for third floor and above	177 feet
Side (Interior)	10 feet	10 feet
Rear	10 feet	12 feet

* The project site contains a 0.14-acre (5.5%) portion within the MR zone. To account for the project crossing zones, a blended density requirement is applied which is calculated using a weighted average of the MR density of 5.1 to 16 dwelling units per acre and the HR density of 16.1 to 28 dwelling units per acre. This results in an allowable density of 15.5 to 27.3 dwelling units per acre for the site.

All other applicable standards related to the siting and development of the proposed structures, including lot coverage, building height, and minimum landscape area was reviewed for compliance with the Minor Design Review in **Attachment 8**.

Required Findings for Tentative Map

Tentative Maps are governed by SHMC Section 16.16, as well as the California Subdivision Map Act. Specifically, SHMC Sections 16.16.060 (Planning Commission action) and 16.16.070 (City Council action) require the proposed Map to be first presented to Planning Commission for review and recommendation to City Council.

At the December 2, 2025 regularly scheduled Planning Commission meeting, the Planning Commission held a public hearing and adopted findings and a recommendation for approval to City Council pursuant to SHMC Section 16.16.060 (**Attachment 3**).

SHMC Section 16.16.080(A) includes the findings that must be made by City Council to approve a Tentative Map. While there are a number of concerns that have been expressed by the community, a Tentative Map may only be denied if it is found to be inconsistent with the findings below (from SHMC Section 16.16.080 of the St Helena Municipal Code). Each of the findings required for approval of a Tentative Map **can** be made, as recommended by Staff analysis in italics below.

A. In recommending approval or conditional approval or in approving or conditionally approving a tentative map, the planning commission and city council shall find:

1. That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of this code; and

The proposed subdivision, together with the provision for its design and improvement, is consistent with the general plan, any applicable specific plan, and applicable provisions of this code in that the proposed subdivision is consistent with the allowable density of the General Plan land use designation as well as applicable General Plan policies as demonstrated in Attachment 7. No Specific Plans apply to the site. In addition, the proposed subdivision complies with the minimum lot

dimensions and applicable building setbacks of the HR zoning district per SHMC Table 17.16.030 and the lot design requirements of SHMC Section 16.32.050

2. Except for condominium conversion projects where no new structures are added, that the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council.

The proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council in that the proposed subdivision meets minimum lot dimensional requirements of SHMC Table 17.16.030 and SHMC Section 16.32.050, the majority of units are oriented to provide southeastern solar exposure, and the majority of units would allow for prevailing upvalley breeze to provide for natural cooling if front and rear doors and windows were opened. In addition, the proposed subdivision layout would provide an internal network of private streets that would be shaded by the Project buildings. The Project also provides open space areas that would be landscaped with future construction.

In addition, the proposed subdivision is a "housing development project" as defined by State law, and in recent years the State legislature has passed legislation that significantly restricts the grounds pursuant to which a housing development project can be denied. Specifically, Government Code Section 65589.5(j)(1) provides that if a housing development project complies with applicable objective general plan, zoning, and subdivision standards and criteria in effect at the time the application was deemed complete, the City may only deny the Project if it finds, based on written findings supported by a preponderance of the evidence in the record that both of the following conditions exist:

1. The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, safety standards, policies, or conditions as they existed on the date the application was deemed complete.
2. There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

Other, more general policy considerations not related to these findings or to consistency with the General Plan (such as the other concerns expressed by the public) should not be cited in a recommendation to approve or deny the proposed subdivision.

Water Neutrality

The applicant requests City Council approval, pursuant to SHMC 13.12.030, to pay the water neutrality in-lieu retrofit fee (**Attachment 1**).

Public Works has reviewed the Water Neutrality Report submitted by the applicant, dated November 10, 2025 (**Attachment 11**), and Public Works finds the calculation has been prepared in conformance with the Water Neutrality Policy.

The findings are as follows:

Baseline (pre-construction water usage) =	1,350 gallons/day (GPD)
<u>Estimated (post-construction water usage) =</u>	<u>11,182 GPD</u>
Mandatory offset (Estimated – Baseline) =	10,613 GPD

The applicant has requested to use the in-lieu fee process instead of retrofitting offsite properties. The applicant has prepared an estimate of the equivalent cost of retrofitting. Applicant used the City's residential baseline formula to estimate the water usage of an older home and an average bedroom count:

150 GPD x 3.9-bedrooms* = 585 GPD (*average number of bedrooms per unit for the Spring Grove Development)

The water usage of a home with water-efficient appliances and fixtures was calculated using the City's template, LEED/EnergySTAR values and an average number of occupants for each unit equivalent to the occupancy of the Spring Grove Development as shown in **Table 2** below:

Table 2.					
Flow			Occupants		
Fixture	Rate	Duration	Daily Uses	Number*	Gal/Day
Toilet	2	8	1	7.8	125
Sink Faucet	1.5	0.25	3	7.8	9
Showerhead	1.5	4	1	7.8	47
Kitchen Faucet	1.3	1	3	7.8	30
Clothes Washer	19.7	1	0.37	7.8	57
Dish Washer	6.3	1	0.1	7.8	5
<i>Total Gal/Day - 1 Home (Rooms - Spring Grove Blended Avg.)</i>			Per Unit GPD		273

Estimated water savings for a single equivalent residence is 585 GPD – 312 GPD = 312 GPD water savings per retrofitted residence.

The estimated number of residences that would need to be upgraded was calculated as:

$10,613 \text{ GPD mandatory offset} / 312 \text{ GPD water savings per retrofitted residence} = 34 \text{ residences to be upgraded}$

The applicant then estimated the cost of LEED/EnergySTAR compliant fixtures and appliances as \$2,491 per retrofitted residence.

Labor costs were estimated as an additional \$1,430 per retrofitted residence for a total of \$3,922.00 per residence.

The in-lieu fee was then calculated as:

$\$3,922.00 \text{ per residence} \times 34 \text{ residences to be upgraded} = \$133,348$

Public Works finds that the methodology and assumptions used in the applicant's calculation conforms with the Water Neutrality Policy. The in-lieu fee estimate is a reasonable approximation of the cost to retrofit 34 homes. Since most homes in St. Helena have already been upgraded with water efficient fixtures and appliances, Public Works concurs that requiring the applicant to retrofit 34 homes is a hardship and recommends that the City Council grant the applicant's request to use the in-lieu retrofit fee process.

PUBLIC CONCERNS/COMMENTS

Based on public input and prior review of the Project at the January 21, 2025 Pre-Submittal Meeting and December 2, 2025 Planning Commission public hearing, the following are issues of concern to the public, but not necessarily related to the applications under consideration by the City Council.

- Calculation of density
- Site layout
- Community character, noise, building height, and architecture
- Fire access
- Affordability
- Tree removal
- Traffic
- Stormwater management, flooding, and preservation of the riparian corridor
- Neighborhood outreach
- Historic preservation

This staff report addresses how density is calculated based on gross acreage pursuant to SHMC Chapter 17.32. Hypothetically, if certain areas were to be "netted out" from the density calculation – which would not meet the measurement requirements SHMC Chapter 17.32 – it would have the effect of increasing proposed residential density. For example, removing the 0.1-acre Parcel A from the density calculation would result in an overall residential density of 16.9 units per acres (41 dwelling units / 2.43 gross acres =

16.9 dwelling units per acre), which would bring the project further into conformance with the 15.5 to 27.3 dwelling units per acre allowed.

Site layout, noise, building height, architecture, fire access, affordability, tree removal, and preservation of the riparian corridor were reviewed by City Planning, Building, Fire, and Public Works staff for compliance with applicable objective standards, and adopted plans, programs, and policies under the Minor Design Review. (See Attachment 6.) As discussed above, the Minor Design Review application was subject to ministerial review, pursuant to SHMC Section 17.05.080.B.2, and therefore was not subject to subjective review criteria regarding community character.

In addition, the Vesting Tentative Subdivision Map was reviewed by City Planning, Building, Fire, and Public Works staff for compliance with all applicable City requirements related to fire access, traffic, stormwater management, and flooding. As detailed in **Attachment 10**, the applicant conducted neighborhood outreach to incorporate future public input.

An historic evaluation was analyzed under the Demolition Permit pursuant to SHMC Section 17.05.030, and was approved by Planning Commission by a vote of 4-0 at the regularly scheduled December 2, 2025 Planning Commission meeting (**Attachment 4**).

CORRESPONDENCE

Please refer to the January 13, 2026 agenda item page for any public comments pertaining to this Project and also the December 2, 2025 and January 21, 2025 Planning Commission agenda pages.

ENVIRONMENTAL REVIEW:

In July 2025, the Governor signed a budget trailer bill (AB 130) that includes new and amended statutes, including Public Resources Code section 21080.66, which significantly streamlined the environment review process for housing projects.

Based on substantial evidence the City staff has determined that the Project is exempt from further environmental review pursuant to Public Resources Code Section 21080.66 (Infill Housing Development Exemption). A full analysis of the Project's eligibility is included in **Attachment 9**. CEQA review for the Project was conducted only via Public Resources Code section 21080.66 and not via any other potential CEQA exemptions.

GOAL:

Miscellaneous/Other

DOCUMENTS ATTACHMENTS:

[1. Water Neutrality In-Lieu Fee Authorization CC Reso 2-10-2026](#)

- [2. Spring Grove VTSM CC Reso 2-10-2026](#)
- [3. Vesting Tentative Subdivision Map PC Reso No. PC2025-019](#)
- [4. Demolition Permit PC Reso No. PC2025-018](#)
- [5. Project Plans, dated November 10, 2025](#)
- [6. Project Narrative, prepared by City Ventures, dated November 14, 2025](#)
- [9. CEQA Exemption Memo v2 md](#)
- [7. 2019 General Plan Consistency Analysis](#)
- [8. Minor Design Review Notice of Action](#)
- [8.A. Density Bonus Eligibility Letter](#)
- [9.A. BRA, prepared by Monk & Associates, Inc., dated November 21, 2024](#)
- [10. Response to Feedback, prepared by City Ventures, dated November 19](#)
- [11. Water Neutrality Report, prepared by City Ventures, dated November 10, 2025](#)
- [12. Response to Public Comments- Spring Grove_Final](#)
- [13. FAQ Spring Grove Key Issues](#)
- [14. City Attorney response to DP_F Letter re Spring Grove](#)
- [Memo re Wolfe Letter re Spring Grove\(44661358.1\)-c1-c1](#)
- [16. FD Response to Zari Report Final 2.5.26](#)

**CITY OF ST. HELENA
RESOLUTION NO. 2026-**

Resolution of the City Council of the City of St. Helena authorizing, pursuant to a statutory exemption from the California Environmental Quality Act, City Ventures, LLC to pay an in-lieu retrofit fee in compliance with Section 13.12.030(B) of the St. Helena Municipal Code and accepting the in-lieu fee amount to be \$133,348.00 for the proposed housing project at 1447, 1505 & 1515 Spring Street in the City of St. Helena, California

- A. St. Helena Municipal Code (“SHMC”) Section 13.12.030 requires that new development in the City of St. Helena shall completely offset its water requirement by installing city-approved ultra-low flush toilets and associated water efficient hardware in a sufficient number of existing homes or nonresidential properties having toilets that use one and six-tenths gallons per flush or greater, unless the City Council determines that retrofitting of existing residential or nonresidential buildings is impractical or constitutes an unusual hardship on an applicant; and
- B. In the event that the City Council does determine such retrofitting is impractical or constitutes an unusual hardship, SHMC Section 13.12.030(B) authorizes the City Council to allow a property developer to pay an in-lieu retrofit fee in lieu of complying with the retrofitting requirement described above; and
- C. City Ventures, LLC (the “Applicant”), have submitted an application for development entitlements for a proposed housing project located at 1447, 1505 and 1515 Spring Street in the City of St. Helena (the “Spring Grove Project”). In order to completely offset the water requirement for the Spring Grove Project, the Applicant would have to retrofit 34 existing homes in the City of St. Helena with water efficient fixtures and appliances; and
- D. The City of St. Helena has conducted environmental review of the Spring Grove housing Project pursuant to Public Resources Code Section 21080.66, a statutory exemption from California Environmental Quality Act (CEQA) review for infill housing developments that meet certain conditions. The City has determined, as documented in the Memorandum for the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project (see Attachment 9 of the January 13, 2026 City Council Staff Report), that the Spring Grove housing project qualifies for a statutory exemption from CEQA pursuant to Public Resources Code Section 21080.66; and

- E. The Applicant has asserted, and Public Works Department staff concurs, that given the fact that most homes in St. Helena have already been upgraded with water efficient fixtures and appliances, it would be impractical and an unusual hardship to require the Applicant to locate 34 homes in need of retrofitting and to obtain agreement from the owners of those 34 homes to agree to the required retrofitting; and
- F. The Applicant has therefore requested that the City accept payment of an in-lieu retrofit fee and has calculated that an in-lieu fee amount that is the equivalent of the cost of retrofitting the 34 homes, including staff time to accomplish the required retrofitting using the fees collected is \$133,348.00; and
- G. City Public Works staff has reviewed the calculation and found that the amount is appropriate and conforms with SHMC Section 13.12.030.

RESOLUTION

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

- 1. That the Spring Grove housing project is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66; and
- 2. The City Council hereby determines that retrofitting of existing residential or nonresidential buildings to offset the water requirement for the Spring Grove Project is impractical and constitutes an unusual hardship on the Applicant; and
- 3. That the Applicant is therefore authorized to pay an in-lieu retrofit fee for the Spring Grove Project in order to comply with the requirements of SHMC 13.12.030; and
- 4. That the City Council accepts the in-lieu retrofit fee for the Spring Grove Project shall be \$133,348.00, which amount shall be paid in full prior to issuance of the first building permit for the Spring Grove Project.

Approved at a regular meeting of the St. Helena City Council on February 10, 2026 by the following vote:

Mayor Dohring:	_____
Vice Mayor Deasy:	_____
Council Member Barak:	_____
Council Member Spadarotto:	_____
Council Member Summers:	_____

APPROVED:

ATTEST:

Andrew Bradley, City Clerk

Paul Jamison Dohring, Mayor

CITY COUNCIL RESOLUTION NO. XXXX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ST. HELENA APPROVING, PURSUANT TO A STATUTORY EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, A VESTING TENTATIVE SUBDIVISION MAP TO SUBDIVIDE THREE EXISTING PARCELS TOTALING 2.53 ACRES INTO 42 LOTS, 41 FOR CONDOMINIUM PURPOSES, ONE LOT FOR COMMON AREAS TO BE OWNED BY THE FUTURE HOMEOWNERS' ASSOCIATION, AND ONE 0.1-ACRE LETTERED LOT (PARCEL A) TO CONTAIN THE RIPARIAN CORRIDOR NOT FOR DEVELOPMENT, LOCATED AT 1447, 1505, AND 1515 SPRING STREET IN THE CITY OF ST. HELENA, CALIFORNIA, APNs 009-590-003, 009-590-005, 009-590-010

PROPERTY OWNER: Edward S. & Eleonore M. Aslanian 2006 Revocable Trust
Iren Aslanian Jenny & Samson Aslanian, Successor Trustees

APNs: 009-590-003, 009-590-005, 009-590-010

WHEREAS, the property owner requests adoption of a resolution recommending approval of a vesting tentative subdivision map in order to accommodate the subdivision of three existing parcels under single ownership totaling 2.53 acres into 42 lots, 41 for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one 0.1-acre lettered lot (Parcel A) to contain the riparian corridor not for development in the High Density Residential (HR) and Medium Density Residential zoning districts; and

WHEREAS, City of St. Helena has conducted environmental review for the proposed tentative map pursuant to Public Resources Code Section 21080.66, a statutory exemption from California Environmental Quality Act (CEQA) review for infill housing developments that meet certain conditions. The City has determined, as documented in the Memorandum for the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project (see **Attachment 9** of the February 10, 2026 City Council Staff Report), that the proposed tentative map qualifies for a statutory exemption from CEQA pursuant to Public Resources Code Section 21080.66; and

WHEREAS, prior to the December 2, 2025 Planning Commission meeting, a public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and

WHEREAS, the Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on December 2, 2025; and

WHEREAS, the Planning Commission of the City of St. Helena, State of California, at a duly noticed public hearing on December 2, 2025, by a vote of 4-0, adopted Planning Commission Resolution No. PC2025-019 to recommend that the City Council approve the tentative map for the Spring Grove project; and

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WHEREAS, prior to the January 13, 2026 City Council meeting, a public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and

WHEREAS, the City Council of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on January 13, 2026; and

WHEREAS, the City Council of the City of St. Helena, State of California, at a duly noticed public hearing on January 13, 2026, by a vote of 4-0, continued the Vesting Tentative Map and Water Neutrality In-Lieu Retrofit Fee request to a date certain, January 27, 2026 to receive more information from staff addressing public comments; and

WHEREAS, prior to the January 27, 2026 City Council meeting, a public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and

WHEREAS, the City Council of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on January 27, 2026; and

WHEREAS, the City Council of the City of St. Helena, State of California, at a duly noticed public hearing on January 27, 2026, by a vote of 4-0, continued the Vesting Tentative Map and Water Neutrality In-Lieu Retrofit Fee request to a date certain, February 10, 2026 to receive more information from staff addressing fire access; and

WHEREAS, the City Council of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on February 10, 2026; and

WHEREAS, the findings made in this Resolution are based upon the information and evidence set forth in the February 10, 2026 City Council staff report and upon other substantial evidence that has been presented at the hearings and in the record of the proceedings. The documents, staff reports, technical studies, appendices, plans, specifications, and other materials that constitute the record of the proceedings on which this Resolution is based are on file for public examination during normal business hours at the Planning Division located at City of St. Helena City Hall, 1088 College Avenue, St. Helena CA; and

WHEREAS, the City Council has considered the findings identified in Municipal Code Section 16.16.080(A) to support the recommended approval of the Vesting Tentative Map, and determined based on the evidence in the record before the City Council as follows:

1. That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of this code; and

The proposed subdivision, together with the provision for its design and improvement, is consistent with the general plan, any applicable specific plan, and applicable provisions of this code in that the proposed subdivision is consistent with the allowable density of the General Plan land use designation

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*as well as applicable General Plan policies as demonstrated in **Attachment 7**. No Specific Plans apply to the site. In addition, the proposed subdivision complies with the minimum lot dimensions and applicable building setbacks of the HR zoning district per SHMC Table 17.16.030 and the lot design requirements of SHMC Section 16.32.050.*

2. Except for condominium conversion projects where no new structures are added, that the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council.

The proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council in that the proposed subdivision meets minimum lot dimensional requirements of SHMC Table 17.16.030 and SHMC Section 16.32.050, the majority of units are oriented to provide southeastern solar exposure, and the majority of units would allow for prevailing upvalley breeze to provide for natural cooling if front and rear doors and windows were opened. In addition, the proposed subdivision layout would provide an internal network of private streets that would be shaded by the Project buildings. The Project also provides open space areas that would be landscaped with future construction.

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

SECTION 1: The City Council finds:

(a) That it has reviewed the proposed tentative map and the evidence and testimony received in conjunction with the public hearing on the proposed tentative map, and that the proposed subdivision as conditioned by the proposed conditions of approval attached to this Resolution as Exhibit A, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of the St. Helena Municipal Code, statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66; and

(b) That design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council.

SECTION 2: Based on the aforementioned findings, the City Council does

(a) Find that the proposed tentative map is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66; and

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(b) approve the Spring Grove Vesting Tentative Subdivision Map, subject to the conditions of approval attached to this Resolution.

SECTION 3: The documents and materials that constitute the records of proceedings on which this Resolution has been based are located at the City of St. Helena City Hall at 1088 College Avenue, St. Helena, CA. The custodian for these records is the City of St. Helena City Clerk.

SECTION 4: The Secretary shall certify to the adoption of this resolution.

ADOPTED AND APPROVED the 10th day of February, 2026.

PAUL JAMISON DOHRING, MAYOR

I hereby certify that the foregoing is a true copy of a resolution adopted by the City Council of the City of St. Helena at a regular meeting thereof held on the 10th day of February, 2026, by the following vote of the City Council:

AYES:

NOES:

ABSENT:

ABSTAIN:

ANDREW BRADLEY, CITY CLERK

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EXHIBIT A: PROPOSED CONDITIONS OF APPROVAL

Vesting Tentative Subdivision Map PL24-065 (TSM 25-001)
APNs : 009-590-003 (1447 Spring St.); 009-590-005 (1505 Spring St.); 009-590-010
(1515 Spring St.)

These conditions shall apply to City approval of Vesting Tentative Subdivision Map PL24-065 (TSM25-001). However, the only conditions herein that constitute preconditions to the approval of the Final Map are those that explicitly state that they constitute such preconditions, and such conditions may be satisfied through substantial completion, as determined by the City Engineer.

Planning Division: General Conditions

1. This approval is based upon all conditions of approval set forth herein, including specified plans and agreements included by reference, as well as all applicable City rules and regulations. Any minor deviations from the conditions must be reviewed and approved by City staff for substantial conformity with this approval. Major deviations may require approved changes to these approvals or may require further environmental review. Deviations without the above described approval will constitute a violation of permit approval. Minor deviations do not result in any changes to the number of dwellings, floor area, overall room count, or cost to the City.
2. Except as specifically authorized in these conditions of approval, the grading, development, use, and maintenance of the property; the size, shape, arrangement, and location of the structures, parking areas and landscape areas; and the protection and preservation of resources shall be subject to City approval and shall conform to the conditions of approval below. All plans and agreements (such as landscape maintenance plans) required pursuant to these conditions of approval must be submitted for review and approval and shall be implemented as approved by the City.
3. The use and construction of any structures or improvements authorized by this approval shall not commence until all necessary planning and building permits pertaining to that use or construction in question are obtained. Before any grading or building permit will be issued by the City, the Owner/Applicant must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Applicant has satisfied all pre-construction conditions.
4. The Owner/Applicant's acceptance of this Vesting Tentative Map or commencement of construction shall be deemed acceptance of all conditions of this approval by the Owner/Applicant.
5. Pursuant to the Municipal Code, Section 16.16.100, the Tentative Map approval is valid for a two (2) year period from the date of the final City Council approval of the Vesting Tentative Map, unless later extended by operation of state law. The Final Map shall be filed by this date or an extension of time shall be requested prior to the expiration date.

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6. Pursuant to St Helena Municipal Code, any request for an extension of the Tentative Map must be justified in writing and received by the Community Development Department at least twenty (20) days prior to expiration. The time at which such map expires may be extended by the City Council for one year, and on further application twenty (20) days before the expiration of the one year extension, the subdivider may request a second one-year extension, and on further application twenty (20) days before the expiration of the second one-year extension may request a third one-year extension. No extension shall be permitted beyond the third one-year extension.
7. Prior to recordation of the Final Map, and subject to City approval as to form and content, the Owner/Applicant shall include all of the conditions of approval associated with or required by this Project approval on a separate informational sheet(s) to be recorded with the Final Map. All applicable conditions for the Project shall be printed on grading and building plans for each permit set of drawings.
8. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases not later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.
9. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind.
10. This Tentative Subdivision Map shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.
11. Any revision of the Tentative Map, including revisions to these conditions of approval, must be approved in accordance with Section 16.16.130 of the St. Helena Municipal Code.
12. The project must comply with the General Plan and Zoning Ordinance in effect at the time the preliminary application was submitted, November 5, 2024. The project must comply with all applicable building codes, including fire protection systems and the accessibility standards of Title 24.
13. All required fees, including planning fees, development-impact fees, park-impact fees, park-land fees in lieu of dedication under the Quimby Act, and building permit fees shall be paid prior to issuance of building permit unless such payment has been modified by adopted or conditions of approval or in accordance with state law. Fees shall be those in effect at the time the preliminary application was submitted, November 5, 2024.
14. The Applicant shall be responsible for all City plan check and inspection costs as described in the St. Helena Comprehensive Fee and Rate Schedule.

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15. This authorizes the creation of a tentative subdivision of a 2.53-acre project site (APNs 009-590-003, 009-590-005, and 009-590-010) located at located at 1447, 1505, and 1515 Spring Street into 42 lots, 41 residential condominium purposes, one lot for associated common areas to be owned by the future homeowners' association, and one lettered lot (Parcel A) to contain the riparian corridor, which shall not be for development of any structure.
16. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
17. Common usable open space amenities, including seating areas, and landscape improvements as shown in the approved project plans shall be installed prior to Certificate of Occupancy for the last building.
18. At the time of building permit submittal, the applicant shall provide a will-serve letter from the refuse and recycling collection provider that confirms adequacy of container size and feasible access.
19. The applicant shall follow the recommendation of the Transportation Impact Study, prepared by W-Trans, dated October 1, 2025, to provide wayfinding signs along the project's internal roadway and at the sidewalk connections, and identity a short-term parking area for delivery vehicles.
20. If the bed, bank, channel, or riparian habitat of any streams, including but not limited to ephemeral streams, will be impacted, the Project shall submit a Lake or Streambed Alteration Notification to CDFW and comply with the Streambed Alteration Agreement, if issued (see: <https://epims.wildlife.ca.gov/index.do>). The Project shall also obtain any necessary authorization from the Regional Water Quality Control Board pursuant to the Clean Water Act and Porter Cologne Water Quality Control Act.

Planning Division: Final Map Conditions

21. The owners of the 41 condominiums shall be members of a homeowner's association, or another funding mechanism acceptable to the City, dedicated to the maintenance of the project's common areas and private improvements including but not limited to, the internal irrigation system, private streets, and private utilities.
22. Prior to recordation of the final map and concurrent with the Subdivision Improvement Plan, the applicant shall submit CC&R's (Codes, Covenants and Restrictions) to the City Attorney, Public Works Director and Community Development Director for review and approval. CC&R's shall be recorded at time of recordation of final map. CC&R's shall include all restrictions and maintenance regulations pertaining to, landscaping and common areas; and shall include all restrictions and maintenance agreements pertaining to roads and access easements. The CC&Rs must be recorded prior to issuance of any building permit for any structure on the project site.
23. Pursuant to Section 16.20.090, upon approval of the final map by the City Council, the City Clerk shall execute the appropriate certificate on the certificate sheet and shall, subject to the

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provisions of Section 66464 of the state Subdivision Map Act, transmit the map, or have an authorized agent forward the map, to the county recorder prior to the issuance of a building permit.

24. Prior to issuance of a Certificate of Occupancy, all joint poles and overhead lines will either be demolished or undergrounded if applicable.

Planning: Misc. Conditions

25. Prior to approval of the Final Map, the applicant shall enter into an Affordable Housing Agreement with the City of St. Helena, which agreement shall be subject to review and approval by the St. Helena City Council pursuant to SHMC Section 17.30.040.B.1. The Affordable Housing Agreement shall be recorded in the Official Records of Napa County, and shall ensure that the project complies with the requirements of SHMC Section 17.30.030, inclusionary housing requirements, and all applicable state and local requirements.
26. Prior to issuance of building permit, the applicant shall pay any applicable affordable housing in-lieu fee, as applicable, pursuant to SHMC Section 17.30.030, for the 0.2-unit fraction of the proposed 41-unit project pursuant to the 20% affordable requirement.

Planning: Environmental Conditions

27. Consistent with General Plan Policy OS1.0, the project shall avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (September through January) or by conducting a preconstruction survey by a qualified biologist if vegetation removal and construction is initiated during the nesting season (February through August). Surveys for nesting birds will be conducted no earlier than 14 days prior to tree removal or breaking ground. In the event that nesting birds are found, the project applicant will consult with CDFG and obtain approval for nest-protection buffers prior to tree removal or ground-breeding activities. Nest protection buffers will remain in effect until the young have fledged.
28. Consistent with General Plan policy OS1.1, prior to issuance of a grading permit, the applicant shall maximize the protection of native tree species, which may be done by providing protective fencing around trees to be retained as indicated on the tree inventory, Sheets C1.4-C1.5 of the Vesting Tentative Map Plans dated November 10, 2025.
29. The project shall include tribal monitoring during all ground-disturbing activities, as follows:
 - a. Prior to issuance of a demolition permit or grading permit, whichever occurs first, the applicant/property owner shall retain the services of a Tribal Monitor.
 - b. The Mishewal-Wappo Tribe of Alexander Valley shall designate the monitor.
 - c. The tribal monitor shall comply with applicant's site access and workplace safety requirements.
 - d. The applicant shall compensate the tribal monitor at a reasonable rate, determined in good faith, that aligns with customary compensation for cultural resource monitoring, taking into account factors such as the scope and duration of the project.

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30. As applicable, tribal cultural resources shall be avoided where feasible, in accordance with subdivision (a) of Section 21084.3. In furtherance of this requirement, where feasible, the project applicant shall provide deference to tribal preferences regarding access to spiritual, ceremonial, and burial sites, and incorporate tribal traditional knowledge in the protection and sustainable use of tribal cultural resources and landscapes.
31. All treatment and documentation of tribal cultural resources shall be conducted in a culturally appropriate manner, consistent with Section 21083.9.
32. The applicant shall prepare a California Historical Resources Information System archaeological records search and a tribal cultural records search shall be completed for the project site.
33. The applicant shall submit a Sacred Lands Inventory request to the Native American Heritage Commission.
34. The project shall comply with Section 7050.5 of the Health and Safety Code and Section 5097.98, including immediate work stoppage upon discovery of human remains or burial grounds, and treatment in accordance with applicable law and in consultation with the affected California Native American tribe.

Planning: Landscape Conditions

35. Landscape plans shall comply with the State of California Model Water Efficient Landscape Ordinance and Chapter 17.25 of the St Helena Municipal Code. Plans shall be designed and verified by a landscape professional and shall include drought tolerant landscaping and low water irrigation systems. Landscaping shall not block vision from exits or at street intersections.

Planning: Construction Activities Conditions

36. Mechanical equipment, including heating and air conditioning units, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBa, Ldn per noise-related policies of the St Helena General Plan, including policy PS2.C3 from the 2019 General Plan. For avoidance of doubt, mechanical equipment can be located on the roof if it meets the foregoing noise requirements.
37. The applicant or construction manager shall notify all contractors and subcontractors that no trespassing is allowed on adjoining properties.
38. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be

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unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

Public Works: General Conditions

39. The applicant shall reference on construction drawings for all work in the public right of way City of St. Helena Construction Standards for all public improvements and utilities as applicable. Please utilize the 2025 updated standards, available from Public Works.
40. The developer shall be responsible for all City plan check, map check and inspection costs. The developer shall deposit funds with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer and consistent with state law. Additional funds may be required based upon actual plan check and inspection costs.

Public Works: Fees

41. Public Works engineering and inspection fees for Improvement Plan and Final Map review shall be due and payable at the time of making the first submittal in connection with the Improvement Plans or the Final Map, as applicable, or as allowed by state law.
42. All Public Works Development Impact fees shall be due and payable at the time of issuance of building permit(s) or in accordance with state law for the improvements to which they are applicable, unless otherwise authorized by the City.

Public Works: Improvement Plan and Construction Conditions

43. Improvement plans shall be prepared and submitted by a California Registered Civil Engineer for the construction of all necessary and required on-site and off-site improvements including grading, water, sanitary sewer, storm drain facilities, roadway improvements, curbs, gutters, sidewalks, parkway strips and streetlights. All design and construction shall conform to the City of St. Helena Design and Construction Standards, as applicable.
44. Any private water mains, sewer mains and storm drains shall be clearly labeled "Private" on the improvement plans.
45. Project frontage improvements required. Improvements may include installation of ADA compliant driveways, sidewalk, bike lanes, curb and gutter replacements or repairs. All improvements shall be installed according to City Standards. Improvements shall be prescribed by the Public Works Director during the Building Permit phase.
46. An Encroachment Permit is required for all work within City right of way including obstructions, staging, or closures of the vehicular or pedestrian path of travel. Any damages caused by the project to sidewalk, curb and gutter shall be repaired by the applicant. Applicant

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to keep roadway and sidewalk clear of construction activities and debris (Building Permit Phase).

Public Works Water and Sanitary Sewer Improvements Conditions

47. Water Supply was deemed sufficient for this project under the Housing Element. If there is a nexus to upsize water and sewer infrastructure pertaining to the additional 41 units, that upsizing will be studied and documented in the project plans prior to granting the improvement permit.
48. Any modifications to the existing well, other than the installation or maintenance of pumping and storage equipment and connection to the onsite irrigation water distribution system as approved by City Council pursuant to the Water Neutrality Requirements, shall require an approved permit per section 13.16.060 of the St Helena Municipal Code. The applicant shall also submit a well permit application to, and receive a permit from, the Napa County department of environmental management pursuant to Chapter 13.12 of the Napa County Code and subsequent revisions. Demolition of the well shall go through Napa County and any other applicable agencies.
49. This Vesting Tentative Map approval is contingent upon City Council authorization of the Water Neutrality In-Lieu Retrofit Fee, pursuant to SHMC 13.12.030, as requested by the applicant at the February 10, 2026 City Council public hearing. Payment of any approved Water Neutrality In-Lieu Retrofit Fee shall be paid prior to building permit issuance.
50. Backflow prevention devices shall be installed prior to issuance of a building permit; all public improvements utility connections shall be designed in accordance with the City of St. Helena's Construction Standards (SHMC 16.32.230) (Building Permit Phase).
51. Stormwater Quantity: Prior to issuance of a building permit, onsite stormwater and drainage management shall be sufficiently demonstrated in the building plans per SHMC 16.32.070.
 - a. Calculations required for pre and post development 10-year event. Plans shall demonstrate sufficient management of post development 10-year event.
 - b. Plans shall demonstrate sufficient conveyance facilities for a 100-year event.
 - c. Plans shall demonstrate drainage patterns which prevent diversion or inundation of neighboring properties.
52. A Stormwater Water Pollution Prevention Plan is required. The Plan shall detail all site-specific stormwater management, BMPs and erosion control measures shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit (Building Permit Phase).
53. The plans shall be prepared in accordance with the latest edition of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. Compliance with BASMAA "Regulated Project" requirements shall be demonstrated on a

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sheet in the plan set. The Plan will be reviewed with the building permit application. Plans shall detail all measures as required and indicated in the submitted stormwater control plan. A detailed Post-Construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review approval (Building Permit Phase).

54. Prior to Building Permit issuance, the applicant shall demonstrate that all proposed stormwater facilities comply with SHMC Sections 15.12.040 and 16.32.070. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Drainage improvements for runoff shall be engineered to minimize erosion through the use of rocked culvert inlets and outfalls, energy reducers, the correct location of culverts, etc.
55. All electrical energy and communication service laterals to any new building or structure shall be placed underground (SHMC 13.28.120) (Building Permit Phase).

Public Works Final Map Conditions

56. A legal lot is not created until a Final Map is approved and recorded.
57. Following the final approval of the Vesting Tentative Map from the City Council, applicant has one year to submit a Final Map to Public Works. The Final Map submission package shall include two (2) copies of mylars for the Final Map exhibit and signature pages, and electronic draft deed documents' of legal descriptions with the following information:
 - a. The legal descriptions shall describe the entire boundary of each resulting parcel.
 - b. The legal descriptions shall be prepared, signed and stamped by a registered Land Surveyor or a licensed Civil Engineer.
 - c. All existing, resultant or proposed easements, grants of right of way and deeds as applicable to the subdivision shall be clearly represented on the exhibit, including dimensions.
 - d. Additional easements or grants of right of way that may be required as a result of the subdivision but are not to be executed in the Tentative Map action, should be indicated on the exhibit as proposed and described in a supplemental narrative. Consideration should be made for access, utility, emergency vehicle access and maintenance agreements.
 - e. The following statements shall be included on each draft deed document:
 - i. The purpose of this conveyance and the conveyances being recorded concurrently herewith is to create a subdivision pursuant to California Government Code Section 66412(d) and all local subdivision ordinances.
 - ii. The consolidation of underlying lots, parcels or portions thereof, as set forth in the above metes and bounds description, constitutes an expressed written statement of the Grantor, merging said underlying lots, parcels, or portions thereof pursuant to Section 1093 of the California Civil Code.

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58. The Final Map will be reviewed by the Director of Public Works and presented to the City Council (SMHC 16.20.080) for approval as a consent item at a regular meeting. A Notice of Approval will be provided, and the Applicant may proceed with the recordation. Upon completion of recordation:
 - a. The applicant, or his/her representative, shall submit two (2) copies of the title reports issued within 30 days of the date of the legal descriptions and deed form submittals.
 - b. The applicant, or his/her representative, shall submit two (2) copies of the record maps, deed documents, etc. referred to in the subdivision legal descriptions.
 - c. The applicant, or his/her representative, shall submit proof of payment of the mapping services fee, as required by the Napa County Board of Supervisors Resolution 92-119.
 - d. The applicant, or his/her representative, shall submit proof of prepayment of property taxes.
 - e. Lenders should be contacted and any deeds of trust on the involved properties should be modified, to conform to the new boundary configurations, prior to recording the deed documents.
59. A final map, as defined in the State Subdivision Map Act, shall be prepared by a licensed surveyor or civil engineer, showing all parcels, rights-of-way, and easement(s) shall be filed with the Public Works Department. The final map shall be substantial conformance with the approved Tentative Map and all applicable conditions of approval. The final map is not valid until it has been approved and recorded.

Public Works Construction Conditions

60. Prior to Certificate of Occupancy for a building, the developer shall complete required improvements for that building in accordance with the approved improvement plans. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.
61. No grading or other construction shall be performed until the grading plans have been approved and signed by the City Engineer. Encroachment Permits and Building Permits will not be issued prior to the approval of the grading plans. An Encroachment Permit is required for any work within the City's rights of way.
62. A Stormwater Pollution Prevention Plan (SWPPP) is required and the contractor shall adhere to it at all times during construction. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.
63. Prior to the issuance of a grading permit, the developer shall provide evidence that a Notice of Intent has been submitted and received by the Regional Water Quality Control Board for

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- a General Construction Activity Storm Water Permit. A copy of the project Storm Water Pollution Protection Plan shall be submitted to the City.
64. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Napa County Environmental Health Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.
 65. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.
 66. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.
 67. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired to the satisfaction of the City at the Developer's expense.
 68. Dust control must be maintained to the City's satisfaction.
 69. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer. Prior to issuance of a building permit, an approved Grading Permit will be Required.
 70. No City supplied water use is permitted for construction activities (Building Permit Phase).
 71. Inspection by Public Works Staff is required for utility installations (Building Permit Phase).

Fire Department Conditions

72. Prior to issuance of future building permits, all construction plans for homes shall include NFPA13 fire sprinklers as required by the City of St. Helena Fire Department.
73. Prior to issuance of a building permit, plans shall, consistent with the VTMAP, continue to exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.

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74. One hour minimum fire resistant construction on all exterior walls within 10' of property boundary is required. Fire resistant construction of interior walls shall be determined by type of occupancy.
75. Any gates installed to control vehicular access to a property are required to be setback 30-feet from the property line or edge of pavement, whichever is greater. No vehicle gates may be installed without Fire Department and Public Works Department review and explicit approval.

Building Division Conditions

76. The applicant will be required to comply with the CBC codes adopted at the time the applicant applies for a building permit, or as dictated by state law. The City of St. Helena will utilize the 2025 California Building Code series, starting January 1, 2026.
77. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist, including a construction-level geotechnical report.
78. The applicant shall provide a Construction Waste Management Plan with the building permit application.
79. The plans for construction shall include a checklist for compliance with the California Green Building Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
80. When submitting plans, the Title Page shall include all information referenced on the building permit application checklist Title Page requirements.
81. Building permit application materials and plans shall include any documentation pertaining to special loads applicable to the design and the specified section of the code that addresses the condition; special inspections for any systems or components requiring special inspection; requirements for seismic resistance; and a complete list of deferred submittals at time of application.
82. Any deferral of the required submittal items shall have prior approval of the Building Official, however, deferral of the fire sprinkler design is not allowed.
83. A separate permit submittal is required for generators, fire sprinkler/standpipe systems, fire pumps, fire alarms, and PV-systems.
84. At the time of building permit submittal, EV parking shall be fully detailed to demonstrate compliance with required EV charging per 4.106.4.2.2 and 4.106.4 of the California Green Building Standards Code.
85. Plans shall comply with Chapter 11A CBC ADA requirements for residential units, and Chapter 11B CBC for common areas, as applicable.

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CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO. PC2025-019

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ST. HELENA RECOMMENDING THE CITY COUNCIL APPROVE, PURSUANT TO A STATUTORY EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, A VESTING TENTATIVE SUBDIVISION MAP TO SUBDIVIDE THREE EXISTING PARCELS TOTALING 2.53 ACRES INTO 42 LOTS, 41 FOR CONDOMINIUM PURPOSES, ONE LOT FOR COMMON AREAS TO BE OWNED BY THE FUTURE HOMEOWNERS' ASSOCIATION, AND ONE 0.1-ACRE LETTERED LOT (PARCEL A) TO CONTAIN THE RIPARIAN CORRIDOR NOT FOR DEVELOPMENT, LOCATED AT 1447, 1505, AND 1515 SPRING STREET IN THE CITY OF ST. HELENA, CALIFORNIA, APNs 009-590-003, 009-590-005, 009-590-010

PROPERTY OWNER: Edward S. & Eleonore M. Aslanian 2006 Revocable Trust
Iren Aslanian Jenny & Samson Aslanian, Successor Trustees

APNs: 009-590-003, 009-590-005, 009-590-010 corridor

WHEREAS, the property owner requests adoption of a resolution recommending approval of a vesting tentative subdivision map in order to accommodate the subdivision of three existing parcels under single ownership totaling 2.53 acres into 42 lots, 41 for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one 0.1-acre lettered lot (Parcel A) to contain the riparian corridor not for development in the High Density Residential (HR) and Medium Density Residential zoning districts; and

WHEREAS, City of St. Helena has conducted environmental review for the proposed tentative map pursuant to Public Resources Code Section 21080.66, a statutory exemption from California Environmental Quality Act (CEQA) review for infill housing developments that meet certain conditions. The City has determined, as documented in the Memorandum for the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project (see **Attachment 7** of the December 2, 2025 Planning Commission Staff Report), that the proposed tentative map qualifies for a statutory exemption from CEQA pursuant to Public Resources Code Section 21080.66; and

WHEREAS, a public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and

WHEREAS, the Planning Commission of the City of St. Helena, State of California, considered the project, staff report, and all testimony, written and spoken, at a duly noticed public hearing on December 2, 2025; and

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WHEREAS, the findings made in this Resolution are based upon the information and evidence set forth in the December 2, 2025 Planning Commission staff report and upon other substantial evidence that has been presented at the hearings and in the record of the proceedings. The documents, staff reports, technical studies, appendices, plans, specifications, and other materials that constitute the record of the proceedings on which this Resolution is based are on file for public examination during normal business hours at the Planning Division located at City of St. Helena City Hall, 1088 College Avenue, St. Helena CA; and

WHEREAS, the Planning Commission has considered the findings identified in Municipal Code Section 16.16.080(A) to support the recommended approval of the Vesting Tentative Map, and determined based on the evidence in the record before the Planning Commission as follows:

1. That the proposed subdivision, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of this code; and

*The proposed subdivision, together with the provision for its design and improvement, is consistent with the general plan, any applicable specific plan, and applicable provisions of this code in that the proposed subdivision is consistent with the allowable density of the General Plan land use designation as well as applicable General Plan policies as demonstrated in **Attachment 5**. No Specific Plans apply to the site. In addition, the proposed subdivision complies with the minimum lot dimensions and applicable building setbacks of the HR zoning district per SHMC Table 17.16.030 and the lot design requirements of SHMC Section 16.32.050.*

2. Except for condominium conversion projects where no new structures are added, that the design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council.

The proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council in that the proposed subdivision meets minimum lot dimensional requirements of SHMC Table 17.16.030 and SHMC Section 16.32.050, the majority of units are oriented to provide southeastern solar exposure, and the majority of units would allow for prevailing upvalley breeze to provide for natural cooling if front and rear doors and windows were opened. In addition, the proposed subdivision layout would provide an internal network of private streets that would be shaded by the Project buildings. The Project also provides open space areas that would be landscaped with future construction.

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

SECTION 1: The Planning Commission finds:

(a) That it has reviewed the proposed tentative map and the evidence and testimony received in conjunction with the public hearing on the proposed tentative map, and that the proposed subdivision as conditioned by the proposed conditions of approval attached to this Resolution as Exhibit A, together with the provisions for its design and improvement, is consistent with the general plan, any applicable specific plan, and other applicable provisions of the St. Helena Municipal Code, statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66; and

(b) That design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the State Subdivision Map Act and any guidelines promulgated by the City Council.

SECTION 2: Based on the aforementioned findings, the Planning Commission does hereby recommend that the City Council

(a) Find that the proposed tentative map is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66; and

(b) approve the Spring Grove Vesting Tentative Subdivision Map, subject to the conditions of approval attached to this Resolution.

SECTION 3: The documents and materials that constitute the records of proceedings on which this Resolution has been based are located at the City of St. Helena City Hall at 1088 College Avenue, St. Helena, CA. The custodian for these records is the City of St. Helena City Clerk.

SECTION 4: The Secretary shall certify to the adoption of this resolution.

ADOPTED AND APPROVED the 2nd day of December, 2025.

(Signatures on following page)

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I HEREBY CERTIFY that the foregoing is a true copy of a resolution adopted by the Planning Commission of the City of St. Helena at a regular meeting thereof held on the 2nd day of December, 2025, by the following vote of the Planning Commission:

AYES: Commissioner Anderson, Lopez, Covell and Warner

NOES: None

ABSENT: Commissioner Furdek

ABSTAIN: None

APPROVED:



Christopher Warner
Chair, Planning Commission

ATTEST:



Maya DeRosa, AICP
Community Development Director

EXHIBIT A: PROPOSED CONDITIONS OF APPROVAL

Vesting Tentative Subdivision Map PL24-065 (TSM 25-001)
APNs : 009-590-003 (1447 Spring St.); 009-590-005 (1505 Spring St.); 009-590-010 (1515 Spring St.)

These conditions shall apply to City approval of Vesting Tentative Subdivision Map PL24-065 (TSM25-001). However, the only conditions herein that constitute preconditions to the approval of the Final Map are those that explicitly state that they constitute such preconditions, and such conditions may be satisfied through substantial completion, as determined by the City Engineer.

Planning Division: General Conditions

1. This approval is based upon all conditions of approval set forth herein, including specified plans and agreements included by reference, as well as all applicable City rules and regulations. Any minor deviations from the conditions must be reviewed and approved by City staff for substantial conformity with this approval. Major deviations may require approved changes to these approvals or may require further environmental review. Deviations without the above described approval will constitute a violation of permit approval. Minor deviations do not result in any changes to the number of dwellings, floor area, overall room count, or cost to the City.
2. Except as specifically authorized in these conditions of approval, the grading, development, use, and maintenance of the property; the size, shape, arrangement, and location of the structures, parking areas and landscape areas; and the protection and preservation of resources shall be subject to City approval and shall conform to the conditions of approval below. All plans and agreements (such as landscape maintenance plans) required pursuant to these conditions of approval must be submitted for review and approval and shall be implemented as approved by the City.
3. The use and construction of any structures or improvements authorized by this approval shall not commence until all necessary planning and building permits pertaining to that use or construction in question are obtained. Before any grading or building permit will be issued by the City, the Owner/Applicant must obtain written clearance from all departments having conditions; such clearance shall indicate that the Owner/Applicant has satisfied all pre-construction conditions.
4. The Owner/Applicant's acceptance of this Vesting Tentative Map or commencement of construction shall be deemed acceptance of all conditions of this approval by the Owner/Applicant.
5. Pursuant to the Municipal Code, Section 16.16.100, the Tentative Map approval is valid for a two (2) year period from the date of the final City Council approval of the Vesting Tentative Map, unless later extended by operation of state law. The Final Map shall be filed by this date or an extension of time shall be requested prior to the expiration date.

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6. Pursuant to St Helena Municipal Code, any request for an extension of the Tentative Map must be justified in writing and received by the Community Development Department at least twenty (20) days prior to expiration. The time at which such map expires may be extended by the City Council for one year, and on further application twenty (20) days before the expiration of the one year extension, the subdivider may request a second one-year extension, and on further application twenty (20) days before the expiration of the second one-year extension may request a third one-year extension. No extension shall be permitted beyond the third one-year extension.
7. Prior to recordation of the Final Map, and subject to City approval as to form and content, the Owner/Applicant shall include all of the conditions of approval associated with or required by this Project approval on a separate informational sheet(s) to be recorded with the Final Map. All applicable conditions for the Project shall be printed on grading and building plans for each permit set of drawings.
8. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases not later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.
9. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind.
10. This Tentative Subdivision Map shall be binding upon all parties having any right, title or interest in the real property or any part thereof, their heirs, successors and assigns, and shall inure to their benefit and benefit of the City of St. Helena.
11. Any revision of the Tentative Map, including revisions to these conditions of approval, must be approved in accordance with Section 16.16.130 of the St. Helena Municipal Code.
12. The project must comply with the General Plan and Zoning Ordinance in effect at the time the preliminary application was submitted, November 5, 2024. The project must comply with all applicable building codes, including fire protection systems and the accessibility standards of Title 24.
13. All required fees, including planning fees, development-impact fees, park-impact fees, park-land fees in lieu of dedication under the Quimby Act, and building permit fees shall be paid prior to issuance of building permit unless such payment has been modified by adopted or conditions of approval or in accordance with state law. Fees

shall be those in effect at the time the preliminary application was submitted, November 5, 2024.

14. The Applicant shall be responsible for all City plan check and inspection costs as described in the St. Helena Comprehensive Fee and Rate Schedule.
15. This authorizes the creation of a tentative subdivision of a 2.53-acre project site (APNs 009-590-003, 009-590-005, and 009-590-010) located at located at 1447, 1505, and 1515 Spring Street into 42 lots, 41 residential condominium purposes, one lot for associated common areas to be owned by the future homeowners' association, and one lettered lot (Parcel A) to contain the riparian corridor, which shall not be for development of any structure.
16. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
17. Common usable open space amenities, including seating areas, and landscape improvements as shown in the approved project plans shall be installed prior to Certificate of Occupancy for the last building.
18. At the time of building permit submittal, the applicant shall provide a will-serve letter from the refuse and recycling collection provider that confirms adequacy of container size and feasible access.
19. The applicant shall follow the recommendation of the Transportation Impact Study, prepared by W-Trans, dated October 1, 2025, to provide wayfinding signs along the project's internal roadway and at the sidewalk connections, and identify a short-term parking area for delivery vehicles.
20. If the bed, bank, channel, or riparian habitat of any streams, including but not limited to ephemeral streams, will be impacted, the Project shall submit a Lake or Streambed Alteration Notification to CDFW and comply with the Streambed Alteration Agreement, if issued (see: <https://epims.wildlife.ca.gov/index.do>). The Project shall also obtain any necessary authorization from the Regional Water Quality Control Board pursuant to the Clean Water Act and Porter Cologne Water Quality Control Act.

Planning Division: Final Map Conditions

21. The owners of the 41 condominiums shall be members of a homeowner's association, or another funding mechanism acceptable to the City, dedicated to the maintenance of the project's common areas and private improvements including but not limited to, the internal irrigation system, private streets, and private utilities.
22. Prior to recordation of the final map and concurrent with the Subdivision Improvement Plan, the applicant shall submit CC&R's (Codes, Covenants and Restrictions) to the City Attorney, Public Works Director and Community Development Director for review

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and approval. CC&R's shall be recorded at time of recordation of final map. CC&R's shall include all restrictions and maintenance regulations pertaining to, landscaping and common areas; and shall include all restrictions and maintenance agreements pertaining to roads and access easements. The CC&Rs must be recorded prior to issuance of any building permit for any structure on the project site.

23. Pursuant to Section 16.20.090, upon approval of the final map by the City Council, the City Clerk shall execute the appropriate certificate on the certificate sheet and shall, subject to the provisions of Section 66464 of the state Subdivision Map Act, transmit the map, or have an authorized agent forward the map, to the county recorder prior to the issuance of a building permit.
24. Prior to issuance of a Certificate of Occupancy, all joint poles and overhead lines will either be demolished or undergrounded if applicable.

Planning: Misc. Conditions

25. Prior to approval of the Final Map, the applicant shall enter into an Affordable Housing Agreement with the City of St. Helena, which agreement shall be subject to review and approval by the St. Helena City Council pursuant to SHMC Section 17.30.040.B.1. The Affordable Housing Agreement shall be recorded in the Official Records of Napa County, and shall ensure that the project complies with the requirements of SHMC Section 17.30.030, inclusionary housing requirements.
26. Prior to issuance of building permit, the applicant shall pay any applicable affordable housing in-lieu fee pursuant to SHMC Section 17.30.030, for the 0.2-unit fraction of the proposed 41-unit project pursuant to the 20% affordable requirement.

Planning: Environmental Conditions

27. Consistent with General Plan Policy OS1.0, the project shall avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (September through January) or by conducting a preconstruction survey by a qualified biologist if vegetation removal and construction is initiated during the nesting season (February through August). Surveys for nesting birds will be conducted no earlier than 14 days prior to tree removal or breaking ground. In the event that nesting birds are found, the project applicant will consult with CDFG and obtain approval for nest-protection buffers prior to tree removal or ground-breeding activities. Nest protection buffers will remain in effect until the young have fledged.
28. Consistent with General Plan policy OS1.1, prior to issuance of a grading permit, the applicant shall maximize the protection of native tree species, which may be done by providing protective fencing around trees to be retained as indicated on the tree inventory, Sheets C1.4-C1.5 of the Vesting Tentative Map Plans dated November 10, 2025.

29. The project shall include tribal monitoring during all ground-disturbing activities, as follows:
 - a. Prior to issuance of a demolition permit or grading permit, whichever occurs first, the applicant/property owner shall retain the services of a Tribal Monitor.
 - b. The Mishewal-Wappo Tribe of Alexander Valley shall designate the monitor.
 - c. The tribal monitor shall comply with applicant's site access and workplace safety requirements.
 - d. The applicant shall compensate the tribal monitor at a reasonable rate, determined in good faith, that aligns with customary compensation for cultural resource monitoring, taking into account factors such as the scope and duration of the project.
30. As applicable, tribal cultural resources shall be avoided where feasible, in accordance with subdivision (a) of Section 21084.3. In furtherance of this requirement, where feasible, the project applicant shall provide deference to tribal preferences regarding access to spiritual, ceremonial, and burial sites, and incorporate tribal traditional knowledge in the protection and sustainable use of tribal cultural resources and landscapes.
31. All treatment and documentation of tribal cultural resources shall be conducted in a culturally appropriate manner, consistent with Section 21083.9.
32. The applicant shall prepare a California Historical Resources Information System archaeological records search and a tribal cultural records search shall be completed for the project site.
33. The applicant shall submit a Sacred Lands Inventory request to the Native American Heritage Commission.
34. The project shall comply with Section 7050.5 of the Health and Safety Code and Section 5097.98, including immediate work stoppage upon discovery of human remains or burial grounds, and treatment in accordance with applicable law and in consultation with the affected California Native American tribe.

Planning: Landscape Conditions

35. Landscape plans shall comply with the State of California Model Water Efficient Landscape Ordinance and Chapter 17.25 of the St Helena Municipal Code. Plans shall be designed and verified by a landscape professional and shall include drought tolerant landscaping and low water irrigation systems. Landscaping shall not block vision from exits or at street intersections.

Planning: Construction Activities Conditions

36. Mechanical equipment, including heating and air conditioning units, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBA, Ldn per noise-related policies of the St

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Helena General Plan, including policy PS2.C3 from the 2019 General Plan. For avoidance of doubt, mechanical equipment can be located on the roof if it meets the foregoing noise requirements.

37. The applicant or construction manager shall notify all contractors and subcontractors that no trespassing is allowed on adjoining properties.
38. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

Public Works: General Conditions

39. The applicant shall reference on construction drawings for all work in the public right of way City of St. Helena Construction Standards for all public improvements and utilities as applicable. Please utilize the 2025 updated standards, available from Public Works.
40. The developer shall be responsible for all City plan check, map check and inspection costs. The developer shall deposit funds with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer and consistent with state law. Additional funds may be required based upon actual plan check and inspection costs.

Public Works: Fees

41. Public Works engineering and inspection fees for Improvement Plan and Final Map review shall be due and payable at the time of making the first submittal in connection with the Improvement Plans or the Final Map, as applicable, or as allowed by state law.
42. All Public Works Development Impact fees shall be due and payable at the time of issuance of building permit(s) or in accordance with state law for the improvements to which they are applicable, unless otherwise authorized by the City.

Public Works: Improvement Plan and Construction Conditions

43. Improvement plans shall be prepared and submitted by a California Registered Civil Engineer for the construction of all necessary and required on-site and off-site improvements including grading, water, sanitary sewer, storm drain facilities, roadway improvements, curbs, gutters, sidewalks, parkway strips and streetlights. All design and construction shall conform to the City of St. Helena Design and Construction Standards, as applicable.
44. Any private water mains, sewer mains and storm drains shall be clearly labeled "Private" on the improvement plans.
45. Project frontage improvements required. Improvements may include installation of ADA compliant driveways, sidewalk, bike lanes, curb and gutter replacements or repairs. All improvements shall be installed according to City Standards. Improvements shall be prescribed by the Public Works Director during the Building Permit phase.
46. An Encroachment Permit is required for all work within City right of way including obstructions, staging, or closures of the vehicular or pedestrian path of travel. Any damages caused by the project to sidewalk, curb and gutter shall be repaired by the applicant. Applicant to keep roadway and sidewalk clear of construction activities and debris (Building Permit Phase).

Public Works Water and Sanitary Sewer Improvements Conditions

47. Water Supply was deemed sufficient for this project under the Housing Element. If there is a nexus to upsize water and sewer infrastructure pertaining to the additional 41 units, that upsizing will be studied and documented in the project plans prior to granting the improvement permit.
48. Any modifications to the existing well, other than the installation or maintenance of pumping and storage equipment and connection to the onsite irrigation water distribution system as approved by City Council pursuant to the Water Neutrality Requirements, shall require an approved permit per section 13.16.060 of the St Helena Municipal Code. The applicant shall also submit a well permit application to, and receive a permit from, the Napa County department of environmental management pursuant to Chapter 13.12 of the Napa County Code and subsequent revisions. Demolition of the well shall go through Napa County and any other applicable agencies.
49. Prior to or concurrent with Tentative Map approval by the City Council, the applicant is responsible for conformance with the City of St. Helena Water Neutrality Requirements (Policy 9.2.1) in accordance with SHMC 13.04.221(B)(13) and 13.12.030. The proposed Water Neutrality statement, in lieu fee calculation and/or offsetting proposal, is subject to review by the Public Works Director and requires approval by the City Council. A final version of the project's Water Neutrality Calculation and in-lieu fee estimate shall be submitted by the applicant for City Council

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consideration. The applicant shall include a clear description of the number of bedrooms (as defined by the policy guideline) that will be constructed by the project, the project's final determination regarding whether groundwater will be included as a mitigation measure, and a copy of the letter requesting Council approval to use the in-lieu fee process.

50. Backflow prevention devices shall be installed prior to issuance of a building permit; all public improvements utility connections shall be designed in accordance with the City of St. Helena's Construction Standards (SHMC 16.32.230) (Building Permit Phase).
51. Stormwater Quantity: Prior to issuance of a building permit, onsite stormwater and drainage management shall be sufficiently demonstrated in the building plans per SHMC 16.32.070.
 - a. Calculations required for pre and post development 10-year event. Plans shall demonstrate sufficient management of post development 10-year event.
 - b. Plans shall demonstrate sufficient conveyance facilities for a 100-year event.
 - c. Plans shall demonstrate drainage patterns which prevent diversion or inundation of neighboring properties.
52. A Stormwater Water Pollution Prevention Plan is required. The Plan shall detail all site-specific stormwater management, BMPs and erosion control measures shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit (Building Permit Phase).
53. The plans shall be prepared in accordance with the latest edition of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. Compliance with BASMAA "Regulated Project" requirements shall be demonstrated on a sheet in the plan set. The Plan will be reviewed with the building permit application. Plans shall detail all measures as required and indicated in the submitted stormwater control plan. A detailed Post-Construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review approval (Building Permit Phase).
54. Prior to Building Permit issuance, the applicant shall demonstrate that all proposed stormwater facilities comply with SHMC Sections 15.12.040 and 16.32.070. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Drainage improvements for runoff shall be engineered to minimize erosion through the use of rocked culvert inlets and outfalls, energy reducers, the correct location of culverts, etc.
55. All electrical energy and communication service laterals to any new building or structure shall be placed underground (SHMC 13.28.120) (Building Permit Phase).

Public Works Final Map Conditions

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56. A legal lot is not created until a Final Map is approved and recorded.
57. Following the final approval of the Vesting Tentative Map from the City Council, applicant has one year to submit a Final Map to Public Works. The Final Map submission package shall include two (2) copies of mylars for the Final Map exhibit and signature pages, and electronic draft deed documents' of legal descriptions with the following information:
- a. The legal descriptions shall describe the entire boundary of each resulting parcel.
 - b. The legal descriptions shall be prepared, signed and stamped by a registered Land Surveyor or a licensed Civil Engineer.
 - c. All existing, resultant or proposed easements, grants of right of way and deeds as applicable to the subdivision shall be clearly represented on the exhibit, including dimensions.
 - d. Additional easements or grants of right of way that may be required as a result of the subdivision but are not to be executed in the Tentative Map action, should be indicated on the exhibit as proposed and described in a supplemental narrative. Consideration should be made for access, utility, emergency vehicle access and maintenance agreements.
 - e. The following statements shall be included on each draft deed document:
 - i. The purpose of this conveyance and the conveyances being recorded concurrently herewith is to create a subdivision pursuant to California Government Code Section 66412(d) and all local subdivision ordinances.
 - ii. The consolidation of underlying lots, parcels or portions thereof, as set forth in the above metes and bounds description, constitutes an expressed written statement of the Grantor, merging said underlying lots, parcels, or portions thereof pursuant to Section 1093 of the California Civil Code.
58. The Final Map will be reviewed by the Director of Public Works and presented to the City Council (SMHC 16.20.080) for approval as a consent item at a regular meeting. A Notice of Approval will be provided, and the Applicant may proceed with the recordation. Upon completion of recordation:
- a. The applicant, or his/her representative, shall submit two (2) copies of the title reports issued within 30 days of the date of the legal descriptions and deed form submittals.
 - b. The applicant, or his/her representative, shall submit two (2) copies of the record maps, deed documents, etc. referred to in the subdivision legal descriptions.
 - c. The applicant, or his/her representative, shall submit proof of payment of the mapping services fee, as required by the Napa County Board of Supervisors Resolution 92-119.

- d. The applicant, or his/her representative, shall submit proof of prepayment of property taxes.
 - e. Lenders should be contacted and any deeds of trust on the involved properties should be modified, to conform to the new boundary configurations, prior to recording the deed documents.
59. A final map, as defined in the State Subdivision Map Act, shall be prepared by a licensed surveyor or civil engineer, showing all parcels, rights-of-way, and easement(s) shall be filed with the Public Works Department. The final map shall be substantial conformance with the approved Tentative Map and all applicable conditions of approval. The final map is not valid until it has been approved and recorded.

Public Works Construction Conditions

60. Prior to Certificate of Occupancy for a building, the developer shall complete required improvements for that building in accordance with the approved improvement plans. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.
61. No grading or other construction shall be performed until the grading plans have been approved and signed by the City Engineer. Encroachment Permits and Building Permits will not be issued prior to the approval of the grading plans. An Encroachment Permit is required for any work within the City's rights of way.
62. A Stormwater Pollution Prevention Plan (SWPPP) is required and the contractor shall adhere to it at all times during construction. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.
63. Prior to the issuance of a grading permit, the developer shall provide evidence that a Notice of Intent has been submitted and received by the Regional Water Quality Control Board for a General Construction Activity Storm Water Permit. A copy of the project Storm Water Pollution Protection Plan shall be submitted to the City.
64. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Napa County Environmental Health Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.
65. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.

66. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.
67. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired to the satisfaction of the City at the Developer's expense.
68. Dust control must be maintained to the City's satisfaction.
69. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer. Prior to issuance of a building permit, an approved Grading Permit will be Required.
70. No City supplied water use is permitted for construction activities (Building Permit Phase).
71. Inspection by Public Works Staff is required for utility installations (Building Permit Phase).

Fire Department Conditions

72. Prior to issuance of future building permits, all construction plans for homes shall include NFPA13 fire sprinklers as required by the City of St. Helena Fire Department.
73. Prior to issuance of a building permit, plans shall, consistent with the VTMAP, continue to exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.
74. One hour minimum fire resistant construction on all exterior walls within 10' of property boundary is required. Fire resistant construction of interior walls shall be determined by type of occupancy.
75. Any gates installed to control vehicular access to a property are required to be setback 30-feet from the property line or edge of pavement, whichever is greater. No vehicle gates may be installed without Fire Department and Public Works Department review and explicit approval.

Building Division Conditions

*Spring Grove Subdivision
Resolution / Conditions of Approval
December 2, 2025*

76. The applicant will be required to comply with the CBC codes adopted at the time the applicant applies for a building permit, or as dictated by state law. The City of St. Helena will utilize the 2025 California Building Code series, starting January 1, 2026.
77. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist, including a construction-level geotechnical report.
78. The applicant shall provide a Construction Waste Management Plan with the building permit application.
79. The plans for construction shall include a checklist for compliance with the California Green Building Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
80. When submitting plans, the Title Page shall include all information referenced on the building permit application checklist Title Page requirements.
81. Building permit application materials and plans shall include any documentation pertaining to special loads applicable to the design and the specified section of the code that addresses the condition; special inspections for any systems or components requiring special inspection; requirements for seismic resistance; and a complete list of deferred submittals at time of application.
82. Any deferral of the required submittal items shall have prior approval of the Building Official, however, deferral of the fire sprinkler design is not allowed.
83. A separate permit submittal is required for generators, fire sprinkler/standpipe systems, fire pumps, fire alarms, and PV-systems.
84. At the time of building permit submittal, EV parking shall be fully detailed to demonstrate compliance with required EV charging per 4.106.4.2.2 and 4.106.4 of the California Green Building Standards Code.
85. Plans shall comply with Chapter 11A CBC ADA requirements for residential units, and Chapter 11B CBC for common areas, as applicable.

CITY OF ST. HELENA PLANNING COMMISSION

RESOLUTION NO. PC2025-018

GRANTING, PURSUANT TO A STATUTORY EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, A DEMOLITION PERMIT AND APPROVAL TO 1447, 1505 and 1515 SPRING STREET (File No. DP25-002 and PL24-065)

PROPERTY OWNER: Edward S. & Eleonore M. Aslanian 2006 Revocable Trust
Iren Aslanian Jenny & Samson Aslanian, Successor Trustees

APNs: 009-590-003, 009-590-005, 009-590-010

Recitals

1. The property owner requests adoption of a resolution approving a demolition permit to demolish three existing houses for the construction of 41 townhouses on the property located at 1447, 1505 and 1515 Spring Street in the High Density Residential (HR) and Medium Density Residential (MR) zoning districts; and
2. The City of St. Helena has conducted environmental review for the proposed residential development pursuant to Public Resources Code Section 21080.66, a statutory exemption from California Environmental Quality Act (CEQA) review for infill housing developments that meet certain conditions. The City has determined, as documented in the Memorandum for the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project (see **Attachment 7** of the December 2, 2025 Planning Commission Staff Report), that the proposed residential development, including the demolition, qualifies for a statutory exemption from CEQA under Public Resources Code Section 21080.66; and
3. A public notice was published in the Napa Valley Register and mailed to residents and occupants within 300 feet of the project site in compliance with state and local law; and
4. The Planning Commission of the City of St. Helena, State of California, considered the demolition permit and all testimony, written and spoken, at a duly noticed public hearing on December 2, 2025; and
5. Now, therefore, let it be found that the Planning Commission approves the demolition permit, thereby authorizing the proposal contained in said plans based on the findings below and subject to the conditions of approval enumerated herein.

Resolution

- A. In making the findings in this Resolution, the Planning Commission relied upon and hereby incorporates by reference all of the documents referenced in this Resolution and the associated staff reports, City files for this matter, correspondence, presentations and other materials.

*1447, 1505 and 1515 Spring St
Demolition Permit Resolution / Conditions of Approval
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- B. The Planning Commission hereby finds that the demolition is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080.66, as documented in the Memorandum for the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project (see **Attachment 7** of the December 2, 2025 Planning Commission Staff Report), and directs staff to file a Notice of Exemption.
- C. The Planning Commission hereby finds that, subject to expert evaluation of the properties proposed for demolition pursuant to the National Register of Historic Places and California Register of Historical Resources criteria, the properties are not eligible for Federal, State, or local historic listing, and thus the properties are not significant architectural or historical buildings under SHMC 17.05.030(d)(1). Specifically, in accordance with SHMC Section 17.05.030(D), the Planning Commission finds that the project demonstrates the following:
1. *The buildings are determined not to be a significant architectural or historical building based on the public record and testimony presented at a public hearing in that a Historic Resource Evaluation for 1447 Spring Street and Preliminary Determination of Historic Eligibility for 1505 and 1515 Spring Street, prepared by an architectural historian who exceeds the Secretary of the Interior's professional qualification standards, are provided as **Attachments 8** and **9** of the December 2, 2025 Planning Commission Staff Report. The historical analyses conclude none of the existing homes on the project site are eligible for listing in the National Register, California Register, or local historic resource inventory. Specifically, the existing home at 1447 Spring Street underwent major renovations between 1944-1953 and again in 1961 that have changed the property so much that it no longer retains enough physical integrity to convey its nineteenth century origins and association with influential people. Further, though the proposed residential development is statutorily exempt from CEQA, these reports also note that the structures do not constitute historical resources under CEQA, specifically Public Resources Code section 21084.1.*
 2. *The demolition would not eliminate elements that are required to maintain the essential character of the neighborhood in that the existing homes are located in the Mitchell Neighborhood per General Plan Figure 7.1, which is characterized by both typical residential lots and a variety of housing types including townhomes and architectural forms including gable roofs and front porches. The home at 1447 Spring Street is an early farmstead that was part of a rural character that no longer exists in the residential neighborhood, 1515 Spring Street is located approximately 300 feet from Spring Street and does not contribute to the character of the existing neighborhood as it is not visible from any public street, and 1505 Spring Street is characterized by diminutive and compact massing, single story,*

minimal decoration and economical construction techniques.

3. *Design review of the proposed replacement structure has been reviewed and approved subject to Minor Design Review pursuant to SHMC Section 17.05.080.B.2 in **Attachment 6**.*
4. *The buildings to be demolished do not reflect neglect by the owner in that the buildings are proposed for demolition to accommodate the future development of the proposed 41-unit housing development project.*

Planning Department Conditions of Approval

- A. The Planning Commission approves Demolition Permit (DP25-002) for the above-described project with the following conditions of approval. The conditions noted below are particularly pertinent to this permit and shall not be construed to permit violation of other laws and policies not so listed.

Demolition Permit – Planning Conditions

1. The applicant shall obtain a separate Demolition Permit from the Building Division prior to any demolition activities on-site.
2. This approval expires 12 months from the date of the Planning Commission approval hearing if a complete demolition permit application (filed with the building department) has not been submitted for the project. The expiration date may be extended for up to two one-year periods in accordance with St. Helena Municipal Code, Section 17.04.140, Extension of Permits and Approvals.
3. The demolition permit administered by the Building Division shall include review by Public Works.
4. Upon completion of demolition, the applicant shall remove all related demolition debris from the site within 30 days of the final day of demolition.
5. Given the age of the existing buildings on the property, the presence of lead-based paint (LBP) and asbestos containing materials (ACMs) is possible. The applicant shall conduct a comprehensive, pre-demolition LBP and ACM survey in accordance with the sampling protocol of the Asbestos Hazard Emergency Response Act (AHERA) prior to any activities with the potential to disturb building materials to determine whether LBP and ACMs are present. Further, in the event ACM is detected, proper removal and disposal of the materials identified is required prior to any activities with the potential to disturb them.
6. No earthmoving equipment for grading activities is allowed under the demolition permit. The applicant shall obtain a separate grading permit for earthmoving activities.

7. The project shall be in conformance with all city ordinances, rules, regulations and policies in effect at the time of issuance of a building permit including without limitation compliance with health and safety standards related to access.
8. Any request for an extension of the demolition permit shall be justified in writing and received by the Planning Department at least thirty (30) days prior to expiration.
9. The approvals shall not become effective until fourteen (14) calendar days after approval, provided that the action is not appealed by the City Council or any other interested party within that 14-day period.
10. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases no later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.
11. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind, so long as the City reasonably promptly notifies the applicant of any such claim, action, or proceedings and the City cooperates fully in the defense of the action or proceedings.
12. Provided they are in general compliance with this approval, minor modifications may be approved by the Community Development Director.
13. Demolition shall be in compliance with the plans submitted and reviewed by the Planning Commission on December 2, 2025, except as modified herein.
14. Prior to demolition, the project site shall be adequately fenced and secured to prevent trespassing.
15. All demolition related equipment and vehicles shall be parked on-site for the duration of demolition operations.
16. To reduce disturbance of residents in the project vicinity, activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The Public Works Director must be notified and give approval in advance of such work. No construction activities shall occur on Sundays

*1447, 1505 and 1515 Spring St
Demolition Permit Resolution / Conditions of Approval
December 2, 2025*

or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.

Demolition Permit - Public Works Conditions

17. An Encroachment Permit is required for all work within City right of way including obstructions, staging, or closures of the vehicular or pedestrian path of travel. Any damages to sidewalk, curb and gutter shall be repaired by the applicant. Applicant to keep roadway and sidewalk clear of construction activities and debris.
18. A Grading Permit is required for soil disturbance more than 50 cubic yards, a disturbance area of 10,000 square feet, a cut or fill of 3 feet or more, or alteration of any drainage pattern.
19. No City supplied water use permitted for demolition/construction activities.
20. The Applicant shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.

I HEREBY CERTIFY that the foregoing Demolition Permit application was duly and regularly approved by the Planning Commission of the City of St. Helena at a regular meeting of said Planning Commission held on December 2, 2025 by the following roll call vote:

AYES: Commissioner Anderson, Lopez, Covell and Warner

NOES: None

ABSENT: Commissioner Furdek

ABSTAIN: None

APPROVED:



Christopher Warner
Chair, Planning Commission

ATTEST:



Maya DeRosa, AICP
Community Development Director

VICINITY MAP



PROJECT TEAM

DEVELOPER

CITY VENTURES
Contact: Kelso Barnett
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707.758.3805 | KBarnett@CityVentures.com

DESIGNER

FOURNIER DESIGN STUDIO
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ARCHITECT

HUNT HALE JONES ARCHITECTS
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CIVIL ENGINEER

ADOBE ASSOCIATES, INC.
Contact: Casey Talbot
1220 N. Dutton Ave. | Santa Rosa, CA 95401
707.541.2300 | CTalbot@Adobeinc.com.com

LANDSCAPE ARCHITECTURE

C2 COLLABORATIVE
Contact: Quinn DeBence
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949.542.7717 | QDeBence@C2Collaborative.com

UTILITY CONSULTANT

TARRAR UTILITY CONSULTANTS
Contact: Justin Reardon
9245 Laguna Springs Dr., Ste. 380 | Elk Grove, CA 95758
925.240.2595 | JReardon@Tarrar.com

PROJECT DESCRIPTION

City Ventures is delighted to submit our proposal for Spring Grove. We look forward to the opportunity to collaborate with the City of St. Helena and are pleased to submit an application that responds to the housing goals envisioned in St. Helena's recently certified Housing Element.

Our proposed project is comprised of three parcels, totaling 2.52-acres, located at 1447, 1505 and 1515 Spring Street. Two of the parcels, 1447 and 1515, combine to create housing opportunity "Site 9" in St. Helena's 2023-31 housing element. These parcels also represented a housing opportunity site within the 2015-23 Housing Element. The project site, which currently is developed with three single-family homes, is proposed for 41 for-sale solar all-electric townhome-style condominiums. 1447 and 1515 Spring, where the proposed townhomes are to be constructed, are zoned high-density residential. 1505 Spring is medium-density residential and will provide access to the development. At an overall density of 16.3 units/acre, Spring Grove will be at the low end of the allowed density range, 16.1~28 du/ac, in the high-density residential zone.

Spring Grove is designed with first-time homebuyers and young families in mind. The project is designed to be consistent with the City of St. Helena's General Plan, adopted in 2019, and the Objective Design Standards codified in October 2023. Spring Grove is a Housing Development Project within the meaning of Government Code section 65589.5(h)(2) and has been designed to comply with applicable objective General Plan and subdivision standards and criteria as described in Government Code section 65589.5(j).

Per St. Helena's Inclusionary Housing ordinance, twenty percent (20%) of the housing units, 8.2 units, will be made available to households at moderate incomes. As shown in Table A, 4 units will be made available to households whose annual income does not exceed 100% of median income, and 4 units will be made available to households whose annual income does not exceed 120% of median income. We propose to satisfy the remaining 0.2-unit through the payment of the in-lieu fee.

Because this for-sale project provides at least 20-percent deed-restricted homes for households with moderate incomes, Spring Grove is eligible for State Density Bonus Law (Gov. Code, §§ 65915–65918) benefits, including waivers and two concessions. City Ventures is requesting density bonus waivers per Table B. City Ventures reserves the right to request additional concessions or waivers/incentives under the State Density Bonus Law at a later time.

We can't wait to bring this thoughtful project program to life and integrate Spring Grove into the existing neighborhood fabric. The 41-homes are comprised of 3 bedrooms, with some homes optioning up to 4 bedrooms, ranging in size from approximately 1,480-sf to 1,810-sf. Each home has its own private garage accessed by an internal private street with the front doors accessed from gracious paseos. Each home will come standard with solar panels and will incorporate a specific focus on healthy, energy efficient living. The proposed 41-homes would be distributed throughout 6-buildings, contemplated to have a modern agrarian aesthetic. The project proposes 93 parking spaces, comprised of 2-dedicated spaces within each home's garage, as well as 11 surface parking stalls. The project will include over 50 bicycle parking spaces, with 41-long-term spaces located in each residential garage, and the remainder in onsite bicycle racks. Spring Grove will have extensive landscaping, incorporating mature trees and vegetation along with new plantings chosen to complement the project design and setting.

Please find the full written statement and narrative in a separate submitted document. City Ventures is respectfully requesting a Vesting Tentative Map, Design Review, Density Bonus and Demolition permit from the City of St. Helena. City Ventures previously submitted a preliminary application for consideration under SB330 which was deemed complete and vested as of November 21, 2024. City Ventures looks forward to working with the City of St. Helena to create a walkable housing development just a stone's throw from Main Street in which more St. Helena families can put down roots, just like the vineyards for which the area is world famous.

Table A - Inclusionary Housing (St.H MC 17.30.030.G)		
Income Category	#/Homes	% Area Median Income
Median Income	4	100%
Moderate Income	4	120%

Table B: Density Bonus Waivers					
#	Waiver	St. Helena Municipal Code	#	Waiver	St. Helena Municipal Code
1	Full Height Recesses	17.16.040.C.1.h	7	Entry Design	17.16.040.C.3.b.i
2	Rowhouse: 8-unit Max	17.16.040.C.2.b	8	Maximum Paved/Hardscaped Area	17.16.030.B
3	Units on Common Open Space	17.16.040.C.4.c	9	Long-Term Bicycle Parking	17.26.080.B
4	Minimum Distance: Drive Aisle/Walkway	17.16.040.A.7.e	10	Minimum Landscape Area	17.16.030.B
5	Private Ground Floor Open Space	17.16.030.B	11	Interior Side Yard Setback	17.16.030.B
6	Driveway Curb Cuts	17.16.040.A.7.g			

PROJECT SUMMARY

PARCEL TABULATIONS									
RESIDENTIAL		LivingSF	GarageSF	8' Patio	Deck* N/I	Total	Beds	41 units	
P1	3B/2.5Ba/2C	1,480	580	0	78		3	4 units	
P2	3B/2.5Ba/2C+Den	1,595	430	170	90	170	3	5 units	
P3	3B/2.5Ba/2C+Den/Opt 4B	1,746	456	170	85	170	4	15 units	
P4	3B/2.5Ba/2C+Den/Opt 4B	1,810	460	170	88	170	4	17 units	

SITE TABULATION MATRIX			
		High Density HR Zoning	Provided
ACREAGE			2.52 Ac
DENSITY		16.1 ~ 28du/ac	16.3 du/ac
FAR			0.64 FAR
COVERAGE		55% Max.	32.6% Ac
BUILDING HEIGHT		42' Max	40'
BUILDING STORIES		3 Stories	3 Stories
RESIDENTIAL			41 Units
Market Rate units			33 Units
Inclusionary Units		20% Units	8 Units
RESIDENTIAL SF			70,855 SF
Residential Unit Average SF			1,728 ASF
OPEN SPACE		210 sf/du	589 sf/du
Common		150 sf/du	18,548 SF
Private (ground floor only*)		60 sf/du	5,595 SF
PARKING		72 cars	93 Cars
Residential (3 - 4 Bedroom)		1.5 cars/du	82 Cars
Open		0.25 cars/du	11 Cars

SITE DESIGN ASSUMPTIONS		HR Zoning	Proposed
Streets	Entry	28'	28'
	Main Drive	28' Fire Access	28' Fire Access
	Alley	21' clr ~ 25' garage to garage	24' clr ~ 30' garage to garage
	Alley/Drive	N/A	
Setbacks	Front	15' & 25' @ 3rd Floor	N/A
	Rear	10'	10' ~ 15'
	Interior Side	10'	10' ~ 15'
Parking	Covered	19x19 per 2 car 10x40 per 2 car Tandem 9' door 9x19 ~ 9x23 parallel	19x19 per 2 car 10x40 per 2 car Tandem 9' door 9x19 ~ 9x23 parallel
	Open		

BUILDING AREAS	Living SF	Garage Sf	Deck SF	Total SF
Building 1	13,477	3,882	680	18,039
Building 2	15,883	4,098	785	20,766
Building 3	8,922	2,292	434	11,648
Building 4	6,897	1,802	348	9,047
Building 5	12,199	3,174	606	15,979
Building 6	13,477	3,882	680	18,039
TOTAL SF	70,855	19,130	3,533	93,518

FOOTPRINT AREAS	Living SF	Garage SF	Deck SF	Total SF
Building 1	2,244	3,882	680	6,806
Building 2	3,147	4,098	785	8,030
Building 3	1,729	2,292	434	4,455
Building 4	1,422	1,802	348	3,572
Building 5	2,456	3,174	606	6,236
Building 6	2,244	3,882	680	6,806
TOTAL SF	13,242	19,130	3,533	35,905

	Required Parking Spaces	Min. EV Charging Spaces	EV Spaces Provided
SHMC 17.26.090	10~25	1	
Spring Grove	10.3	1	
Residential*	82		82
Open	11		1
Total	93	5.58	83

VESTING TENTATIVE
MAP SUBMITTAL

November 10, 2025

Spring Grove

1447-1505-1515 Spring St.
St. Helena, CA

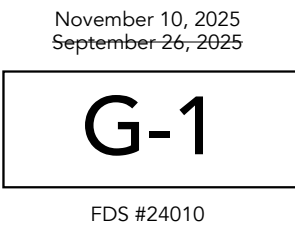
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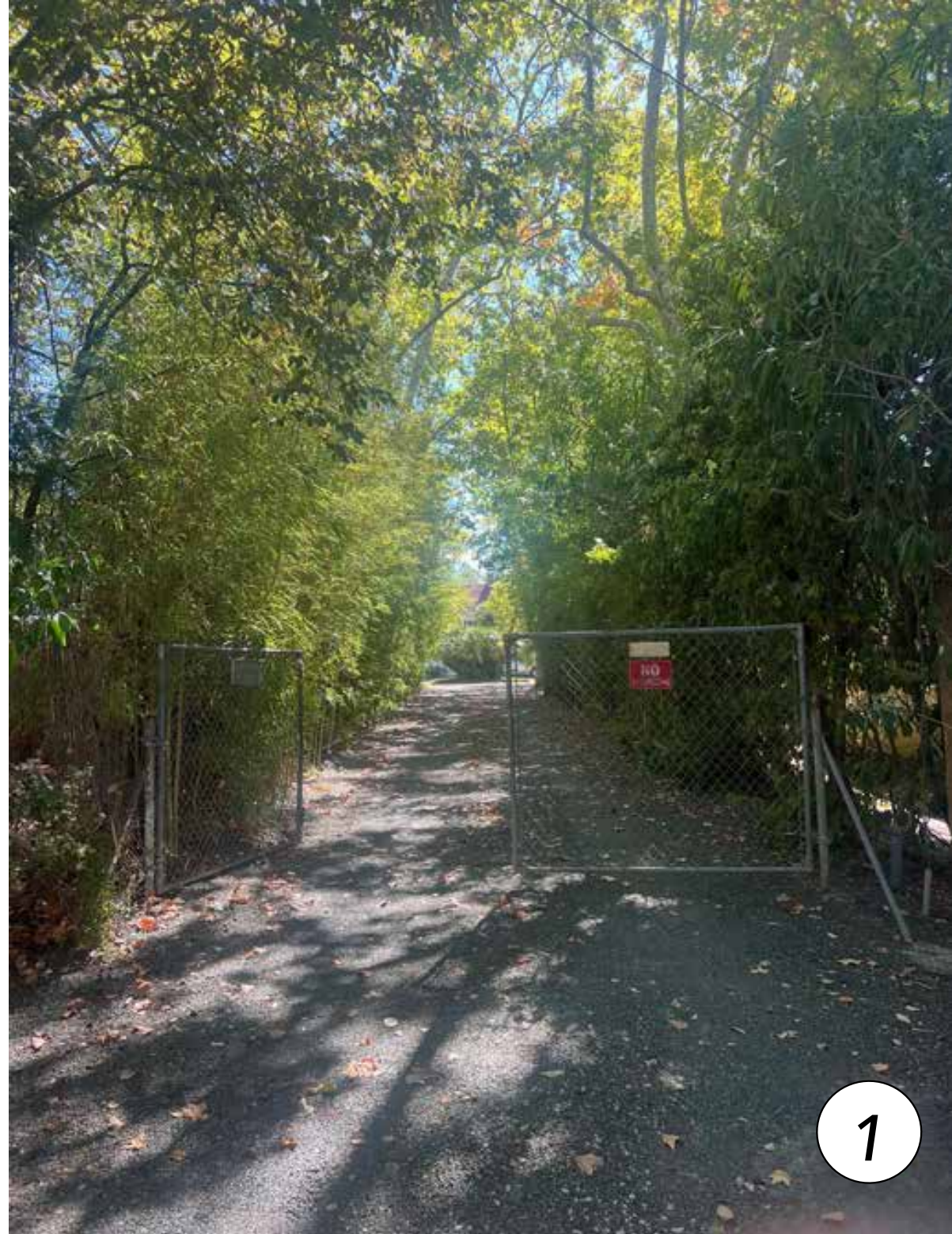


Spring Grove

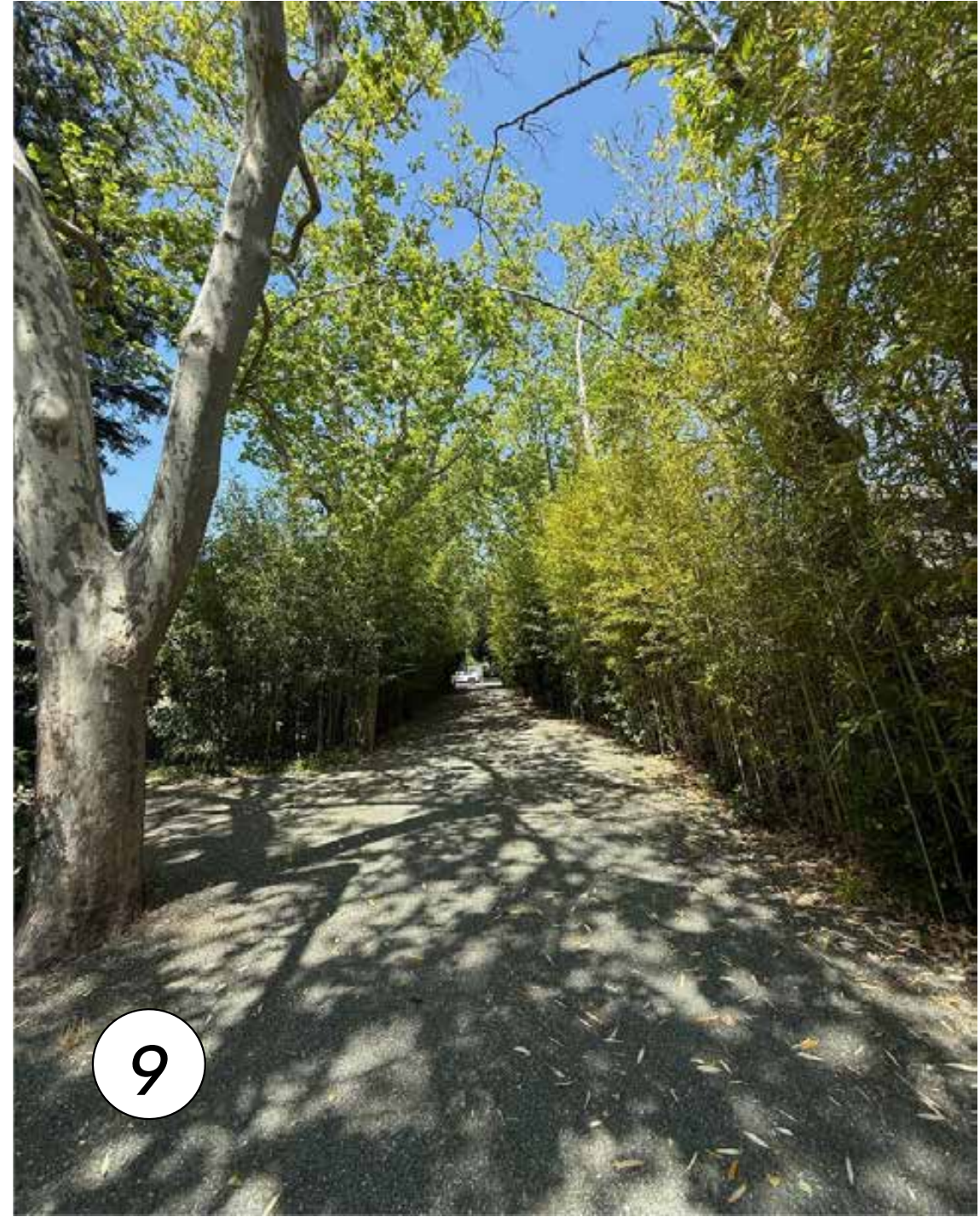
APN: 009-590-003, -005, -010

1447~1505~1515 Spring Street
St. Helena, CA





EXISTING SITE PHOTOGRAPHY 1 ~ 6



EXISTING SITE PHOTOGRAPHY 7 ~ 12



ILLUSTRATIVE SITE PLAN



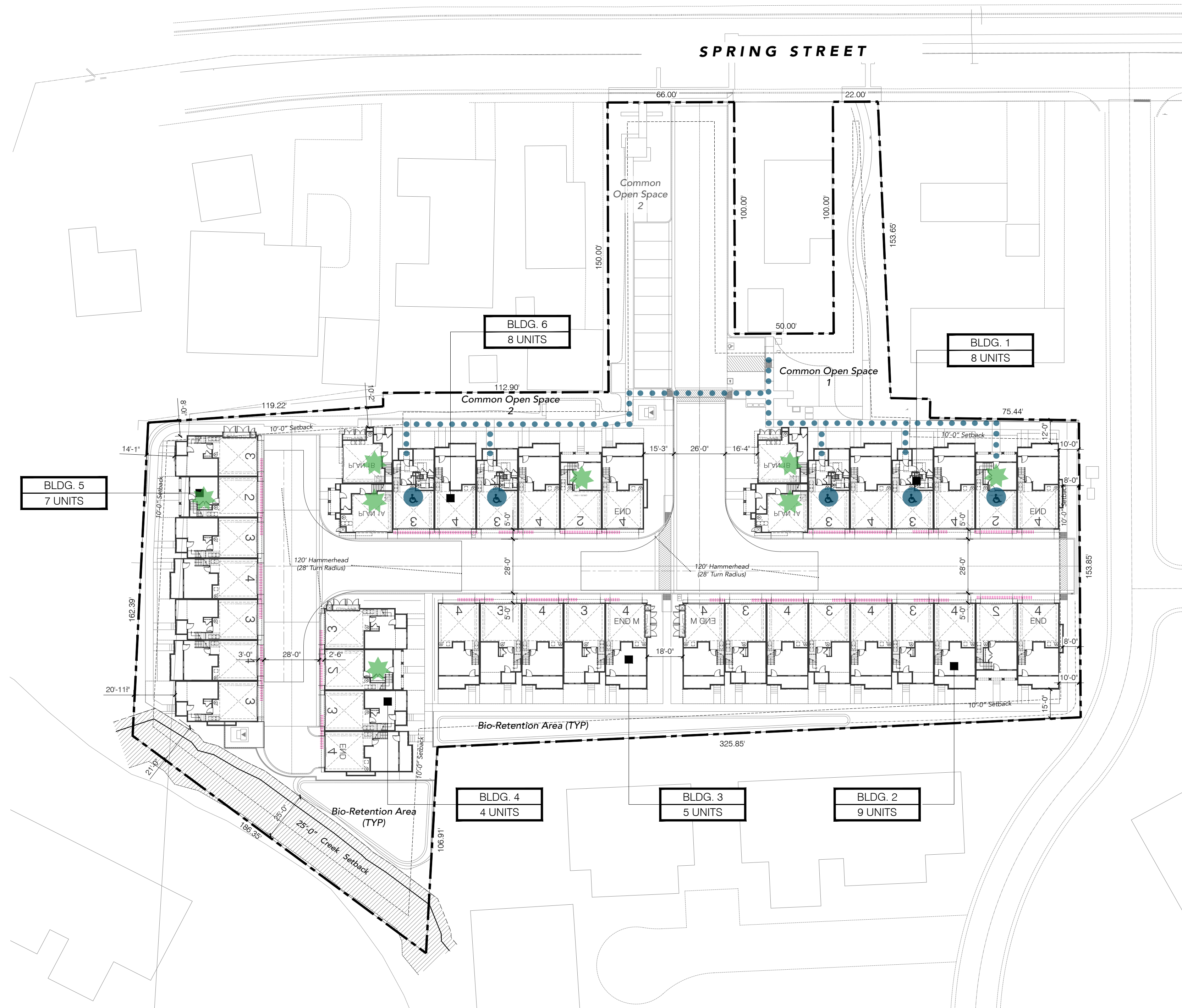
Spring Grove
 APN: 009-590-003, -005, -010
 1447~1505~1515 Spring Street
 St. Helena, CA

TARRAR
 UTILITY CONSULTANTS

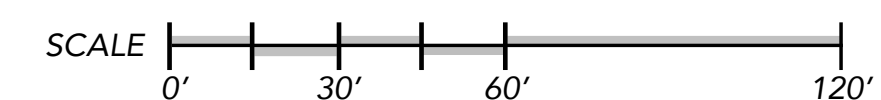
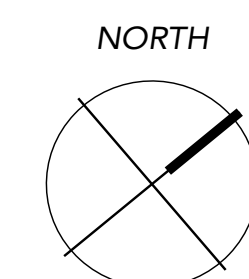


FDS
 FOURNIER DESIGN STUDIO
 Planning | Design | Collaboration
 Roland@FournierDesignStudio (520) 719-4600

November 10, 2025
 September 26, 2025
G-4
 FDS #24010



- SITE PLAN NOTES**
- Indicates;
+29'-10" F.G. Roof Height for Fire Access
 - Indicates;
ADA Path of travel
 - Indicates;
ADA Accessable Units ~ 10% of Qualifying Units
 - Indicates;
Conceptual Location of Affordable Units
 - See Civil sheets for additional information
 - See Landscape Architecture sheets for additional information

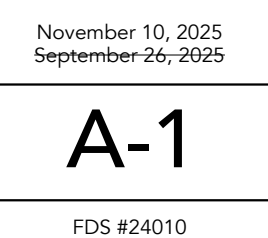


CONCEPTUAL ARCHITECTURAL SITE PLAN

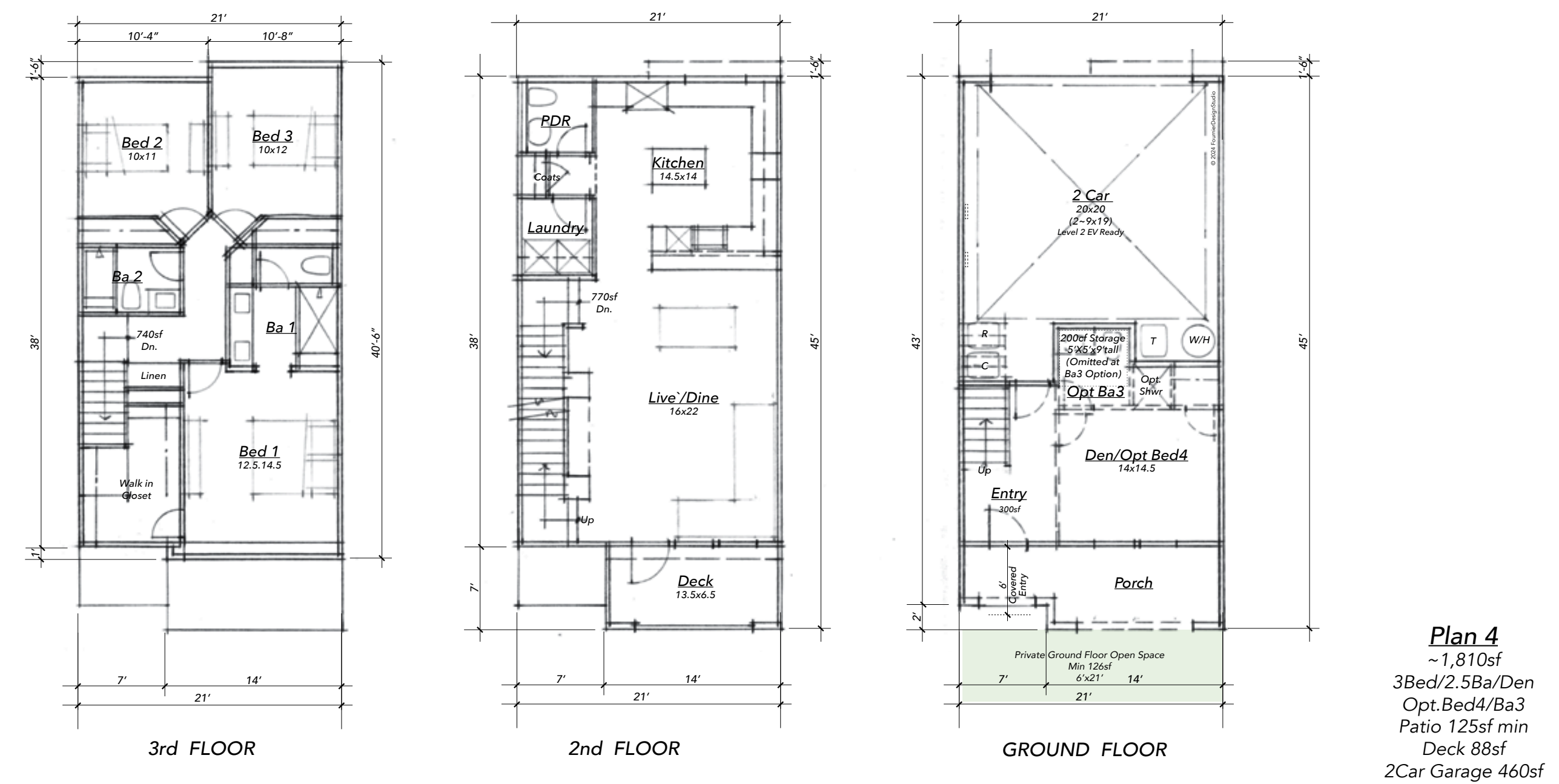
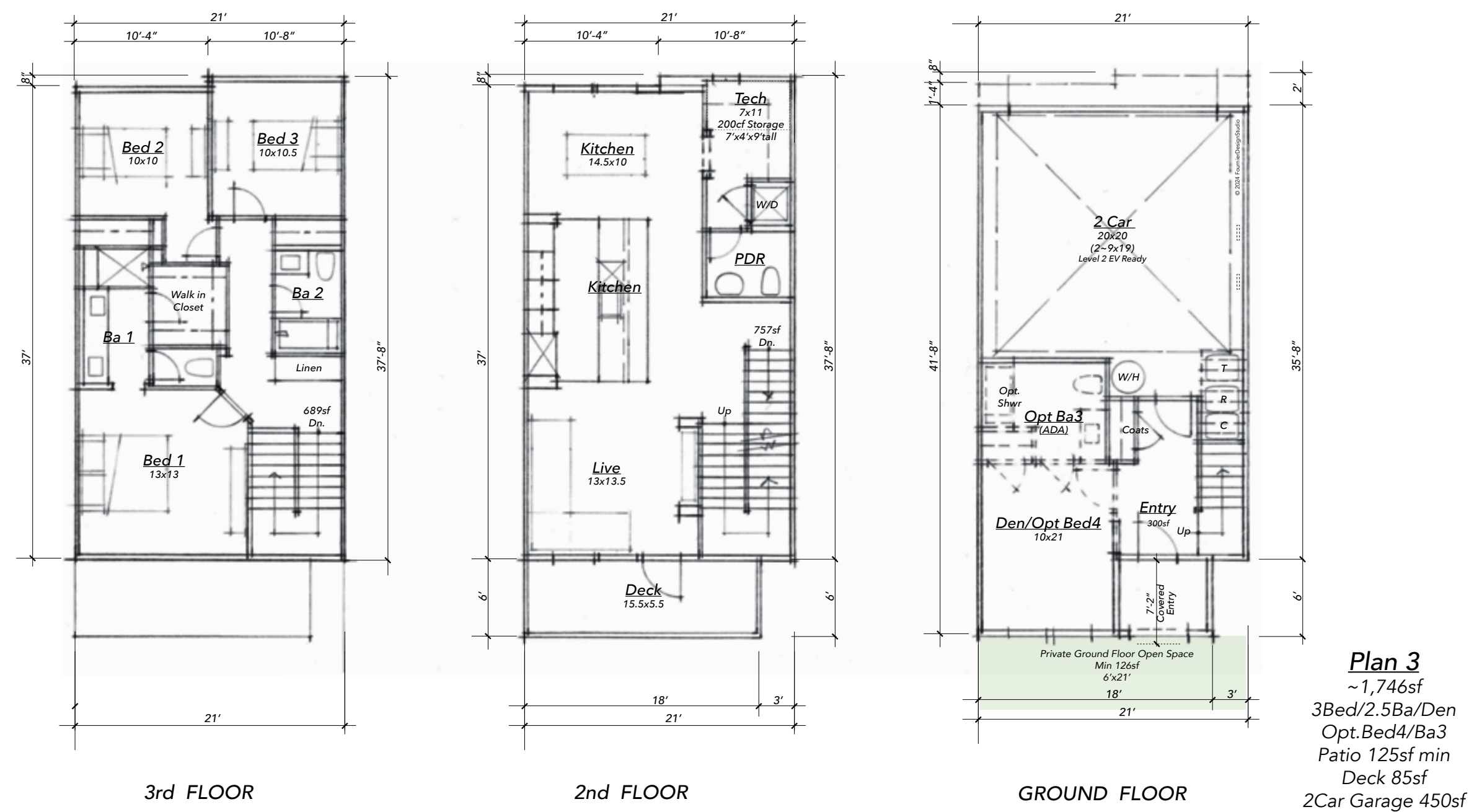
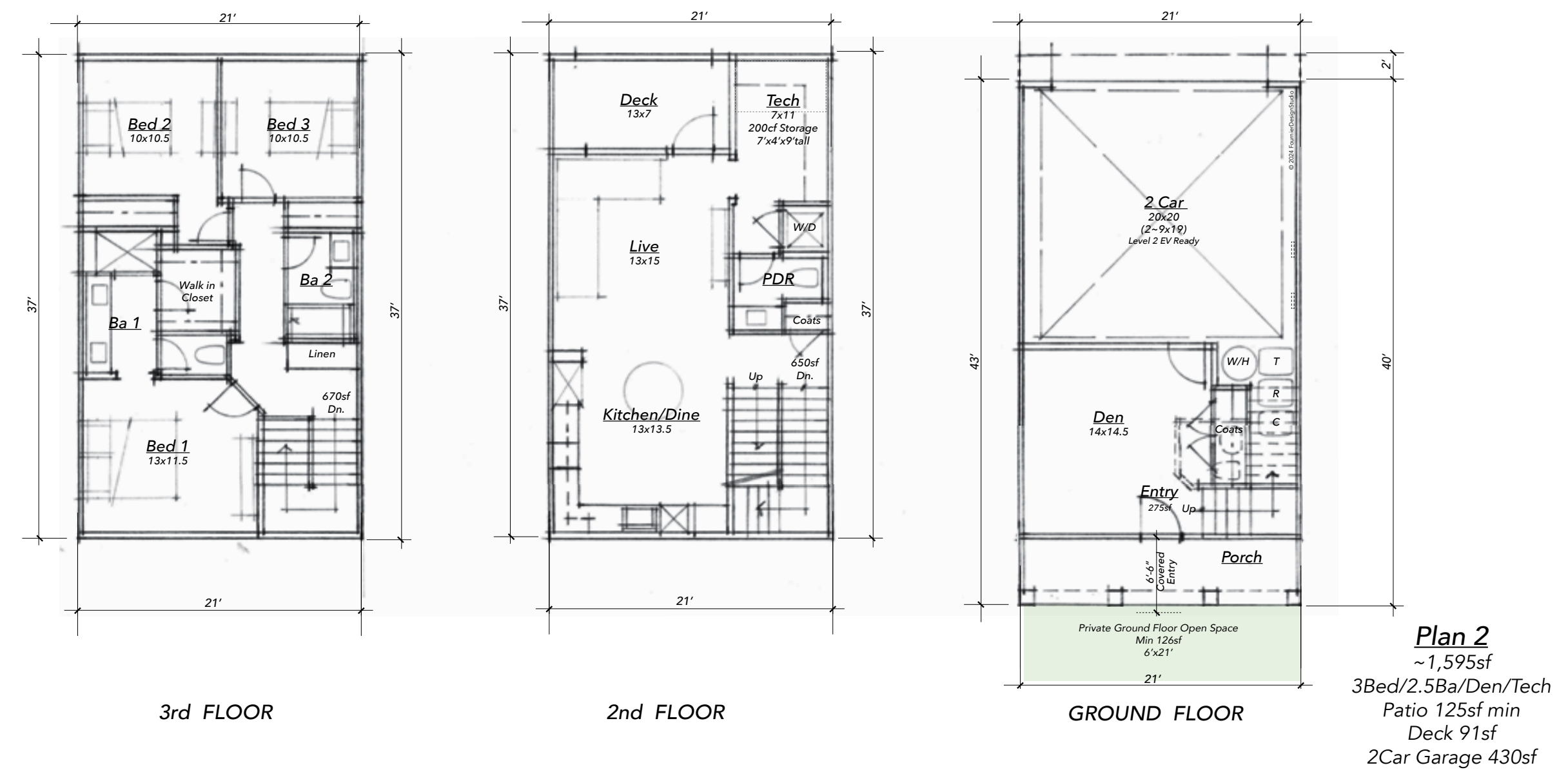
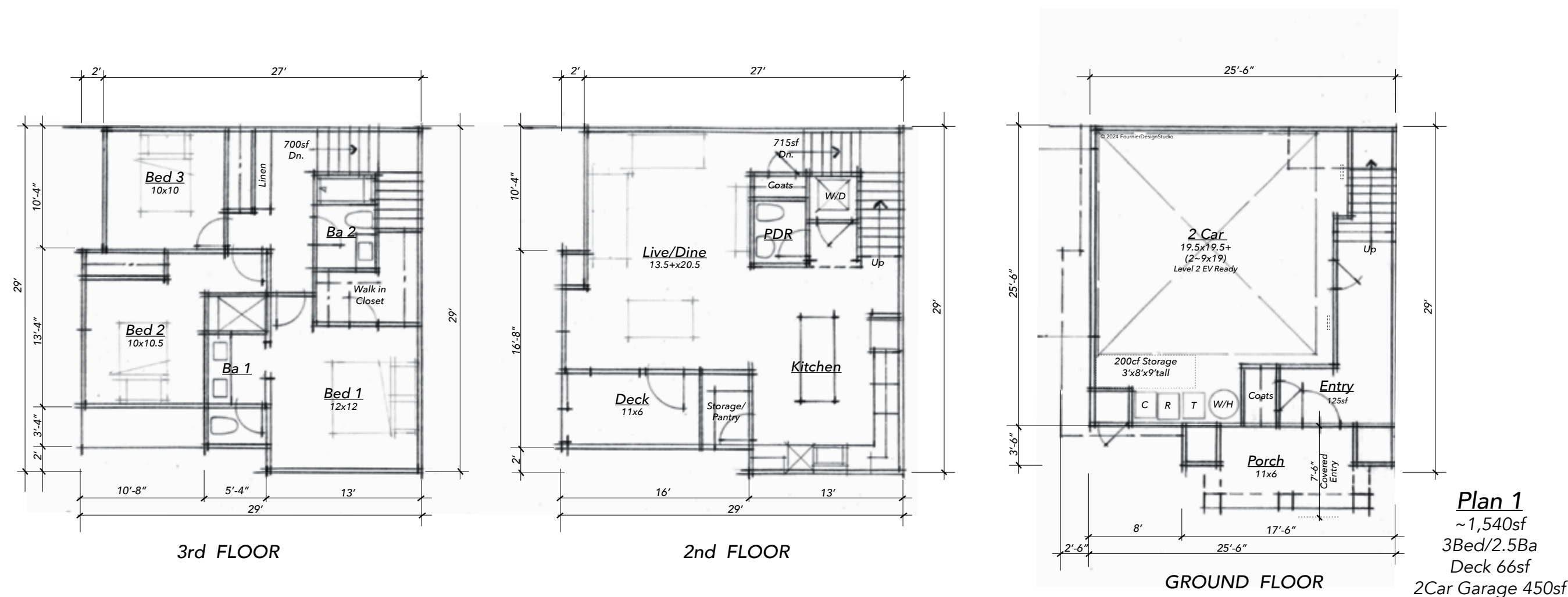


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FLOORPLAN NOTES
(T)(R)(C) Trash, Recycle, Compost Bins are located in each individual unit garage space.
..... Indicates Long Term Bicycle Storage
 Image of Conceptual Bicycle Storage Bracket



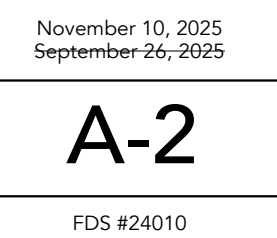
CONCEPTUAL FLOORPLANS



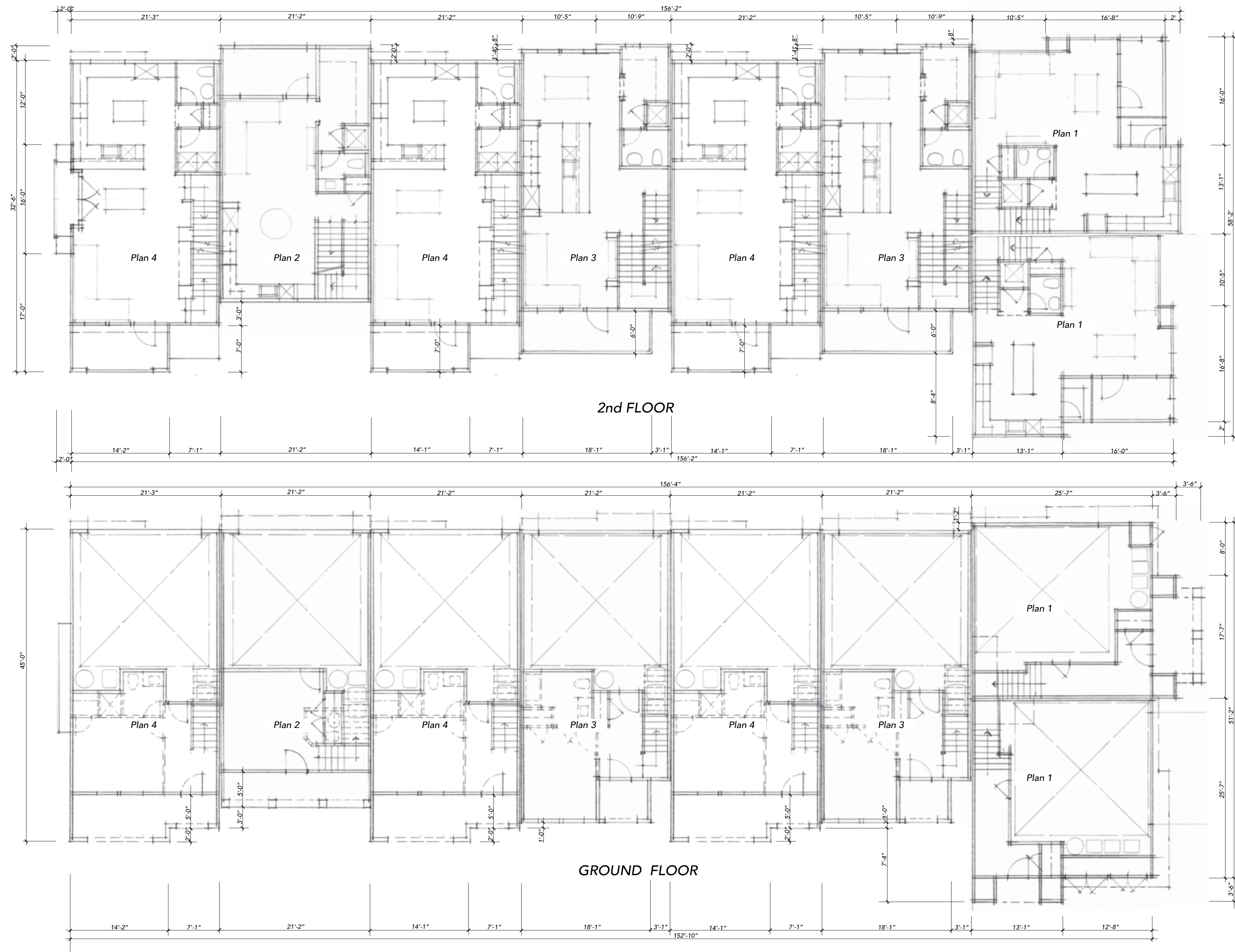
Spring Grove

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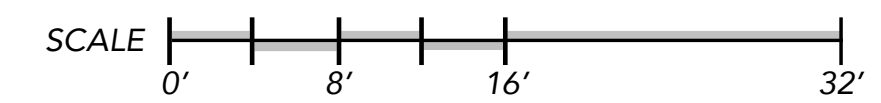
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FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.



BUILDING 1 & 6
CONCEPTUAL BUILDING FLOOR PLANS

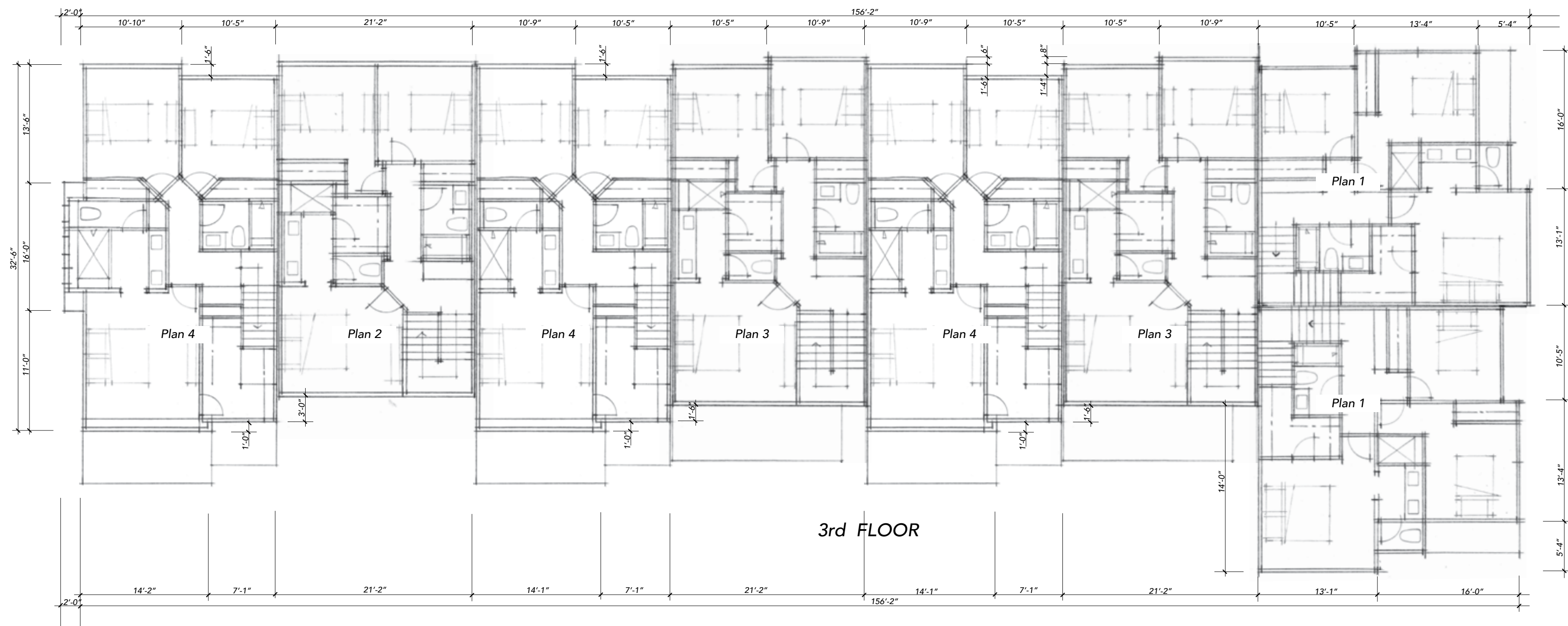
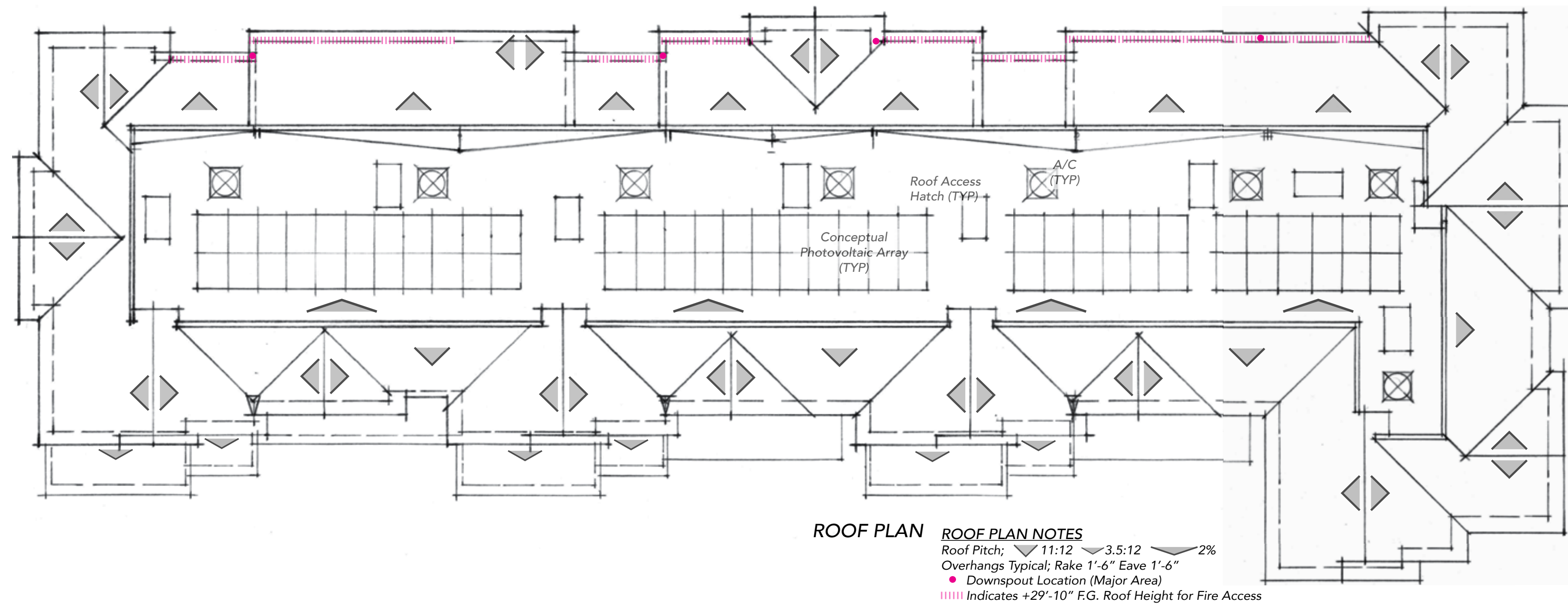


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FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

BUILDING 1 & 6
CONCEPTUAL BUILDING FLOOR & ROOF PLANS

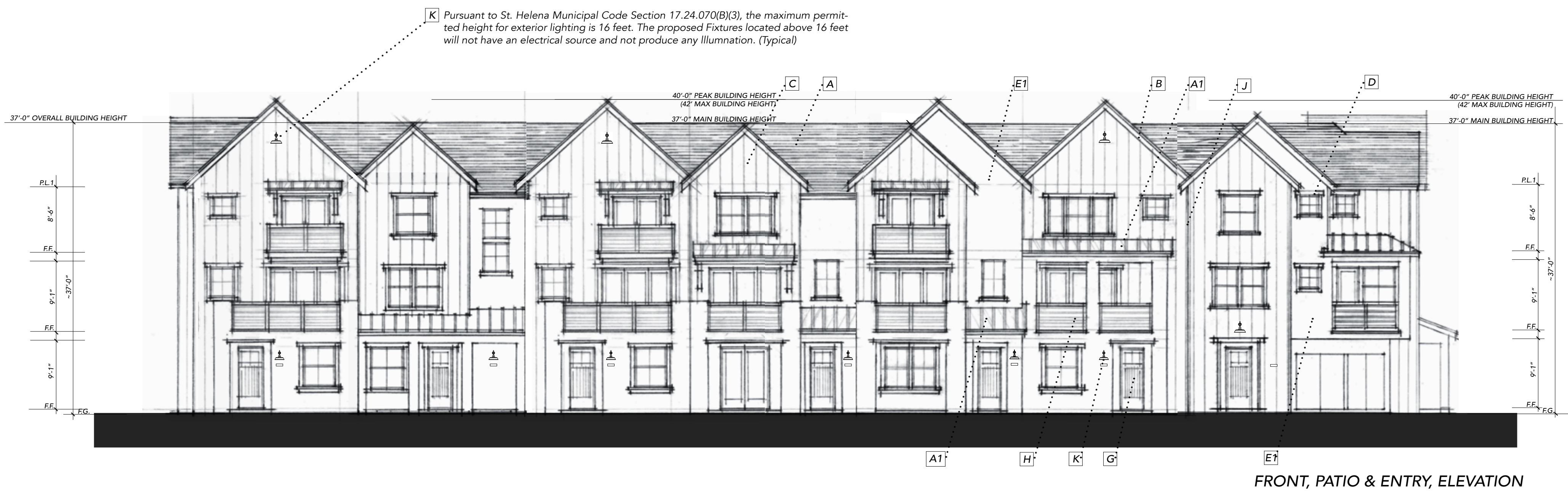


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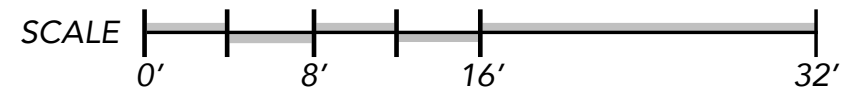
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FRONT, PATIO & ENTRY, ELEVATION

EXTERIOR MATERIALS SPECIFICATIONS			
(or Equal)			
See COLOR RENDERINGS FOR APPLICATION			
Asphalt Composition Shingle Roofing	A	CertainTeed	
Mtl Standing Seam Accent	A1	20" Standing Seam	
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia	
Cementous Siding	C	.75x2.5 Smooth batt @ 18"o.c.	
Cementous Trim Boards	D	5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill	
Stucco	E1	Sand Finish	
Stucco	E2	Sand Finish	
Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)	
Entry Door	G	Thermatru 'Smooth Star' FibreGlass w/ Glass	
Wood Railings	H	1x6 & 1x4 slats 1.5" gap	
Vinyl Windows	I	Milgard	
Downspouts	J	3.5" Round	
Architectural Lighting	K	Allenbury (Downward Lighting)	
Metal Wire Vine Lines	L	Galvanized Metal	

ELEVATION NOTES
All color/material changes to occur at inside corner
||||| Indicates +29'-10" F.G. Roof Height (Fire Access)



BUILDING 1 & 6
CONCEPTUAL ELEVATIONS

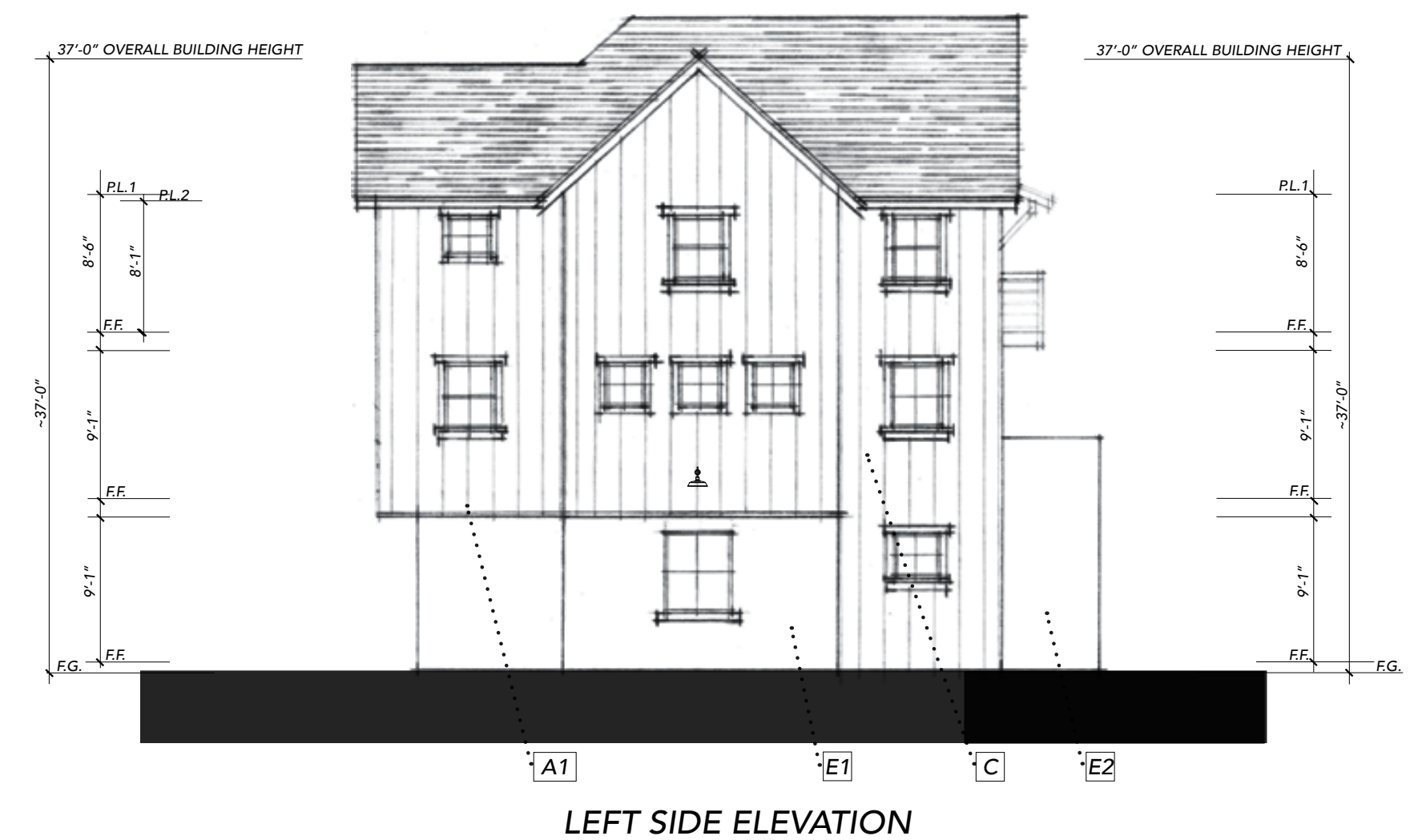


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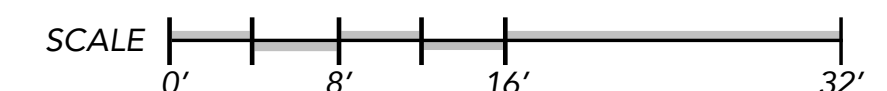
EXTERIOR MATERIALS SPECIFICATIONS (or Equal)

See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia
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Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
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Wood Railings	H	1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I	Milgard
Downspouts	J	3.5" Round
Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

ELEVATION NOTES

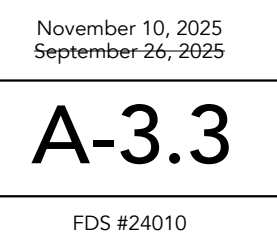
All color/material changes to occur at inside corner
||||| Indicates +29'-10" F.G. Roof Height (Fire Access)



BUILDING 1 & 6
CONCEPTUAL ELEVATIONS



Spring Grove
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PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7008	SW 7649	SW 6197	SW 7008	SW 7032	SW 7008	SW 7624	SW 7622	SW 6244	SW 7674	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS (or Equal)	
See COLOR RENDERINGS FOR APPLICATION	
Asphalt Composition Shingle Roofing	A CertainTeed
Mtl Standing Seam Accent	A1 20" Standing Seam
Wood Rake - Fascia - Eaves	B 6x Rake Resawn, 4x Fascia
Cementous Siding	C .75x2.5 Smooth batt @ 18" o.c.
Cementous Trim Boards	D 5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1 Sand Finish
Stucco	E2 Sand Finish
Garage Door	F Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
Entry Door	G Thermatru 'Smooth Star' FibreGlass w/ Glass
Wood Railings	H 1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I Milgard
Downspouts	J 3.5" Round
Architectural Lighting	K Allenbury (Downward Lighting)
Metal Wire Vine Lines	L Galvanized Metal

BUILDING 1 & 6
CONCEPTUAL ELEVATIONS, COLOR AND MATERIALS



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PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7008	SW 7649	SW 6197	SW 7008	SW 7032	SW 7008	SW 7624	SW 7622	SW 6244	SW 7674	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS (or Equal)	
See COLOR RENDERINGS FOR APPLICATION	
Asphalt Composition Shingle Roofing	A CertainTeed
Mtl Standing Seam Accent	A1 20" Standing Seam
Wood Rake - Fascia - Eaves	B 6x Rake Resawn, 4x Fascia
Cementous Siding	C .75x2.5 Smooth batt @ 18" o.c.
Cementous Trim Boards	D 5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1 Sand Finish
Stucco	E2 Sand Finish
Garage Door	F Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
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Wood Railings	H 1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I Milgard
Downspouts	J 3.5" Round
Architectural Lighting	K Allenbury (Downward Lighting)
Metal Wire Vine Lines	L Galvanized Metal

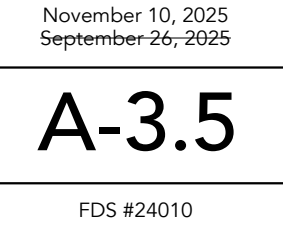
BUILDING 1 & 6
CONCEPTUAL ELEVATIONS, COLOR AND MATERIALS



Spring Grove

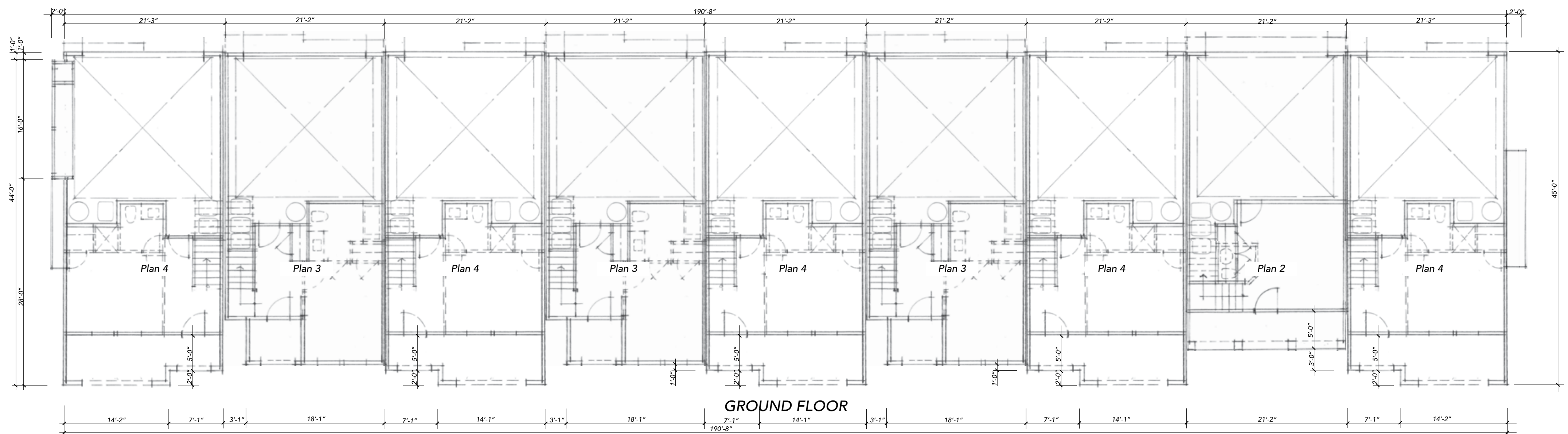
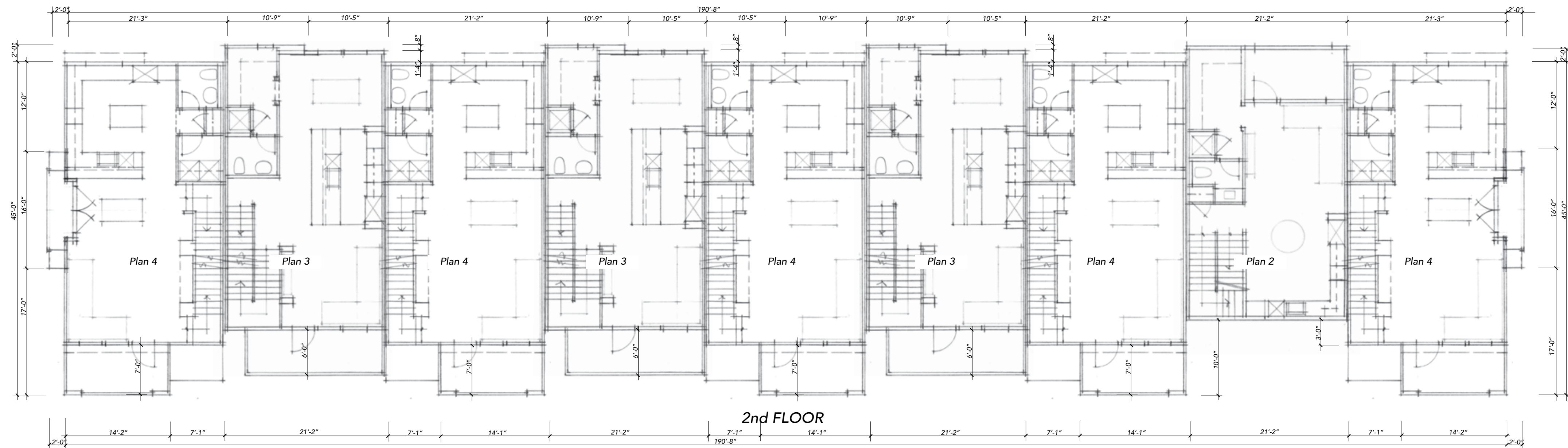
APN: 009-590-003, -005, -010
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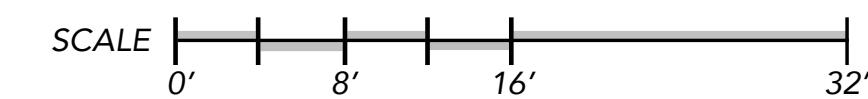
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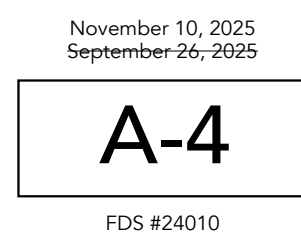


FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

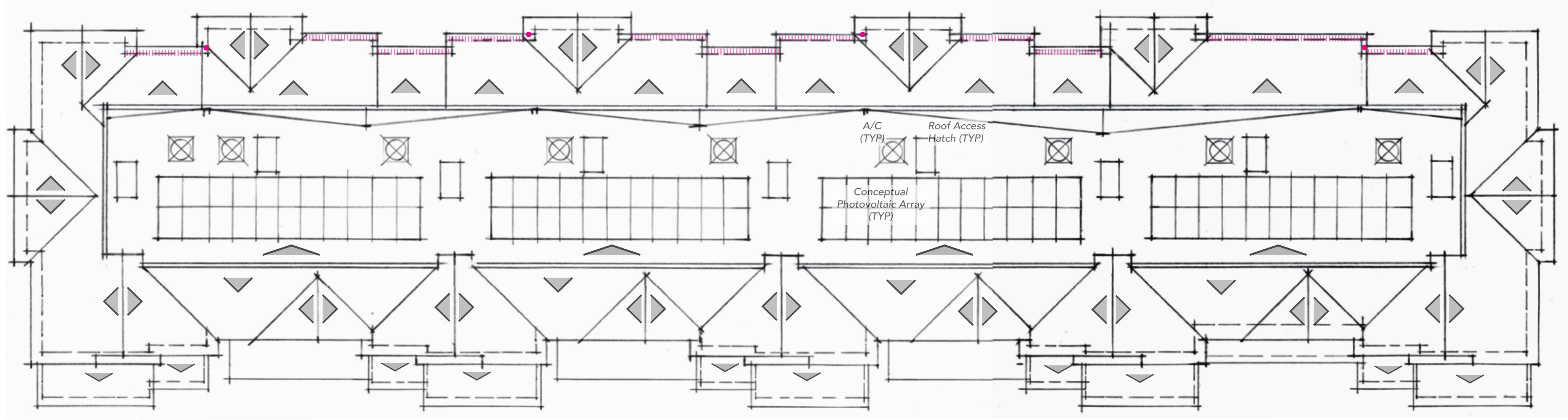
BUILDING 2
CONCEPTUAL BUILDING FLOOR PLANS



Spring Grove
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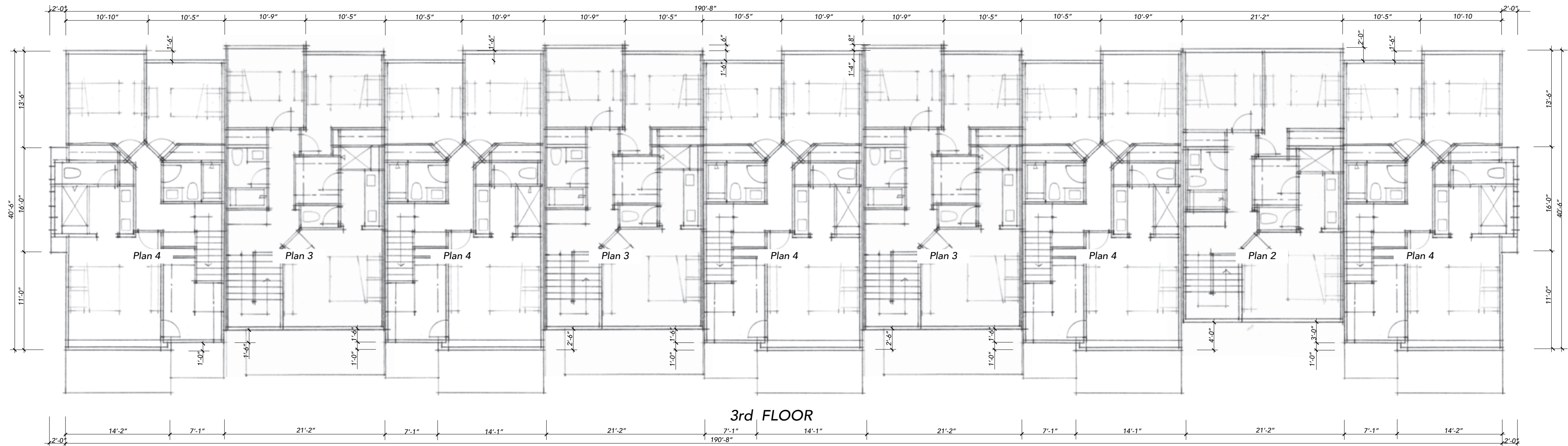


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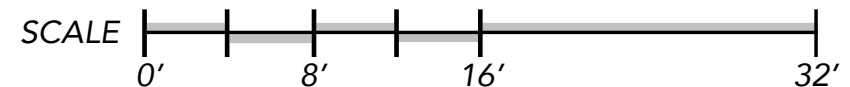
ROOF PLAN

ROOF PLAN NOTES
 Roof Pitch; 11:12 3.5:12 2%
 Overhangs Typical; Rake 1'-6" Eave 1'-6"
 ● Downspout Location (Major Area)
 ■■■■ Indicates +29'-10" F.G. Roof Height for Fire Access



FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

BUILDING 2
CONCEPTUAL BUILDING FLOOR & ROOF PLANS



CITY VENTURES

Building It Forward

Spring Grove

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FRONT, PATIO & ENTRY, ELEVATION

EXTERIOR MATERIALS SPECIFICATIONS
(or Equal)

See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia
Cementous Siding	C	.75x2.5 Smooth batt @ 18"o.c.
Cementous Trim Boards	D	5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1	Sand Finish
Stucco	E2	Sand Finish
Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
Entry Door	G	Thermatru 'Smooth Star' FibreGlass w/ Glass
Wood Railings	H	1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I	Milgard
Downspouts	J	3.5" Round
Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

ELEVATION NOTES
All color/material changes to occur at inside corner
||||| Indicates +29'-10" F.G. Roof Height (Fire Access)

SCALE 0' 8' 16' 32'

BUILDING 2
CONCEPTUAL ELEVATIONS



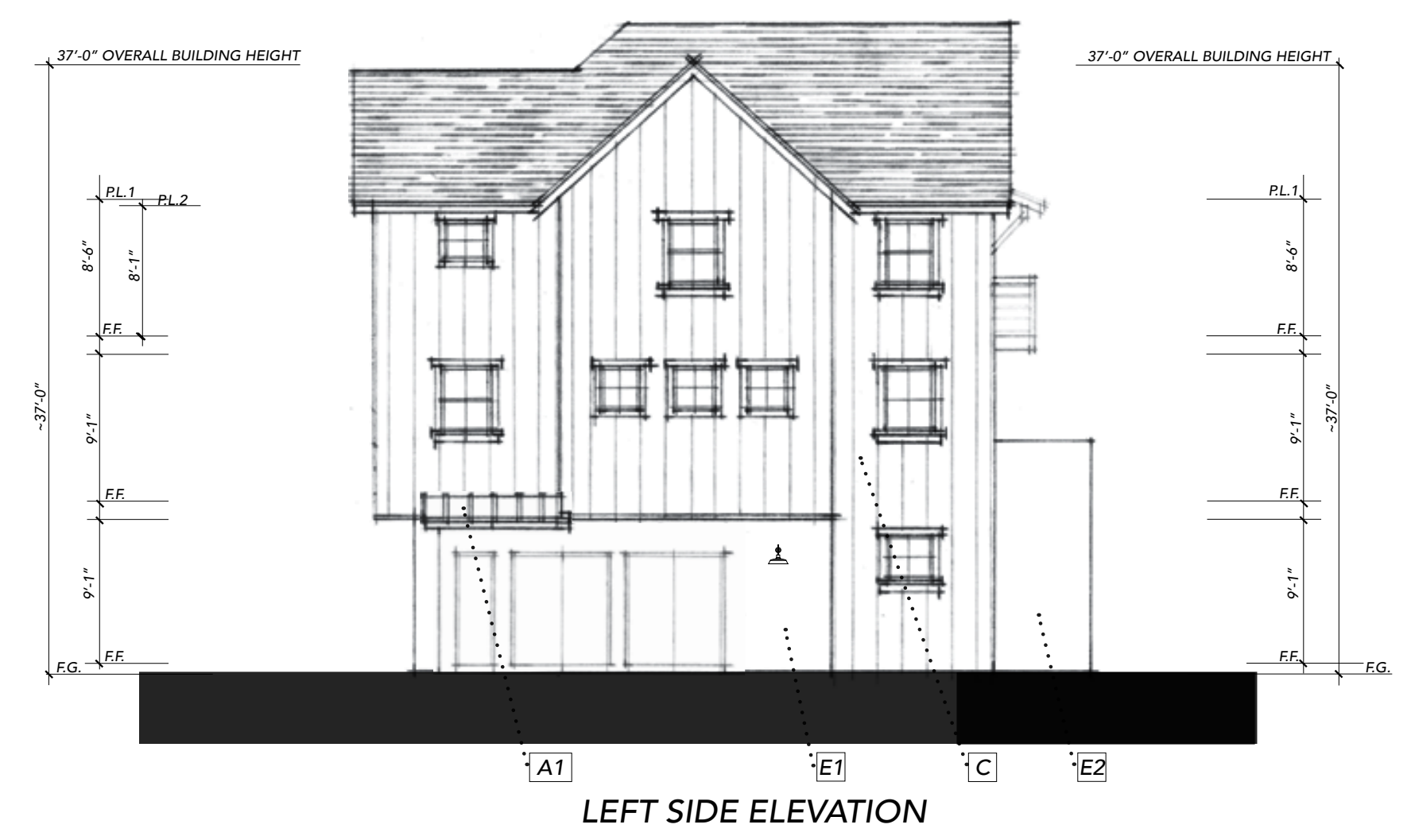
Spring Grove

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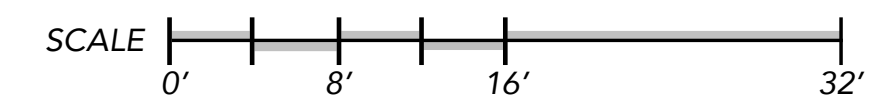
EXTERIOR MATERIALS SPECIFICATIONS (or Equal)

See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
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Vinyl Windows	I	Milgard
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Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

ELEVATION NOTES

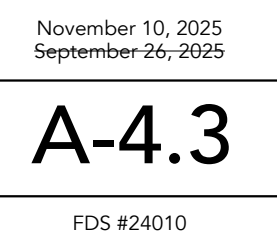
All color/material changes to occur at inside corner
 ■■■■ Indicates +29'-10" F.G. Roof Height (Fire Access)



BUILDING 2 CONCEPTUAL ELEVATIONS



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PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7655	SW 7649	SW 7012	SW 7012	SW 7032	SW 7012	SW 7874	SW 6244	SW 6278	SW 6251	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS (or Equal)	
See COLOR RENDERINGS FOR APPLICATION	
Asphalt Composition Shingle Roofing	A CertainTeed
Mtl Standing Seam Accent	A1 20" Standing Seam
Wood Rake - Fascia - Eaves	B 6x Rake Resawn, 4x Fascia
Cementous Siding	C .75x2.5 Smooth batt @ 18" o.c.
Cementous Trim Boards	D 5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1 Sand Finish
Stucco	E2 Sand Finish
Garage Door	F Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
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Wood Railings	H 1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I Milgard
Downspouts	J 3.5" Round
Architectural Lighting	K Allenbury (Downward Lighting)
Metal Wire Vine Lines	L Galvanized Metal

BUILDING 2
CONCEPTUAL ELEVATIONS, COLOR AND MATERIALS



SIDE ELEVATION



SIDE ELEVATION



REAR ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7655	SW 7649	SW 7012	SW 7012	SW 7032	SW 7012	SW 7674	SW 6244	SW 6278	SW 6251	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS (or Equal)	
See COLOR RENDERINGS FOR APPLICATION	
Asphalt Composition Shingle Roofing	A CertainTeed
Mtl Standing Seam Accent	A1 20" Standing Seam
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Wood Railings	H 1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I Milgard
Downspouts	J 3.5" Round
Architectural Lighting	K Allenbury (Downward Lighting)
Metal Wire Vine Lines	L Galvanized Metal

BUILDING 2
CONCEPTUAL ELEVATIONS, COLOR AND MATERIALS

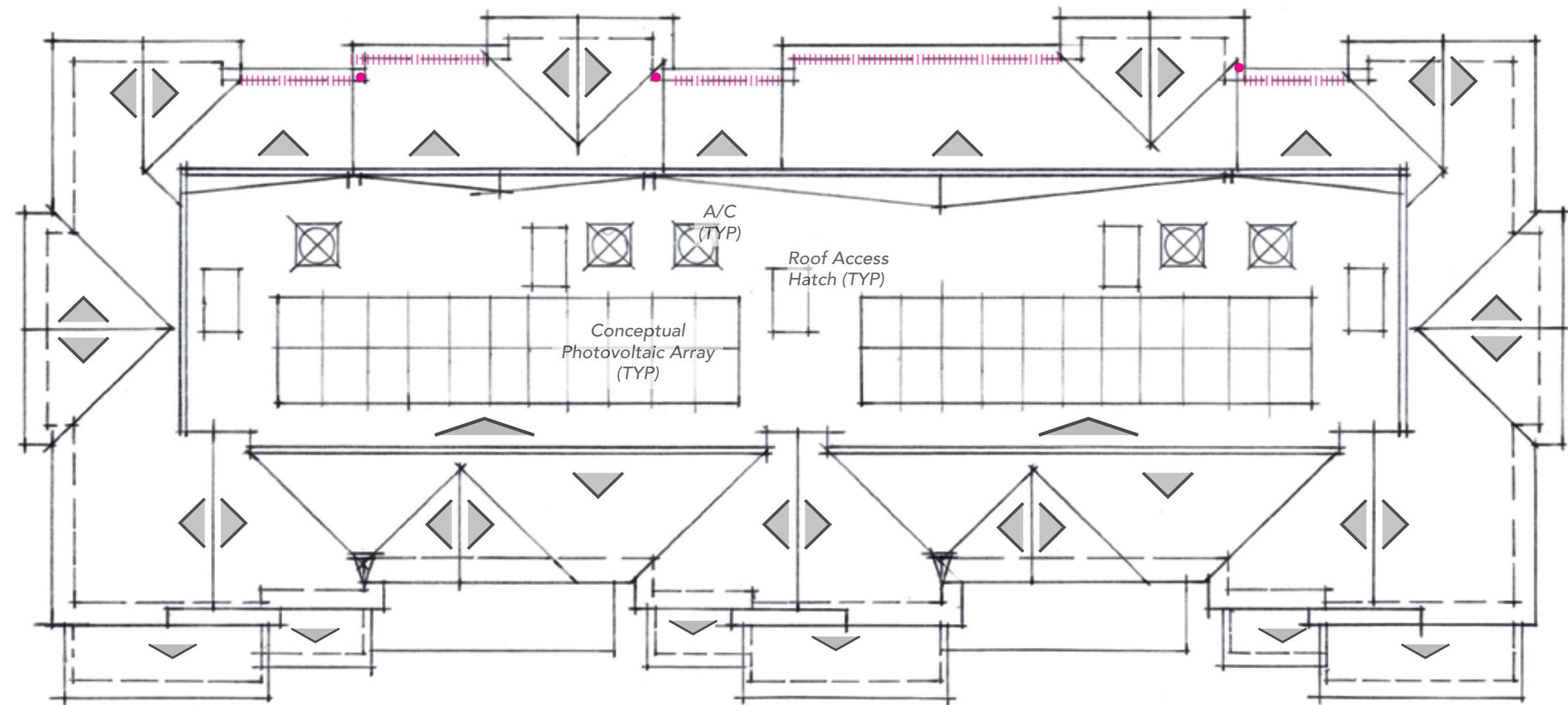


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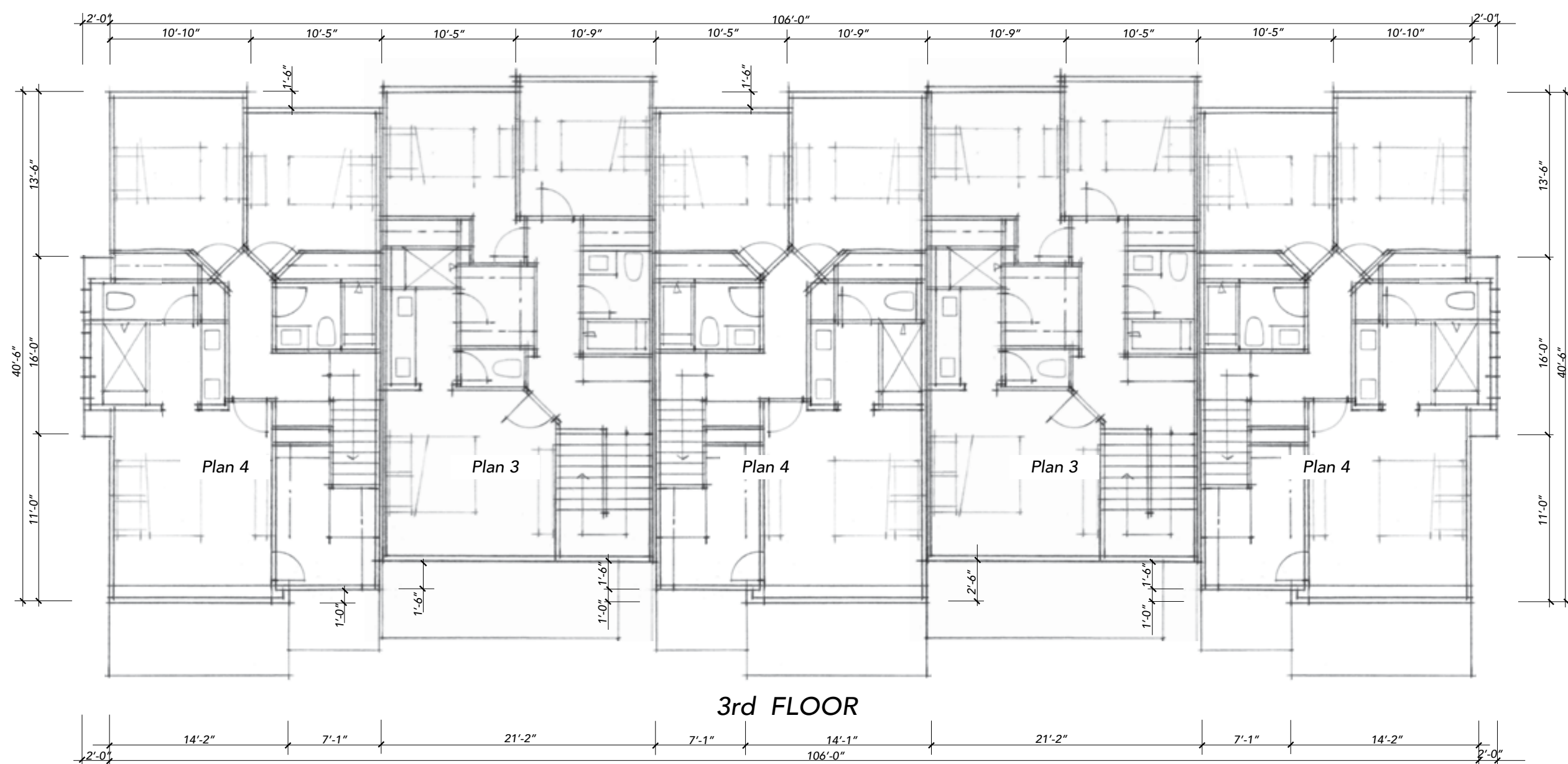
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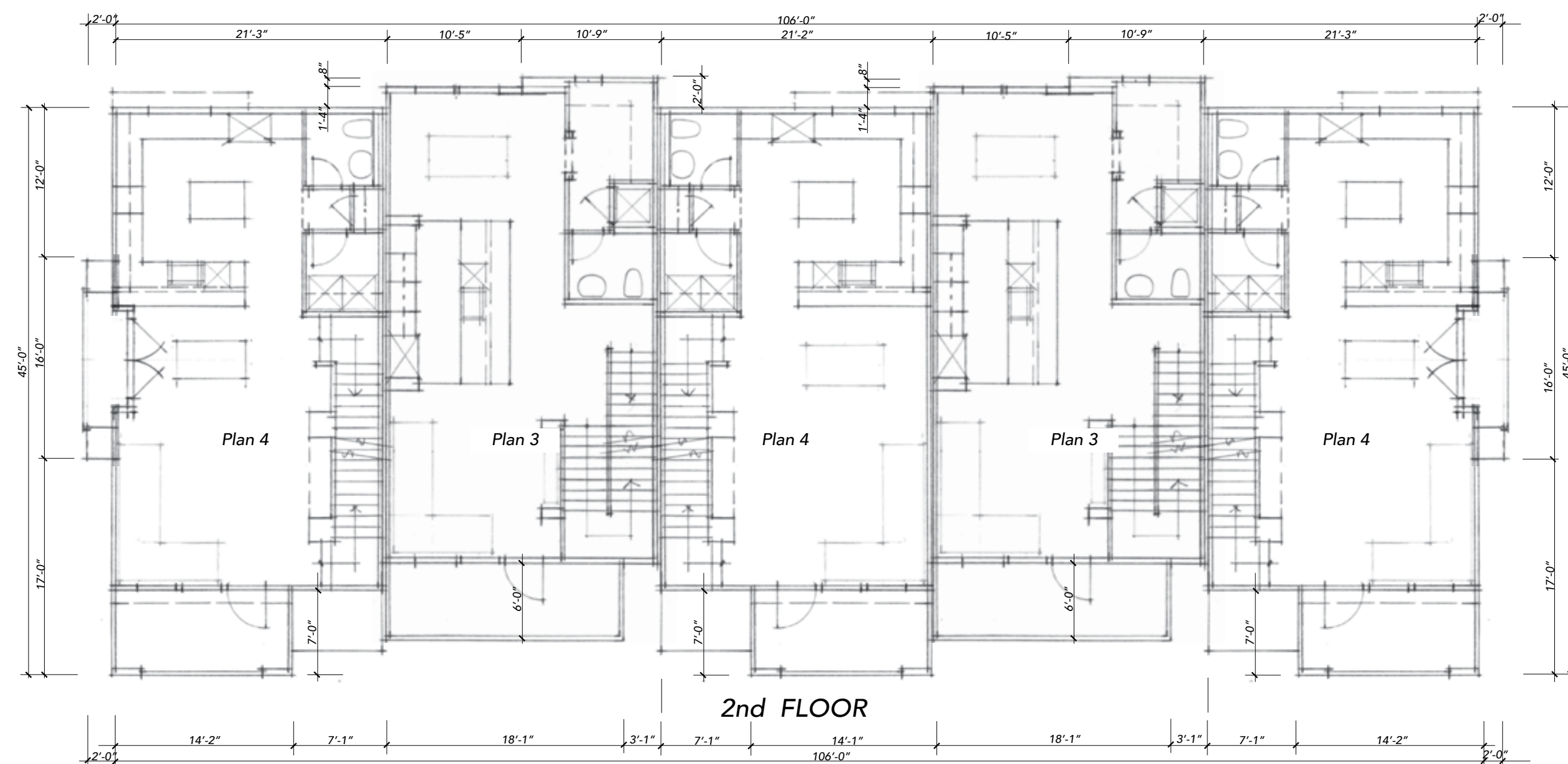
FDS #24010



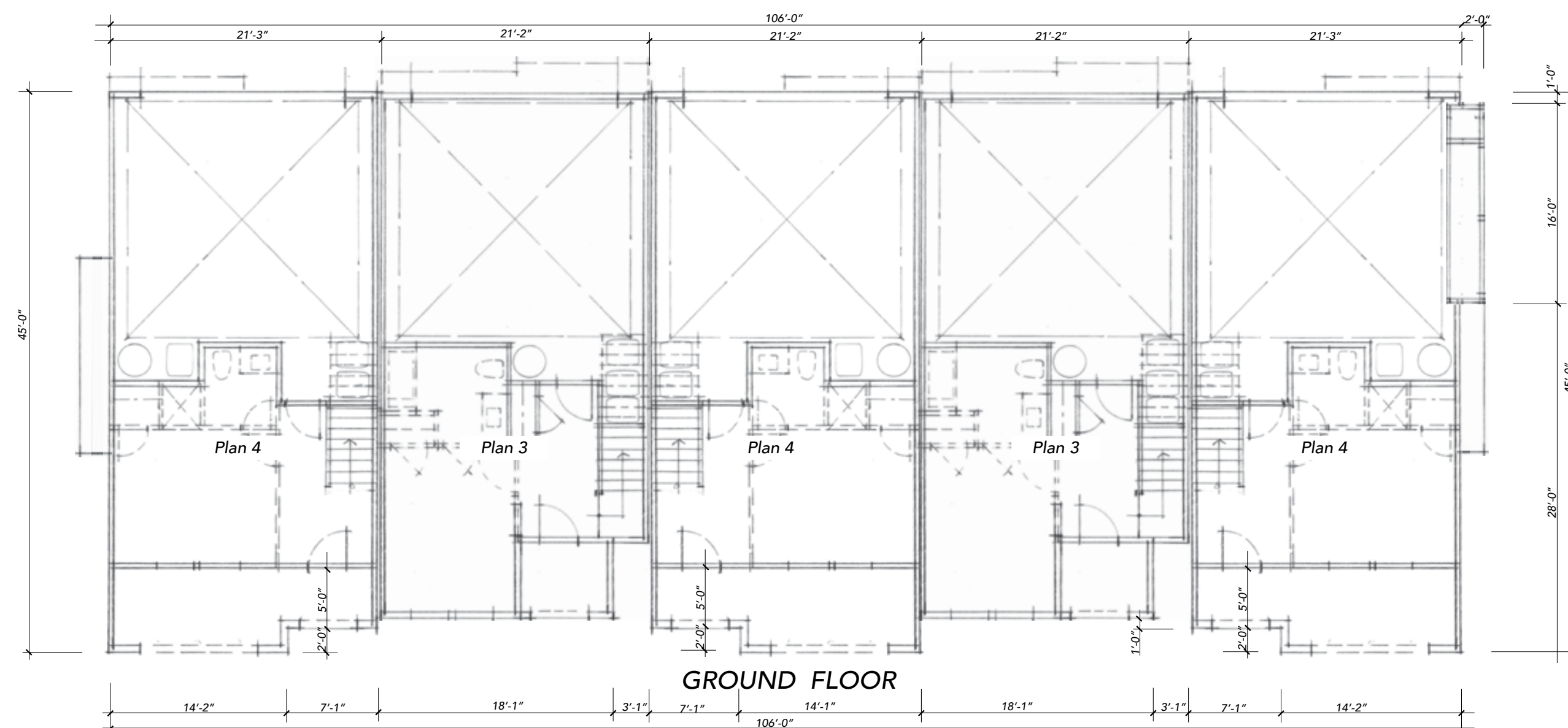
ROOF PLAN **ROOF PLAN NOTES**
 Roof Pitch; 11:12 3.5:12 2%
 Overhangs Typical; Rake 1'-6" Eave 1'-6"
 Downspout Location (Major Area)
 Indicates +29'-10" F.G. Roof Height for Fire Access



3rd FLOOR



2nd FLOOR



GROUND FLOOR

FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

BUILDING 3
CONCEPTUAL BUILDING FLOOR & ROOF PLANS

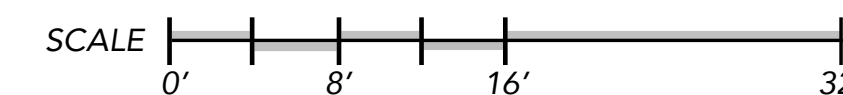


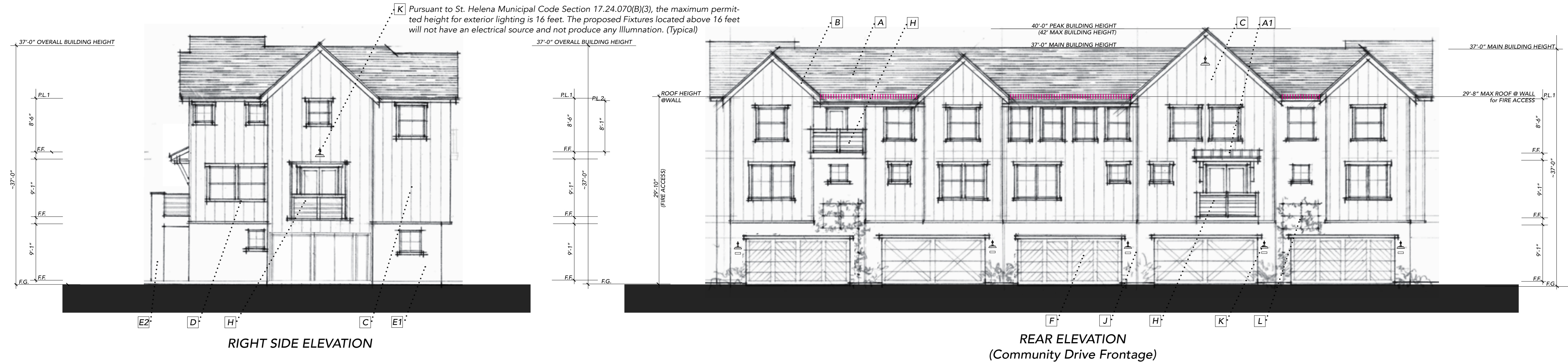
Spring Grove
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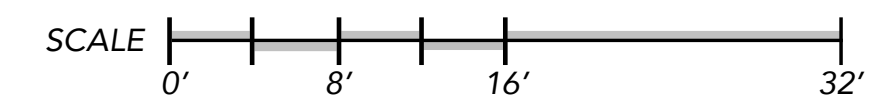
EXTERIOR MATERIALS SPECIFICATIONS (or Equal)

See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia
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Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
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Metal Wire Vine Lines	L	Galvanized Metal

ELEVATION NOTES

All color/material changes to occur at inside corner
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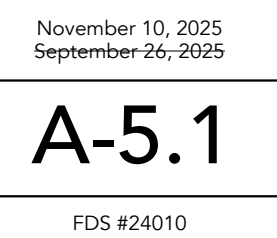


BUILDING 3 CONCEPTUAL ELEVATIONS



Spring Grove

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SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION



PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7655	SW 7649	SW 7012	SW 7012	SW 7032	SW 7012	SW 7674	SW 6244	SW 6278	SW 6251	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS
(or Equal)

See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia
Cementous Siding	C	.75x2.5 Smooth batt @ 18" o.c.
Cementous Trim Boards	D	5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1	Sand Finish
Stucco	E2	Sand Finish
Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
Entry Door	G	Thermatru 'Smooth Star' FibreGlass w/ Glass
Wood Railings	H	1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I	Milgard
Downspouts	J	3.5" Round
Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

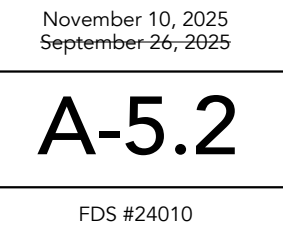
BUILDING 3
CONCEPTUAL ELEVATIONS, COLORS AND MATERIALS



Spring Grove

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St. Helena, CA

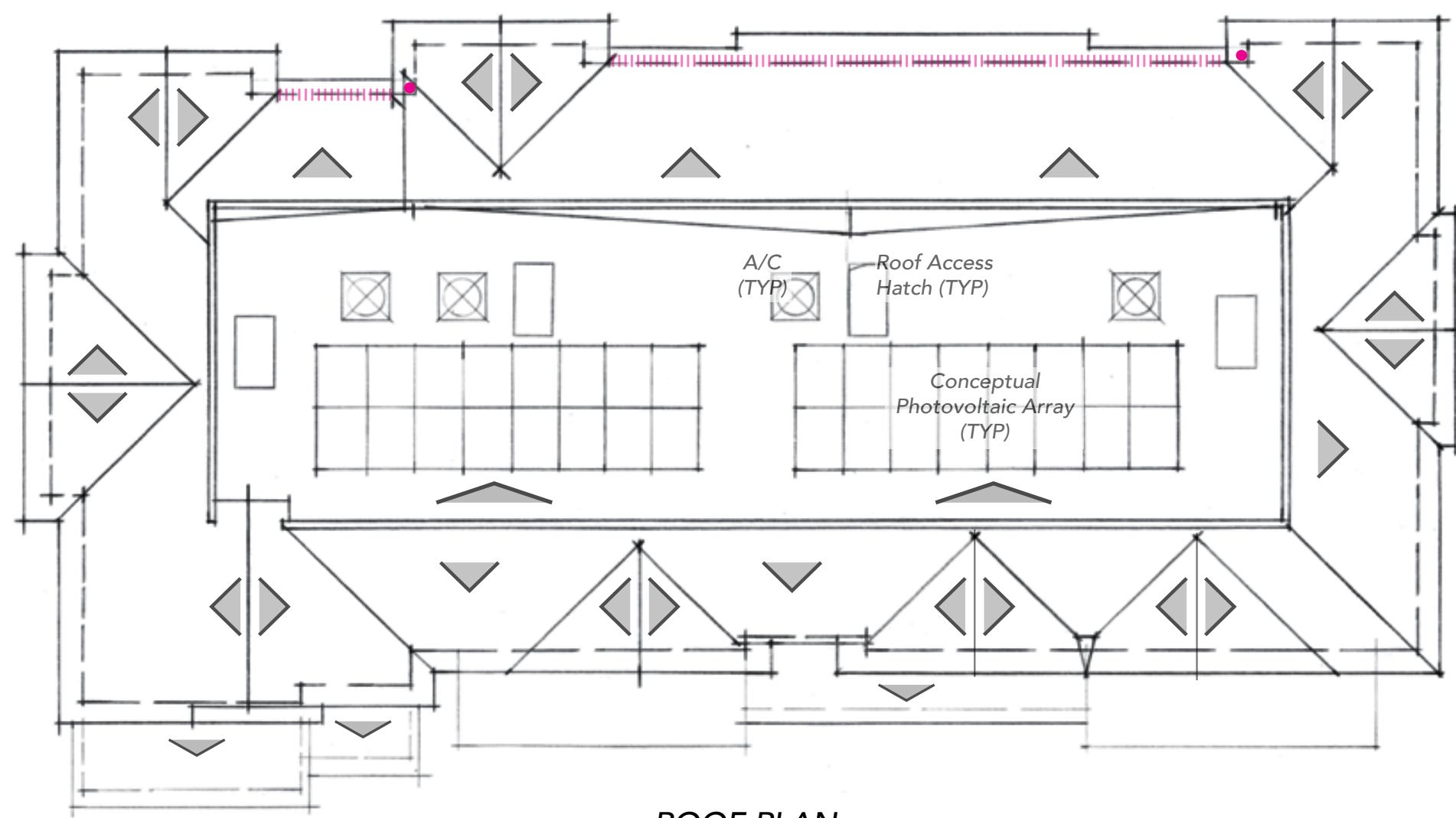
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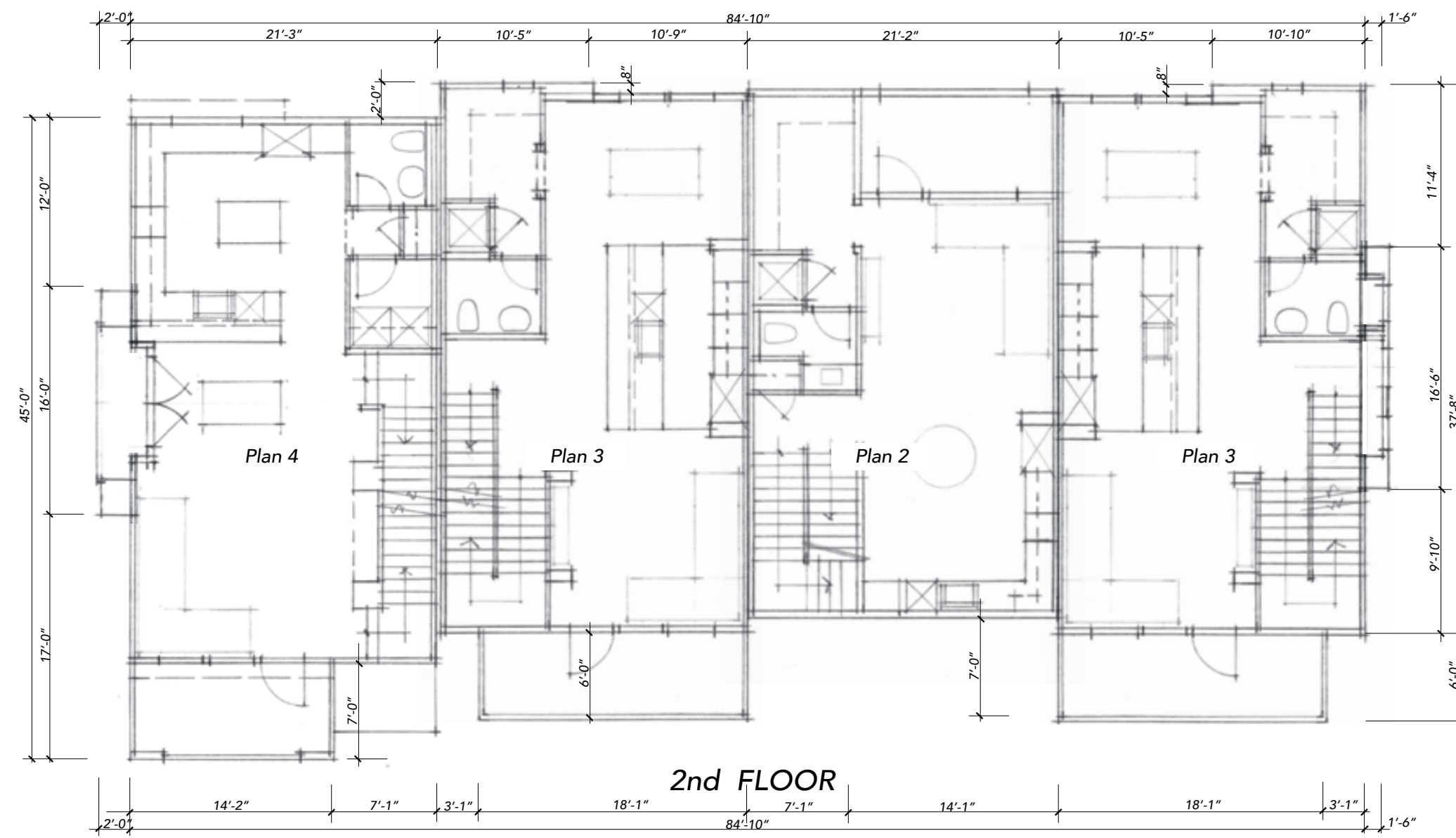
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FDS #24010

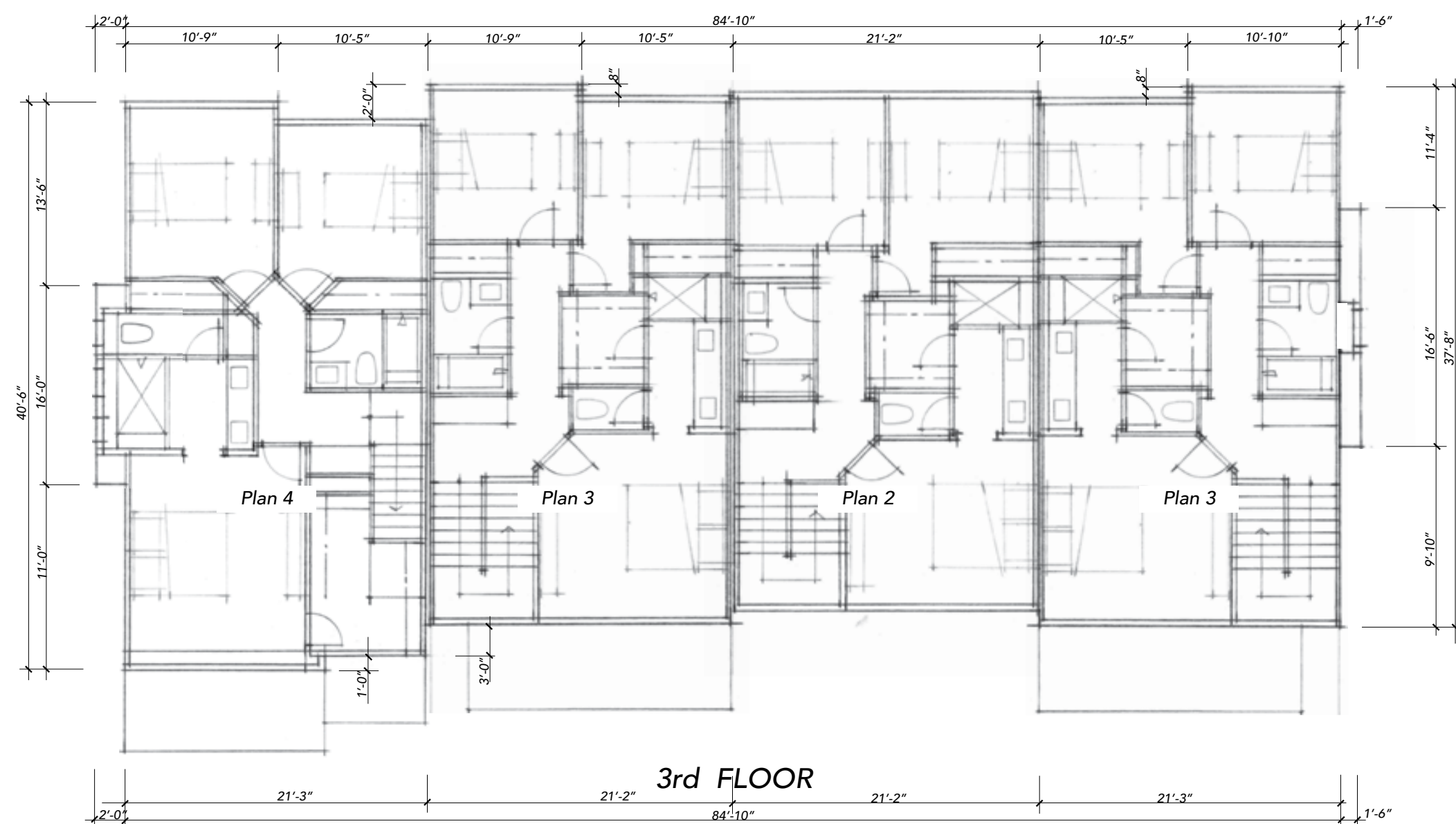


ROOF PLAN

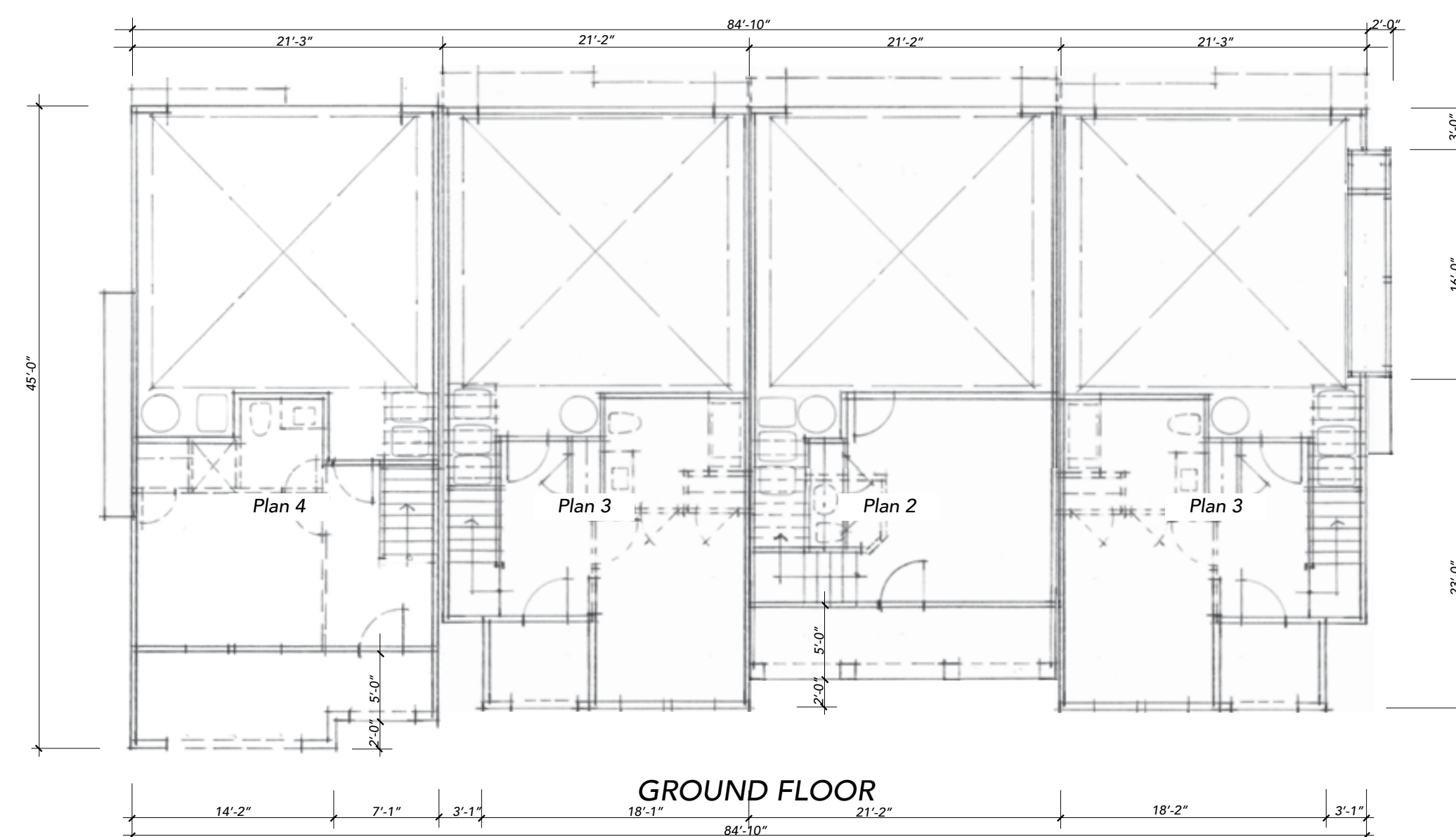
ROOF PLAN NOTES
 Roof Pitch: 11:12 ~ 3.5:12 ~ 2%
 Overhangs Typical; Rake 1'-6" Eave 1'-6"
 • Downspout Location (Major Area)
 Indicates +29'-10" F.G. Roof Height for Fire Access



2nd FLOOR



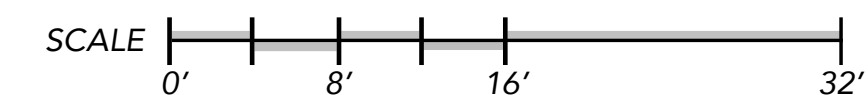
3rd FLOOR



GROUND FLOOR

FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

BUILDING 4
CONCEPTUAL BUILDING FLOOR & ROOF PLANS

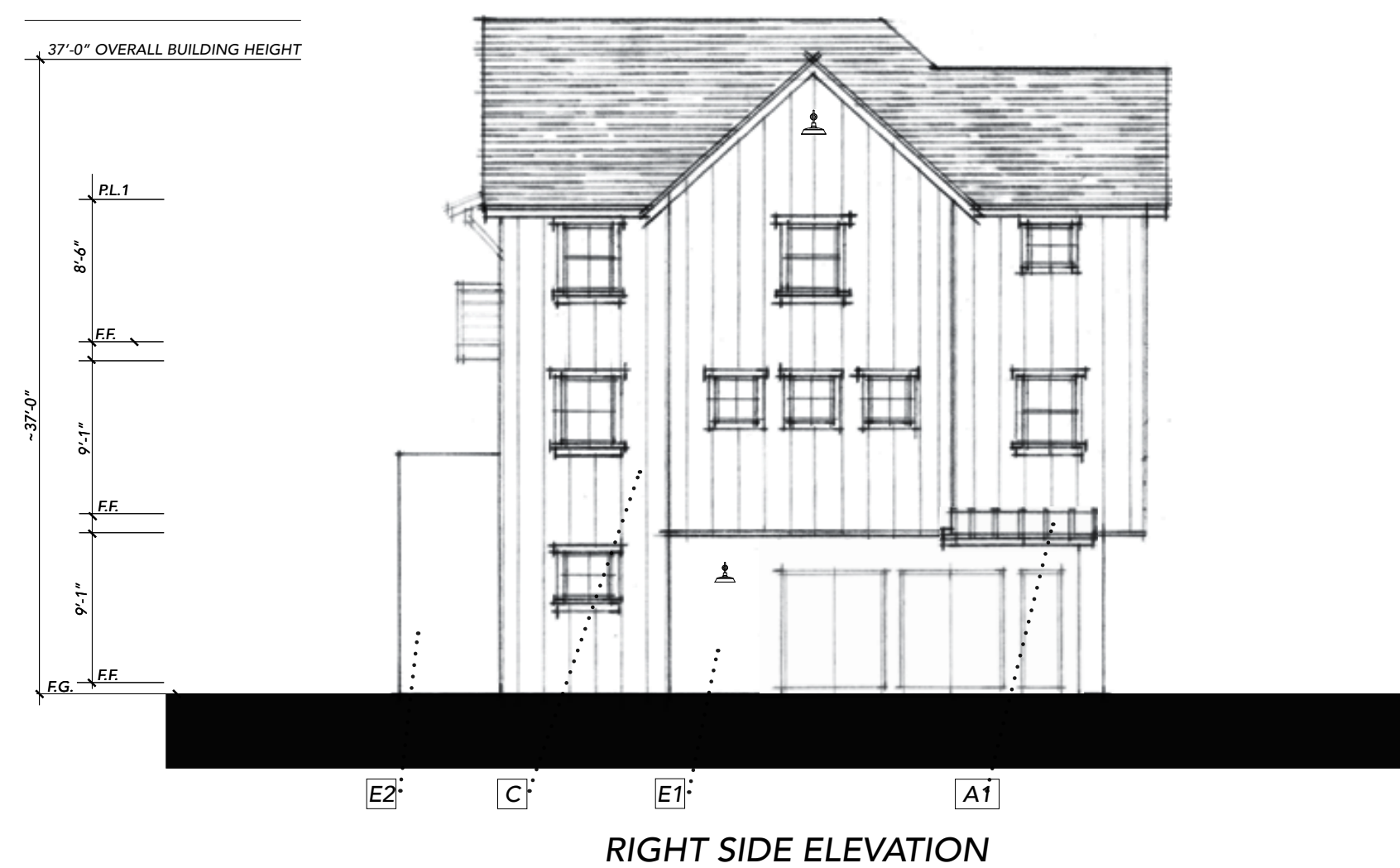


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A-6
 FDS #24010

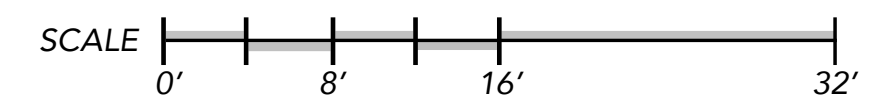


Pursuant to St. Helena Municipal Code Section 17.24.070(B)(3), the maximum permitted height for exterior lighting is 16 feet. The proposed Fixtures located above 16 feet will not have an electrical source and not produce any illumination. (Typical)

EXTERIOR MATERIALS SPECIFICATIONS (or Equal) See COLOR RENDERINGS FOR APPLICATION

Asphalt Composition Shingle Roofing	A	CertainTeed
Mtl Standing Seam Accent	A1	20" Standing Seam
Wood Rake - Fascia - Eaves	B	6x Rake Resawn, 4x Fascia
Cementous Siding	C	.75x2.5 Smooth batt @ 18"o.c.
Cementous Trim Boards	D	5/4x7 Head, 4/4x3.5 Sides, 2x3 Sill
Stucco	E1	Sand Finish
Stucco	E2	Sand Finish
Garage Door	F	Coplay 'Canyon Ridge' ~ 'Chevron & Elements' (metal)
Entry Door	G	Thermatru 'Smooth Star' FibreGlass w/ Glass
Wood Railings	H	1x6 & 1x4 slats 1.5" gap
Vinyl Windows	I	Milgard
Downspouts	J	3.5" Round
Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

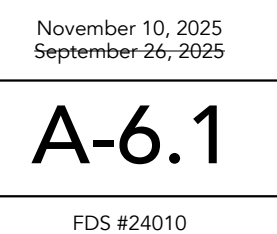
ELEVATION NOTES
All color/material changes to occur at inside corner
||||| Indicates +29'-10" F.G. Roof Height (Fire Access)



BUILDING 4 CONCEPTUAL ELEVATIONS



Spring Grove
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SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION



PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
SW 7657	SW 7059	SW 9165	SW 7012	SW 7032	SW 7008	SW 7874	SW 9133	SW 7505	SW 6216	MOIRE BLACK	CHARCOAL GRAY

EXTERIOR MATERIALS SPECIFICATIONS
(or Equal)

See COLOR RENDERINGS FOR APPLICATION

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Wood Railings	H	1x6 & 1x4 slats 1.5" gap
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Downspouts	J	3.5" Round
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Metal Wire Vine Lines	L	Galvanized Metal

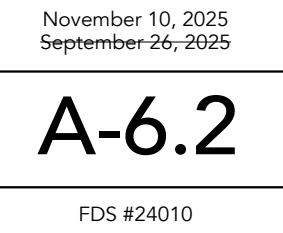
BUILDING 4
CONCEPTUAL ELEVATIONS, COLORS AND MATERIALS



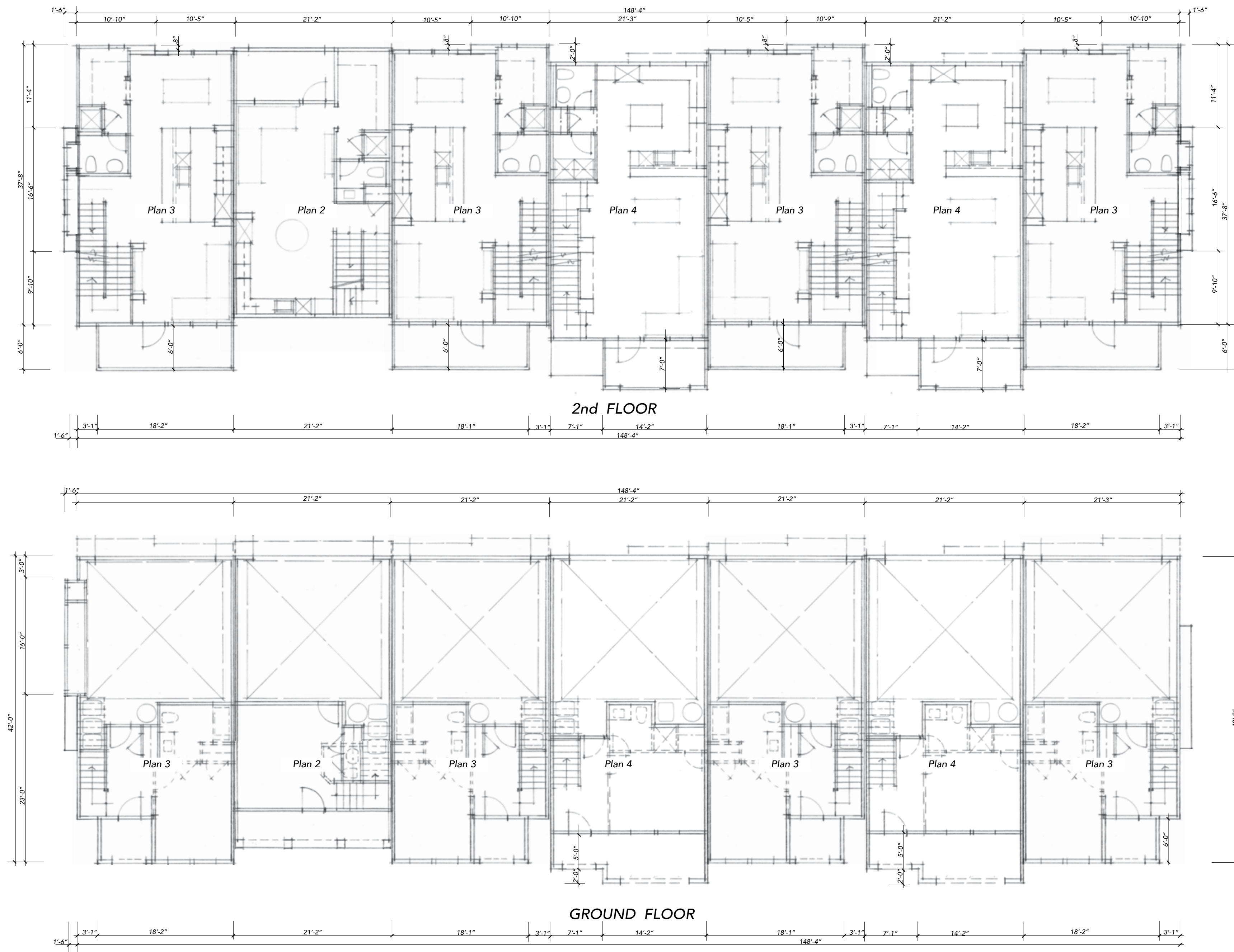
Spring Grove

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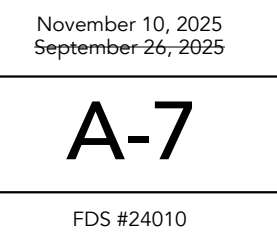
FDS #24010



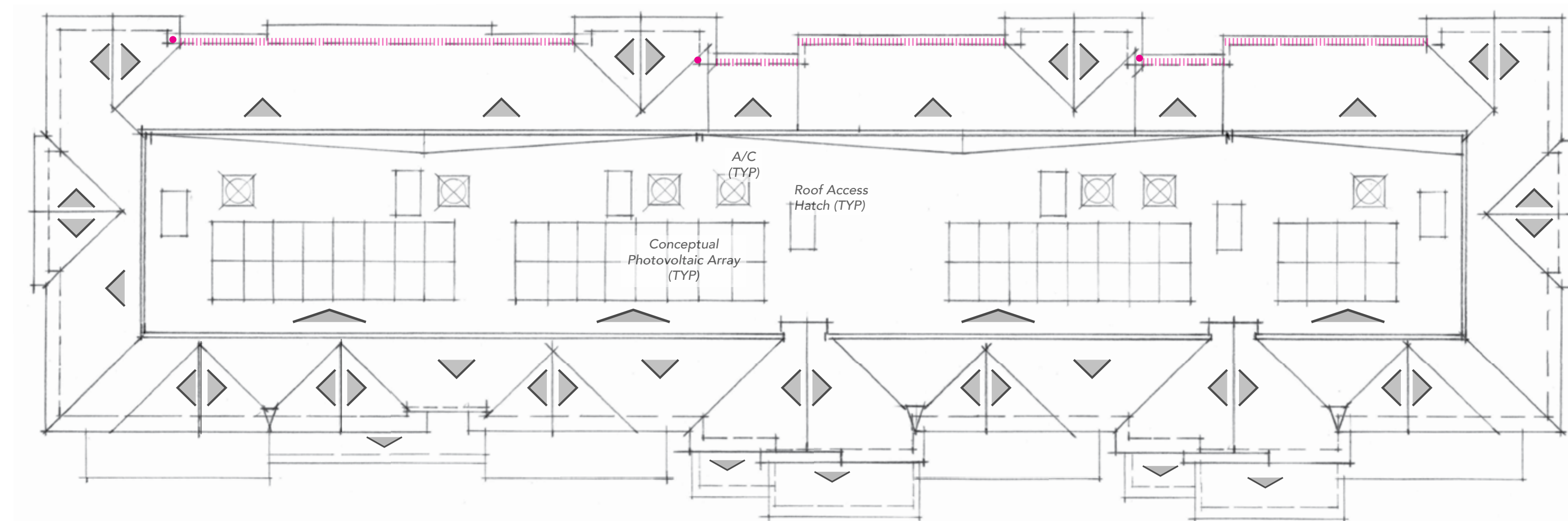
BUILDING 5
CONCEPTUAL BUILDING FLOOR PLANS



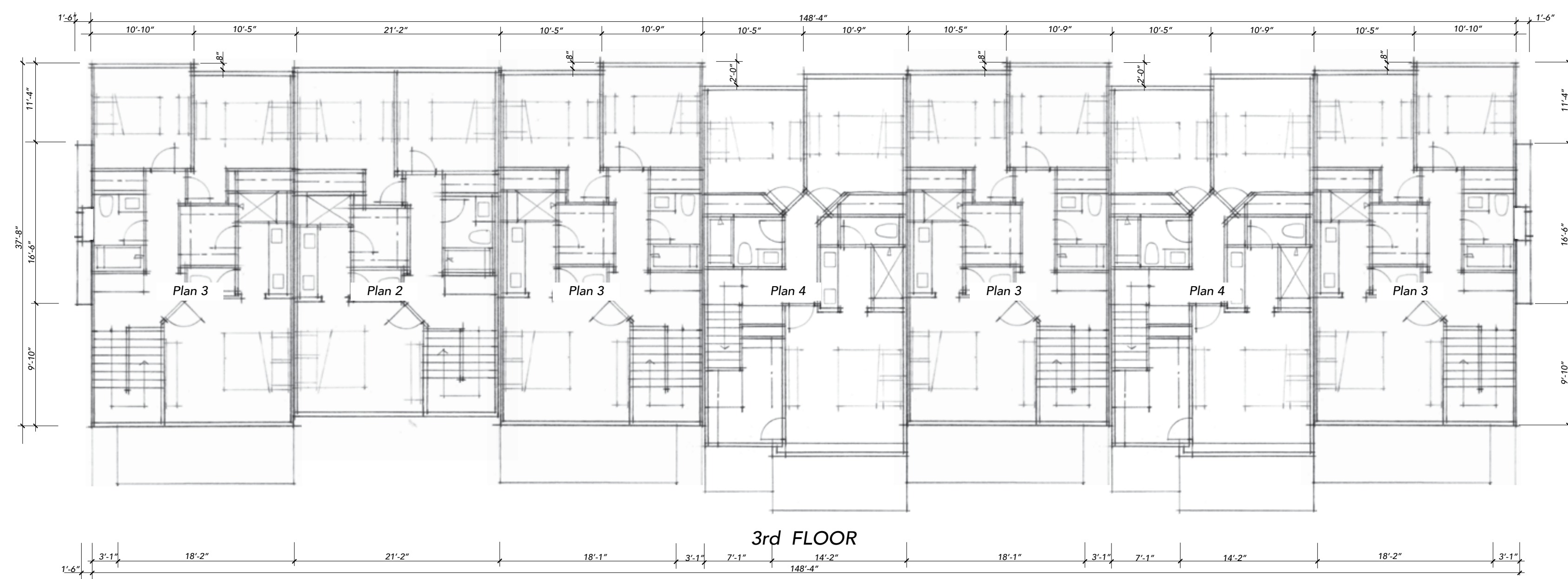
Spring Grove
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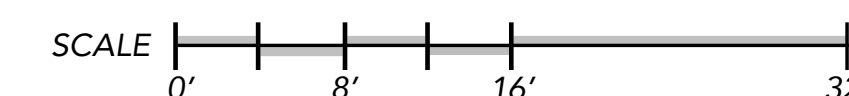


ROOF PLAN **ROOF PLAN NOTES**
 Roof Pitch: 11:12 3.5:12 2%
 Overhangs Typical; Rake 1'-6" Eave 1'-6"
 ● Downspout Location (Major Area)
 - - - - - Indicates +29'-10" F.G. Roof Height for Fire Access



FLOORPLAN NOTES
 Dimensions are conceptual and approximate.
 (T) Trash, (R) Recycle, (C) Compost Bins are located in each individual unit garage space.

BUILDING 5
CONCEPTUAL BUILDING FLOOR & ROOF PLANS



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A-7.1
 FDS #24010



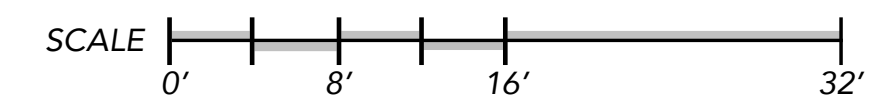
**EXTERIOR MATERIALS SPECIFICATIONS
(or Equal)**

See COLOR RENDERINGS FOR APPLICATION

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Downspouts	J	3.5" Round
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Metal Wire Vine Lines	L	Galvanized Metal

ELEVATION NOTES

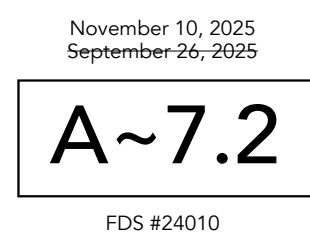
All color/material changes to occur at inside corner
 ■■■■ Indicates +29'-10" F.G. Roof Height (Fire Access)



**BUILDING 5
CONCEPTUAL ELEVATIONS**



Spring Grove
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SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION



PATIO/ENTRY ELEVATION

BODY 1	BODY 2	BODY 3	TRIM	GARAGE 1	GARAGE 2	BALCONY RAILING	ACCENT ENTRY 1	ACCENT ENTRY 2	ACCENT ENTRY 3	ROOFING	METAL ROOFING
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EXTERIOR MATERIALS SPECIFICATIONS
(or Equal)

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Architectural Lighting	K	Allenbury (Downward Lighting)
Metal Wire Vine Lines	L	Galvanized Metal

BUILDING 5
CONCEPTUAL ELEVATIONS, COLORS AND MATERIALS



Spring Grove

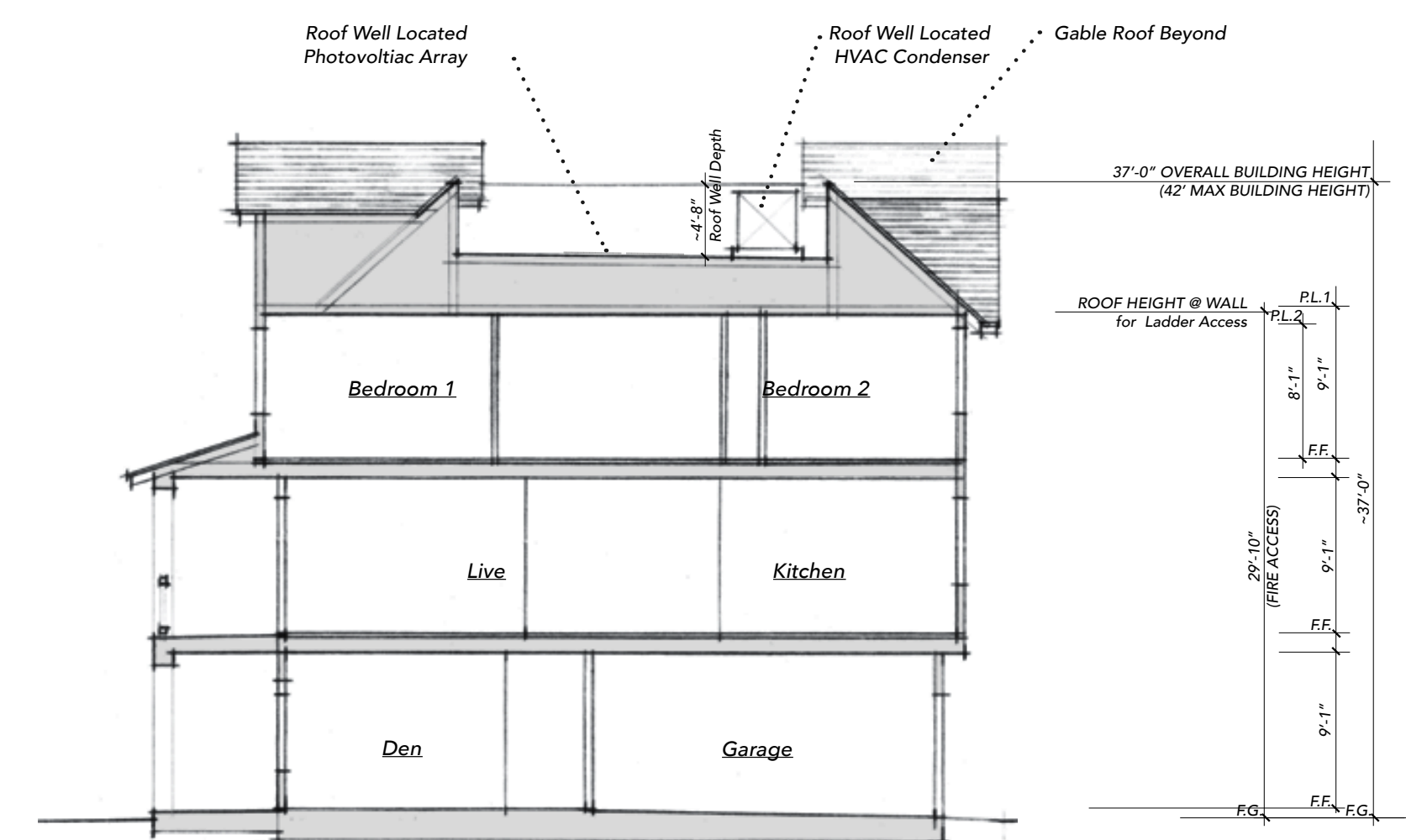
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FDS #24010



Typical Building Cross Section
(Plan 4)

PLAN 4

CONCEPTUAL BUILDING CROSS SECTION



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CONCEPTUAL IMAGERY

November 10th, 2025



St. Helena
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LEGEND

- 1 Community Entry Seating Area (See Enlargement)
- 2 Community Entry Pedestrian Corridor (See Enlargement)
- 3 Community Open Space (See Enlargement)
- 4 Enhanced Paving at Crosswalks
- 5 Concrete Walk
- 6 Parking Stalls
- 7 Private Patio
- 8 Stormwater Basin
- 9 Existing Creek Setback
- 10 Transformer
- 11 Screening Planting at Perimeter
- 12 Existing Canopy Trees to be Protected in Place
- 13 Short Term Bike Parking (Bike Racks)

CONCEPTUAL SITE PLAN

November 10th, 2025



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St. Helena, CA



L-2



LEGEND

- 1 Seat Wall
- 2 Focal Tree
- 3 Enhanced Paving
- 4 Vineyard Trellis with Fruiting Vines
- 5 Meandering Path at Pedestrian Corridor
- 6 Transformer
- 7 Natural Turf Lawn with Existing Shade Tree
- 8 Picnic Area with Community Seating
- 9 Cluster Mailbox Units
- 10 Parking Stalls
- 11 Enhanced Paving at Crosswalk
- 12 Screening Planting at Perimeter
- 13 Existing Canopy Trees - to be Protected in Place
- 14 Short Term Bike Parking (Bike Racks)



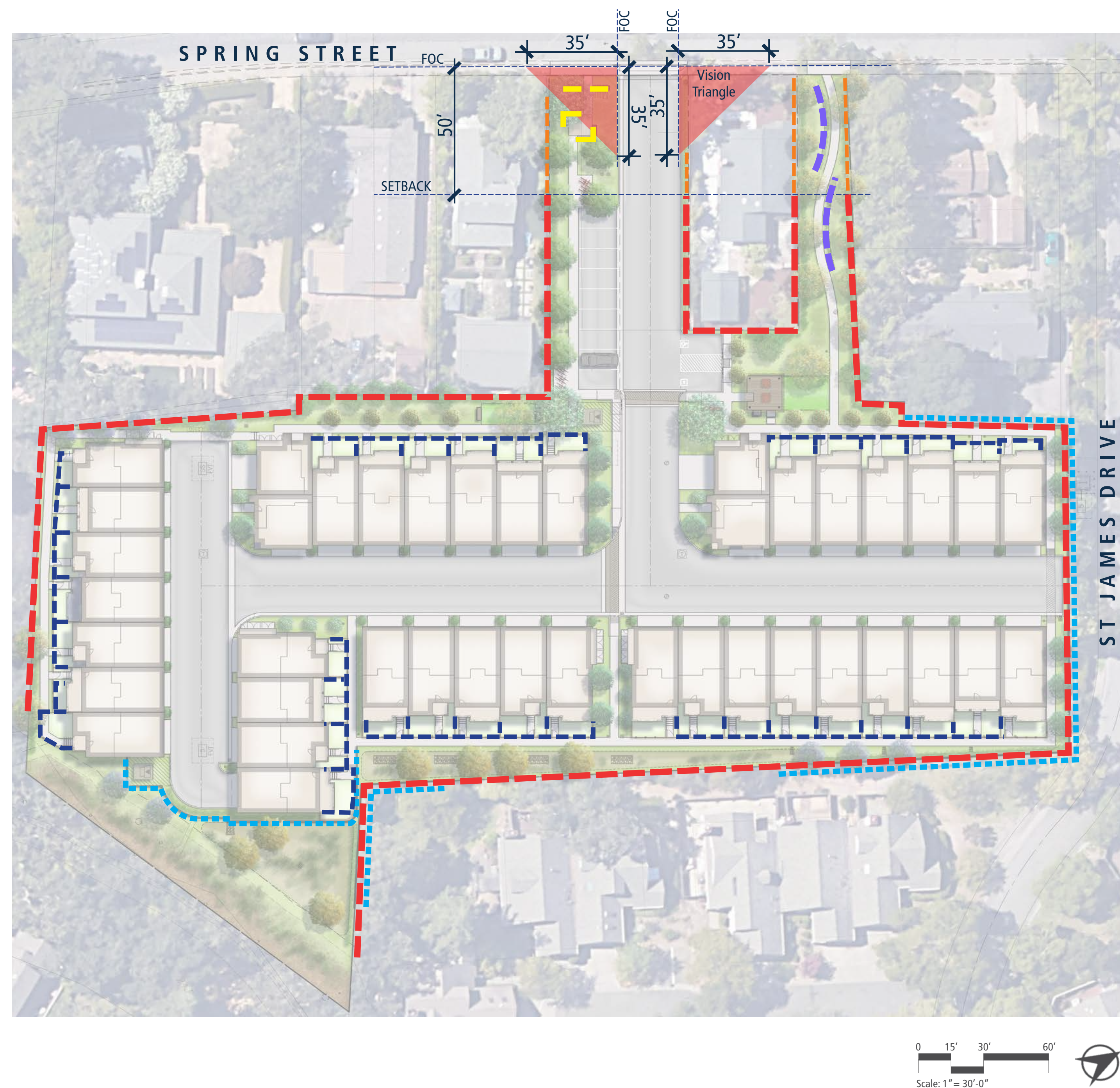
November 10th, 2025

CONCEPTUAL ENLARGEMENT PLAN

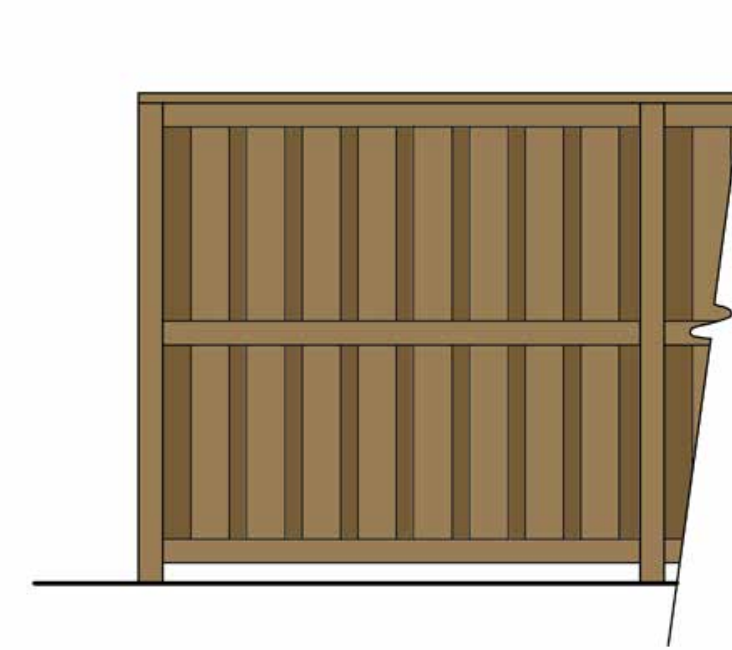


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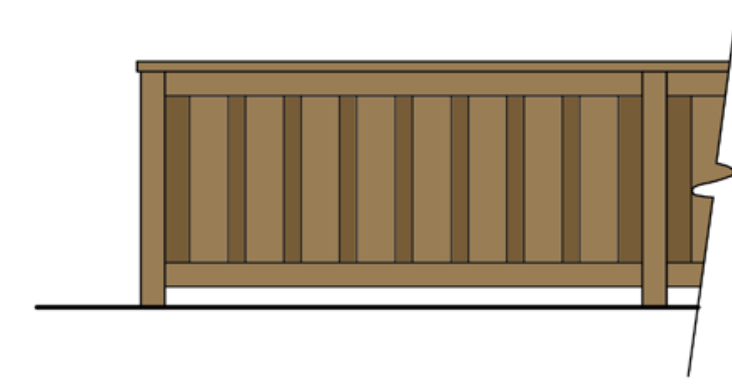
LEGEND



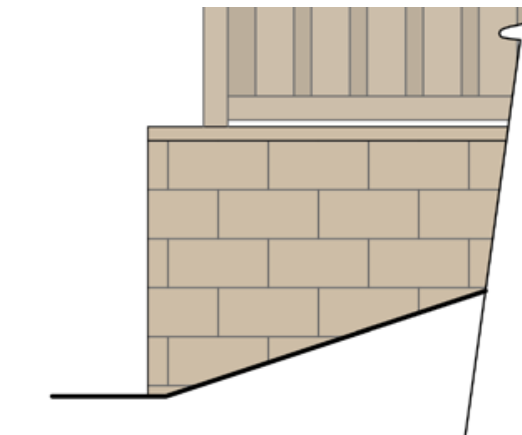
Wood Perimeter Fence
-Western Red Cedar or Approved Equal
-6' ht. min.



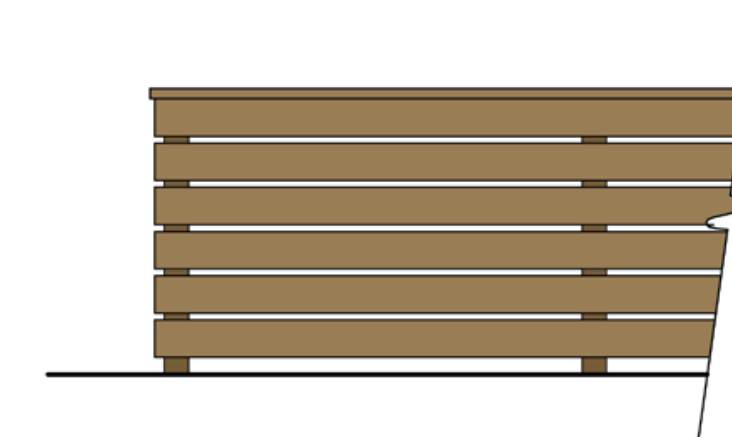
Vineyard Trellis
-Wood Posts w/ Steel Wire
-5' ht.



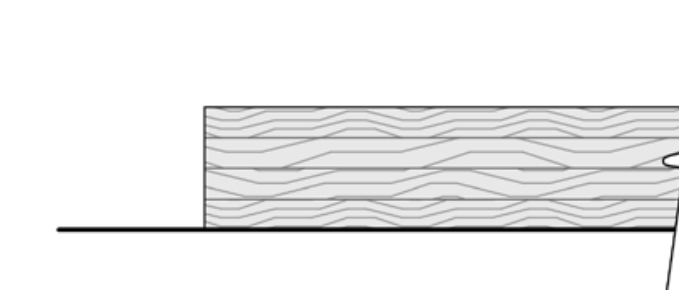
Wood Perimeter Low Fence
-Western Red Cedar or Approved Equal
-3'-0" ht.



Retaining Block Wall
-Splitface CMU Block and Cap w/ Perimeter
Fence Embedment
-3'-4" ht. max



Wood Patio Fence/Gate
-Western Red Cedar or Approved Equal
-3'-6" ht.



Seat Wall
-PIP Concrete w/ Boardform Finish
-1'-6" ht.

CONCEPTUAL WALL AND FENCE PLAN

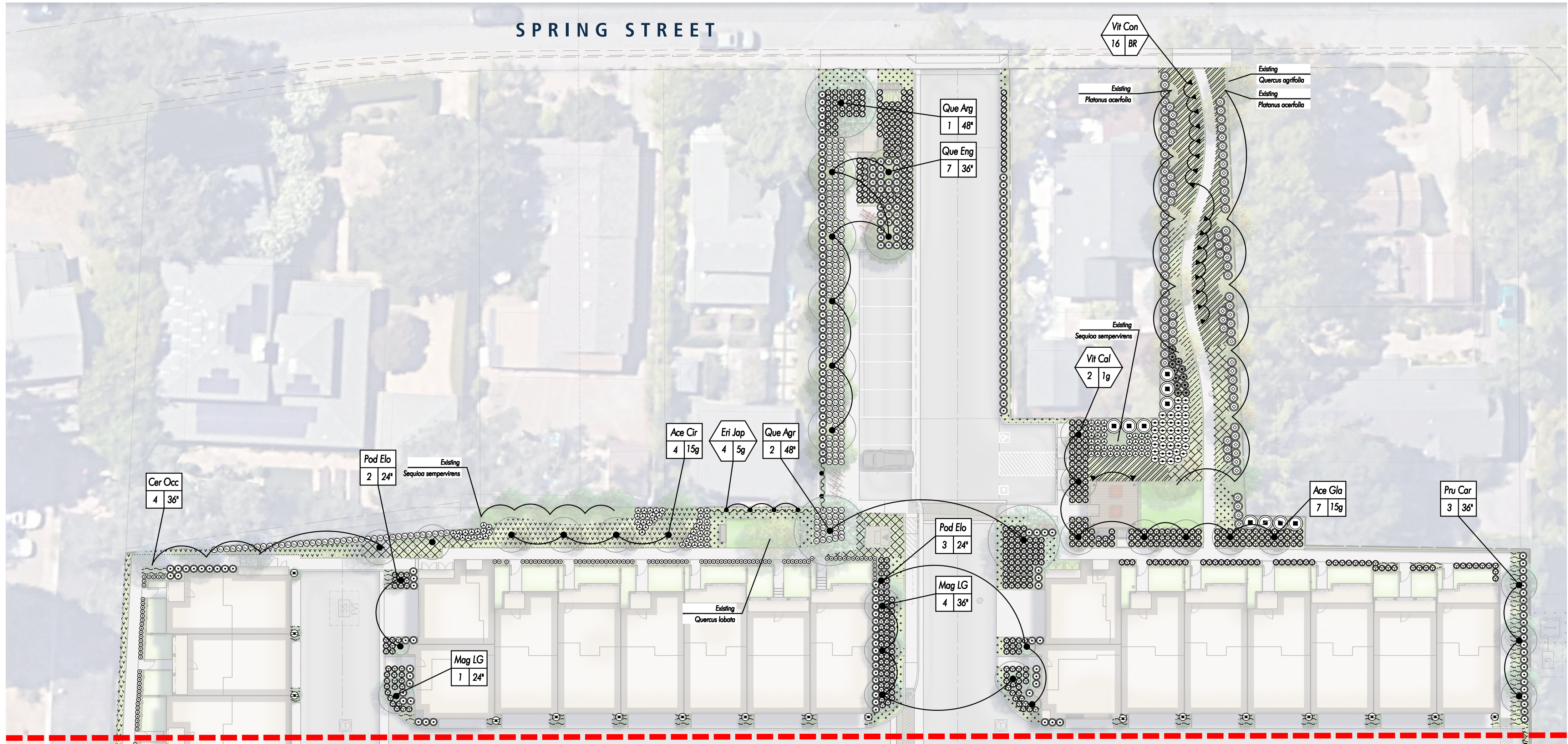
November 10th, 2025



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St. Helena, CA



L-4



MATCHLINE - SEE SHEET L-6

LEGEND

TREE SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
Ace Cir	Acer circinatum	Vine Maple	Per Plan	Per Plan	6
Ace Gla	Acer glabrum	Rocky Mountain Maple	Per Plan	Per Plan	5
Cer Occ	Cercis occidentalis	Western Redbud	Per Plan	Per Plan	6
Mag LG	Magnolia grandiflora 'Little Gem'	Little Gem Southern Magnolia	Per Plan	Per Plan	7
Pru Car	Prunus caroliniana	Carolina Cherry Laurel	Per Plan	Per Plan	6
Pod Elo	Podocarpus elongatus 'Monrovia'	Icee Blue Yellowwood	Per Plan	Per Plan	11
Pla Rac	Platanus racemosa	Western Sycamore	Per Plan	Per Plan	7
Que Agr	Quercus agrifolia	Coast Live Oak	Per Plan	Per Plan	3
Que Eng	Quercus engelmannii	Engelmann Oak	Per Plan	Per Plan	7
Que Kal	Quercus kelloggii	California Black Oak	Per Plan	Per Plan	1

VINE/ESPALIER SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
Vitis Cal	Vitis californica 'Roger's Red'	Roger's Red California Grape	Per Plan	Per Plan	2
Vit Can	Vitis labrusca 'Concord'	Concord Grape	Per Plan	Per Plan	16
Eri Jap	Eriobotrya japonica	Japanese Loquat	Per Plan	Per Plan	12

SHRUB SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
As	Arctostaphylos densiflora 'Harmony'	Harmony Manzanita	5 gal.	Per Plan	14
+	Buxus microphylla var. japonica 'Green Beauty'	Japanese Boxwood	1 gal.	Per Plan	158
+	Calamagrostis x acuticarpa 'Karl Foerster'	Feather Reed Grass	1 gal.	Per Plan	122
+	Dianella revoluta 'Little Rev'	Little Rev Flax Lily	1 gal.	Per Plan	143
+	Festuca mairei	Atlas Fescue	1 gal.	Per Plan	148
+	Festuca mairei	Atlas Fescue	5 gal.	Per Plan	12
+	Frangula californica 'San Bruno'	San Bruno Calleberry	5 gal.	Per Plan	116
+	Hakonechloa macro 'Aureola'	Golden Japanese Forest Grass	1 gal.	24" o.c.	112
+	Heteromeles arbutifolia	Toyon	15 gal.	Per Plan	13
+	Ilex vomitoria 'Stoke's Dwarf'	Stoke's Dwarf Yaupon Holly	5 gal.	Per Plan	119
+	Juncus patens	Spreading Rush	1 gal.	30" o.c.	189
+	Ligustrum japonicum 'Tessatum'	Waxleaf Privet	5 gal.	Per Plan	234
+	Lomandra longifolia 'Arctic Frost'	Arctic Frost Mat Rush	1 gal.	Per Plan	458
+	Miscanthus sinensis var. condensatus	Large Silver Grass	1 gal.	Per Plan	71
+	Muhlenbergia lindheimeri	Lindheimer's Muhly	1 gal.	Per Plan	177
+	Podocarpus macrophyllus 'Maki'	Fern Podocarpus	5 gal.	Per Plan	40
+	Polystichum munitum	Western Sword Fern	1 gal.	Per Plan	96
+	Rhaphiolepis umbellata 'Minor'	Dwarf Yeddo Hawthorn	5 gal.	Per Plan	254
+	Rosa floribunda 'Icecap'	Icecap Rose	5 gal.	Per Plan	34
+	Salvia 'Amstad'	Friendship Sage	5 gal.	Per Plan	37

GROUND COVER SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
+	Marathon II	Turf	Sodded	-	600 SF
+	Carex pansa	Sand Dune Sedge	1 gal.	18" o.c.	168
+	Carex tumulicola	Foothill Sedge	1 gal.	18" o.c.	1,399
+	Geranium 'Rozanne'	Rozanne Geranium	1 gal.	24" o.c.	232
+	Heuchera maxima	Island Alum Root	1 gal.	12" o.c.	386
+	Sesleria autumnalis	Autumn Moor Grass	1 gal.	16" o.c.	1,105
+	Trachelaspemum asiaticum	Asiatic Jasmine	1 gal.	24" o.c.	667

NOTE: All ground-mounted equipment is to be screened on edges facing adjacent prop-
erties and public ROW using shrubs that are
at minimum equivalent in height to the adja-
cent equipment.



PLANTING PLAN

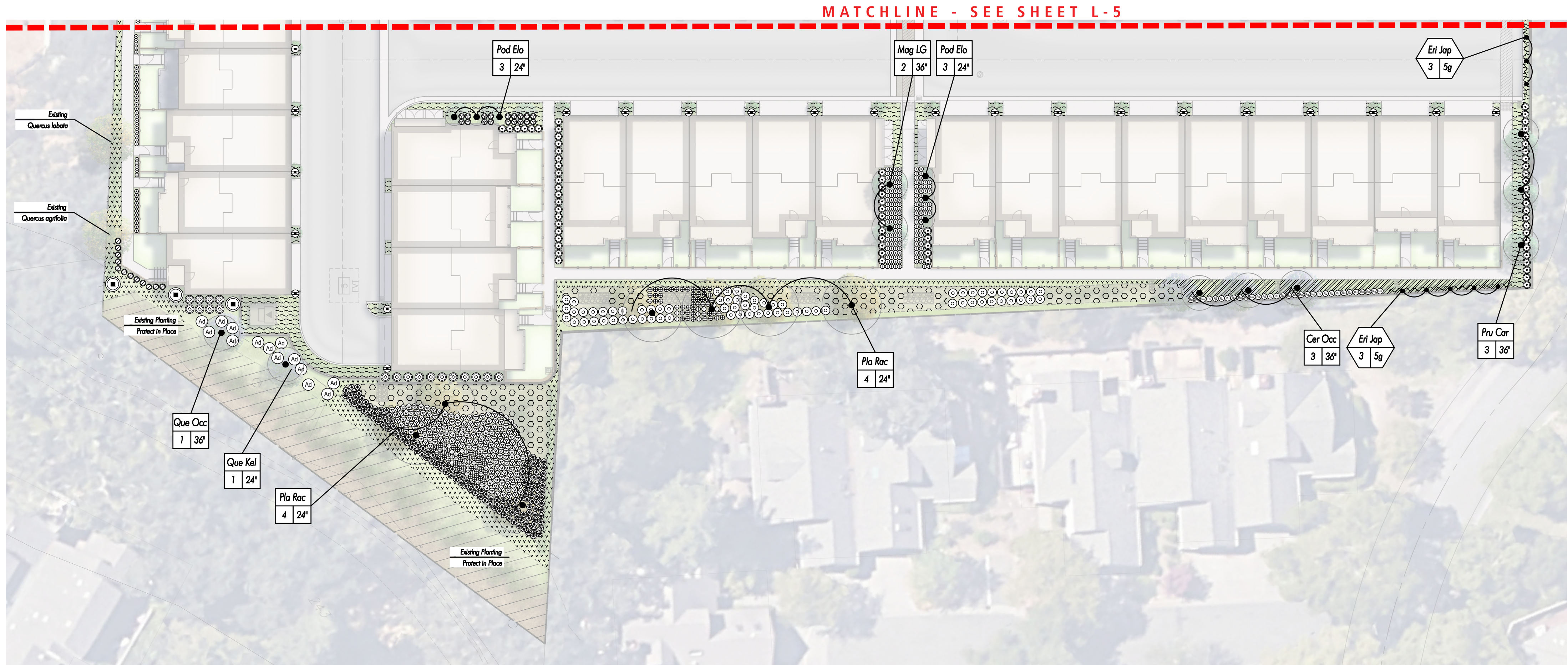


St. Helena
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1447~1505~1515 Spring Street
St. Helena, CA



L-5

November 10th, 2025



LEGEND

TREE SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
Ace Cr	Acer circinnatum	Vine Maple	Per Plan	Per Plan	6
Ace Gla	Acer glabrum	Rocky Mountain Maple	Per Plan	Per Plan	5
Cer Occ	Cercis occidentalis	Western Redbud	Per Plan	Per Plan	6
Mag LG	Magnolia grandiflora 'Little Gem'	Little Gem Southern Magnolia	Per Plan	Per Plan	7
Pru Car	Prunus caroliniana	Carolina Cherry Laurel	Per Plan	Per Plan	6
Pod Elo	Podocarpus elongatus 'Monrovia'	Icee Blue Yellowwood	Per Plan	Per Plan	11
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Que Agr	Quercus agrifolia	Coast Live Oak	Per Plan	Per Plan	3
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⊗	Hakonechloa macro 'Aureola'	Golden Japanese Forest Grass	1 gal.	24" o.c.	112
⊙	Heteromeles arbutifolia	Toyon	15 gal.	Per Plan	13
⊙	Ilex vomitoria 'Stoke's Dwarf'	Stoke's Dwarf Yaupon Holly	5 gal.	Per Plan	119
⊙	Juncus patens	Spreading Rush	1 gal.	36" o.c.	189
⊙	Ligustrum japonicum 'Texanum'	Waxleaf Privet	5 gal.	Per Plan	234
⊙	Lomandra longifolia 'Arctic Frost'	Arctic Frost Mat Rush	1 gal.	Per Plan	458
⊙	Miscanthus sinensis var. condensatus	Large Silver Grass	1 gal.	Per Plan	71
⊙	Muhlenbergia lindheimeri	Lindheimer's Muhly	1 gal.	Per Plan	177
⊙	Podocarpus macrophyllus 'Maki'	Fern Podocarpus	5 gal.	Per Plan	40
⊙	Polystichum munitum	Western Sword Fern	1 gal.	Per Plan	96
⊙	Rhaphiolepis umbellata 'Minor'	Dwarf Yeddo Hawthorn	5 gal.	Per Plan	254
⊙	Rosa floribunda 'Icecap'	Icecap Rose	5 gal.	Per Plan	34
⊙	Salvia 'Amistad'	Friendship Sage	5 gal.	Per Plan	37

GROUND COVER SCHEDULE:

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COUNT
Marathon II	Marathon II	Turf	Sodded	-	600 SF
Carex pansa	Carex pansa	Sand Dune Sedge	1 gal.	18" o.c.	168
Carex tumulicola	Carex tumulicola	Foothill Sedge	1 gal.	18" o.c.	1,339
Geranium 'Rozanne'	Geranium 'Rozanne'	Rozanne Geranium	1 gal.	24" o.c.	232
Heuchera maxima	Heuchera maxima	Island Alum Root	1 gal.	12" o.c.	386
Sesleria autumnalis	Sesleria autumnalis	Autumn Moor Grass	1 gal.	16" o.c.	1,105
Trachelaspemum asiaticum	Trachelaspemum asiaticum	Asiatic Jasmine	1 gal.	24" o.c.	667

NOTE: All ground-mounted equipment is to be screened on edges facing adjacent properties and public ROW using shrubs that are at minimum equivalent in height to the adjacent equipment.



Scale: 1" = 20'-0"

November 10th, 2025

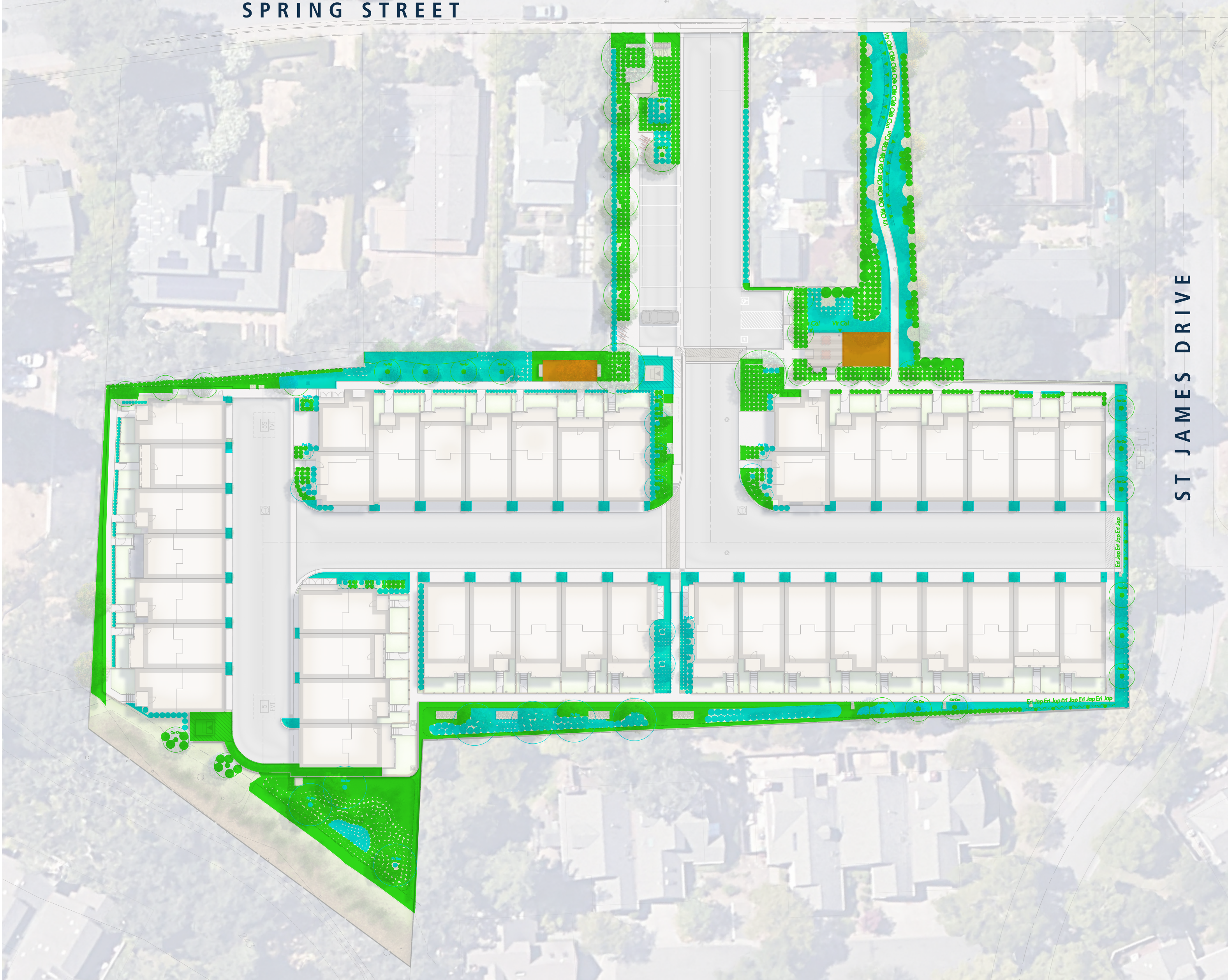
PLANTING PLAN



St. Helena
APN: 009-590-003, -005, -010
1447~1505~1515 Spring Street
St. Helena, CA



L-6



HYDROZONE LEGEND

- Low Water Use (Drip Irrigation) 11,442 SF
- Moderate Water Use (Drip Irrigation) 9,566 SF
- High Water Use (Turf - Overhead Spray) 600 SF

Total Irrigated Landscape Area: 21,608 SF

Maximum Applied Water Allowance (MAWA): 225,998

Estimated Total Water Usage (ETWU): 285,008

*Refer to MWELO Landscape Documentation Package for full Calculation Worksheet

HYDROZONE AND MWELO PLAN

November 10th, 2025



St. Helena
 APN: 009-590-003, -005, -010
 1447~1505~1515 Spring Street
 St. Helena, CA





OPEN SPACE LEGEND:

- Common Open Space: 18,548 SF
- Riparian Corridor - undisturbed, not for recreation or development: 4,482 SF
- Private Open Space: 5,595 SF

Total Project Area: 105,135 SF
Total Common Open Space Coverage: 23,030 SF (21.9%)
Common Open Space per Unit: 561 SF (23,030 SF/ 41 Units)

NOTE:
Common Open Space does not include any hardscape areas, private patios, or any planters less than 3 feet in width

✱ Denotes units with no private ground floor open space (All other units have a minimum of 60 SF private ground floor open space).



OPEN SPACE CALCULATIONS

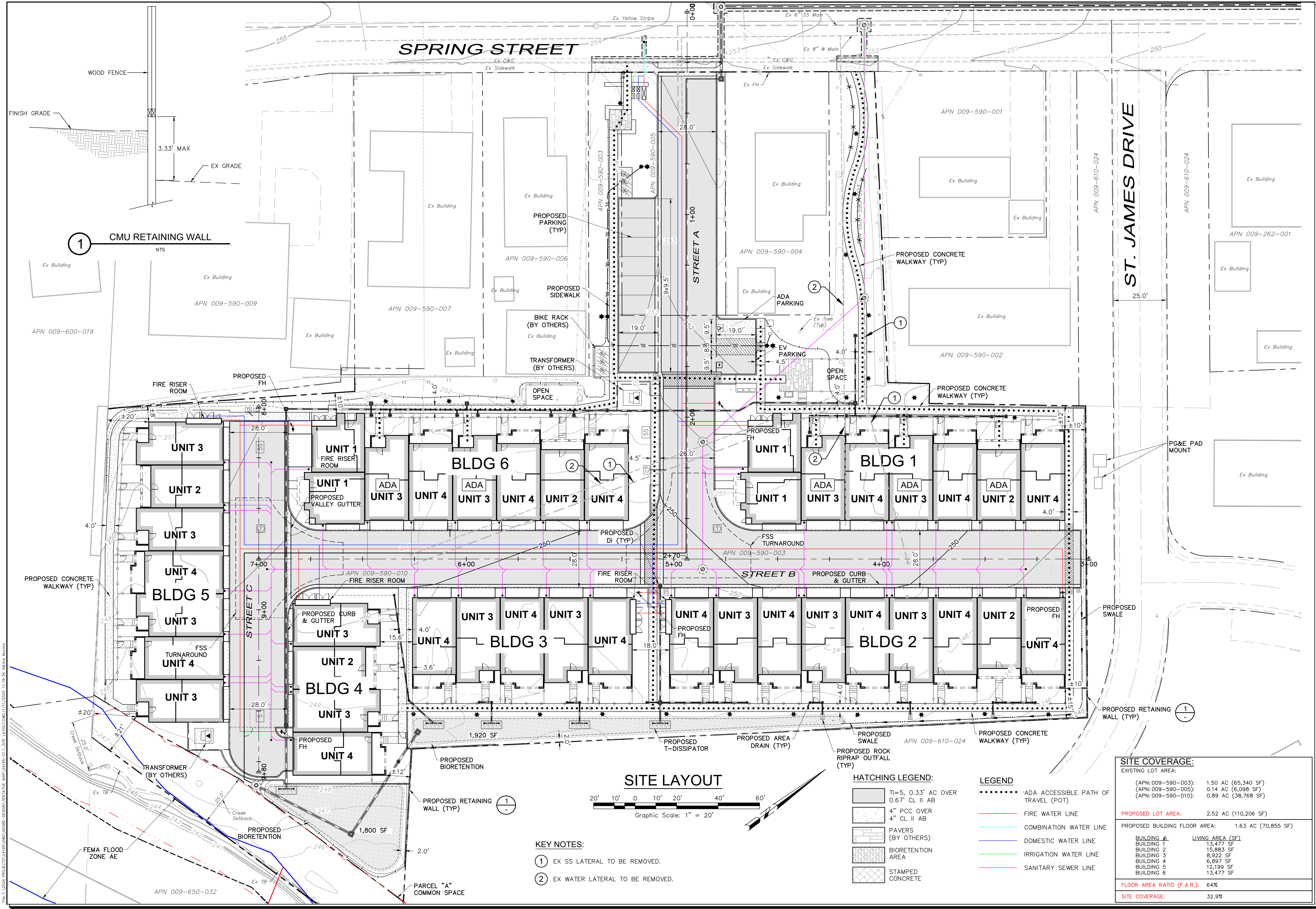
November 10th, 2025



St. Helena
APN: 009-590-003, -005, -010
1447~1505~1515 Spring Street
St. Helena, CA



L-8



Revisions

No.	Date	Description	Approved

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My license expires 3/31/2026

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TENTATIVE MAP

SPRING GROVE

SITE LAYOUT

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

SCALE: AS SHOWN

Date: November 11, 2025

Design by: KM/JAL

Drawn by: KM/JAL

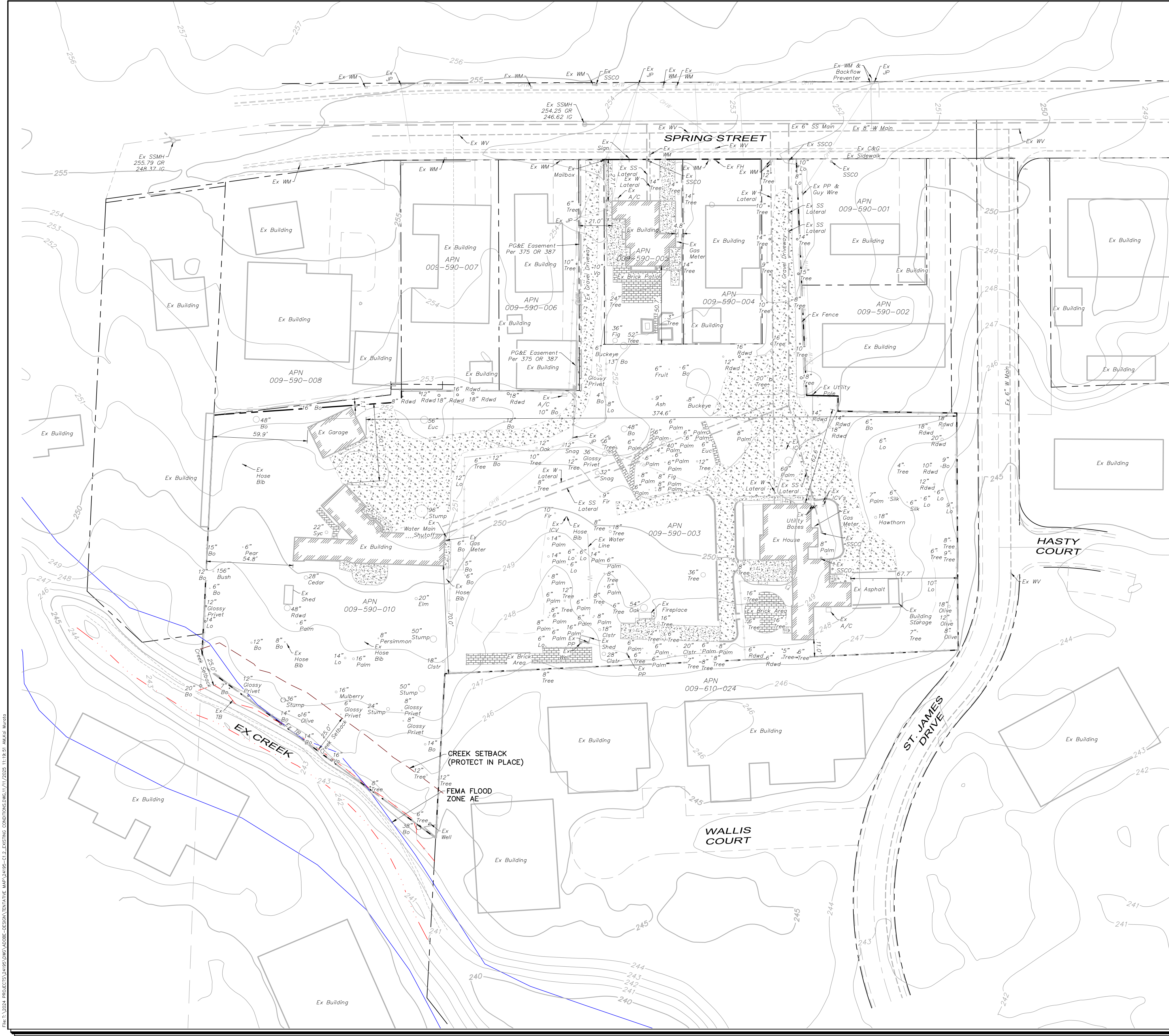
Checked by: CT

Sheet

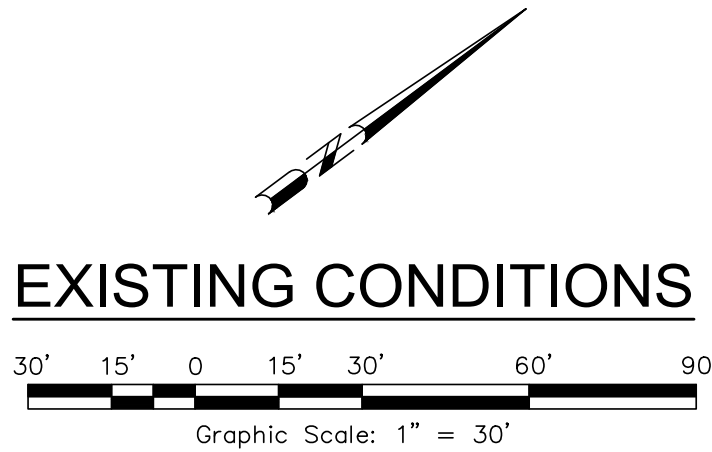
C1.1

2 of 18 Sheets

Job 24195



SITE COVERAGE:	
EXISTING LOT AREA:	
(APN: 009-590-003):	1.50 AC (65,340 SF)
(APN: 009-590-005):	0.14 AC (6,098 SF)
(APN: 009-590-010):	0.89 AC (38,768 SF)
PROPOSED LOT AREA:	
2.52 AC (110,206 SF)	
BUILDING FOOTPRINT:	
0.15 AC (6,742 SF)	
(APN: 009-590-003):	
3,199 SF	
(APN: 009-590-005):	
1,006 SF	
(APN: 009-590-010):	
2,537 SF	
LOT COVERAGE (%):	
6.1%	
BUILDING FLOOR AREA:	
0.19 AC (8,445 SF)	
(APN: 009-590-003):	
4,902 SF	
(APN: 009-590-005):	
1,006 SF	
(APN: 009-590-010):	
2,537 SF	
FLOOR AREA RATIO (F.A.R.):	
7.7%	



Revisions

No.	Date	Description	Approved

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DAVID R. BROWN

No. 41833

Exp. 3/31/2026

REGISTERED CIVIL ENGINEER OF CALIFORNIA

David R. Brown, ROE 41833

My license expires 3/31/2026

TENTATIVE MAP

SPRING GROVE

EXISTING CONDITIONS

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

SCALE: AS SHOWN

Date: November 11, 2025

Design by: KM/JAL

Drawn by: KM/JAL

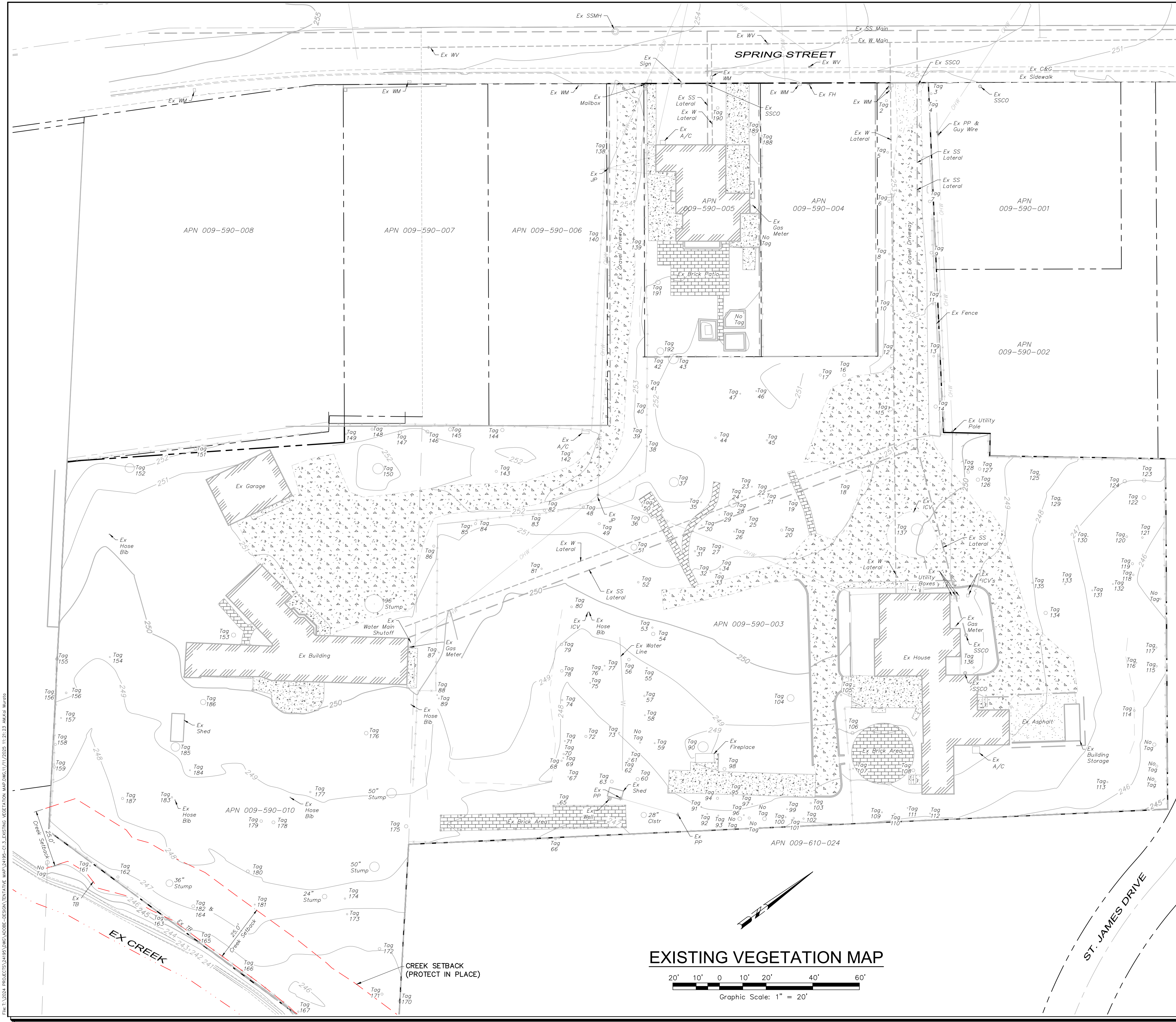
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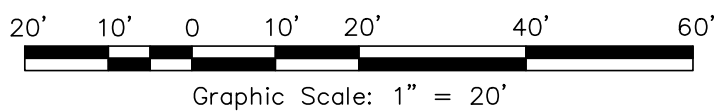
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3 of 18 Sheets

Job 24195

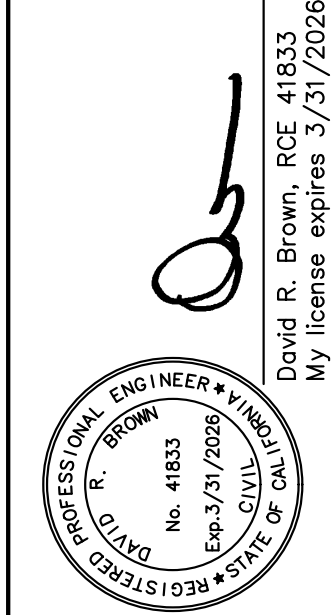


EXISTING VEGETATION MAP



TENTATIVE MAP
SPRING GROVE
EXISTING VEGETATION MAP
1447, 1505, 1515 Spring Street
St Helena, California
APN 009-590-003, -005, -010

SCALE: AS SHOWN	Sheet
Date: November 11, 2025	C1.3
Design by: KM/JAL	4 of 18 Sheets
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Revisions			Approved
No.	Date	Description	

Page 225 of 818

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
1	<i>Quercus agrifolia</i>	Coast Live Oak	8	20	12	4	3	None - Preserved	None
2	<i>Platanus acerifolia</i>	London Plane	13	35	18	4	3	None - Preserved	None
3	<i>Quercus agrifolia</i>	Coast Live Oak	12	35	16	4	3	None - Preserved	None
4	<i>Platanus acerifolia</i>	London Plane	10	35	18	4	3	None - Preserved	None
5	<i>Platanus acerifolia</i>	London Plane	12	40	18	4	3	None - Preserved	None
6	<i>Platanus acerifolia</i>	London Plane	18	40	20	4	3	None - Preserved	None
7	<i>Platanus acerifolia</i>	London Plane	13	40	18	4	3	None - Preserved	None
8	<i>Platanus acerifolia</i>	London Plane	10	40	15	4	3	None - Preserved	None
9	<i>Quercus agrifolia</i>	London Plane	16	40	18	4	3	None - Preserved	None
10	<i>Platanus acerifolia</i>	London Plane	12	40	15	4	3	None - Preserved	None
11	<i>Platanus acerifolia</i>	London Plane	17	40	15	4	3	None - Preserved	None
12	<i>Platanus acerifolia</i>	London Plane	22	45	25	4	3	None - Preserved	None
13	<i>Platanus acerifolia</i>	London Plane	12	40	18	4	3	None - Preserved	None
14	<i>Platanus acerifolia</i>	London Plane	20	45	20	4	3	None - Preserved	None
15	<i>Platanus acerifolia</i>	London Plane	24	55	30	4	3	None - Preserved	None
16	<i>Sequois sempervirens</i>	Coast Redwood	21	60	15	4	3	None - Preserved	None

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
49	<i>Quercus agrifolia</i>	Coast Live Oak	2+2+4+6	20	12	4	3	Removed	N/A
50	<i>Ligustrum lucidum</i>	Glossy Privet	6	20	12	3	3	Removed	N/A
51	<i>Morus alba</i>	Mulberry	11+18	35	16	3	3	Removed	N/A
52	<i>Picea pungens</i>	Colorado Spruce	13	40	15	3	3	Removed	N/A
53	<i>Ligustrum lucidum</i>	Glossy Privet	6+6+6	35	15	3	3	Removed	N/A
54	<i>Ligustrum lucidum</i>	Glossy Privet	9	35	16	3	3	Removed	N/A
55	<i>Trachycarpus fortunei</i>	Windmill Palm	6	8	4	4	3	Removed	N/A
56	<i>Trachycarpus fortunei</i>	Windmill Palm	6	14	4	4	3	Removed	N/A
57	<i>Ligustrum lucidum</i>	Glossy Privet	10	35	16	3	3	Removed	N/A
58	<i>Trachycarpus fortunei</i>	Windmill Palm	6	35	4	4	3	Removed	N/A
59	<i>Prunus domestica</i>	Wild Plum	6	22	12	4	3	Removed	N/A
60	<i>Ligustrum lucidum</i>	Glossy Privet	4+4+5+6	35	16	3	3	Removed	N/A
61	<i>Trachycarpus fortunei</i>	Windmill Palm	6	18	4	4	3	Removed	N/A
62	<i>Trachycarpus fortunei</i>	Windmill Palm	6	24	4	4	3	Removed	N/A
63	<i>Washingtonia robusta</i>	Mexican Fan Palm	21	70	5	4	3	Removed	N/A
64	<i>Olea europaea</i>	Olive	26+6+6+7	25	16	4	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
97	<i>Trachycarpus fortunei</i>	Windmill Palm	7	20	5	4	3	Removed	N/A
98	<i>Ligustrum lucidum</i>	Glossy Privet	40	18	4	3	3	Removed	N/A
99	<i>Trachycarpus fortunei</i>	Windmill Palm	6	12	4	4	3	Removed	N/A
100	<i>Ligustrum lucidum</i>	Glossy Privet	6	35	12	3	3	Removed	N/A
101	<i>Ligustrum lucidum</i>	Glossy Privet	6+4	35	12	3	3	Removed	N/A
102	<i>Ligustrum lucidum</i>	Glossy Privet	6	30	12	3	3	Removed	N/A
103	<i>Trachycarpus fortunei</i>	Windmill Palm	12	22	5	4	3	Removed	N/A
104	<i>Morus alba</i>	Mulberry	20+20+20+26	35	30	3	3	Removed	N/A
105	<i>Robinia pseudoacacia</i>	Locust	8	35	18	3	3	Removed	N/A
106	<i>Ligustrum lucidum</i>	Glossy Privet	6+8	40	18	3	3	Removed	N/A
107	<i>Magnolia grandiflora</i>	Southern Magnolia	6	30	12	4	3	Removed	N/A
108	<i>Robinia pseudoacacia</i>	Locust	28	45	18	3	2	Removed	N/A
109	<i>Sequois sempervirens</i>	Coast Redwood	7	40	12	4	3	Removed	N/A
110	<i>Sequois sempervirens</i>	Coast Redwood	6	40	12	4	3	Removed	N/A
111	<i>Robinia pseudoacacia</i>	Locust	6	35	14	4	3	Removed	N/A
112	<i>Ligustrum lucidum</i>	Glossy Privet	6	25	12	3	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
17	<i>Sequois sempervirens</i>	Coast Redwood	13	22	14	2	3	None - Preserved	N/A
18	<i>Trachycarpus fortunei</i>	Windmill Palm	10	18	4	4	3	Removed	N/A
19	<i>Lagerstroemia indica</i>	Crepe Myrtle	6	18	10	3	3	Removed	N/A
20	<i>Albizia julibrissen</i>	Silk Tree	10	18	10	3	3	Removed	N/A
21	<i>Trachycarpus fortunei</i>	Windmill Palm	6	9	4	4	3	Removed	N/A
22	<i>Trachycarpus fortunei</i>	Windmill Palm	6	14	4	4	3	Removed	N/A
23	<i>Trachycarpus fortunei</i>	Windmill Palm	6	12	4	4	3	Removed	N/A
24	<i>Trachycarpus fortunei</i>	Windmill Palm	6	30	4	4	3	Removed	N/A
25	<i>Trachycarpus fortunei</i>	Windmill Palm	6	14	4	4	3	Removed	N/A
26	<i>Trachycarpus fortunei</i>	Windmill Palm	6	12	4	4	3	Removed	N/A
27	<i>Ficus carcla</i>	Fig	5+5+5+5+6	14	10	4	3	Removed	N/A
28	<i>Trachycarpus fortunei</i>	Windmill Palm	6	10	4	4	3	Removed	N/A
29	<i>Trachycarpus fortunei</i>	Windmill Palm	6+6+6+6+6+6	15	4	4	3	Removed	N/A
30	<i>Trachycarpus fortunei</i>	Windmill Palm	12	12	4	4	3	Removed	N/A
31	<i>Trachycarpus fortunei</i>	Windmill Palm	12	12	4	4	3	Removed	N/A
32	<i>Trachycarpus fortunei</i>	Windmill Palm	7	20	5	4	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
65	<i>Quercus agrifolia</i>	Coast Live Oak	6	25	14	4	3	Removed	N/A
66	<i>Ligustrum lucidum</i>	Glossy Privet	9	12	12	3	3	Removed	N/A
67	<i>Trachycarpus fortunei</i>	Windmill Palm	6	12	4	4	3	Removed	N/A
68	<i>Trachycarpus fortunei</i>	Windmill Palm	8	12	4	4	3	Removed	N/A
69	<i>Trachycarpus fortunei</i>	Windmill Palm	6	20	4	4	3	Removed	N/A
70	<i>Ligustrum lucidum</i>	Glossy Privet	4+7+7	25	18	3	3	Removed	N/A
71	<i>Trachycarpus fortunei</i>	Windmill Palm	7	18	5	4	3	Removed	N/A
72	<i>Morus alba</i>	Mulberry	6+8	22	15	3	3	Removed	N/A
73	<i>Trachycarpus fortunei</i>	Windmill Palm	6	10	4	4	3	Removed	N/A
74	<i>Trachycarpus fortunei</i>	Windmill Palm	7	15	5	4	3	Removed	N/A
75	<i>Quercus agrifolia</i>	Coast Live Oak	7	35	15	4	3	Removed	N/A
76	<i>Quercus agrifolia</i>	Coast Live Oak	6	30	18	4	3	Removed	N/A
77	<i>Quercus agrifolia</i>	Coast Live Oak	6	35	14	4	3	Removed	N/A
78	<i>Washingtonia robusta</i>	Mexican Fan Palm	13	30	5	4	3	Removed	N/A
79	<i>Washingtonia robusta</i>	Mexican Fan Palm	18	40	5	4	3	Removed	N/A
80	<i>Cedrus deodara</i>	Deodar Cedar	10	50	14	3	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
113	<i>Pistace chinensis</i>	Chinese Pistache	7	30	15	4	3	Removed	N/A
114	<i>Quercus agrifolia</i>	Coast Live Oak	6+8+12	25	18	4	3	Removed	N/A
115	<i>Liquidambar styraciflua</i>	Sweetgum	13	50	16	4	3	Removed	N/A
116	<i>Photinia fraseri</i>	Photinia	7	22	18	4	3	Removed	N/A
117	<i>Robinia pseudoacacia</i>	Locust	8	35	16	3	3	Removed	N/A
118	<i>Sequois sempervirens</i>	Coast Redwood	10	35	14	4	3	Removed	N/A
119	<i>Sequois sempervirens</i>	Coast Redwood	12	45	15	4	3	Removed	N/A
120	<i>Sequois sempervirens</i>	Coast Redwood	12	45	15	4	3	Removed	N/A
121	<i>Quercus lobata</i>	Valley Oak	10	45	20	4	3	Removed	N/A
122	<i>Sequois sempervirens</i>	Coast Redwood	25	60	15	4	3	Removed	N/A
123	<i>Sequois sempervirens</i>	Coast Redwood	22	60	15	4	3	Removed	N/A
124	<i>Sequois sempervirens</i>	Coast Redwood	22	60	15	4	3	Removed	N/A
125	<i>Quercus lobata</i>	Valley Oak	6	40	18	4	3	Removed	N/A
126	<i>Sequois sempervirens</i>	Coast Redwood	28	60	15	4	3	Removed	N/A
127	<i>Sequois sempervirens</i>	Coast Redwood	15	60	15	4	3	Removed	N/A
128	<i>Sequois sempervirens</i>	Coast Redwood	20	60	15	4	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
33	<i>Trachycarpus fortunei</i>	Windmill Palm	8+7	12	4	4	3	Removed	N/A
34	<i>Trachycarpus fortunei</i>	Windmill Palm	8	12	4	4	3	Removed	N/A
35	<i>Trachycarpus fortunei</i>	Windmill Palm	6	8	4	4	3	Removed	N/A
36	<i>Ligustrum lucidum</i>	Glossy Privet	3+3+4+5+5+5+6	35	15	3	2	Removed	N/A
37	<i>Quercus lobata</i>	Valley Oak	55	50	30	2.5	3	Removed	N/A
38	<i>Quercus agrifolia</i>	Coast Live Oak	11	25	14	3	3	Removed	N/A
39	<i>Quercus lobata</i>	Valley Oak	5	30	8	3	3	Removed	N/A
40	<i>Ligustrum lucidum</i>	Glossy Privet	6	30	12	3	3	Removed	N/A
41	<i>Quercus lobata</i>	Valley Oak	14	45	18	4	3	Removed	N/A
42	<i>Ligustrum lucidum</i>	Glossy Privet	6+7	14	15	3	3	Removed	N/A
43	<i>Ligustrum lucidum</i>	Glossy Privet	4+6+6+6+7+7+8	25	30	3	2	Removed	N/A
44	<i>Fraxinus oxy. RaywoodII</i>	Raywood Ash	10	30	12	4	3	Removed	N/A
45	<i>Aesculus carnea</i>	Red horsechestnut	6+7	25	12	4	3	Removed	N/A
46	<i>Quercus lobata</i>	Valley Oak	6	30	12	4	3	Removed	N/A
47	<i>Pyrus communis</i>	Pear	2+2+3+5	14	12	3	3	Removed	N/A
48	<i>Ligustrum lucidum</i>	Glossy Privet	6+7+8	15	12	1	2	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
81	<i>Diospyros kaki</i>	Permisson	6+6	18	12	2	2	Removed	N/A
82	<i>Quercus lobata</i>	Valley Oak	13	40	20	4	3	Removed	N/A
83	<i>Ligustrum lucidum</i>	Glossy Privet	6	25	14	2	3	Removed	N/A
84	<i>Quercus lobata</i>	Valley Oak	15	40	21	4	3	Removed	N/A
85	<i>Quercus agrifolia</i>	Coast Live Oak	6	14	10	0	0	Removed	N/A
86	<i>Quercus agrifolia</i>	Coast Live Oak	14	35	18	4	3	Removed	N/A
87	<i>Quercus lobata</i>	Valley Oak	6	30	15	4	3	Removed	N/A
88	<i>Quercus lobata</i>	Valley Oak	6	20	15	4	3	Removed	N/A
89	<i>Quercus lobata</i>	Valley Oak	7	35	16	4	3	Removed	N/A
90	<i>Quercus lobata</i>	Valley Oak	55	50	30	1	1	Removed	N/A
91	<i>Trachycarpus fortunei</i>	Windmill Palm	9	20	4	1	3	Removed	N/A
92	<i>Ligustrum lucidum</i>	Glossy Privet	8	25	12	4	3	Removed	N/A
93	<i>Trachycarpus fortunei</i>	Windmill Palm	6	12	4	4	3	Removed	N/A
94	<i>Ligustrum lucidum</i>	Glossy Privet	6+7+7	35	12	3	3	Removed	N/A
95	<i>Ligustrum lucidum</i>	Glossy Privet	6	35	18	3	3	Removed	N/A
96	<i>Trachycarpus fortunei</i>	Windmill Palm	6	6	4	4	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
129	<i>Quercus agrifolia</i>	Coast Live Oak	6	35	14	4	3	Removed	N/A
130	<i>Quercus agrifolia</i>	Coast Live Oak	6	30	12	4	3	Removed	N/A
131	<i>Albizia julibrissen</i>	Silk Tree	6	30	15	4	3	Removed	N/A
132	<i>Quercus agrifolia</i>	Coast Live Oak	6	30	12	4	3	Removed	N/A
133	<i>Albizia julibrissen</i>	Silk Tree	6	30	16	4	3	Removed	N/A
134	<i>Crataegus phenopyrum</i>	Hawthorn	6+6+9	22	15	4	3	Removed	N/A
135	<i>Trachycarpus fortunei</i>	Windmill Palm	7	24	5	4	3	Removed	N/A
136	<i>Trachycarpus fortunei</i>	Windmill Palm	8	30	5	4	3	Removed	N/A
137	<i>Trachycarpus fortunei</i>	Windmill Palm	10+10	12	12	4	3	Removed	N/A
138	<i>Quercus lobata</i>	Valley Oak	6	30	14	4	3	Removed	N/A
139	<i>Quercus lobata</i>	Valley Oak	12	40	18	4	3	Removed	N/A
140	<i>Quercus agrifolia</i>	Coast Live Oak	11	25	12	4	3	Removed	N/A
141	No #141	x	x	x	x	x	x	x	x
142	<i>Quercus lobata</i>	Valley Oak	12	40	24	4	3	None - Preserved	None
143	<i>Quercus lobata</i>	Valley Oak	14	40	16	4	3	Removed	N/A
144	<i>Sequois sempervirens</i>	Coast Redwood	24	50	15	4	3	None - Preserved	None

File: J:\2024\2004-0000\2004-0000\2004-0000\TENTATIVE MAP 2415-014 TREE INVENTORY.DWG 11/17/2025 11:25:40 AM dms hmd

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
145	<i>Sequois sempervirens</i>	Coast Redwood	28	40	14	4	3	None - Preserved	None
146	<i>Sequois sempervirens</i>	Coast Redwood	17	40	14	4	3	None - Preserved	None
147	<i>Sequois sempervirens</i>	Coast Redwood	19	50	15	4	3	None - Preserved	None
148	<i>Sequois sempervirens</i>	Coast Redwood	14	40	15	4	3	None - Preserved	None
149	<i>Sequois sempervirens</i>	Coast Redwood	7	35	14	4	3	None - Preserved	None
150	<i>Eucaluptus globulus</i>	Blue Gum	30+36	70	30	4	3	Removed	N/A
151	<i>Quercus lobata</i>	Valley Oak	22	40	25	4	3	Removed	N/A
152	<i>Quercus lobata</i>	Valley Oak	75	45	40	4	2.5	Removed	N/A
153	<i>Platanus acerifolia</i>	London Plane	32	50	30	4	3	Removed	N/A
154	<i>Pyrus communis</i>	Pear	6	12	8	4	3	Removed	N/A
155	<i>Quercus lobata</i>	Valley Oak	15	40	21	4	3	None - Preserved	None
156	<i>Quercus lobata</i>	Valley Oak	13	40	22	4	3	Removed	N/A
157	<i>Quercus lobata</i>	Valley Oak	6	35	15	4	3	Removed	N/A
158	<i>Ligustrum lucidum</i>	Glossy Privet	4+5+6	25	16	3	3	Removed	N/A
159	<i>Quercus agrifolia</i>	Coast Live Oak	22	40	30	4	3	None - Preserved	None
160	<i>Ligustrum lucidum</i>	Glossy Privet	7	25	14	3	3	Removed	None

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
193	<i>Ligustrum lucidum</i>	Glossy Privet	5+6	25	12	2	3	Removed	N/A
194	<i>Olea europaeaea</i>	Olive	3+3+4+4	14	12	4	3	Removed	N/A
195	<i>Olea europaeaea</i>	Olive	2+3+4+4	14	12	4	3	Removed	N/A
196	<i>Olea europaeaea</i>	Olive	5+5+5+6	14	12	4	3	Removed	N/A
197	<i>Quercus agrifolia</i>	Coast Live Oak	12	40	18	4	3	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
161	<i>Quercus lobata</i>	Valley Oak	9	30	15	4	3	None - Preserved	None
162	<i>Ligustrum lucidum</i>	Glossy Privet	5+6	30	14	3	3	None - Preserved	None
163	<i>Quercus lobata</i>	Valley Oak	17	45	21	4	3	None - Preserved	None
164	<i>Olea europaeaea</i>	Olive	6+10	22	16	4	3	None - Preserved	None
165	<i>Quercus lobata</i>	Valley Oak	13	40	22	4	3	None - Preserved	None
166	<i>Quercus lobata</i>	Valley Oak	13	45	21	4	3	None - Preserved	None
167	<i>Juglans nigra</i>	Black Walnut	7	25	15	2	3	None - Preserved	None
168	<i>Quercus lobata</i>	Valley Oak	50	50	40	4	3	None - Preserved	None
169	<i>Quercus lobata</i>	Valley Oak	6	40	25	3	3	None - Preserved	None
170	<i>Quercus lobata</i>	Valley Oak	14	45	30	4	3	Removed	N/A
171	<i>Ligustrum lucidum</i>	Glossy Privet	5+9	35	14	2	3	Removed	N/A
172	<i>Ligustrum lucidum</i>	Glossy Privet	12	35	14	2	2	Removed	N/A
173	<i>Ligustrum lucidum</i>	Glossy Privet	4+4+5+5+6	35	15	2	2	Removed	N/A
174	<i>Ligustrum lucidum</i>	Glossy Privet	10	35	16	2	3	Removed	N/A
175	<i>Photinia serrulata</i>	Photinia	3+4+5+6	15	14	2	3	Removed	N/A
176	<i>Ulmus parvifolia</i>	Siberian Elm	26	22	16	2	2	Removed	N/A

			Trunk	Height	Radius	Health	Structure		
Tree #	Species	Common Name	(dbh +/- in.)	(+/- ft.)	(+/- ft.)	(1-5)	(1-5)	Development Impacts	Recommendations
177	<i>Diospyros kaki</i>	Permission	5+8	14	10	1	2	Removed	N/A
178	<i>Trachycarpus fortunei</i>	Windmill Palm	5+6	10	4	4	3	Removed	N/A
179	<i>Quercus agrifolia</i>	Coast Live Oak	15	40	20	4	3	Removed	N/A
180	<i>Ligustrum lucidum</i>	Glossy Privet	6	30	15	3	3	Removed	N/A
181	<i>Ligustrum lucidum</i>	Glossy Privet	6	30	15	2	2	Removed	N/A
182	<i>Ligustrum lucidum</i>	Glossy Privet	6	30	15	2	3	Removed	N/A
183	<i>Quercus lobata</i>	Valley Oak	7	40	15	4	3	Removed	N/A
184	<i>Trachycarpus fortunei</i>	Windmill Palm	6	14	4	4	3	Removed	N/A
185	<i>Sequois sempervirens</i>	Coast Redwood	60	15	5	0	0	Removed	N/A
186	<i>Cedrus deodara</i>	Deodar Cedar	40	60	21	3	3	Removed	N/A
187	<i>Quercus lobata</i>	Valley Oak	14	45	22	4	3	Removed	N/A
188	<i>Juniperus species</i>	Upright Juniper	18	30	14	3	3	Removed	N/A
189	<i>Juniperus species</i>	Upright Juniper	18	25	14	3	3	Removed	N/A
190	<i>Platanus acerifolia</i>	London Plane	14	40	30	4	3	Removed	N/A
191	<i>Cedrus deodara</i>	Deodar Cedar	28	60	18	4	3	Removed	N/A
192	<i>Aesculus carnea</i>	Red horsechestnut	3+6	30	15	4	3	Removed	N/A

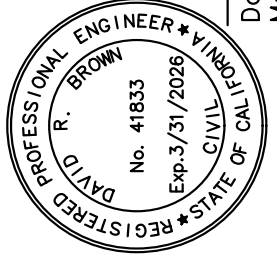
TENTATIVE MAP
SPRING GROVE
TREE INVENTORY

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St Helena, California
APN 009-590-003, -005, -010

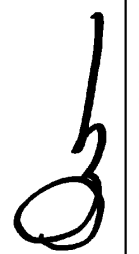
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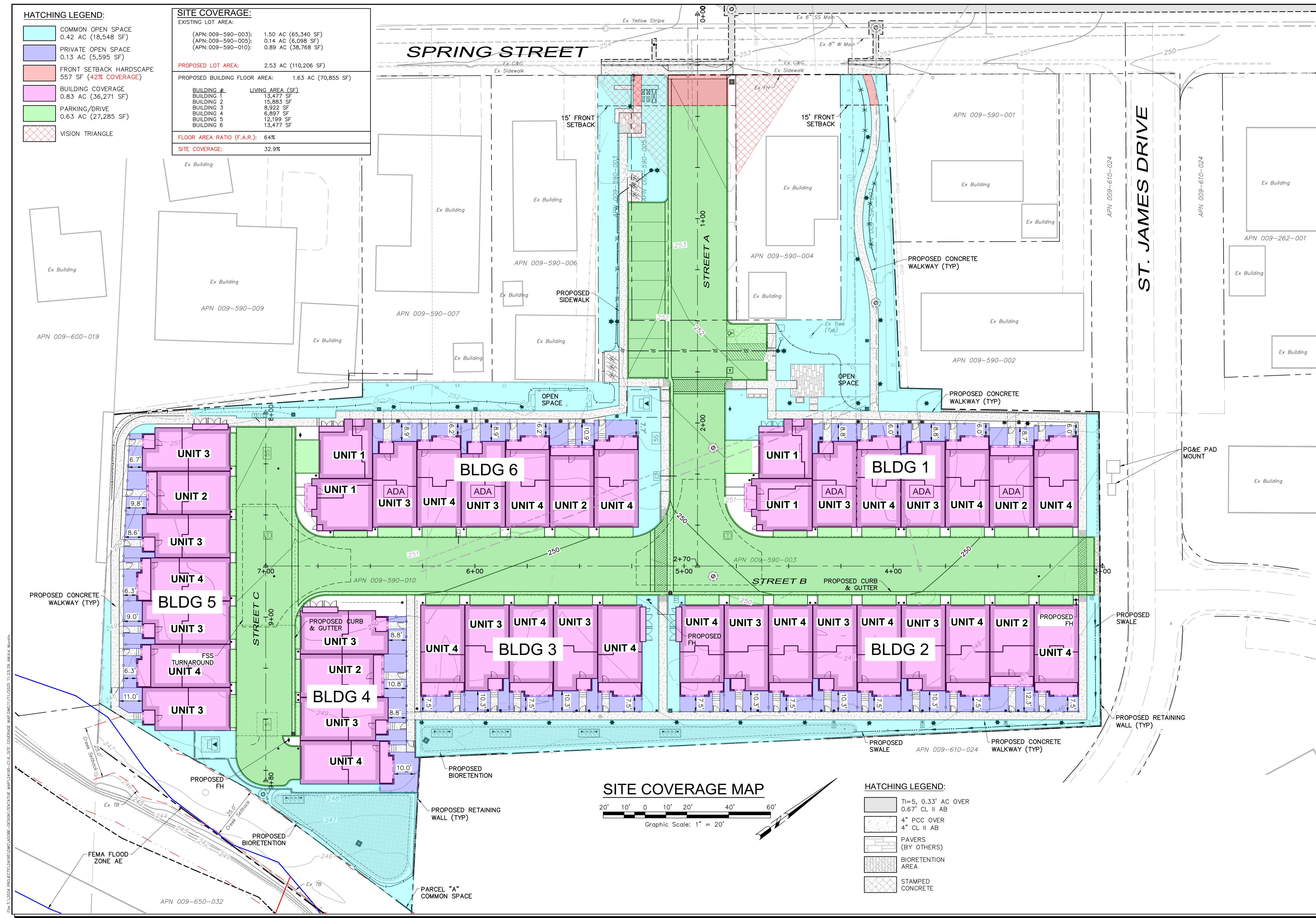




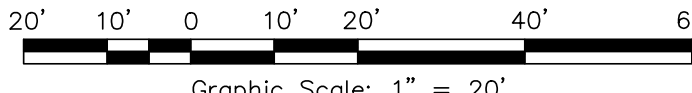
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SITE COVERAGE MAP



HATCHING LEGEND:

- TI=5, 0.33' AC OVER
0.67' CL II AB
- 4" PCC OVER
4" CL II AB
- PAVERS
(BY OTHERS)
- BIORETENTION
AREA
- STAMPED
CONCRETE

TENTATIVE MAP
SPRING GROVE
SITE COVERAGE MAP
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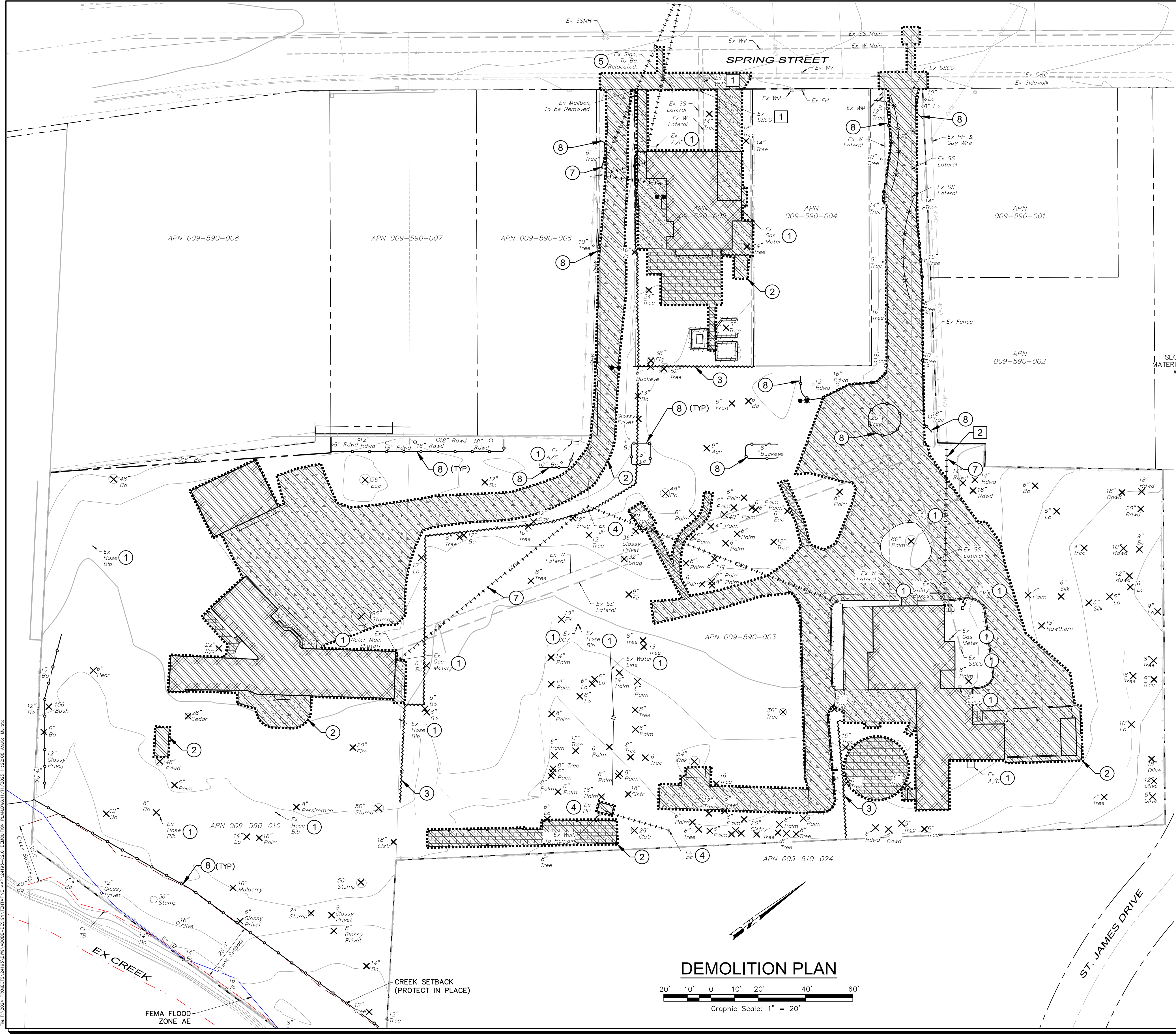
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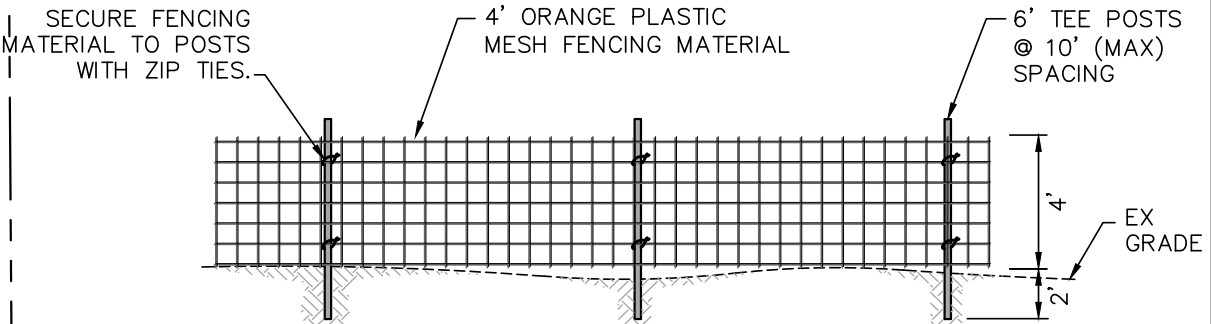


DEMOLITION TABLE *			
SYMBOL	DEMOLITION FEATURE	UNITS	QUANTITY
.....	APPROXIMATE LIMIT OF DEMOLITION WORK	SQ FT	±33,789
①	REMOVE UTILITY	EA	15
②	REMOVE EXISTING BUILDING, HARDSCAPE, & GRAVEL	SQ FT	±30,036
////////	REMOVE EXISTING WALL	LF	±395
~~~~~	REMOVE EXISTING FENCE	LF	±485
④	REMOVE EXISTING UTILITY/LIGHT POLE	EA	3
⑤	REMOVE EXISTING SIGNS	EA	1
✕	REMOVE EXISTING TREE	EA	153
.....	REMOVE EX OVERHEAD WIRE	LF	±539
⑧	TREE PROTECTION FENCING	LF	±640

* CONTRACTOR TO VERIFY QUANTITIES PRIOR TO CONSTRUCTION

KEY NOTES:

- ① PROTECT IN PLACE, ADJUST TO GRADE IF NEEDED.
- ② REMOVE GUY WIRE.



NOTES:  
1. CONTRACTOR TO APPLY 2'X3' WATERPROOF SIGNAGE TO ALL FENCED AREAS EVERY 50 FEET TO READ AS FOLLOWS:  
**TREE PROTECTION AREA**  
ALL TREES WITHIN THESE FENCES ARE PROTECTED AND MAY NOT BE DAMAGED OR REMOVED FOR ANY REASON. FENCES MUST REMAIN IN THEIR CURRENT LOCATIONS FOR THE DURATION OF GRADING AND CONSTRUCTION. MOVING OR REMOVING THESE PROTECTIVE FENCES WILL RESULT IN A STOP-WORK ORDER, AND MAY ALSO RESULT IN THE IMPOSITION OF FINES, PENALTIES, OR BOTH.

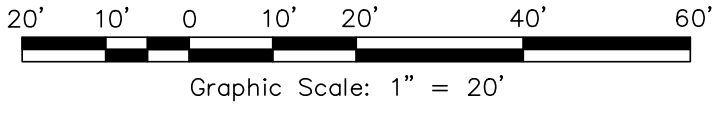
TREE PROTECTION FENCING

NTS

TREE PROTECTION NOTES:

- 1. CONTRACTOR SHALL CONTACT ARBORIST FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY SITE DEMO OR SITE WORK TO INSPECT TREE PROTECTION FENCING.
- 2. SEE TREE PRESERVATION AND MITIGATION REPORT BY HORTICULTURAL ASSOCIATES DATED SEPTEMBER 27, 2024.
- 3. ALL CONTRACTORS ARE RESPONSIBLE FOR COMPLIANCE WITH THE TREE PROTECTION PLAN AND NOTES OF THE PLAN SET. FAILURE TO FULLY COMPLY WITH THE RESTRICTIONS, CONDITIONS, AND MITIGATION MEASURES OF THE TREE PROTECTION PLAN OR NOTES, AS REFLECTED ON THIS SHEET WILL RESULT IN THE ISSUANCE OF A STOP-WORK ORDER, AND MAY ALSO RESULT IN THE IMPOSITION OF FINES, PENALTIES, OR BOTH.
- 4. TREE PROTECTION FENCING TO BE POSTED WITH A SIGN READING ALL TREES WITHIN THESE FENCES ARE PROTECTED AND MAY NOT BE DAMAGED OR REMOVED FOR ANY REASON. FENCES MUST REMAIN IN THEIR CURRENT LOCATIONS FOR THE DURATION OF GRADING AND CONSTRUCTION. MOVING OR REMOVING THESE PROTECTIVE FENCES WILL RESULT IN A STOP-WORK ORDER, AND MAY ALSO RESULT IN THE IMPOSITION OF FINES, PENALTIES, OR BOTH.
- 5. FENCES ARE NOT TO BE REMOVED OR RELOCATED FOR ANY REASON WITHOUT CONSULTATION WITH THE PROJECT ARBORIST, APPROVAL OF REVISED LOCATIONS, AND ANY MITIGATION REQUIRED BY THE RELOCATION. ALL FENCE RELOCATING MUST BE DOCUMENTED IN WRITING BY THE PROJECT ARBORIST AND SUBMITTED TO THE CITY WITHIN 2 DAYS OF MODIFICATION.

DEMOLITION PLAN



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TENTATIVE MAP

SPRING GROVE

DEMOLITION PLAN

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

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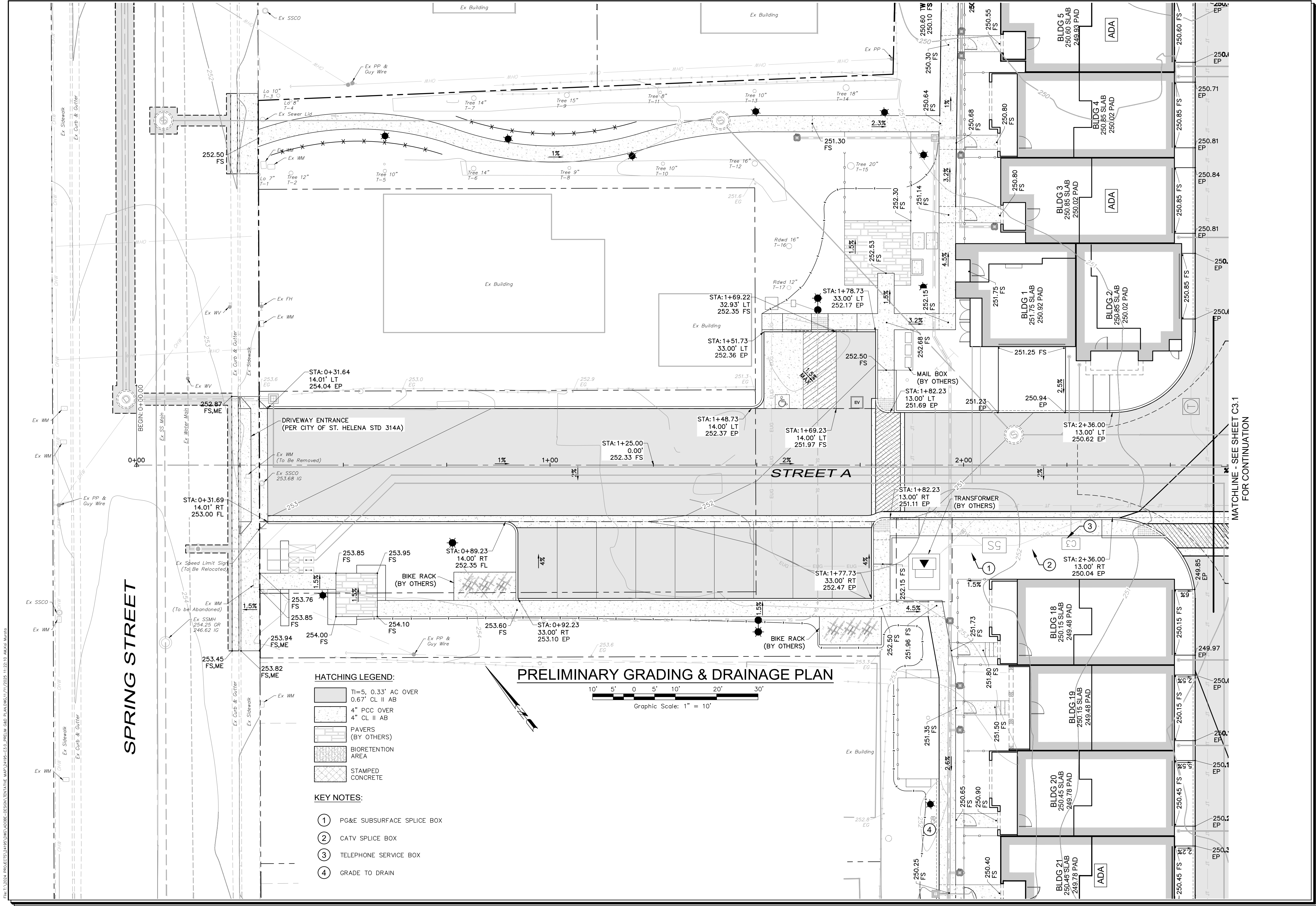
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TENTATIVE MAP

SPRING GROVE

PRELIMINARY GRADING & DRAINAGE PLAN

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

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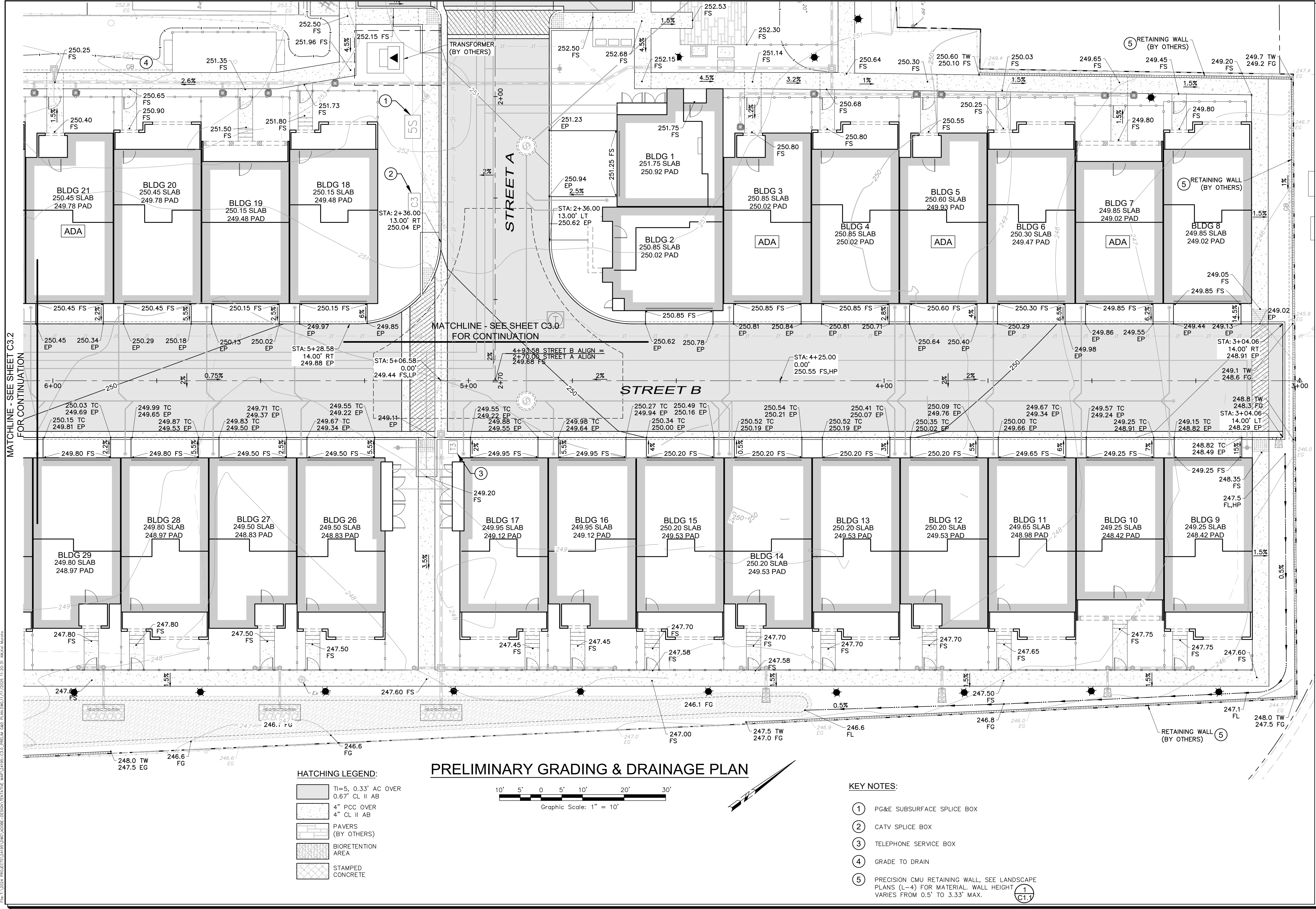
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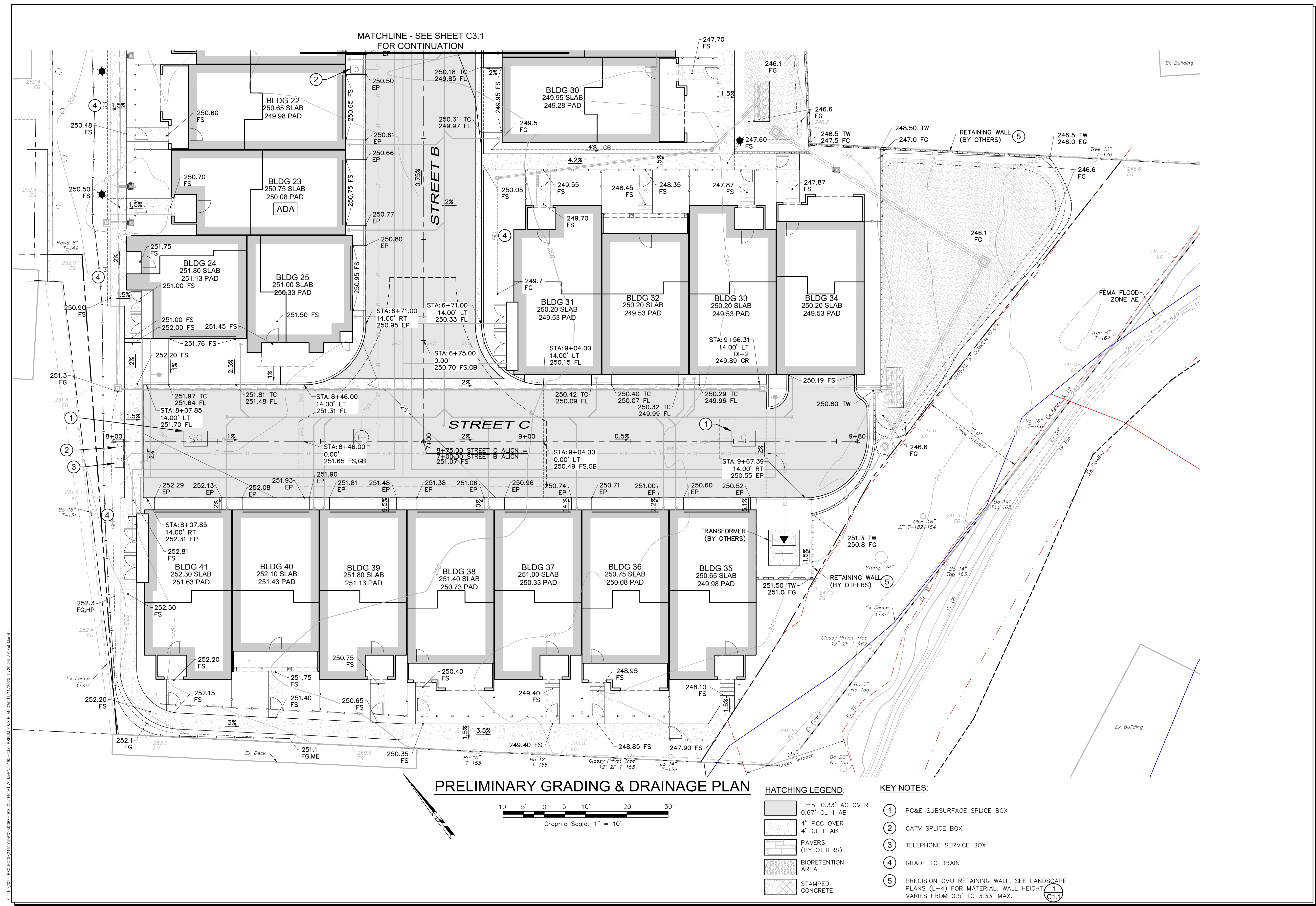
**TENTATIVE MAP**  
**SPRING GROVE**  
**PRELIMINARY GRADING & DRAINAGE PLAN**  
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St Helena, California  
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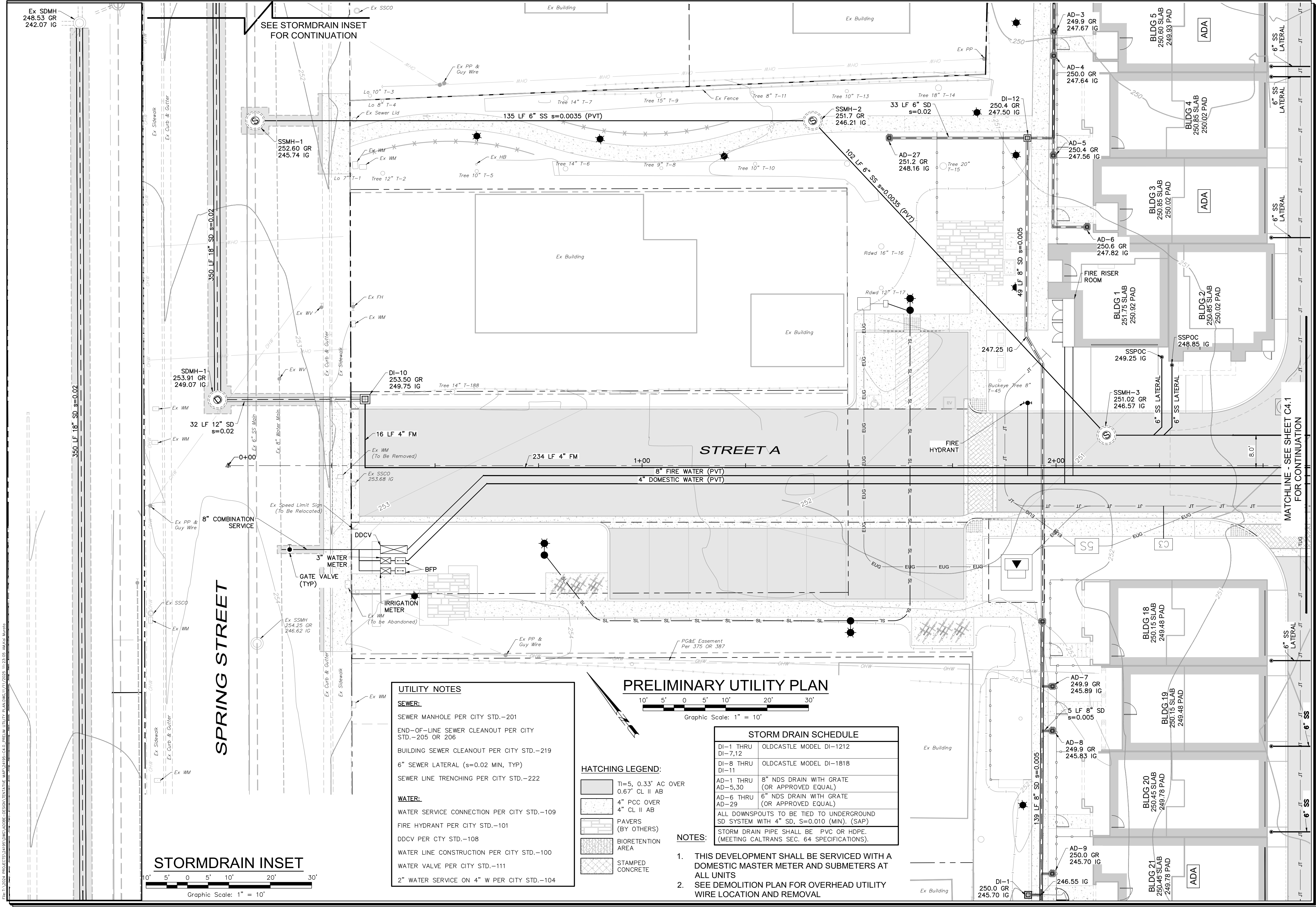
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Agenda Item #11.1





TENTATIVE MAP

SPRING GROVE

PRELIMINARY UTILITY PLAN

1447, 1505, 1515 Spring Street

St Helena, California

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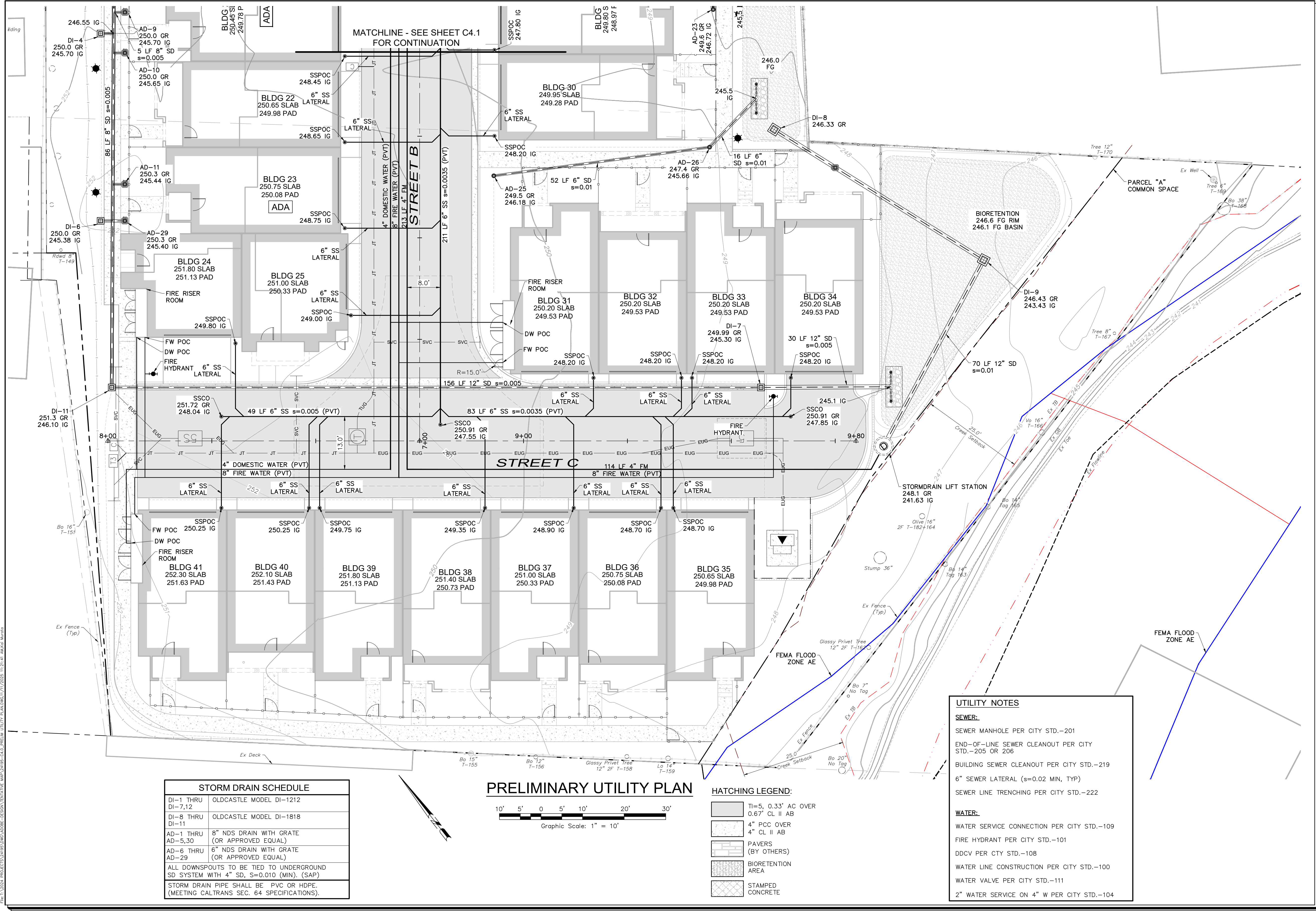
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TENTATIVE MAP

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PRELIMINARY UTILITY PLAN

1447, 1505, 1515 Spring Street

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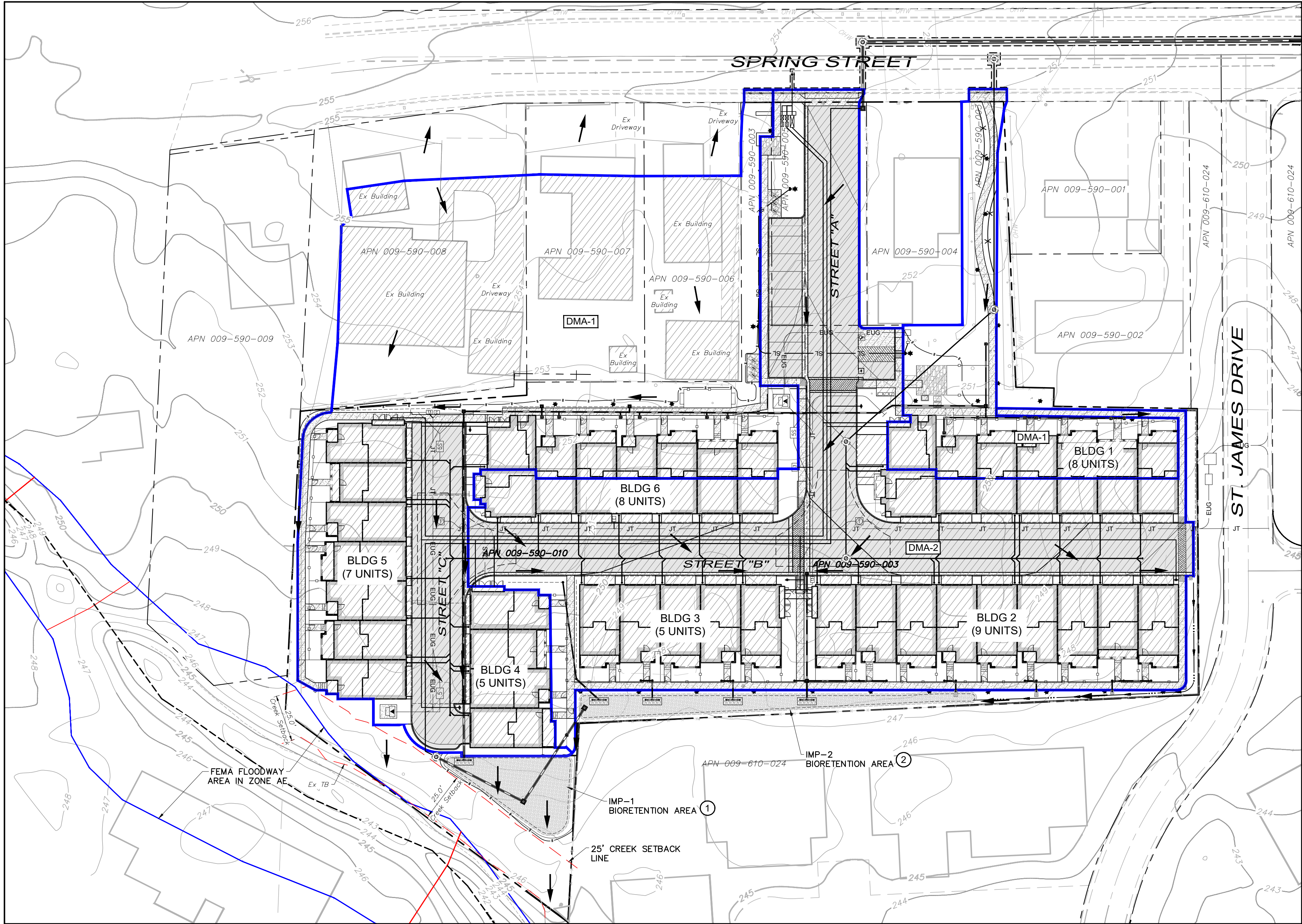
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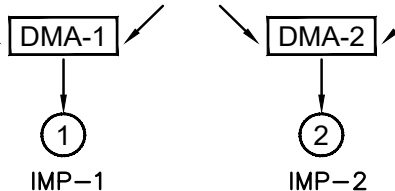
DRAINAGE AREA TABLE

DMA-1 = 1.45 AC  
(63,128 SF)  
  
DMA-2 = 1.22 AC  
(53,144 SF)

DRAINAGE AREA LEGEND

- DMA-1 DRAINAGE MANAGEMENT AREA
- ① POINT OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- - - PROPERTY LINE
- DIRECTION OF FLOW

DRAINAGE ROUTING



Bioretention Sizing: IMP-1

DMA Name	Area (SF) ¹	Post-Project Surface Type	Runoff Factor	Area x Runoff Factor	Facility Name		
DMA-1	40,250.00	Roof Paving	1.0	40,250.00	Bioretention Facility		
	22,878.00	Landscape Areas	0.1	2,287.80	Sizing Factor	Minimum Facility Size (SF) ¹	Proposed Facility Size (SF) ¹
	-	Permeable Pavers	0.2	-			
Total >				42,537.80	0.04	1,702	1,800
Sized Correctly =					TRUE		
Area Oversized (SF) =					98		

Bioretention Sizing: IMP-2

DMA Name	Area (SF) ¹	Post-Project Surface Type	Runoff Factor	Area x Runoff Factor	Facility Name		
DMA-2	46,424.00	Roof Paving	1.0	46,424.00	Bioretention Facility		
	6,720.00	Landscape Areas	0.1	672.00	Sizing Factor	Minimum Facility Size (SF) ¹	Proposed Facility Size (SF) ¹
	-	Permeable Pavers	0.2	-			
Total >				47,096	0.04	1,884	1,920
Sized Correctly =					TRUE		
Area Oversized (SF) =					36		

HATCHING LEGEND

- IMPERVIOUS AREA
- BIORETENTION FACILITY

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NO. 41833

EXP. 3/31/2026

STATE OF CALIFORNIA

REGISTERED

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

My license expires 3/31/2026

SCALE: AS SHOWN

Date: November 11, 2025

Design by: KM/JAL

Drawn by: KM/JAL

Checked by: CT

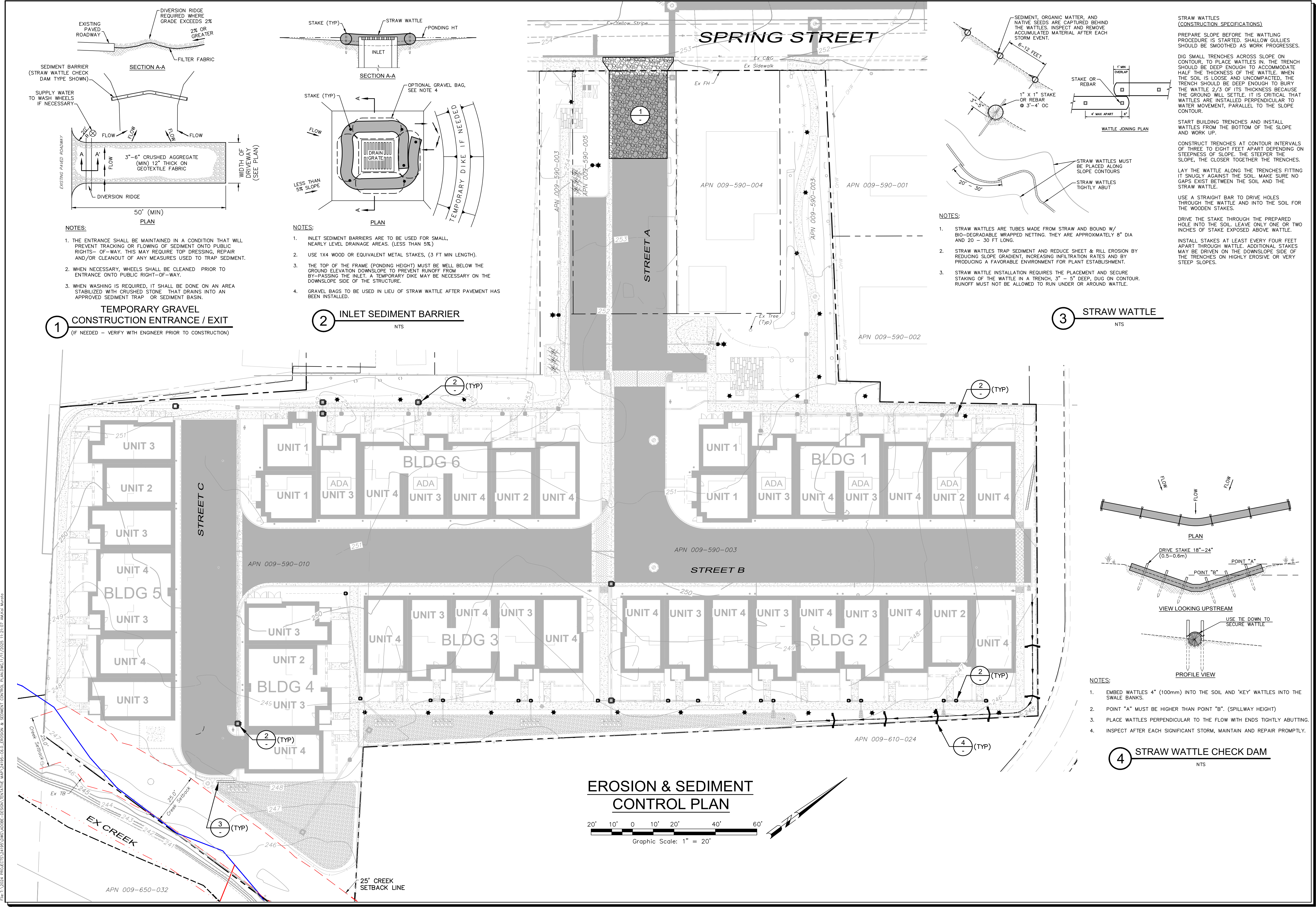
Sheet

C5.0

16 of 18 Sheets

Job 24195





Revisions		Approved	
No.	Date	Description	

**adobe associates, inc.**  
civil engineering / land surveying / wastewater  
1220 N. Dutton Ave. Santa Rosa, CA 95401  
P: (707) 541-2300 F: (707) 541-2301  
Website: www.adobeinc.com

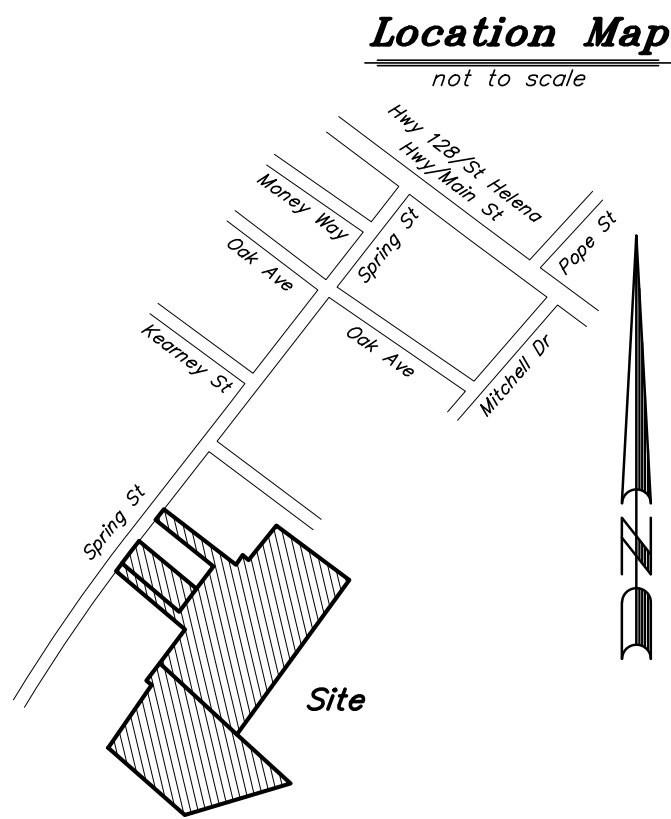
**DAVID R. BROWN**  
REGISTERED PROFESSIONAL ENGINEER  
No. 41833  
Exp. 3/31/2026  
My license expires 3/31/2026

**TENTATIVE MAP**  
**SPRING GROVE**  
**EROSION & SEDIMENT CONTROL PLAN**  
1447, 1505, 1515 Spring Street  
St Helena, California  
APN 009-590-003, -005, -010

**SCALE:** AS SHOWN  
Date: November 11, 2025  
Design by: KM/JAL  
Drawn by: KM/JAL  
Checked by: CT

Sheet  
**C6.0**  
17 of 18 Sheets  
Job 24195





*SURVEYOR/ENGINEER:*

ADOBE ASSOCIATES, INC.  
1220 N. Dutton Avenue  
Santa Rosa, CA. 95401  
(707) 541-2300 phone  
(707) 541-2301 fax  
asmith@adobeinc.com

OWNER/SUBDIVIDER:

City Ventures Homebuilding, LLC  
c/o Kelso Barnett  
1185 Old Mason Street  
San Francisco, CA 94123  
(707) 758-3805 phone  
kbarnett@cityventures.com

### General Notes

Contours shown hereon are a 1' (one foot) vertical interval and are shown based upon a field survey performed by Adobe Associates, Inc., in July and August of 2024.

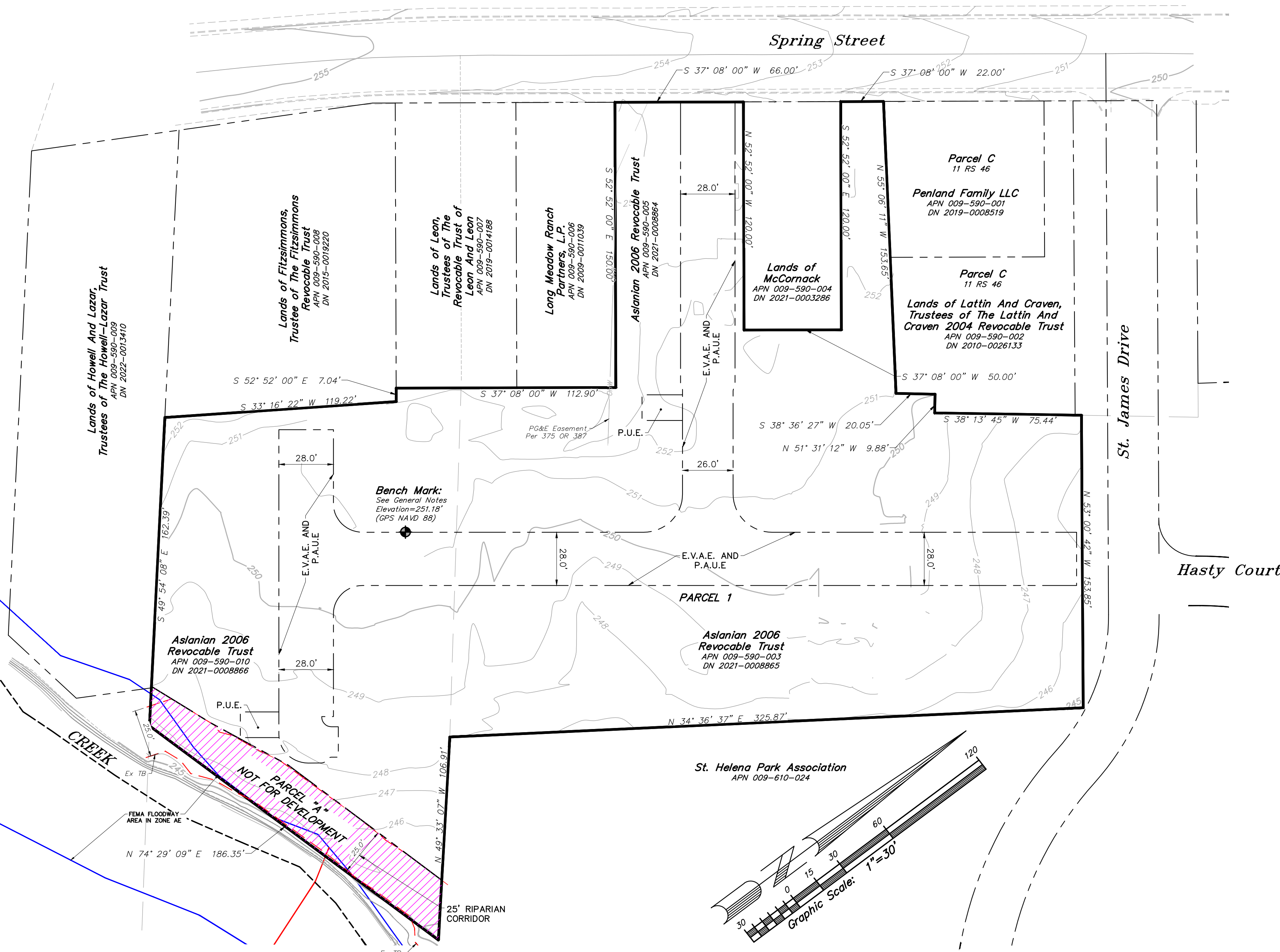
**Bench Mark:** Set 1/2" rebar and cap, Adobe Associates, Inc.  
Control Point #80, as shown hereon. Elevation = 251.18' This  
elevation is on a GPS Derived NAVD88 based upon static GPS  
measurements collected July 31, 2024 and adjusted using the NGS  
OPUS adjustment tool according to Geoid 18.

### ABBREVIATIONS

AE	ACCESS EASEMENT
APN	ASSESSORS PARCEL NUMBER
BM	BENCHMARK
CITY	CITY OF ST. HELENA
CL	CENTERLINE
DN	DOCUMENT NUMBER
ESMT	EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
PAUE	PUBLIC ACCESS AND UTILITY EASEMENT
PL	PROPERTY LINE
PUE	PUBLIC UTILITY EASEMENT
PVT	PRIVATE
R/W	RIGHT OF WAY
WE	WATER EASEMENT

HATCHING LEGEND:

 RIPARIAN CORRIDOR NOT FOR DEVELOPMENT  
(4,482 SF)



Scale:  $1'' = 30'$

Date: November 2025  
Design by: IAL  
Drawn by: IAL  
Checked by: ARS

Sheets

1

18 of 18 sheet  
Job No. 24195



### LEGEND

	ESL	EXISTING STREET LIGHT CONDUIT
	SL	PROPOSED STREET LIGHT CONDUIT
	(XX)(X'S.L. COND.)	STREET LIGHTING CONDUIT LABEL, 'X' INDICATES CONDUIT LENGTH, (XX)(X'S.L. COND.) INDICATES CONDUIT SIZE
	X'(XX)	STREET LIGHTING WIRE LABEL, 'X' INDICATES WIRE LENGTH, (XX) INDICATES WIRE TYPE.
	(2W)	2-#8 CU. WIRE (SEE NOTE 15)
	(3W)	3-#8 CU. WIRE (SEE NOTE 15)
	(3WG)	2-#8 CU. WIRE & 1-#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
	(4WG)	3-#8 CU. WIRE & 1-#8 BARE CU. GROUND (UNLESS OTHERWISE NOTED); SEE NOTE 15 & GROUNDING DETAIL
		EXISTING TRAFFIC SIGNAL
		STREET LIGHTING PULL BOX STATE TYPE #3 1/2, 10" x 17" x 12"
		STREET LIGHTING GROUND BOX STATE TYPE #5, 13" x 24" x 12"
		PROPOSED PRIVATE/PUBLIC STREET LIGHT, POST TOP
		PROPOSED PUBLIC/PRIVATE STREET LIGHT, SINGLE ARM
		PROPOSED PRIVATE LIGHTING BOLLARD
		PROPOSED EXTERIOR LIGHT, WALL MOUNT (BY OTHERS)
		EXISTING STREET LIGHT, POST TOP
		EXISTING STREET LIGHT, SINGLE ARM
		EXISTING STREET LIGHT, DOUBLE ARM
		EXISTING STREET LIGHT, POST TOP, DOUBLE ARM
		EXISTING STREET LIGHT POST TOP, SINGLE ARM
		EXISTING LIGHTING BOLLARD
		EXISTING EXTERIOR LIGHT, WALL MOUNTED (BY OTHERS)
		METERED SERVICE PEDESTAL
		METERED SERVICE PEDESTAL W/ IRRIGATION CONTROLLER
		IRRIGATION CONTROLLER (BY OTHERS)
	(X)	CIRCUIT NUMBER/PHASE (SEE ELECTRIC SOURCE DETAILS)
	(XXXX)	POLE NUMBER
		STREET LIGHT POINT OF SERVICE
	F/CURB	FACE OF CURB

[illegible]

ADDITIONAL NOTES:  
-PRIVATE LIGHTS TO BE MAINTAINED BY H.O.A.  
(HOMEOWNER ASSOCIATION) UPON TRACT  
ACCEPTANCE.

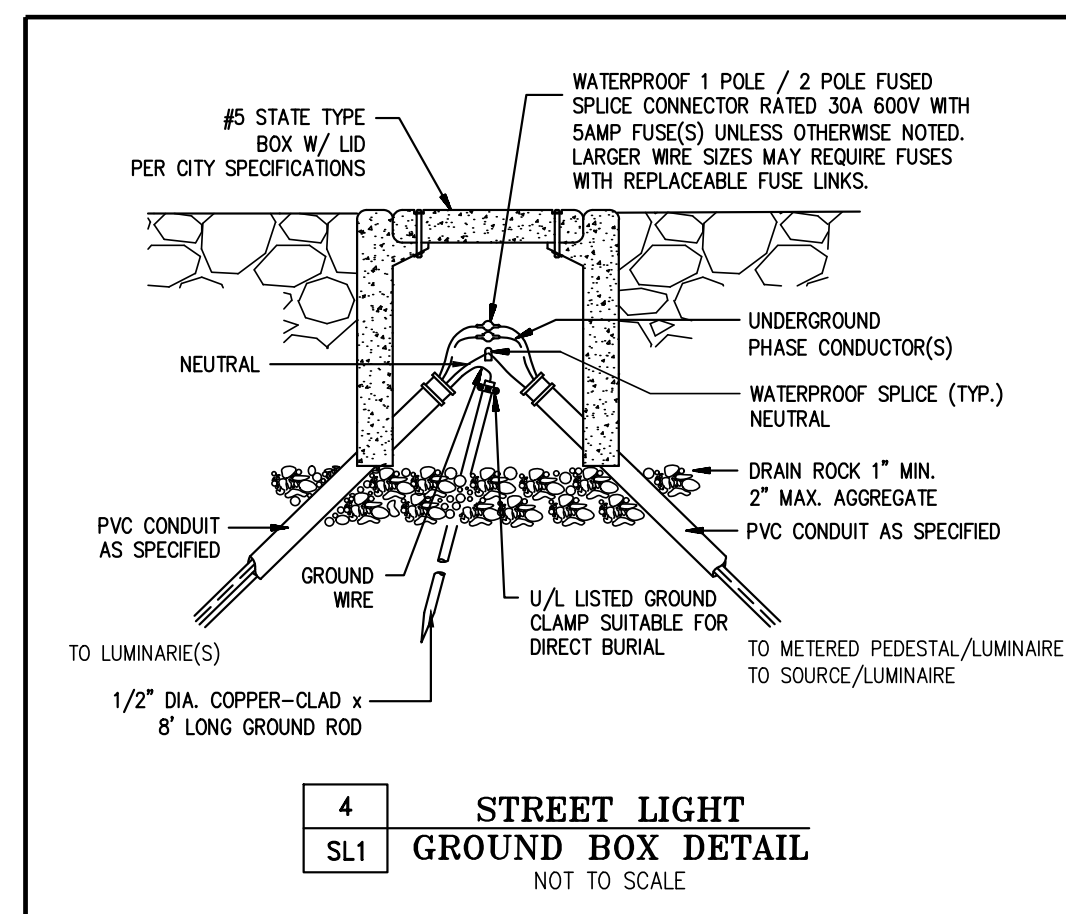
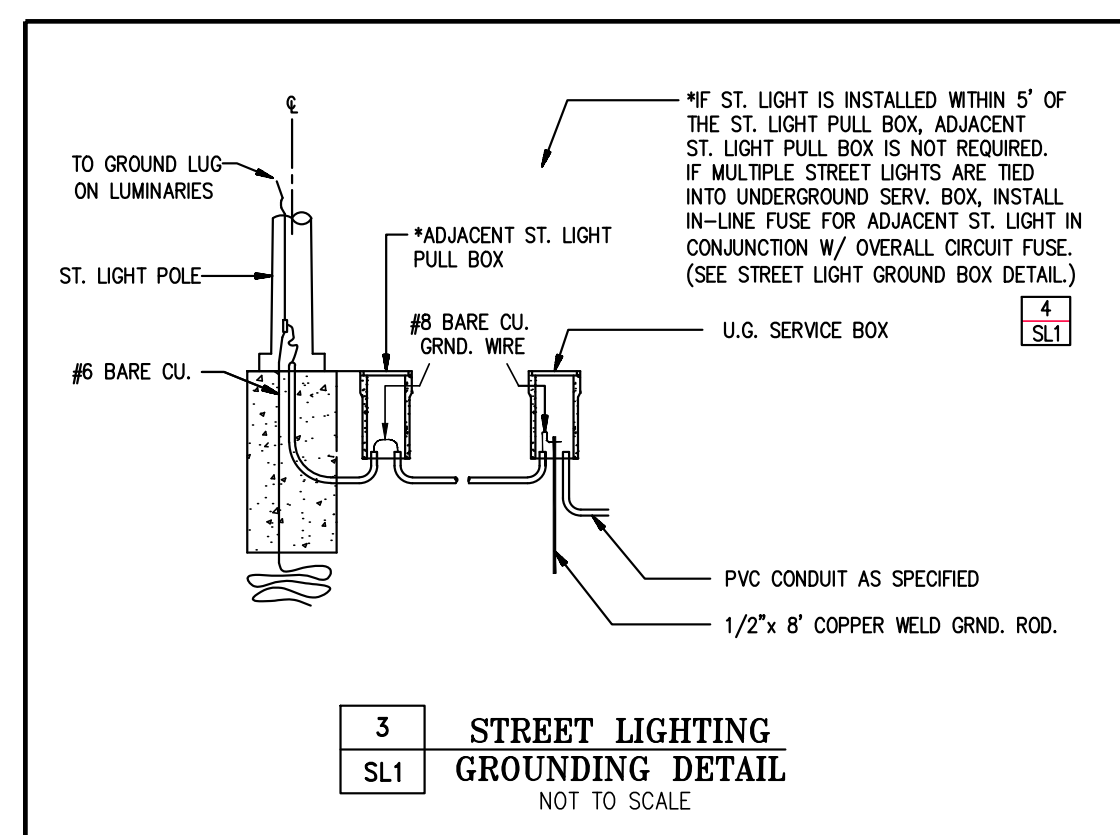
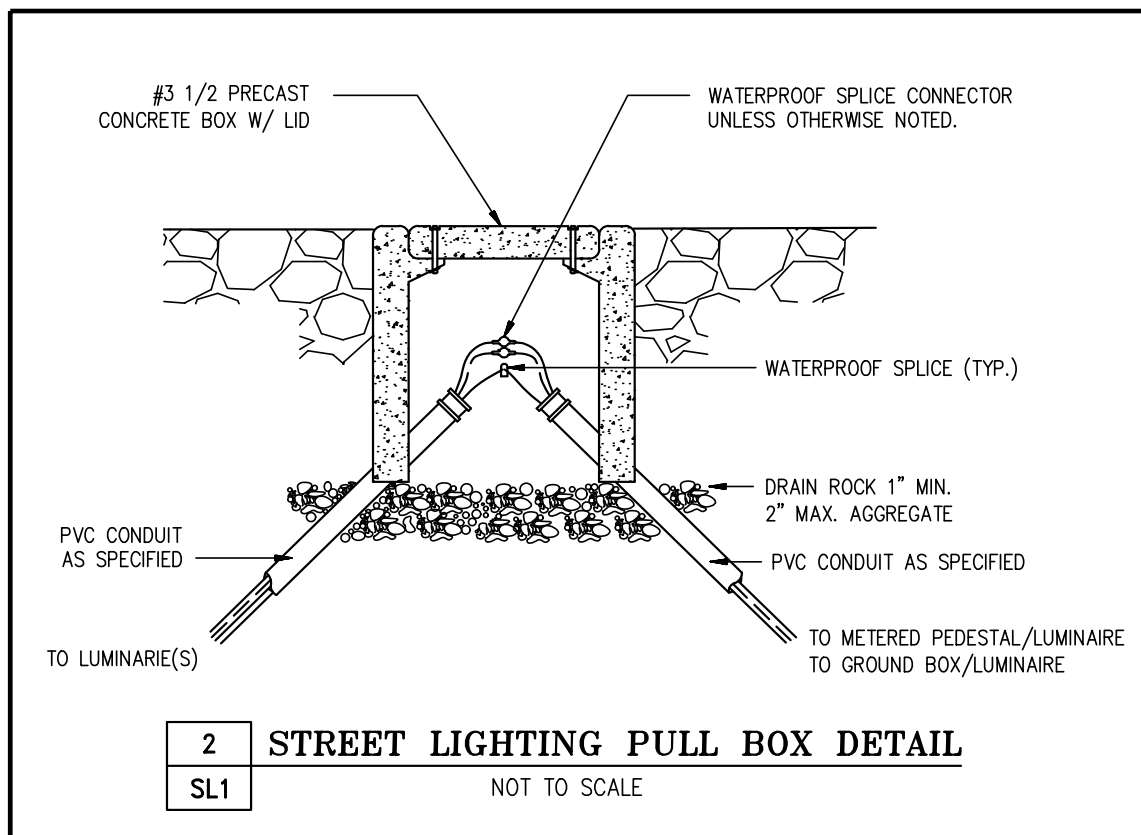
PG&E INSTALLATION RESPONSIBILITY:

PG&E INSTALLS AND CONNECTS THE SERVICE CONDUCTOR, TRANSFORMERS, AND RELATED EQUIPMENT TO COMPLETE THE SERVICE CONNECTION. ONLY PG&E PERSONNEL MAY CONNECT OR DISCONNECT THE CUSTOMER'S LOADS FROM PG&E'S DISTRIBUTION SYSTEM.

METERING:

EACH LIGHTING CIRCUIT OR ELECTROLIER  
CIRCUIT WILL BE SEPARATELY METERED AND  
BILLED.

1. ALL MATERIAL AND WORKMANSHIP SHALL FULLY CONFORM WITH THE NATIONAL ELECTRIC CODE AND STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF ST. HELENA.
2. THE ELECTRICAL CONTRACTOR SHALL INSTALL THE UNDERGROUND SERVICE FROM THE LUMINAIRE TO H.O.A. SERVICE POINT AND TERMINATE CONDUIT AND WIRES AT BOX AS DIRECTED BY THE CITY.
3. KEEP STREET LIGHTS A MINIMUM OF 3 FEET AWAY FROM THE EDGE OF DRIVEWAYS, SEWER AND DRAINAGE LATERALS, AND 5 FEET AWAY FROM FIRE HYDRANTS & CATCH BASINS.
4. TWO OR MORE STREET LIGHTS ON THE SAME CIRCUIT SHALL BE WIRED TO BALANCE THE LOAD. (SEE WIRING DIAGRAM), UNLESS OTHERWISE NOTED.
5. CONDUIT AND FITTINGS: ALL CONDUIT AND FITTINGS SHALL BE U.L. APPROVED SCHEDULE 40 P.V.C. UNLESS OTHERWISE NOTED OR REQUIRED, USE MINIMUM 2" SCH. 40 P.V.C. CONDUIT AND FITTINGS BELOW GRADE. MINIMUM RADIUS BENDS SHALL BE 18". FOR ABOVE GROUND INSTALLATION USE METALLIC RIGID STEEL CONDUIT. PROVIDE PULL WIRE IN EMPTY CONDUITS. ALL CROSSINGS TO BE PERPENDICULAR TO STREET.
6. CONDUIT DEPTH: 24" UNDER SIDEWALK; 24" UNDER PLASTER STRIP; 30" UNDER PAVEMENT.
7. CABLE: CABLE SHALL BE U.L. A.W.G. NO. 8-7-STRAND SOFT COPPER, TYPE THW OR THWN WITH MINIMUM OF 3/64" (40 MIL) POLYVINYLCHLORIDE INSULATION, UNLESS OTHERWISE NOTED. U.L. LISTED 600 VOLT, NO. 10 IN POLE MAY BE USED (40 MIL INSULATION).
8. SPLICE BOXES: SPLICE BOXES SHALL BE NO. 3-1/2 STATE TYPE WITH LID AND BRASS HOLD DOWN BOLTS, UNLESS OTHERWISE NOTED. LIDS TO BE INSCRIBED "STREET LIGHTING". SPLICE BOXES SHALL NOT BE MORE THAN 200 FEET APART ON LONG RUNS. SPLICE BOXES TO BE SET ON A CONCRETE FOOTING WHEN SUBJECT TO TRAFFIC LOAD.
9. FUSES: EACH POLE SHALL BE FUSED WITH WATERPROOF IN-LINE FUSE HOLDERS AT EACH ADJACENT BOX WITH 5 AMP FUSE. FOR DUPLEX LIGHTS, EACH LUMINAIRE SHALL BE FUSED SEPARATELY.
10. SPLICING: ALL SPLICES SHALL BE MADE IN HAND HOLES OR SPLICE BOXES ONLY. SPLICES SHALL BE MADE WITH "STACK - ON" CRIMP JUNCTION, "SCOTCH LOCK" FASTENERS, OR APPROVED EQUAL. ON SPLICES MADE BELOW GRADE, WRAP WITH MOISTURE PROOF INSULATION THICKNESS.
11. POLE NUMBERS: OBTAIN AND PLACE POLE NUMBERS ON ALL STREET LIGHT STANDARDS AS REQUIRED. COORDINATE WITH THE CITY FOR THEIR REQUIREMENTS.
12. TRENCH: CONDUIT CANNOT BE PLACED IN JOINT TRENCH. THE CONDUIT LAYOUT IS SHOWN SCHEMATICALLY. USE COMPOSITE DRAWING FOR TRENCH AND BOX LOCATIONS. ANY INCIDENTAL TRENCHING NOT PROVIDED BY TRENCHING AGENT IS CONTRACTOR'S RESPONSIBILITY.
13. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT FIRST NOTIFYING TARRAR UTILITY CONSULTANTS.
14. TARRAR UTILITY CONSULTANTS ASSUMES NO RESPONSIBILITY FOR ANY VARIANCE BETWEEN THESE PLANS AND THE ACTUAL FIELD CONDITIONS. CONTRACTOR SHOULD REVIEW PROJECT SITE PRIOR TO SUBMITTING ITS BID.
15. CONTRACTOR TO CONSULT WITH LOCAL AGENCIES FOR THEIR CIRCUIT GROUNDING REQUIREMENTS. IF GROUND WIRE IS REQUIRED IN CONDUIT, INSTALL ACCORDINGLY.
16. LEGEND SYMBOLS ARE SHOWN IN STREET AREA FOR CLARITY. INSTALL BEHIND CURB AND/OR SIDEWALK PER THE CITY SPECIFICATIONS KEEP CLEAR OF DRIVEWAYS AND PATHWAYS (TYPICAL).
17. CENTERLINE OF STREET LIGHTS SHALL BE LOCATED ON THE LOT LINE UNLESS OTHERWISE NOTED ON THESE PLANS.
18. ANY CHANGES OR MODIFICATIONS TO PROPOSED STREET LIGHT LOCATIONS SHALL BE APPROVED, IN WRITING, BY THE CITY PRIOR TO INSTALLATION.
19. SET ALL STREET LIGHTS TO ULTIMATE FINISHED GRADE. CONSULT WITH CITY FOR PROPER FISHING PROTECTION AND/OR SIGNING AND STRIPING ADJUSTED TO ANY STREET LIGHTS INSTALLED IN THEIR ULTIMATE LOCATIONS THAT ARE NOT PROTECTED BY A VERTICAL CURB, BERM AND COMPACT EARTH TO FINISHED GRADE A MINIMUM OF 5' AROUND STREET LIGHT BASES AT THESE LOCATIONS.
20. CONTACT U.S.A. (2) FULL WORKING DAYS PRIOR TO STARTING WORK IF EXISTING UTILITIES CONFlict WITH POLE LOCATION, FIELD ADJUST TO CLEAR EXISTING UTILITIES A MINIMUM OF 3'-0".
21. STREET LIGHT CONDUIT BENDS SHALL HAVE A MINIMUM 2 FOOT RADIUS. UNLESS OTHERWISE SHOWN ON THE PLANS, NO BEND SHALL BE INSTALLED IN THE STREET LIGHT SYSTEM WITHOUT PRIOR APPROVAL OF THE CITY INSPECTOR.
22. ALL BOXES ARE TO BE INSTALLED WITHIN THE R/W AND/OR P.U.E. AREA.





**JEFFERSON 15**

**CLAMSHELL - TYPING ROUND ALUMINUM POLE**

Pole Size Chart (Poles are 15' long unless otherwise specified)									
C	D	G	F	G	F	G	F	G	F
in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1	3	4.5	4.5	1	3	4.5	4.5	1	3
1.5	4.5	6	6	1.5	4.5	6	6	1.5	4.5
2	6	7.5	7.5	2	6	7.5	7.5	2	6
2.5	7.5	9	9	2.5	7.5	9	9	2.5	7.5
3	9	10.5	10.5	3	9	10.5	10.5	3	9
3.5	10.5	12	12	3.5	10.5	12	12	3.5	10.5
4	12	13.5	13.5	4	12	13.5	13.5	4	12
4.5	13.5	15	15	4.5	13.5	15	15	4.5	13.5
5	15	16.5	16.5	5	15	16.5	16.5	5	15
5.5	16.5	18	18	5.5	16.5	18	18	5.5	16.5
6	18	19.5	19.5	6	18	19.5	19.5	6	18
6.5	19.5	21	21	6.5	19.5	21	21	6.5	19.5
7	21	22.5	22.5	7	21	22.5	22.5	7	21
7.5	22.5	24	24	7.5	22.5	24	24	7.5	22.5
8	24	25.5	25.5	8	24	25.5	25.5	8	24
8.5	25.5	27	27	8.5	25.5	27	27	8.5	25.5
9	27	28.5	28.5	9	27	28.5	28.5	9	27
9.5	28.5	30	30	9.5	28.5	30	30	9.5	28.5
10	30	31.5	31.5	10	30	31.5	31.5	10	30
10.5	31.5	33	33	10.5	31.5	33	33	10.5	31.5
11	33	34.5	34.5	11	33	34.5	34.5	11	33
11.5	34.5	36	36	11.5	34.5	36	36	11.5	34.5
12	36	37.5	37.5	12	36	37.5	37.5	12	36
12.5	37.5	39	39	12.5	37.5	39	39	12.5	37.5
13	39	40.5	40.5	13	39	40.5	40.5	13	39
13.5	40.5	42	42	13.5	40.5	42	42	13.5	40.5
14	42	43.5	43.5	14	42	43.5	43.5	14	42
14.5	43.5	45	45	14.5	43.5	45	45	14.5	43.5
15	45	46.5	46.5	15	45	46.5	46.5	15	45
15.5	46.5	48	48	15.5	46.5	48	48	15.5	46.5
16	48	49.5	49.5	16	48	49.5	49.5	16	48
16.5	49.5	51	51	16.5	49.5	51	51	16.5	49.5
17	51	52.5	52.5	17	51	52.5	52.5	17	51
17.5	52.5	54	54	17.5	52.5	54	54	17.5	52.5
18	54	55.5	55.5	18	54	55.5	55.5	18	54
18.5	55.5	57	57	18.5	55.5	57	57	18.5	55.5
19	57	58.5	58.5	19	57	58.5	58.5	19	57
19.5	58.5	60	60	19.5	58.5	60	60	19.5	58.5
20	60	61.5	61.5	20	60	61.5	61.5	20	60
20.5	61.5	63	63	20.5</					

[illegible]

## PBL PureForm LED bollard

### Dimensions

The drawing illustrates the PBL PureForm LED bollard in both exploded and assembled states. Key dimensions and components are labeled as follows:

- Top Cap:** 9.6" dia (24.875"), 0.2" (5.08) thick. Features an "Apex location of anemometer windmill (if ordered)" and an "Apex location of GFC outlet if ordered".
- Body:** 36" (91.44) tall. Features an "Apex location of GFC outlet if ordered" and "Apex location of anemometer windmill (if ordered)".
- Base:** 4.5" dia (11.43). Features an "Apex location of GFC outlet if ordered" and "Apex location of anemometer windmill (if ordered)".
- Flange:** 4.7" dia (11.94).
- Base Feet:** 4.7" dia (11.94) with a 1.5" (38.1) spacing between them.
- Assembly Dimensions:**
  - Overall height: 67" (170.32)
  - Base diameter: 4.7" (119.43)
  - Base to top flange height: 62" (157.48)

### Specifications

#### Housing

Main body housing and pole made of low copper, cast aluminum alloy for a high resistance to corrosion. Luminaire shell features an advanced extruded aluminum base housing. Bottom section has a casted ring for ease of assembly. In addition to base assembly with four (4) hex head set screws. Most electrical components are integrated in the shaft of the bollard by design. This allows for the apex flange, giving the freedom to have a faster mechanical assembly design with minimum distribution to optical performance. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

#### Light engine

Light engine comprises of a 14-LED module made out of aluminum metal clad board fully coated with optical. Module is RoHS compliant. Color temperature: 3000K or 10K, 4000K, 5000K or 200K. Maximum CRI of 70. LED light engine is rated IP68 in accordance to IEC 60598.

#### Energy saving benefits

System efficiency up to 100 lm/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

#### Optical system

Type B and C distributions available. Performance tested per LM-79 and TM-30 according to photometric performance. Luminaire designed with 0% light loss per IESNA TM-30.

#### Housing

Base assembly consists of a cast aluminum platform. Assembly is secured and fastened to the mounting foundation with four (4) 3/4" x 1 1/2" (19.05 mm x 20.32 mm x 3.81 cm) end-another bolts on 2 3/4" (6.8 cm) bolt circles.

PBL PureForm bollard: 03/25 page 2 of 4

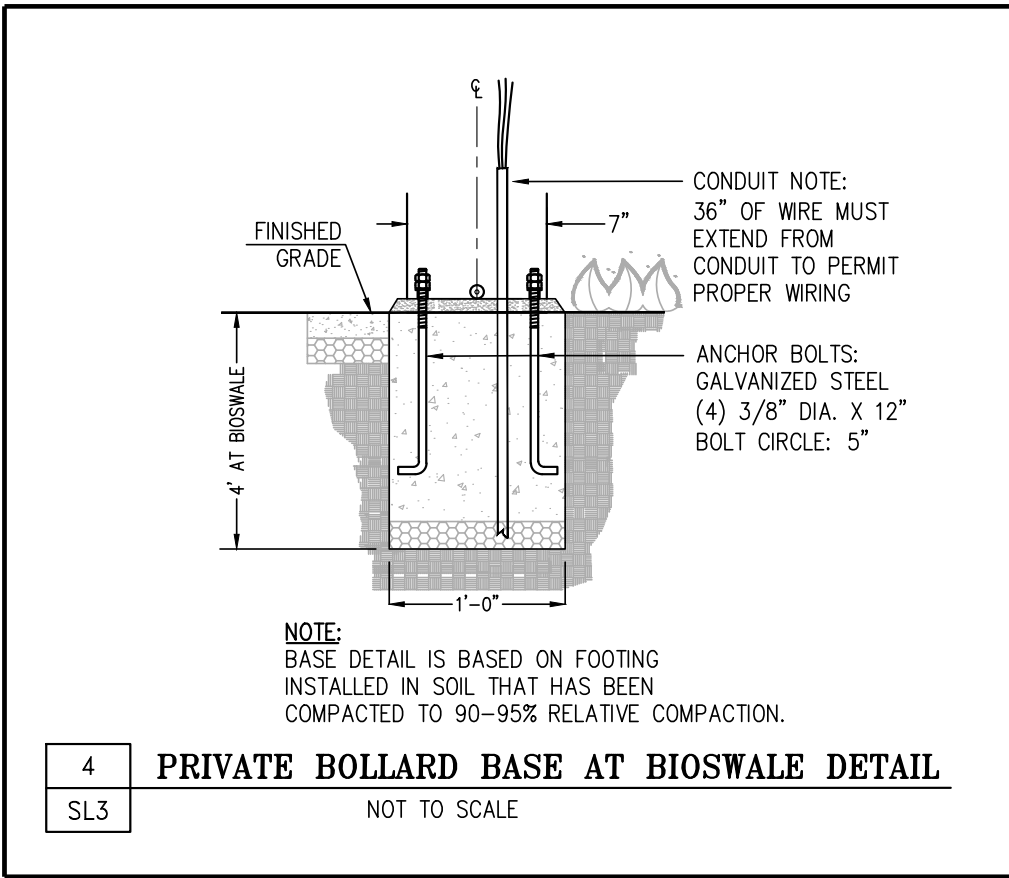
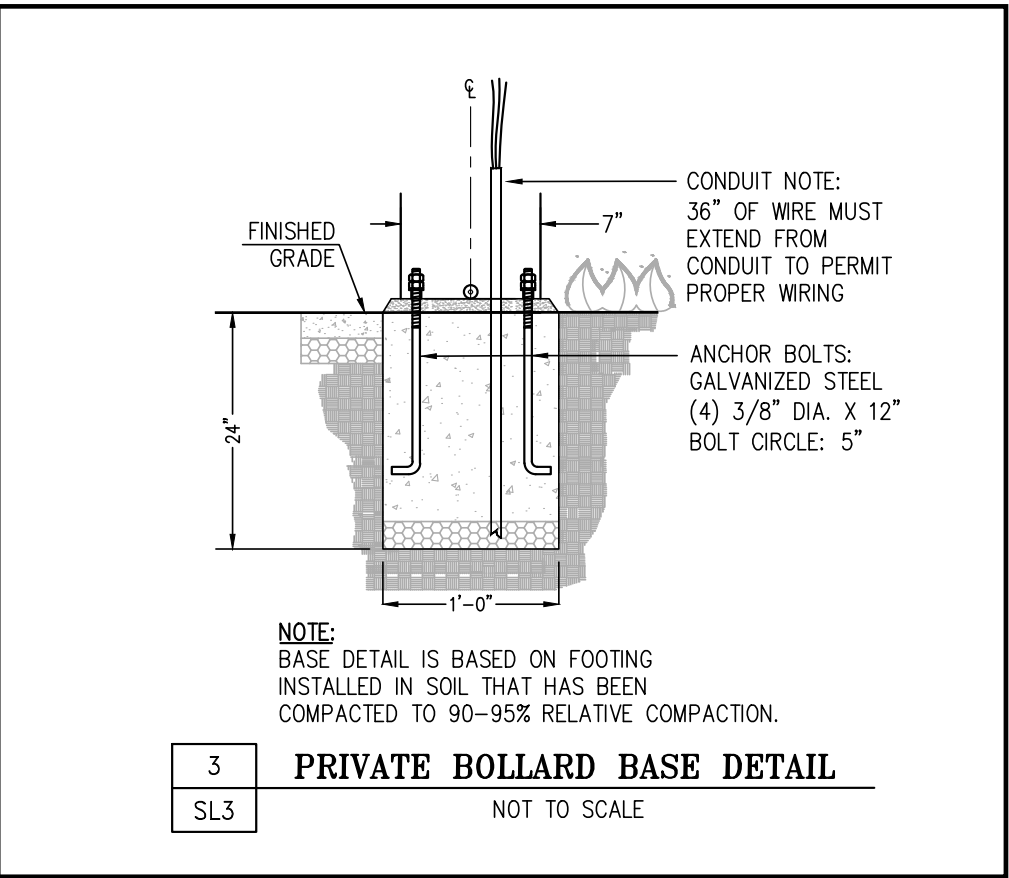
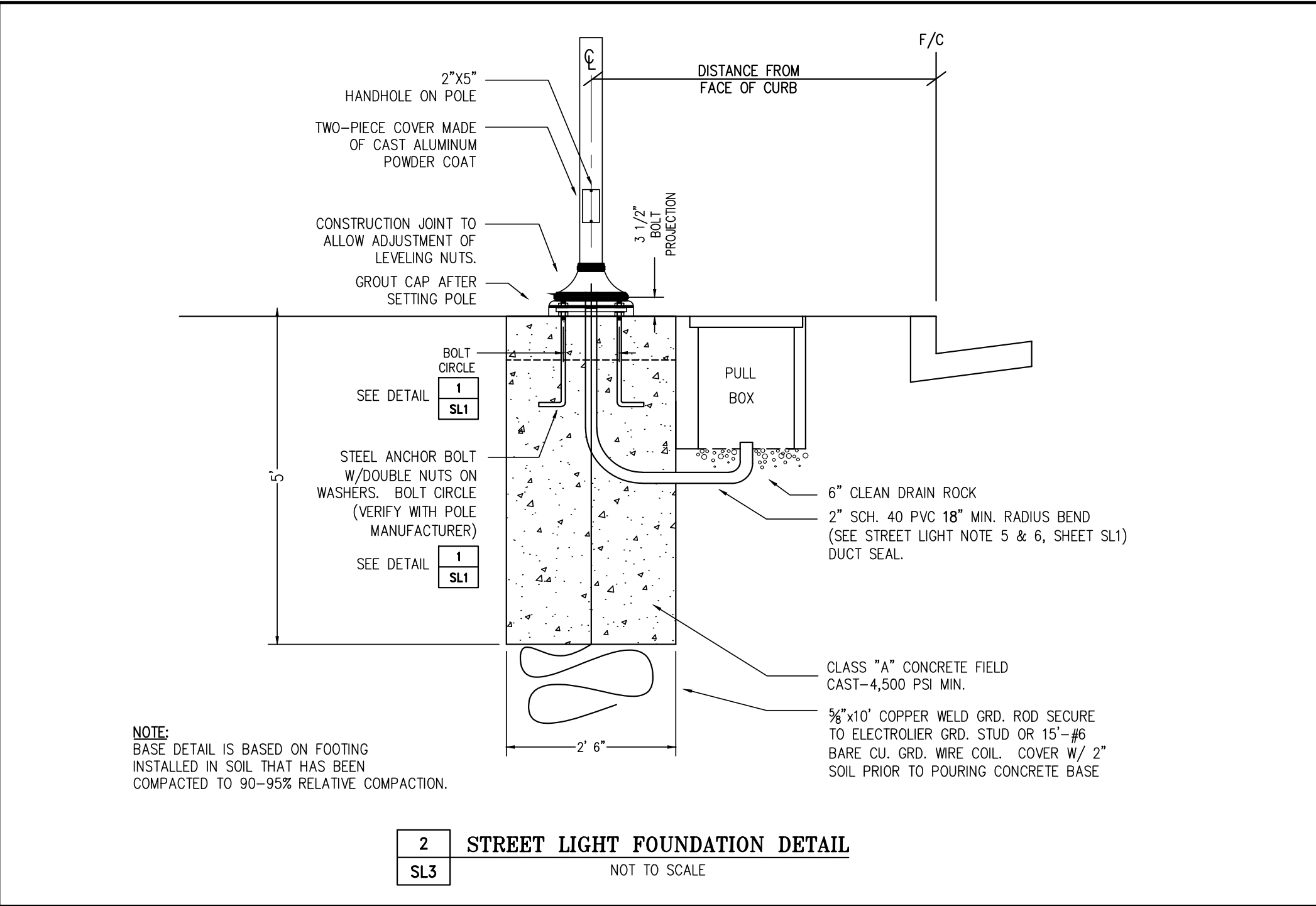
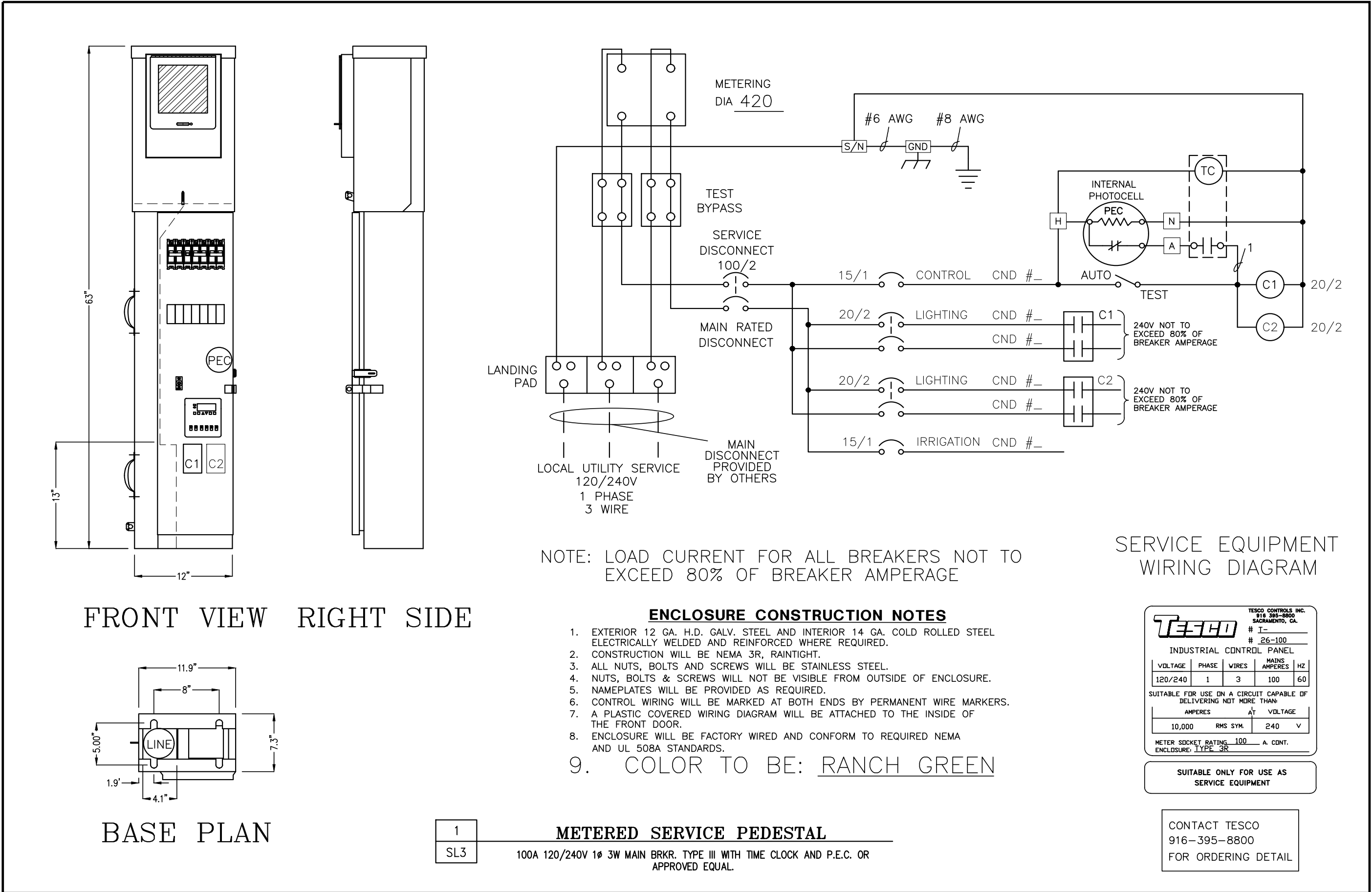
— GARDCO PBL—42

TO SCALE

Agenda Item #11.1.1.



LIGHTING AND IRRIGATION



SINGLE PHASE

PROJECT: XXX																	
PANEL - METERED SERVICE PEDESTAL																	
SERVICE	LOAD				CB		A	B	CB	LOAD				SERVICE			
	LTG	REC	DED	MOT	P	A				LTG	REC	DED	MOT				
SPACE	X	X	X	X			1	2						SPACE			
SPACE							3	4						SPACE			
SPACE							5	6						SPACE			
SPACE							7	8						SPACE			
SPACE							9	10						SPACE			
SPACE							11	12						SPACE			
SPACE							13	14						SPACE			
SPACE							15	16						SPACE			
SPACE							17	18						SPACE			
SPACE							19	20						SPACE			
TOTALS														TOTALS			
VOLTS: 120/240, 1PH, 3W												MTG: XXX		CAPACITY: XXXA		LIGHTING: X (125%)	
SCA: XXX														USED: XXXA		RECEPTS: X	
MAINS: 100 AMP														FUTURE: XXXA		DEDICATED: X	
( xxxKVA = xxxA )																MOTORS: X	
														TOTAL: X		KVA = xxxA	













## SPRING GROVE CONSOLIDATED WRITTEN STATEMENT

**PROJECT** SPRING GROVE

**REQUESTED ENTITLEMENTS** VESTING TENTATIVE SUBDIVISION MAP PERMIT  
STATE DENSITY BONUS LAW  
DESIGN REVIEW PERMIT (MINISTERIAL)  
DEMOLITION PERMIT  
PRE-SUBMITTAL REVIEW

### ADDRESS, APN & ACREAGE

Parcel	Address	Zoning	APN	Acres	SF
1	1447 Spring Street	High Density Res.	009-590-003	1.50	65,340
2	1505 Spring Street	Medium Density Res.	009-590-005	0.14	6,098
3	1515 Spring Street	High Density Res.	009-590-010	0.89	38,768
<b>Totals:</b>				<b>2.52</b>	<b>110,206</b>

**OWNER** Edward S. & Eleonore M. Aslanian 2006 Revocable Trust  
Iren Aslanian Jenny & Samson Aslanian, Successor Trustees

**APPLICANT** City Ventures (Saint Helena 1 Inv, LLC)  
Kelso G. Barnett, Senior Director of Development  
707.758.3805

### OVERVIEW

City Ventures respectfully submits this application for a Vesting Tentative Map Permit, Demolition Permit, Pre-Submittal Review and Ministerial Design Review Permit, along with requests for minor reductions in development standards pursuant to the State Density Bonus Law (SDBL), to construct 41 for-sale townhomes at 1447, 1505, and 1515 Spring Street in St. Helena.

### BACKGROUND & PROJECT

The City of St. Helena rezoned 1447 and 1515 Spring Street to high density residential in the mid-1990s. These parcels were housing opportunity sites in both the 2015-2023 Housing Element and the current

2023-2031 Housing Element, which projects a capacity of 48-units. In 2023, the City of St. Helena also codified Objective Design Standards, which allows for ministerial approval of the project's design elements.

The project site, which currently is developed with three single-family homes, is proposed for 41 for-sale solar all-electric townhome-style condominiums. 1447 and 1515 Spring, where the proposed townhomes are to be constructed, are zoned high-density residential. 1505 Spring is medium-density residential and will provide access to the development. At an overall density of 16.2 units/acre, Spring Grove will be at the low end of the allowed density range (16.1-28) in the high-density residential zone.

### **EXISTING CONDITIONS**

The surrounding neighborhood is a quiet, residential area characterized by a mix of older single-family homes and newer, small-scale multi-family housing. Architectural styles range from early 20th-century bungalows and ranch-style homes to more contemporary remodels, contributing to a charming and varied streetscape. Sidewalks, tree-lined streets, and a generally low-speed traffic environment make the area highly walkable and family-friendly. Several public amenities are nearby, including schools, churches, and parks, contributing to a strong sense of community and everyday convenience.

Just a short walk east along Spring Street brings residents directly into downtown St. Helena, the historic and cultural heart of the city. Downtown offers a vibrant mix of boutique shops, wine tasting rooms, cafes, restaurants, and essential services. It blends the charm of a small town with the sophistication of a world-renowned wine country destination. Anchored by Main Street, this walkable district supports a pedestrian-oriented lifestyle and offers regular community events, a local farmers market, and access to public transportation. The close proximity of the subject properties to downtown makes them ideal for new housing aimed at first-time buyers and young families seeking both community connection and convenience.

Additionally, nearby amenities such as Lyman Park, St. Helena Public Library, and local schools, including St. Helena Primary and High School, enhance the area's appeal to families. The neighborhood is also within easy reach of Highway 29, providing regional connectivity while maintaining a peaceful, small-town environment. This setting offers a unique opportunity to introduce new housing that is both context-sensitive and responsive to St. Helena's broader housing goals.

### **PROJECT OBJECTIVES**

- Deliver New Homeownership Opportunities for the "Missing Middle"
- Promote Infill Development
- Enhance Walkability and Access to Amenities
- Incorporate Sustainable and Resilient Design Practices



## VESTING TENTATIVE MAP

City Ventures is proposing a vesting tentative map because the proposed townhomes will be for-sale, thus per the California Subdivision Map Act, a tentative map, which allows for the ultimate recordation of the Final Map, is required. Specifically, the vesting tentative map, seen on Sheet 1, proposes a map with 42 residential condominium units, 41, and the remaining common area owned by the future HOA.

Per St. Helena Municipal Code 16.16.020.C, the following proposed design elements and improvements shall be shown on the tentative map or described on an attached written statement.

These elements are shown within the tentative map package, specifically below:

1. Streets
  - a. Street Plan & Sections show on Sheet C1.0
  - b. Note: all streets are proposed to be privately maintained.
2. Location, width and purposed of all proposed easements
  - a. Shown on VTMAP (Sheet 1)
  - b. PAUE: Public Access and Utility Easement
    - i. Shown on the VTMAP; coterminous with the internal streets
  - c. EVAE: Emergency Vehicle Access Easement
    - i. Shown on the VTMAP; coterminous with the internal streets
  - d. PUE: Public Utility Easement
    - i. Two are shown on the VTMAP; these will be where the transformers are placed.
3. Lots
  - a. Shown on VTMAP (Sheet 1); condominium units shown on Sheet C1.1
  - b. There are 42 proposed lots; 41 airspace condominiums, and the remaining common lot owned by the future Homeowner's Association.
4. Parks
  - a. No parks are proposed.
5. Public Use
  - a. No areas are proposed to be dedicated or reserved for public use beyond the easements described above proposed for public access and public utilities.
6. Common or Open Space Areas
  - a. Common/Open Space area shown on Sheet C1.1
7. Utilities
  - a. Preliminary Utility Plan shown on Sheet C4.0, C4.1 and C4.2
8. Erosion Control and Fencing
  - a. Proposed Erosion & Sediment Control Plan shown on Sheet C6.0
9. Drainage/Flood Control
  - a. Preliminary Grading & Drainage Plan shown on C3.0, C3.1 and C3.2
  - b. Stormwater Control Plan shown on Sheet C5.0

Per St. Helena Municipal Code 16.16.020.D.15, City Ventures will defend, indemnify and hold the City of St. Helena, its agents, officers, and employees harmless from any claim, action or proceeding to attach, set aside, void or annul an approval of city concerning the subdivision so long as the city promptly

notifies the subdivider of any such claim, action or proceedings and the city cooperate fully in the defense. Note also that similar language was part of the Advanced Funding Agreement signed by City Ventures on October 3, 2024.

Per SHMC 16.16.020.D.14, please see Sheet C1.6 for the location of the proposed deed restricted inclusionary units. We propose the following language to be included as part of the Final Map signature block: *“this subdivision contains inclusionary units, which shall be more particularly described in, and subject to, the requirements of that certain Inclusionary Housing Agreement with the City of St. Helena consistent with the City of St. Helena Municipal Code; said agreement must be recorded prior to the issuance of building permits.”*

Per SHMC 16.16.020.D.18, the proposed preliminary improvement schedule would be as follows (subject to change):

Task	Date
Demolition	9/1/2026
Rough Grade	10/1/2026
Start Model Foundations	10/15/2026
Sewer	11/1/2026
Storm	11/15/2026
Water	12/1/2026
Fire Water	12/15/2026
Joint Trench	1/1/2027
Subgrade/rock	2/1/2027
Curb & Gutter	3/1/2027
Pull wire/test/PG&E	3/15/2027
Finish Rock/Pave	4/1/2027
Start Model Framing	4/1/2027
PG&E Energize	4/15/2027

Per St. Helena Municipal Code 16.16.030.C, a vesting tentative map shall be accompanied by a description of the housing type and plans for the structures, including location, size, height, architectural style, materials, elevations, landscaping, fencing and irrigation. This is included in the consolidated plan set.

Materials are specifically found on A-3.3 (and other sheets), and listed here:

Element	Material
Roof	Asphalt Composition Shingle
Eaves & Fascia	Wood Rake
Siding	Fiber Cement Board & Batten
Trim	Fiber Cementous
Stucco	Sand Finish Stucco
Garage Door	Clopay "Canyon Ridge" - "Chevron & Elements" (Metal)



Entry Door	Fiberglass & Glass
Railings	Wood Rake
Windows	Vinyl (Milgard)
Downspouts	Aluminum
Lighting	Metal (Black Allenbury Downward)
Wire Vine Lines	Galvanized Metal
Accent	Standing Seam Metal

Further discussion of the proposed project's architectural design is below within the Design Review subsection.

#### **DENSITY BONUS**

Spring Grove is designed for first-time homebuyers and families who live and work in St. Helena. The project is designed to be consistent with the City of St. Helena's General Plan, adopted in 2019, and the Objective Design Standards codified in October 2023. Spring Grove is a Housing Development Project within the meaning of Government Code section 65589.5(h)(2) and has been designed to comply with applicable objective General Plan and subdivision standards and criteria as described in Government Code section 65589.5(j).

Spring Grove qualifies for the benefits of the State Density Bonus Law as it provides at least 10% of the units to be deed restricted for households at moderate incomes. Specifically, Per St. Helena's Inclusionary Housing ordinance, twenty percent (20%) of the housing units, 8.2 units, will be made available to households at moderate incomes. Four (4) units will be made available to households whose annual income does not exceed 100% of median income, and four (4) units will be made available to households whose annual income does not exceed 120% of median income. We propose to satisfy the remaining 0.2-unit through the payment of the in-lieu fee.

<b>Density Bonus Application</b>	
Density Bonus %	20%
Total Number of Proposed Units	41
<b>Inclusionary Units Required</b>	<b>8.2</b>
Total Inclusionary Units Proposed	8
Median Income (100% AMI)	4
Moderate Income (120% AMI)	4
Fractional Unit (Paid via In-Lieu Fee)	0.2
<b>Number of Density Bonus Units</b>	<b>0</b>

Because this for-sale project provides at least 20-percent deed-restricted homes for households with moderate incomes, Spring Grove is eligible for State Density Bonus Law (Gov. Code, §§ 65915–65918) benefits, including unlimited waivers and two concessions. City Ventures is requesting four density bonus

waivers. City Ventures reserves the right to request additional concessions (as we currently have the right to use two) or waivers/incentives under the State Density Bonus Law at a later time.

Per state law, waivers of development standards that would physically preclude the development of a project at the density permitted are allowed. Specifically, we are requesting the following waivers from the St. Helena Objective Design Standards (SHMC 17.16.040):

<b>Density Bonus Waiver Requests</b>	
<b>Waiver</b>	<b>St. Helena Municipal Code</b>
1. Full Height Recesses	17.16.040.C.1.h
2. Rowhouse: 8-unit Max	17.16.040.C.2.b
3. Units on Common Open Space	17.16.040.C.4.c
4. Minimum Distance: Drive Aisle/Walkway	17.16.040.A.7.e
5. Private Ground Floor Open Space	17.16.030.B
6. Driveway Curb Cuts	17.16.040.A.7.g
7. Entry Design	17.16.040.C.3.b.i
8. Maximum Paved/Hardscaped Area	17.16.030.B
9. Long-Term Bicycle Parking	17.26.080.B
10. Minimum Landscape Area	17.16.030.B
11. Interior Side Yard Setback	17.16.030.B

Our project program consists of 3+ bedroom townhome-style condominiums, more specifically defined as a “rowhouse” within the St. Helena Municipal Code. These proposed units range between 1,480 and 1,810 square feet, appropriate sizes for the “missing middle” – first time homebuyers and young families – for which the project is designed. At 41-units, the project is at minimum density per the code. The site, Site 9 in the Housing Element, is a unique and irregularly shaped parcel. Weighing design standards, including setbacks, fire access roads, height, open space, parking, and missing middle home sizes can be a balancing act and puzzle, and meeting the vast majority of the objective design standards is testament to skillful design. The eight waivers discussed below are requested as they would physically preclude the development of this project at the density permitted, which is already at the minimum density. Simply put, strict enforcement of these remaining design and zoning code standards would reduce the density of the project. Reducing the density of the project would both violate state law as well as the local development code, as the project would fall beneath the minimum density.

***1. SHMC 17.16.040.C.1.h: Where a new multifamily development is built adjacent to existing lower-scaled residential development, the facade opposite the existing lower-scaled residential development shall incorporate at least one full-height recess a minimum two feet in depth.***

Strict compliance with the design standard requiring that "Where a new multifamily development is built adjacent to existing lower-scaled residential development, the facade opposite the existing lower-scaled residential development shall incorporate at least one full-height recess a minimum two feet in depth" would physically preclude the density permitted on the site for the following reasons:

**Impact on Unit Layout and Efficiency:** A full-height recess of at least two feet disrupts the continuity of unit widths. Our townhome units are typically designed with standardized width, but even a single recess



along a row of units requires either: widening the building footprint, or reducing the number of units in that block to accommodate the recess. The result is that a recess effectively eliminates or compresses one unit's usable space, which must then be accommodated (enlarged) to meet market standards, thereby reducing density.

**No Viable Alternative Configuration:** Our site layout has already been optimized to provide the minimum number of units allowable under applicable zoning and General Plan density. Introducing required recesses would compromise the regular rectangular block format needed for the efficient stacking of units with garages below and living space above. Because townhomes are typically side-by-side units, interruptions in the façade translate directly into lost units, not just architectural shifts.

As Building 5 is the only building whose side façade is adjacent to existing lower scaled development, the waiver request only applies to this building, which also has a recess of 1'6", less than the required 2'. If a waiver was not granted, this would have the affect of pushing the building further south into the creek setback/flood zone, which would practically result in losing a unit. As a result, this would physically preclude the development of this project at the minimum density.

***2. SHMC 17.16.040.C.2.b: Blocks of attached rowhouses must be a minimum of three units and a maximum of eight units.***

Please note that this requirement is met for all buildings except Building 2, which has 9 units. However, strict compliance with the three-to-eight-unit block requirement prevents flexibility in unit layout that is necessary to meet ADA accessibility and site circulation standards. In particular, the required accessible path from guest parking (on the south) across the internal drive aisle to the perimeter path limits where units and driveways can be located, which forces breaks in rowhouse blocks at key circulation points. As a result, it becomes physically impossible to fit the minimum number of units while also satisfying the standard block length, circulation, and accessibility requirements.

Because strict enforcement of the 3–8-unit rowhouse rule would physically prevent the project from reaching the allowed density—due to the need to insert accessible pedestrian paths across the drive aisle—this design standard should be waived. The waiver is necessary to enable accessible circulation, preserve pedestrian connectivity, and allow the full build-out of the site to its intended density.

***3. SHMC 17.16.040.C.4.c: Visibility. Common outdoor recreation spaces must be visible from the primary living spaces of a minimum of fifty percent (50%) of units and be visible to the residents of the project for which the space is provided.***

Strict compliance with the design standard requiring that “common outdoor recreation spaces must be visible from the primary living spaces of a minimum of fifty percent (50%) of units and be visible to the residents of the project for which the space is provided” would physically preclude achieving the density permitted on the site due to the unique constraints of the parcel.

To meet the visibility requirement for 50% of units, the open space would need to be located in a central and unobstructed area, ideally surrounded by units on multiple sides. However, due to the irregular configuration of the parcel organizing buildings around a central open space visible to the majority of units is geometrically unfeasible. Such an arrangement would result in inefficient site layout and a loss of units.

Given these unique physical limitations and the irregular shape of the site, strict adherence to this design standard would physically preclude development at the allowable density. Therefore, a waiver is justified to allow for common open space that is still functional, accessible, and appropriately integrated into the project—just not visible from 50% of unit interiors—so long as it serves the recreational needs of residents and enhances overall project livability.

***4. SHMC 17.16.040.A.7.e: Minimum Distance – Driveway/Walkway. The minimum distance from the back of any drive aisle or walkway interior to a site must be ten (10) feet to the garage door and five feet to any living area or covered porch.***

The St. Helena Zoning Code requires a minimum distance from the back of any drive aisle or walkway interior to a site of ten (10) feet to the garage door and five (5) feet to any living area or covered porch. The proposed project complies with the required 5-foot setback to living areas but does not meet the 10-foot setback to garage doors for certain units accessed from the internal drive aisle.

Due to the irregular shape of the parcel and the need to efficiently organize garages along the internal driveway network, strict application of the 10-foot garage setback would necessitate larger individual townhome footprints. This would directly reduce the number of units that can be accommodated on the site. As a result, enforcing this standard would physically preclude the project from achieving the minimum permitted density under Government Code § 65915. A waiver of this development standard is therefore necessary to allow an efficient site layout that delivers the planned housing while maintaining safe and functional access.

***5. SHMC 17.16.030.B: Private Ground Floor Open Space: 60 square feet of private ground floor open space per unit is required.***

The St. Helena Zoning Code requires that each unit include a minimum of sixty (60) square feet of private ground floor open space. In the proposed project, 37 of the 41 townhome units meet or exceed this standard. Four smaller end units, however, do not include private patios. These units were intentionally designed and located to achieve the site's minimum permitted density while also accommodating the parcel's irregular shape and preserving the undisturbed riparian corridor.

Strict application of the private open space requirement to these four units would require significant redesign, eliminating them entirely or enlarging their footprints at the expense of other units or site features. Either option would reduce the total unit count and physically preclude the project from achieving the minimum density permitted under Government Code § 65915.

The proposed design provides ample shared open space and preserves valuable natural areas, ensuring all residents benefit from accessible outdoor amenities while meeting the City's and State's housing production goals. A waiver of this development standard is therefore necessary to maintain the project's planned density and site-sensitive design.

***6. SHMC 17.16.040.A.7.g: Driveway Curb Cuts. Where individual driveways are accessed by a private or shared drive, a maximum of one driveway curb cut is allowed for each fifty (50) feet of street frontage.***



The St. Helena Zoning Code limits developments in which individual driveways are accessed by a private or shared drive to a maximum of one driveway curb cut for every fifty (50) feet of street frontage. The proposed project includes more than one curb cuts within 50-foot frontage segments to provide adequate access to individual townhome garages and maintain functional circulation throughout the site.

The site's irregular configuration, coupled with the need to preserve an undisturbed riparian corridor along a substantial portion of the frontage, significantly constrains where curb cuts can be located. Concentrating all driveways into fewer curb cuts would require excessive internal maneuvering space, reduce the number of buildable units/footprints, and create awkward, inefficient driveway alignments. This would directly reduce the achievable unit count and physically preclude the project from meeting the minimum permitted density under Government Code § 65915.

The proposed curb cut configuration balances vehicular access needs with preservation of sensitive natural features, avoids excessive grading or disturbance to the riparian corridor, and maintains a safe, logical circulation network. A waiver of this standard is therefore necessary to ensure both environmental protection and the delivery of much-needed housing at the density allowed by state law.

***7. SHMC 17.16.040.C.3.b.i: Entry Design. Individual ground floor entrances to units within a multifamily development must be visible and directly accessible from the right of way or a shared pathway.***

The St. Helena Zoning Code requires that individual ground floor entrances to units within a multifamily development be visible and directly accessible from the public right-of-way or a shared pathway. In the proposed project, the vast majority of units—39 of 41—comply with this standard. However, two of the Plan 1 units, which are smaller homes specifically designed to help achieve the project's minimum permitted density, do not have entries directly visible from a shared pathway. These units are located at the ends of buildings opposite the shared pathway, a placement dictated by the unique shape and physical constraints of the site.

This layout allowed the inclusion of compact, efficiently designed homes that maximize the site's housing potential while maintaining architectural variety and preserving key site features such as the riparian corridor. Enforcing strict compliance with this standard would require a substantial redesign, eliminating these units and thereby reducing the overall unit count. This reduction would physically preclude the project from achieving the minimum density permitted under Government Code § 65915.

The proposed design maintains safe and convenient access to all units, preserves high-quality architecture, and supports the City's and State's shared objective of delivering housing at allowed densities. A waiver of this development standard is therefore necessary to retain these smaller, attainable units while respecting the site's constraints.

***8. SHMC 17.16.030.B: Maximum Paved/Hardscaped Area: The maximum paved/hardscaped area is 30% within the required front setback.***

The St. Helena Zoning Code limits paved or hardscaped surfaces within the front setback to no more than thirty percent (30%) of that area. Due to the unique configuration of the parcel, only a small portion of the site fronts Spring Street, and this limited frontage must serve as the primary vehicular access point as well

as accommodate multiple pedestrian pathways. These circulation elements are essential to provide safe, functional, and code-compliant access to all parts of the project.

Strict adherence to the 30% paving limitation would require narrowing the primary driveway from Spring Street, which would in turn fail to meet fire access standards. This would not only create life-safety concerns but would also render the project infeasible. In addition, reconfiguring the access to comply with the paving cap would require significant redesign that would either eliminate units or reduce buildable area, physically precluding the project from achieving the minimum permitted density under Government Code § 65915.

The proposed design balances the need for safe and efficient vehicular and pedestrian access with aesthetic considerations, incorporating landscaping wherever feasible while ensuring compliance with fire safety and accessibility requirements. A waiver of this standard is therefore necessary to maintain both site functionality and the project's housing production goals.

***9. SHMC 17.16.080.B.4: Long-term Bicycle Parking: Two feet of clearance shall be provided between bicycle parking spaces and adjacent walls, etc. Five feet of clearance shall be provided from vehicle parking spaces.***

The project requests a waiver from the required two- and five-foot clearance standards for long-term bicycle parking. The proposed design provides wall-mounted bicycle racks within individual private garages, allowing each homeowner to securely store bicycles within their own unit.

Strict application of the clearance standards would make it infeasible to provide the required number of long-term bicycle parking spaces without significantly increasing the size of the garages or the overall building footprint. This, in turn, would reduce the site's development potential below the minimum density permitted by the zoning and the Density Bonus Law, directly conflicting with the State's intent to facilitate the production of housing.

Furthermore, the clearance requirement appears to have been written for multifamily projects with common bicycle storage rooms, where multiple racks are placed in shared spaces and pedestrian maneuvering areas are needed. In this case, each bicycle space is privately located within a garage, without shared circulation. The intent of the code—to ensure safe, accessible, and secure bicycle storage—is fully achieved through the proposed design, even without the prescribed clearances.

For these reasons, the project qualifies for a waiver under Government Code §65915(e), as the clearance requirement would physically preclude the development of the site at the permitted density and is unnecessary given the design of the long-term bicycle parking system.

***10. SHMC 17.16.030.B: Minimum Landscape Area. Per the table, the minimum landscape area is 25% of the lot area, of 27,552 square feet.***

Spring Grove provides a total of 19,545 square feet of open space, which is slightly less than the 27,552 square feet required under the City's development standards. However, this modest deviation is justified under the State Density Bonus Law (Government Code § 65915(e)), which allows waivers of development standards that would physically preclude construction of a project with the granted density bonus, including affordable housing units.



In this case, the open space requirement would physically constrain the site's ability to achieve the planned mix of missing-middle homes and deed-restricted affordable units, both of which advance the City's adopted Housing Element goals. The project's overall design thoughtfully integrates a variety of open space types that together achieve the intent—and, functionally, the benefit—of the quantitative standard.

Specifically:

- Common Open Space: Landscaped paseos, a central gathering green, and small neighborhood pocket spaces provide communal outdoor areas that foster interaction, recreation, and a sense of community.
- Private Open Space: Every residence includes its own private yard, balcony, or patio, offering personal outdoor living areas that supplement shared amenities.
- Riparian Corridor and Natural Edge: The project preserves and enhances the existing riparian corridor, establishing a natural open-space buffer and habitat zone that exceeds the qualitative value of typical on-site open space. This area contributes to the visual openness and environmental character of the development, benefiting both residents and the public realm.

Collectively, these open space components deliver a balanced, high-quality living environment consistent with the City's open space objectives—promoting livability, connectivity, and environmental stewardship—even though the total area falls below the numerical requirement.

Strict application of the open space standard would physically preclude construction of the density bonus units and conflict with the project's broader public benefits, including attainable ownership housing and 8 deed-restricted affordable homes. For these reasons, the waiver is both necessary and appropriate under State Density Bonus Law and fully consistent with the intent of the City's General Plan and Housing Element policies.

***11. SHMC 17.16.030.B: Interior Side Yard Setback. Per the table, the interior side yard setback in the HR zoning district is 10-feet.***

The HR zoning district establishes a 10-foot interior side yard setback. Buildings 1 and 2 are fully compliant with this requirement; however, the associated utility cabinets extend approximately two feet into the setback area. These cabinets are essential service components, fixed in size, and required to be placed in accessible locations by the serving utility providers. Given the compact and highly constrained nature of the site—an infill parcel bordered by existing residential uses and shaped by the riparian corridor to the south—there is no feasible way to relocate or redesign these utility elements without materially reducing the project's buildable area and jeopardizing the minimum density required under the Housing Element designation. As allowed and encouraged under State Density Bonus Law, a waiver of the side setback standard for these minor encroachments is necessary to physically accommodate the project at a density consistent with the City's adopted housing obligations.

Similarly, Building 5 requires a waiver from the 10-foot interior side yard setback because the building sits approximately eight feet from the property line. This placement was the direct result of shifting the building north to fully respect and buffer the riparian corridor along the southern project edge—an environmentally beneficial design refinement made in response to both City feedback and biological resource considerations. Complying with the full 10-foot setback would require either decreasing the

number of homes or materially reconfiguring the site in a way that would reduce the project below the minimum density necessary to qualify under the Housing Element and Density Bonus provisions. Because State law expressly entitles applicants to waivers of development standards that would otherwise physically preclude a qualifying project from achieving its permitted density, this requested waiver is both appropriate and essential.

In summary, these setback waivers are modest in scale, arise directly from legitimate site constraints and environmental protections, and are necessary to allow the project to be developed at the minimum density contemplated by State housing law and the City's certified Housing Element. Granting the waivers ensures the City can realize needed missing-middle ownership housing without compromising environmental resources, life-safety infrastructure, or site functionality.

### Other Information Required for Special Projects

As the density bonus application is requested for a proposed housing development that would result in the removal or conversion of existing dwelling units, please find the requested information below:

Housing Units Proposed to be Demolished			
Address	Property Description	Current Tenant Income Levels	2018-2023 Monthly Rate
1447 Spring	3-bdrm Single Family Home	Vacant	N/A
1505 Spring	2-bdrm Single Family Home	120% AMI +	\$1,800
1515 Spring	4-bdrm Single Family Home	120% AMI +	\$3,000

### PRE-SUBMITTAL REVIEW

Per best practice in the City of St. Helena, a project of this size first goes before the Planning Commission for evaluation as part of the "pre-submittal review" application. Also known as a study session, this provides an important opportunity for the project to be introduced to the community and neighbors. This also provides an opportunity to receive feedback from the Planning Commission. For these reasons, a pre-submittal review is requested.

As this is a proposed construction project, all aspects of the project, including specific data points, are throughout this consolidated written statement and the submitted plan set. However, to specifically answer the questions posed within the pre-submittal review application:

- The maximum building height is 38-feet (within the high-density residential zone's 42-foot maximum)
- Each of the six buildings have three floors
- Floor area information is provided within the project submittal plan set.
- The first floor of each plan has a garage and either a bedroom, ADU or office/den, second floor has living areas, including kitchen, bathroom and family room, while the third floor has the bedrooms.
- The project has 93 parking spaces, 82 spaces within garages and 11 open spaces.
- Access to the property will be via a roadway off Spring Street at the current location of 1505 Spring Street, a single-family home proposed to be demolished.



- Please find maximum building load calculations below within the Design Review section of this consolidated written statement.

## DESIGN REVIEW

We look forward to bringing this thoughtful project program to life and to seamlessly integrate Spring Grove into the existing neighborhood fabric. The 41-homes are comprised of 3-4 bedrooms ranging in size from approximately 1,480-sf to 1,810-sf. Each home has its own private garage accessed by an internal private street with the front doors accessed from graciously landscaped paseos.

The proposed buildings will be 40' tall, lower than the maximum height allowed in the high-density residential zoning district, 42'. Each building will be 3-stories, and as the project proposes townhomes, each unit will be 3-stories. The unit's garage will be on the first floor along with a den and/or bedroom, the kitchen and primary living area will be on the second floor, and bedrooms on the third floor. Please find specific design standards and metrics, including the gross floor area of each floor, number of parking spaces to be provided, etc., on Sheet G-1 in the consolidated project plan set. Finishing materials are shown on the Conceptual Elevations, Colors & Materials Sheet (A3.3, A4.4, A5.2, A6.2, A7.3).

As the Design Review Checklist calls for materials to be listed within the design review narrative, they are repeated below (and also found on A-3.3, among other sheets):

Element	Material
Roof	Asphalt Composition Shingle
Eaves & Fascia	Wood Rake
Siding	Fiber Cement Board & Batten
Trim	Fiber Cementous
Stucco	Sand Finish Stucco
Garage Door	Clopay "Canyon Ridge" - "Chevron & Elements" (Metal)
Entry Door	Fiberglass & Glass
Railings	Wood Rake
Windows	Vinyl (Milgard)
Downspouts	Aluminum
Lighting	Metal (Black Allenbury Downward)
Wire Vine Lines	Galvanized Metal
Accent	Standing Seam Metal

Each home will come standard with solar panels and will incorporate a specific focus on healthy, energy efficient living. The proposed 41-homes would be distributed throughout 6-buildings, contemplated to have a modern agrarian aesthetic.

The project proposes 93 parking spaces, comprised of 2-dedicated spaces within each home's garage, as well as 11 surface parking stalls. The project will include over 50 bicycle parking spaces, with 41-long-

term spaces located in each residential garage, and the remainder in onsite bicycle racks. Spring Grove will have extensive landscaping, incorporating mature trees and vegetation along with new plantings chosen to complement the project design and setting.

With regard to maximum building occupant load, under the California Building Code (CBC), Group R-2 occupancies (the type of occupancy proposed with this project) do not have a fixed maximum occupancy limit. Instead, the occupant load is determined based on the building's design and use, primarily to ensure adequate means of egress and compliance with safety requirements. Because our buildings don't share a common means of egress, we would treat each unit separately. The occupant load factor for an R2 Occupancy is 200sf/person.

The chart below shows the maximum occupant load per plan. This is then multiplied by the number of units per plan, and then added up to provide the maximum occupant load for the project total. While this is the maximum occupant load for the project, please note the family size for this type of home is approximately 2.3 people based on 2019-2023 census data.

Plan	Living SF	Occupant Load Factor*	Max Building Occupant Load	Units/Plan	Project Total
P1	1,480	200	7	4	29
P2	1,595	200	8	5	40
P3	1,746	200	9	15	131
P4	1,810	200	9	17	153
				<b>Total</b>	<b>353</b>

***: R2 Occupancy (SF/Person)**

#### DEMOLITION

The details of the proposed project have been discussed throughout the consolidated written statement. As it specifically relates to demolition, the three existing homes are proposed to be demolished to allow for the development of the project; 41 townhome-style condominiums.

Specific square footage metrics are below (proposed full structure demolition):

Home	Bdrm	Bath	SF
1447 Spring Street	3	2	2,091
1505 Spring Street	2	1	1,006
1515 Spring Street	4	3	1,824
<b>Total SF:</b>			<b>4,921</b>

No structures proposed for demolition are on the City of St. Helena's Local Historic Register or in the Historic Preservation Overlay.



City Ventures looks forward to working with the City of St. Helena to create a walkable housing development just a stone's throw from Main Street in which more St. Helena families can put down roots, just like the vineyards for which the area is world famous.

A handwritten signature in black ink, reading "Kelso G. Barnett" with a stylized flourish at the end.

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Kelso G. Barnett, Senior Director of Development  
November 14, 2025

# CEQA EXEMPTION MEMO



**DATE:** December 2, 2025

**TO:** Maya DeRosa, AICP, Community Development Director

**FROM:** Mike Janusek, AICP, Planning Consultant

**RE:** 1447, 1505, and 1515 Spring Street Spring Grove Multifamily California Environmental Quality Act (CEQA) Statutory Exemption Per Public Resources Code Section 21080.66

The City of St. Helena has conducted environmental review for the Spring Grove housing development project pursuant to Public Resources Code (PRC) Section 21080.66, a statute within Assembly Bill (AB 130). Effective June 30, 2025, AB 130 made significant modifications to the California Environmental Quality Act (CEQA), including creation of a new statutory CEQA exemption, PRC Section 21080.66, for infill housing developments that meet certain conditions. As detailed below, City staff has determined that the 1447, 1505, and 1515 Spring Street Spring Grove Multifamily Project ("Project") qualifies for statutory exemption from CEQA pursuant to PRC Section 21080.66.

## PROJECT DESCRIPTION

The Project proposes a subdivision for condominium purposes, demolition of three existing single-family homes, and development of a 41-unit multifamily development consisting of six three-story buildings on a 2.53-acre site. Three existing parcels under single ownership totaling 2.53 acres would be subdivided. The proposed subdivision would create 41 lots for condominium purposes, one lot for common areas to be owned by the future homeowners' association, and one lettered lot, Parcel A, to contain the riparian corridor not for development. Each unit would be a 3-bedroom condominium, with some unit types including the option for a fourth bedroom. On-site parking (93 spaces) would be provided through a combination of attached two-car garages for each unit and 11 perpendicular parking stalls along a private street. Access would be via a 28-foot-wide private street from Spring Street. Additional site improvements include landscaping with 59 trees, common usable open space including a picnic area and seating, continuous pedestrian walkways, and stormwater facilities.

## CEQA STATUTORY EXEMPTION APPLICABILITY

AB 130 created a new statutory exemption for infill housing development projects that meet the eligibility criteria under PRC 21080.66. The following table provides an analysis of the Project against the eligibility criteria to determine the applicability of the infill housing development project statutory exemption.



**Table 1: Criteria for AB 130 Exemption**

	PRC § 21080.66 Criteria	Project Complies?
	<b>Project Details</b>	
<b>(a)(1)</b>	<b>Project site meets either of the following criteria:</b>	<input checked="" type="checkbox"/>
(a)(1)(A)	Is not greater than 20 acres.	Yes. The Project site is 2.53 acres.
(a)(1)(B)	If a builder's remedy project is proposed, the project site or parcel size is not more than 5 acres.	Not Applicable. The Project is not invoking builder's remedy.
<b>(a)(2)</b>	<b>Project site meets either of the following criteria:</b>	<input checked="" type="checkbox"/>
(a)(2)(A)	Is located within the boundaries of an incorporated municipality	Yes. The Project site is located within the boundaries of the City of St. Helena, an incorporated municipality.
(a)(2)(B)	Is located within an urban area, as defined by the United States Census Bureau.	Yes. The Project site is located within an urban area as defined by the US Census Bureau.
<b>(a)(3)</b>	<b>Project site meets <u>any</u> of the following criteria:</b>	<input checked="" type="checkbox"/>
(a)(3)(A)	Has been previously developed with an urban use.	
(a)(3)(B)	At least 75 percent of the perimeter of the site adjoins parcels that are developed with urban uses.	Yes. 100 percent of the perimeter of the site adjoins parcels that development with residential development, an urban use.
(a)(3)(C)	At least 75 percent of the area within a one-quarter mile radius of the site is developed with urban uses.	
(a)(3)(D)	For sites with four sides, at least three out of four sides are developed with urban uses and at least two-thirds of the perimeter of the site adjoins parcels that are developed with urban uses.	

	PRC § 21080.66 Criteria	Project Complies?
(a)(4)(A)	The project is consistent with the applicable general plan and zoning ordinance, as well as any applicable local coastal program.	<input checked="" type="checkbox"/> Yes. The Project submitted a development application (PL24-065) on November 22, 2024 under SB 330, and Staff has determined the Project is consistent with the applicable General Plan and zoning ordinance. The approval of a density bonus, incentives or concessions, waivers or reductions of development standards, shall not be grounds for determining that the project is inconsistent with the applicable general plan, zoning ordinance, or local coastal program.
(a)(5)	The project will be at least one-half of the applicable density specified in subparagraph (B) of paragraph (3) of subdivision (c) of Section 65583.2 of the Government Code (for St. Helena, one-half of 20 du/ac = 10 du/ac).	<input checked="" type="checkbox"/> Yes. The Project is located in a suburban jurisdiction per HCD's Default Density categories pursuant to Government Code section 65583.2, which requires a density of at least 20 du/ac. Therefore, the Project must provide at least 10 du/ac.  The Project proposes 16.2 dwelling units/acre (41 du on 2.53 ac = 16.2 du/ac).
(a)(7)	The project does not require the demolition of a historic structure that was placed on a national, state, or local historic register before the date a preliminary application was submitted for the project pursuant to Section 65941.1 of the Government Code.	<input checked="" type="checkbox"/> Yes. There are no listed historic structures on a national, state, or local historic register on the Project site.
(a)(8)	For a project that was deemed complete on or after January 1, 2025, no portion of the project is designated for use as a hotel, motel, bed and breakfast inn, or other transient lodging.	<input checked="" type="checkbox"/> Yes. The Project does not offer any hotel, motel, bed and breakfast inn, or other transient lodging uses.
	<b>Additional Site Details</b>	
(a)(6)	The project satisfies all the requirements specified in paragraph (6) of subdivision (a) of Section 65913.4 of the Government Code:	Yes. See below.



	PRC § 21080.66 Criteria	Project Complies?
(a)(6)(A)	Not located in any of the following coastal zone areas:       1) An area between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance; or     2) Tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff.     3) An area of the coastal zone that is not subject to a certified local coastal program or a certified land use plan.     4) An area of the coastal zone that is vulnerable to five feet of sea level rise, as determined by the National Oceanic and Atmospheric Administration, the Ocean Protection Council, the United States Geological Survey, the University of California, or a local government's coastal hazards vulnerability assessment.     5) On a parcel within the coastal zone that is not zoned for multifamily housing.     6) On a parcel in the coastal zone and located on or within a 100-foot radius of a wetland, as defined in <a href="#">Section 30121 of the Public Resources Code</a>, or on prime agricultural land, as defined in <a href="#">Sections 30113</a> and <a href="#">30241 of the Public Resources Code</a>.	<input type="checkbox"/>   Yes. The City of St. Helena is not located within the Coastal zone. See <a href="https://coastal.ca.gov/maps/czb/">coastal.ca.gov/maps/czb/</a>.

	PRC § 21080.66 Criteria	Project Complies?
(a)(6)(B)	Not located on prime farmland or farmland of statewide importance.	<input checked="" type="checkbox"/> Yes. The Project site is classified by the California Department of Conservation on the California Important Farmland Finder as "Urban and Built Up Land." See <a href="https://maps.conservation.ca.gov/dlrp/ciff/">https://maps.conservation.ca.gov/dlrp/ciff/</a> .
(a)(6)(C)	Not located on wetlands, as defined in the United States Fish and Wildlife Service Manual.	<input checked="" type="checkbox"/> Yes. The Project site is developed and there is no evidence that wetlands exist onsite. Additionally, the National Wetlands Inventory Surface Waters and Wetlands map does not indicate the presence of wetlands onsite. See <a href="https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/">https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/</a> .
(a)(6)(D)	Not located within a very high fire hazard severity zone or within the state responsibility area, unless the site has adopted specified fire hazard mitigation measures.	<input checked="" type="checkbox"/> Yes. The Project site is not classified by the California Department of Forestry and Fire Protection (CAL FIRE) as a very high fire hazard severity zone nor is the site within the state responsibility area. See <a href="https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones">https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones</a> .
(a)(6)(E)	Not located on a hazardous waste site, unless either of the following apply:      1) The site is an underground storage tank site that received a uniform closure letter based on closure criteria established by the State Water Resources Control Board for residential use or residential mixed uses.     2) The State Department of Public Health, State Water Resources Control Board, Department of Toxic Substances Control, or a local agency making a determination pursuant	<input checked="" type="checkbox"/> Yes. The Project site is not identified by the Regional Water Quality Control Board or the Department of Toxic Substances Control as a hazardous waste site. See <a href="https://www.envirostor.dtsc.ca.gov/public/map/">https://www.envirostor.dtsc.ca.gov/public/map/</a> and <a href="https://geotracker.waterboards.ca.gov/">https://geotracker.waterboards.ca.gov/</a> .



	PRC § 21080.66 Criteria	Project Complies?
	to <a href="#">subdivision (c) of Section 25296.10 of the Health and Safety Code</a> , has otherwise determined that the site is suitable for residential use or residential mixed uses.	
(a)(6)(F)	Not located within a delineated earthquake fault zone as determined by the State Geologist in any official maps published by the State Geologist, unless the development complies with applicable seismic protection building code standards adopted by the California Building Standards Commission under the California Building Standards Law, and by any local building department.	<input checked="" type="checkbox"/> Yes. The Project site is not within a delineated earthquake fault zone as shown on the California Geologic Survey's Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones map.
(a)(6)(G)	Not located within a special flood hazard area subject to inundation by the 1 percent annual chance flood (100-year flood) as determined by the Federal Emergency Management Agency in any official maps published by the Federal Emergency Management Agency, unless either of the following apply:      1) The site has been subject to a Letter of Map Revision prepared by the Federal Emergency Management Agency and issued to the local jurisdiction.     2) The site meets Federal Emergency Management Agency requirements necessary to meet minimum flood plain management criteria of the National Flood Insurance Program.	<input checked="" type="checkbox"/> Yes. A small portion of the Project site is designated by FEMA as Zone A (1% chance flood), however, this area is not proposed for development as it is within the City's required 20-foot waterway setback. Because no development is proposed within the 100-year floodplain, minimum flood plain management criteria of the National Flood Insurance Program do not apply. See image below.





	PRC § 21080.66 Criteria	Project Complies?
(a)(6)(I)	Not located on lands identified for conservation in an adopted natural community conservation plan pursuant to the Natural Community Conservation Planning Act, habitat conservation plan pursuant to the federal Endangered Species Act of 1973, or other adopted natural resource protection plan.	<input checked="" type="checkbox"/> Yes. No portion of the City of St. Helena, including the Project site, is within a conservation plan area.
(a)(6)(J)	Not located within a habitat for protected species identified as candidate, sensitive, or species of special status by state or federal agencies, fully protected species, or species protected by the federal Endangered Species Act of 1973, the California Endangered Species Act, or the Native Plant Protection Act.	<input checked="" type="checkbox"/> As evidence in the Biological Resources Report, prepared for the Project by Monk & Associates, Inc., dated November 21, 2024, there is no potential habitat for special status plant or animal species on site as the site is fully developed and surrounded by other developments. Additionally, the site is not mapped by the United States Department of Fish and Wildlife's (USFWS) as <a href="#">Critical Habitat for Threatened &amp; Endangered Species</a> .
(a)(6)(K)	Not located on lands under conservation easement.	<input checked="" type="checkbox"/> Yes. The Project site is not subject to any conservation easement.

### **Tribal Consultation**

Projects eligible for the statutory infill housing development exemption also must comply with the tribal notification requirements under PRC 21080.66(b). On September 4, 2025, pursuant to PRC 21080.66(b), the City provided formal notification via certified mail and email to each California Native American tribe that is traditionally and culturally affiliated with the Project site, as provided by NAHC, to invite those tribes to consult with the City as to the proposed Project, its location, and the Project's potential effects on tribal cultural resources. One tribe, the Mishewal-Wappo Tribe of Alexander Valley, requested consultation, which the City initiated and participated in, and which concluded on November 10, 2025 in compliance with PRC 21080.66(b)(3)(F).

### **Standard Conditions of Approval**

While there are no known tribal cultural resources on the Project site, per PRC 21080.66(b)(4), the Project will be conditioned to comply with binding conditions of project approval to protect any tribal cultural resources, included below. In addition, the requirement for the local government to condition the Project conduct a phase I environmental site assessment under PRC 21080.66(c) has been met by the applicant who submitted to the City a Phase I ESA, prepared by Stantec, dated May 7, 2024.

1. The project shall include tribal monitoring during all ground-disturbing activities, as follows:
  - a. Prior to issuance of a demolition permit or grading permit, whichever occurs first, the applicant/property owner shall retain the services of a Tribal Monitor.
  - b. The Mishewal-Wappo Tribe of Alexander Valley shall designate the monitor.
  - c. The tribal monitor shall comply with applicant's site access and workplace safety requirements.
  - d. The applicant shall compensate the tribal monitor at a reasonable rate, determined in good faith, that aligns with customary compensation for cultural resource monitoring, taking into account factors such as the scope and duration of the project.
2. As applicable, tribal cultural resources shall be avoided where feasible, in accordance with subdivision (a) of Section 21084.3. In furtherance of this requirement, where feasible, the project applicant shall provide deference to tribal preferences regarding access to spiritual, ceremonial, and burial sites, and incorporate tribal traditional knowledge in the protection and sustainable use of tribal cultural resources and landscapes.
3. All treatment and documentation of tribal cultural resources shall be conducted in a culturally appropriate manner, consistent with Section 21083.9.
4. The applicant shall prepare a California Historical Resources Information System archaeological records search and a tribal cultural records search shall be completed for the project site.



5. The applicant shall submit a Sacred Lands Inventory request to the Native American Heritage Commission.
6. The project shall comply with Section 7050.5 of the Health and Safety Code and Section 5097.98, including immediate work stoppage upon discovery of human remains or burial grounds, and treatment in accordance with applicable law and in consultation with the affected California Native American tribe.

### **Conclusion**

As provided above, the proposed Project qualifies for statutory exemption from CEQA pursuant to PRC Section 21080.66 (Infill Housing Development Exemption). As such, no further environmental analysis under CEQA is required.

Mike Janusek, AICP  
Senior Planner Consulting with M-Group

### **EXHIBITS**

- A. Biological Resources Analysis, prepared by Monk & Associates, Inc., dated November 21, 2024

### **REFERENCES**

1. Phase I Environmental Site Assessment (ESA), prepared by Stantec, May 7, 2024
2. Department of Housing and Community Development, Default Density Standard Option – 2020 Census Update, Memorandum for Planning Directors and Interested Parties, March 21, 2022

**Spring Grove Vesting Tentative Map: 2019 General Plan Consistency**

<b>2019 General Plan Policies</b>		<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable
<b>Land Use and Growth Management</b>		
<b>LU1.1</b> Require new development to occur within well-defined boundaries and be consistent with the ability to provide urban services. New development should mitigate infrastructure impacts by using sustainable, best management practices in green building and stormwater management and paying its share of development impact fees, while minimizing impacts on sewer, water, energy, and natural resources.	The proposed project is adjacent to existing development, and can be provided with all required services, including sewer, water, police, and fire. The project proposes best management practices in stormwater management by providing bioretention facilities. In addition, the project would be all-electric, provide solar panels, and include EV-ready garages. The project is conditioned to pay its share of development impact fees. The subdivision includes one lettered lot, Parcel A, to contain the riparian corridor not for development, which would preserve natural resources.	✓
<b>LU1.2</b> Allow urban development to occur only within the Urban Limit	The proposed subdivision is within the Urban Service Area.	✓
<b>2019 General Plan Policies</b>		<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable
Line. Consider an exception for on-site employee housing on Agricultural lands. Urban services, such as sewer, water, and storm drainage, will only be extended to development within the Urban Limit Line.		
<b>LU1.5</b> Require new development to provide adequate infrastructure and urban services, including compliance with the policies and implementing actions affecting new development as set forth in the Public Facilities and Services Element.	The proposed subdivision is required to install all required infrastructure and facilitate the provision services.	✓





<b>LU2.1</b> Promote a mix of housing types and price ranges that are consistent with the Housing Element RHNA categories of housing affordability.	The project proposes development of a 41-unit multifamily development consisting of a 3-bedroom townhome-style condominium housing type, with some unit types including the option for a fourth bedroom. Units would range from 1,480 square feet to 1,810 square feet and provide an attached two-car garage. The project proposes 19% affordable units for moderate income households earning 120% or less of AMI, with four units available to households earning less than 100% AMI and four units available to households earning less than 120% AMI.	✓
<b>LU2.7</b> Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.	The proposed project includes a continuous network of pedestrian walkways with safe crosswalks differentiated from vehicular circulation areas. The project proposes passive open space amenities and landscaping along the pedestrian walkways, and complies with vision triangle requirements at the project's entrance at Spring Street. The project would provide long-term bike parking within the garage for each unit in addition to on-site bike racks. The project is conditioned to repair the public sidewalk along the frontage, as needed, and provide a public bike lane, as applicable.	✓
<b>LU2.D</b> Continue to require residential developers to contribute to the provision of community facilities and services (e.g. parks, recreation facilities and programs, education facilities, traffic and transportation facilities, and services), consistent with State law requiring a nexus between project impacts and required mitigation.	Conditions of approval require the applicant to pay all applicable development impact fees.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>Economic Sustainability</b>		
<b>ES1.4</b> Encourage the creation of workforce housing to support the local employment base in keeping with small town smart growth.	The project proposes development of a 41-unit multifamily infill housing development, with 19% affordable units for moderate income households earning 120% or less of AMI. Four units will be available to households earning less than 100% AMI and four units will be available to households earning less than 120% AMI.	✓



<b>Public Facilities and Services</b>		
<b>PF1.1</b> Require that the approval of new development be contingent upon the ability of the City to provide water without exceeding the safe annual yield of its water supply system.	The proposed project is conditioned to comply with the City's water neutrality policy prior to approval of the Tentative Map.	✓
<b>PF1.L</b> Require that all new residential housing projects incorporate "best practices" for minimizing water usage.	The proposed project will be required to adhere to all applicable codes and requirements related to water conservation through the building permit review process.	✓
<b>PF2.1</b> Ensure adequate sewage treatment capacity at the City treatment plant to meet the needs of population growth, taking into account the City's Growth Management System, the Regional Housing Needs Allocation, and the needs of non-residential users.	A study of sewer capacity prepared for the project's Tentative Map confirmed that capacity is available to serve the proposed project.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>PF2.C</b> Urban services such as sewer, water, and storm drainage will only be extended to development within the Urban Limit Line. Exceptions will be permitted when undue hardship can be demonstrated and when proposed improvements are not found to induce growth.	The proposed project is within the Urban Limit Line.	✓
<b>PF3.1</b> Ensure that new developments provide adequate drainage improvements and detention to mitigate flooding from increased stormwater runoff attributable to the development.	The proposed project will provide all required onsite drainage facilities to carry stormwater to the public storm drain in Spring Street.	✓





<b>PF3.C</b> Consistent with Municipal Code Section 16.32.170, continue to prohibit the creation of new residential lots that will be subject to periodic inundation from floodwaters. New development proposals on existing lots of record must identify flood hazard areas and mitigate all impacts to base flood levels and potential flood damage from grading, filling, and construction through proper drainage, construction, and location of utilities, in accordance with FEMA requirements.	No development is proposed within the 100-year floodplain. While a small portion of the project site is located within the FEMA-mapped 100-year floodplain, the project is not subject to inundation as no development is proposed within the 100-year floodplain.	✓
<b>PF5.4</b> Require that the approval of residential, commercial, or industrial development be contingent upon the mitigation of the impact of such development on the St. Helena Unified School District's ability to serve school-age children.	The proposed project is required to pay all applicable development impact fees, including school impact fees.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b>  ✓ – Consistent X – Inconsistent  ? – Insufficient Information NA – Not Applicable	
<b>PF5.A</b> Assist the School District in collecting school facility development fees generated by new development. Partner with the District to identify, establish, and implement additional measures to ensure that the highest quality of education is provided.	The proposed project is required to pay all applicable development impact fees, including school impact fees.	✓
<b>Circulation</b>		



<b>CR2.1</b> Create a comprehensive bicycle and pedestrian network that enhances neighborhood connectivity. Develop the system as shown in Figure 5.4 to expand and improve the pedestrian and bikeway system.	The project is conditioned to provide public sidewalk and bike lane improvements along the Spring Street frontage, as applicable.	✓
<b>CR2.C</b> Require any new development and modifications to existing projects to provide bicycle and pedestrian improvements and amenities, consistent with adopted Engineering Standards and the St. Helena Bicycle Plan.	The project is conditioned to provide public sidewalk and bike lane improvements along the Spring Street frontage, as applicable.	✓
<b>CR3.6</b> Support development of the bikeway and pedestrian networks to provide a convenient opportunity for at least 20 percent of commuters to get to work by walking or bicycling.	The project proposes a centrally-located infill housing development project with convenient bicycle and pedestrian opportunities. The proposed project includes a continuous network of pedestrian walkways with safe crosswalks. In addition, the project would provide long-term bike parking within the garage for each unit in addition to on-site bike racks.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>Community Design</b>		
<b>CD1.1</b> Ensure high-quality design and construction through a robust design review process.	Design of the proposed townhomes built within the proposed subdivision was reviewed as part of the Minor Design Review for the project to determine conformance with City policies and objective design standards for residential projects, SHMC 17.16.040.	✓
<b>CD1.8</b> Require, to the extent feasible, that all new development include underground utilities to minimize their negative visual impact. In addition, funding sources to underground electrical lines shall be sought so the undergrounding of existing overhead lines can occur over time.	The proposed project is conditioned to place all utilities underground.	✓





<b>CD3.2</b> Ensure that new residential designs contribute positively to existing neighborhoods by complementing character and incorporating design features, such as front porches, façade articulation and setbacks.	Design of the proposed townhomes built within the proposed subdivision was reviewed as part of the Minor Design Review for the project to determine conformance with City policies and objective design standards for residential projects, SHMC 17.16.040, including those regulating building architecture. The project will provide a variety of architectural features including front porches, standing-seam metal canopies, and facade articulation.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>CD6.1</b> Ensure a connected circulation system that maximizes pedestrian and bicycle connectivity.	The proposed project includes a continuous network of pedestrian walkways with safe crosswalks differentiated from vehicular circulation areas. The project would provide long-term bike parking within the garage for each unit in addition to on-site bike racks. The project is conditioned to repair the public sidewalk along the frontage and provide a bike lane within Spring Street, as applicable.	✓
<b>CD6.2</b> Promote the inclusion of bicycle and pedestrian trails and bicycle lanes throughout the City, as well as connections to regional trail systems, such as the Napa Valley Vine Trail.	The project is conditioned to repair the public sidewalk along the frontage and provide a bike lane within Spring Street, as applicable.	✓
<b>Open Space and Conservation</b>		
<b>OS1.1</b> Preserve and enhance St. Helena's riparian corridors for their value in providing wildlife habitat, biodiversity, natural drainage, and visual amenity.	The proposed project complies with the City's 20-foot-wide City waterway setback. The proposed subdivision includes a 0.1-acre lettered lot, Parcel A, to contain the riparian corridor not for development.	✓
<b>OS1.1</b> Require new development to be sited to maximize the protection of native tree species, riparian vegetation, important concentrations of natural plants, and sensitive wildlife habitat.	The project proposes to retain 19 native trees and plant an additional 24 native trees. In addition, consistent with this policy the project is conditioned to maximize the protection of native tree species, which may be done by providing protective fencing around trees to be retained. The project would implement arborist best practices for tree protection for those trees to be retained.	



OS1.O As part of new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (September through January) or by conducting a preconstruction survey by a qualified biologist if vegetation removal and construction is initiated during the nesting season (February through August). Surveys for nesting birds will be conducted no earlier than 14 days prior to tree removal and/or breaking ground. In the event that nesting birds are found, the project applicant will consult with CDFG and obtain approval for nest-protection buffers prior to tree removal and/or ground-breeding activities. Nest protection buffers will remain in effect until the young have fledged.	The project is conditioned to perform a nesting survey consistent with this standard.	
<b>Public Health, Safety and Noise</b>		
<b>PS1.4</b> Promote an optimized land use development pattern that minimizes cumulative air quality impacts from proposed developments.	The proposed project is consistent with the General Plan Land Use policy map.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>PS2.C</b> Adopt and enforce Title 24 Standards for all types of new residential construction, including single family dwellings, duplexes, apartments, and dormitories.      - An interior maximum noise level of LAdn-45 dBA in all habitable rooms for all dwelling units;    - A maximum allowable interior noise level for bedrooms of an hourly	The project is conditioned to ensure that exterior outdoor mechanical equipment, including HVAC equipment, is located away from property lines and shall not exceed 60 dBA consistent with this policy.	





LAeq-35 dBA;       • A maximum noise level of LAdn-60 dBA for residential exterior activity areas;     • If interior noise standards are met by requiring windows to be closed, cooling and outside air exchange must also be provided in the building's design.		
<b>PS3.1</b> Minimize risk of injury, loss of life and property damage from seismically induced and other known geologic hazards.	The proposed project will be required to conform with all applicable building codes, and all construction plans will be reviewed at the time of building permit review.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b>  ✓ – Consistent X – Inconsistent  ? – Insufficient Information NA – Not Applicable	
<b>PS3.3</b> The required soils and geologic reports for new development shall include geotechnical analysis for construction in areas with potential geological hazards and/or for purposes of environmental analysis. The analysis shall investigate all potential geo-hazard issues for the site where there is substantial evidence of a potential risk.   <b>PS3.4</b> Geologic reports for new development shall describe hazards and include mitigation measures to reduce risks to acceptable levels. Where appropriate, an engineer's or geologist's certification shall be required stating that risks have been mitigated to an acceptable level.	The project prepared a preliminary geotechnical analysis and is required to submit a construction-level geotechnical analysis conforming with these requirements at the time of building permit submittal.	✓
<b>PS3.A</b> Require a soils and geologic report to be submitted for new construction prior to the issuance of grading and building permits and the submission of final maps.	The project prepared a preliminary geotechnical analysis and is required to submit a construction-level geotechnical analysis at the time of building permit submittal.	✓



<b>PS3.B</b> Prohibit any development—including any land alteration, grading for roads, and structural development—in areas of slope instability or other geologic concerns until mitigating measures are taken to limit potential damage to levels of acceptable risk.	The proposed project does not involve any areas of unstable slopes or other geologic concerns.	✓
<b>PS3.E</b> All development and construction proposals shall be reviewed by the City to ensure conformance to applicable building standards. Recommendations of the geotechnical analysis shall be implemented.	Review of construction proposals will take place at the time that plans are submitted.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent X – Inconsistent ? – Insufficient Information NA – Not Applicable	
<b>PS4.6</b> Ensure that all streets and roads are adequate in terms of width, turning radius, and grade in order to facilitate access by City firefighting apparatus, and to provide alternative emergency routes of ingress and egress.	The proposed subdivision has been reviewed by the Fire Department for conformance with all applicable standards.	✓
<b>PS5.1</b> Minimize the risk to people, property and the environment caused by flooding hazards. Site new development to minimize potential damage from a 100-year flood. Continue to require that any new development is constructed FEMA standards. Prohibit the siting of uses within Flood Hazard Areas inconsistent with FEMA standards that could result in health and safety hazards, including those due to the release of chemicals or other substances as a result of inundation or erosion. Ensure that any new flood protection projects comply with federal and State standards.	No development is proposed within the 100-year floodplain that would require construction with FEMA standards. While a small portion of the project site is located within the FEMA-mapped 100-year floodplain, no development is proposed within the 100-year floodplain.	✓





Climate Change		
<b>CC1.1</b> Promote a “walkable” and “bikeable” city.	The project proposes a centrally-located infill housing development project with convenient bicycle and pedestrian opportunities. The proposed project includes a continuous network of pedestrian walkways with safe crosswalks. In addition, the project would provide long-term bike parking within the garage for each unit in addition to on-site bike racks that will promote walking and biking.	✓
<b>2019 General Plan Policies</b>	<b>Consistency Analysis</b> ✓ – Consistent <b>X</b> – Inconsistent ? – Insufficient Information <b>NA</b> – Not Applicable	
Parks and Recreation		
<b>PR1.4</b> Require park land dedications or civic improvement fees on all new residential, commercial, and industrial developments to meet the standard of 5.0 acres of parks per 1,000 residents.	The proposed project is required to pay all applicable development impact fees, including park fees.	✓
<b>PR6.1</b> Promote walking and bicycling as safe and convenient modes of transportation.	The project proposes a centrally-located infill housing development project with convenient bicycle and pedestrian opportunities. The proposed project includes a continuous network of pedestrian walkways with safe crosswalks. In addition, the project would provide long-term bike parking within the garage for each unit in addition to on-site bike racks that will promote walking and biking.	✓
<b>PR6.2</b> Develop a comprehensive network of bicycle and pedestrian trails to enhance bicycle and pedestrian connectivity throughout the city and the region.	The project is conditioned to repair the public sidewalk along the frontage and provide a bike lane within Spring Street, as applicable.	✓



<b>PR6.3</b> Promote the inclusion of bicycle and pedestrian trails, and bicycle lanes throughout the city, as well as connections to regional trail systems, such as the Napa Valley Vine Trail.	The project is conditioned to repair the public sidewalk along the frontage and provide a bike lane within Spring Street, as applicable.	✓
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# NOTICE OF ACTION – MINOR DESIGN REVIEW AND DENSITY BONUS APPROVAL



**DATE:** November 21, 2025

Via email to: kbarnett@cityventures.com

**TO:** City Ventures  
1185 Mason Street  
San Francisco, CA 94123

**FROM:** Mike Janusek, AICP, Planning Consultant

**RE:** Notice of Action – Minor Design Review and Density Bonus Approval. Pursuant to St. Helena Municipal Code Sections 17.05.080 and 17.29.040, the Community Development Director approves Minor Design Review and Density Bonus (PL24-065) (APNs 009-590-003, 009-590-005, and 009-590-010) in the High Density Residential (HR) and Medium Density Residential (MR) Zoning Districts.

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## **PROJECT DESCRIPTION**

The applicant filed the Minor Design Review and Density Bonus development application for review under SB 330, as part of a development application (also including a Vesting Tentative Subdivision Map and Demolition Permit) for a housing development project (“Project”). A complete application was deemed to have been submitted on May 13, 2025. City staff conducted a subsequent consistency analysis pursuant to Government Code section 65589.5(j)(2)(A)(i), and the Project was determined to have submitted an application consistent with applicable plans, programs, policies, ordinances, standards, requirements, or other similar provisions on November 11, 2025.

### *Minor Design Review*

The Project proposes development of a 41-unit multifamily development consisting of six three-story buildings on a 2.53-acre site. Each unit would be a 3-bedroom townhome-style condominium, with some unit types including the option for a fourth bedroom. Units would range from 1,480 square feet to 1,810 square feet and provide an attached two-car garage. Building exteriors would include a variety of neutral-toned stucco and board and batten fiber cement siding, standing-seam metal accent canopies, with gabled roof elements characteristic of a Farmhouse architectural style. On-site parking (93 spaces) would be provided through a combination of attached two-car garages for each unit and 11 perpendicular parking stalls along Street A. Access would be via a 28-foot-wide private street (Street A) from Spring Street. Additional site improvements include landscaping with 59 trees including 24 native trees and preservation of 19 native trees, common usable open space including a picnic area and seating, continuous pedestrian walkways, and bioretention facilities. Each unit would be all-electric and include solar panels, private patios and/or balconies, and EV-ready garage.

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Pursuant to SHMC Section 17.05.080.B.2, new multifamily development consistent with the applicable development and design standards provided in SHMC Section 17.16.040 (objective design standards) are subject to Minor Design Review with the Community Development Director serving as the review authority. The zoning for the site, as shown on the City's Zoning Map, is High Density Residential (HR) (1447 Spring Street and 1515 Spring Street) and Medium Density Residential (MR) (1505 Spring Street). Because portions of the site zoned MR (1505 Spring Street) are for access purposes only, the HR development standards apply to the Project.

#### *Density Bonus*

A project that provides at least 10% of the total number of proposed dwelling units as affordable units is eligible for concessions and waivers authorized by the State Density Bonus Law (SDBL) (Gov. Code, § 65915). Pursuant to the City's Inclusionary Housing Ordinance, SHMC Section 17.30.030, the Project will provide at least 20% affordable units. Per SHMC Section 17.30.030.G.1, for owner-occupied affordable units, at least half of the required affordable units shall be available to households earning less than 100% of annual median income (AMI).

The Project proposes a 41-unit, 19% affordable, multifamily development for moderate income households earning 120% or less of AMI, with four units available to households earning less than 100% AMI and four units available to households earning less than 120% AMI.¹ In accordance with CA Gov't Code § 65915, subd. (a)(3) (D)(i), the Project is eligible for a 14% State Density Bonus pursuant to CA Gov't Code § 65915, subd. (f)(4) and one concession and unlimited waivers. The Project does not request any Density Bonus units as it is within the allowable density range per the General Plan land use designation. The Project does not request any concessions, but does request 11 waivers to development standards. The City's detailed determination of Density Bonus eligibility is included as Exhibit A.

#### **FINDINGS**

Pursuant to St. Helena Municipal Code (SHMC) Section 17.05.080(D), Minor Design Review Findings, the Community Development Director hereby finds that:

1. The Project is in conformance with the general plan and zoning ordinance;
  - a. The Project is consistent with the intent of the High Density Residential and Medium Density Residential General Plan Land Use Designations, which accommodate a range of residential development types including multifamily dwelling uses. In addition, the Project is consistent with the general plan policies, including but not limited to those that encourage infill development near urban services (Policies LU1.1 and LU1.4), and the proposed density of 16.2 du/ac is within the allowed HR density. The Project as shown in the approved plan set (dated November 10, 2025) attached is in conformance with the City's zoning ordinance development standards for the HR zoning district under SHMC Section 17.16.030 as well as other applicable objective development standards in the zoning ordinance.
2. The Project is in conformance with applicable design and development standards;

¹ Pursuant to SHMC Section 17.30.030(A), the developer will pay the housing in-lieu fee for the remaining 0.2 fractional units of affordable to achieve the 20% minimum requirement of the Inclusionary Housing Ordinance.



- a. The Project conforms to the design and development standards set forth in SHMC Section 17.16, Residential Zoning Districts. Specifically, the Project meets all applicable objective design and development standards under: SHMC Sections 17.16.030, including setbacks, height, and lot coverage, and 17.16.040, including architectural features and roofline offset, and SHMC Chapters 17.24 (General Site Standards) including fence height and lighting requirements, 17.25 (Landscaping) including plant selection and irrigation, and 17.26 (Parking and Loading) including minimum required parking and stall dimensions.
  - b. Additionally, the Density Bonus provisions waive compliance with certain development standards as noted in the attached Notice of Density Bonus Eligibility (Exhibit A).
3. The Project's operating characteristics minimize potential negative impacts and land use conflicts;
  - a. The proposed use would be a multifamily residential project in a HR and MR zoning district and is surrounded by other residential uses including attached townhomes within the HR zoning district to the south and east and single-family homes within the MR zoning district to the north and west. As an infill residential project surrounded by similar residential land uses, there are no operating characteristics that would generate potential negative impacts and land use conflicts.
4. Adequate utilities, access roads, drainage, sanitation and other necessary facilities will be in place;
  - a. The proposed Project has adequate utilities, access roads, drainage, sanitation and other necessary facilities in that the Project will connect to existing sewer, storm drain, and water lines in Spring Street and the Project has been reviewed and approved by the Department of Public Works and the Fire Department. In addition, the Project will provide a 28-foot-wide driveway to provide vehicular access to Spring Street.
5. The project is categorically exempt under CEQA or other applicable environmental documents have been certified as complete and adequate; and
  - a. The City has conducted environmental review for the Project pursuant to Public Resources Code Section 21080.66, a statutory exemption from California Environmental Quality Act (CEQA) review for infill housing developments that meet certain conditions. The City has determined that the Project is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.66 as evidenced in the CEQA Exemption Memo included as Attachment 2.
6. The Project will not be detrimental to the public health, safety, and general welfare.
  - a. The Project will not be detrimental to the public health, safety, or welfare because the Project proposes multifamily dwellings consistent with the General Plan land use designation and complies with all applicable development standards, except for requested relief through State Density Bonus Law. No adverse public health or safety impacts associated with this Project can be found that would allow the City to deny the Project under the Housing Accountability Act or State Density

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Bonus. The City concludes (Fire, Public Works, Building, and Planning) that there are no specific adverse impacts that could reasonably result in denial of this Project.

## **APPEALS**

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This approval is subject to a 14-day appeal period per SHMC Section 17.12 (Procedures for Appeals). Anyone interested in appealing this approval must file an appeal with the Community Development Director within 14 days of the date of this letter. The letter of appeal must state: (1) the specific action objected to; (2) the action appellant requests the Planning Commission to take; (3) the reason for the appeal; and (4) the name, address, and telephone number of the appellant or contact person if there are multiple appellants and be accompanied by the appropriate fee.

Sincerely,

Mike Janusek, AICP  
Senior Planner Consulting with M-Group  
City of St. Helena Community Development Department

cc: Maya DeRosa, AICP, Community Development Director

### **Attachments:**

1. Project Plans, dated November 10, 2025
2. CEQA Exemption Memo

### **Exhibits:**

- A. Notice of Density Bonus Eligibility

## **Conditions of Approval - Minor Design Review**

### **Planning**

1. Compliance with all permit conditions shall occur in accordance with specific regulations but in all cases not later than prior to occupancy or initiation of use unless another time is set by law or by this approval. Occupancy or final inspection of a project may be withheld if all conditions, including payment of fees for services rendered by the City, are not met.
2. In any action or proceeding to attack, challenge, invalidate, set aside, void or annul the City's approval of applicant's Project, in whole or in part, applicant shall defend, at its own expense and without any cost to the City, and with counsel acceptable to the City, and shall fully and completely indemnify and hold the City, its agents, officers, and employees harmless from and against any and all claims, causes of action, damages, costs, attorney's fees and liability of any kind.

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3. All applicable conditions for the Project shall be printed on grading and/or building plans for each permit set of drawings.
4. The applicant is responsible for implementing all applicable conditions of approval in any future City Council approval of the associated Vesting Tentative Subdivision Map (Planning File No. TSM25-001). In the event of a conflict between the conditions of approval of this Minor Design Review and any future adopted VTSM conditions of approval, the future adopted VTSM conditions of approval prevail.
5. The applicant is responsible for implementing all applicable conditions of approval in any future Planning Commission approval of the associated Demolition Permit (Planning File No. DP25-002).
6. To reduce disturbance of residents in the project vicinity, construction activities which generate noise that can be heard at the property line of any parcel of real property within the City limits shall be limited to 8:00 a.m. to 5:00 p.m. Monday through Saturday. Delivery of materials/equipment and cleaning and servicing of machines/equipment shall be limited to 7:00 a.m. to 6:00 p.m. Exceptions to these time restrictions may be granted by the Public Works Director for one of the following reasons: (1) inclement weather affecting work, (2) emergency work, or (3) other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance. The City Engineer must be notified and give approval in advance of such work. No construction activities shall occur on Sundays or federal or local holidays that generate noise that can be heard at the property line of any parcel of real property within the City limits.
7. Mechanical equipment, including heating and air conditioning units, shall be located away from property lines and shall be shielded or enclosed to minimize noise levels. Noise generated shall not exceed 60 dBA, Ldn per noise-related policies of the St Helena General Plan, including policy PS2.C3 from the 2019 General Plan. For avoidance of doubt, mechanical equipment can be located on the roof if it meets the foregoing noise requirements.
8. The applicant or construction manager shall notify all contractors and subcontractors that no trespassing is allowed on adjoining properties.
9. Minor Design Review approval may only be extended or modified as provided for in SHMC Section 17.04.140 and Section 17.04.150.
10. Provided they are in general compliance with the approved Design Review, minor revisions found to be in substantial conformance with the approved design may be approved by the Community Development Director.
11. Construction documents shall indicate compliance with the final approved plans dated November 10, 2025 (Attachment 1) as approved through the Minor Design Review process.
12. A business license is required for all contractors and sub-contractors working on the project.

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13. Exterior lighting shall be directed or shielded to prevent glare onto the public roadway or adjacent properties.
14. Prior to approval of the Final Map, the applicant shall enter into an Affordable Housing Agreement with the City of St. Helena, which agreement shall be subject to review and approval by the St. Helena City Council pursuant to SHMC Section 17.30.040.B.1. The Affordable Housing Agreement shall be recorded in the Official Records of Napa County, and shall ensure that the project complies with the requirements of SHMC Section 17.30.030, inclusionary housing requirements.
15. Prior to issuance of building permit, the applicant shall pay any applicable affordable housing in-lieu fee pursuant to SHMC Section 17.30.030, for the 0.2-unit fraction of the proposed 41-unit project pursuant to the 20% affordable requirement.
16. Common usable open space amenities, including seating areas, and landscape improvements as shown in the approved project plans shall be installed prior to Certificate of Occupancy for the last building

Public Works: General Conditions

17. The applicant shall reference on construction drawings for all work in the public right of way City of St. Helena Construction Standards for all public improvements and utilities as applicable. Please utilize the 2025 updated standards, available from Public Works.
18. The developer shall be responsible for all City plan check, map check and inspection costs. The developer shall deposit funds with the City upon the initiation of plan check services. The amount of the initial deposit shall be determined by the City Engineer. Additional funds may be required based upon actual plan check and inspection costs.

Public Works: Fees

19. All Public Works Development Impact fees shall be due and payable at the time of issuance of building permit(s) for the improvements to which they are applicable, unless otherwise authorized by the City.

Public Works: Improvement Plan and Construction Conditions

20. All private water mains, sewer mains and storm drains shall be clearly labeled “Private” on the improvement plans.
21. Frontage improvements required. Improvements may include installation of ADA compliant driveways, sidewalk, bike lanes, curb and gutter replacements or repairs. All improvements shall be installed according to City Standards. Improvements shall be prescribed by the Public Works Director during the Building Permit phase.
22. An Encroachment Permit is required for all work within City right of way including obstructions, staging, or closures of the vehicular or pedestrian path of travel. Any damages to sidewalk, curb and gutter shall be repaired by the applicant. Applicant to keep roadway

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and sidewalk clear of construction activities and debris (Building Permit Phase).

Public Works Water and Sanitary Sewer Improvements Conditions

23. Any modifications to the existing well, other than the installation or maintenance of pumping and storage equipment and connection to the onsite irrigation water distribution system as approved by City Council pursuant to the Water Neutrality Requirements, shall require an approved permit per section 13.16.060 of the St Helena Municipal Code. The applicant shall also submit a well permit application to, and receive a permit from, the Napa County department of environmental management pursuant to Chapter 13.12 of the Napa County Code and subsequent revisions. Demolition of the well shall go through Napa County and any other applicable agencies.
24. Backflow prevention devices shall be installed prior to issuance of a building permit; all public improvements utility connections shall be designed in accordance with the City of St. Helena's Construction Standards (SHMC 16.32.230) (Building Permit Phase).
25. If the bed, bank, channel, or riparian habitat of any streams, including but not limited to ephemeral streams, will be impacted, including but not limited overflow from stormwater facilities, the applicant shall submit a Lake or Streambed Alteration Notification to CDFW and obtain any necessary permit from CDFW and comply with the Streambed Alteration Agreement and permits, if issued (see: <https://epims.wildlife.ca.gov/index.do>). The Project shall also obtain any necessary authorization from the Regional Water Quality Control Board pursuant to the Clean Water Act and Porter Cologne Water Quality Control Act.
26. Stormwater Quantity: Prior to issuance of a building permit, onsite stormwater and drainage management shall be sufficiently demonstrated in the building plans per SHMC 16.32.070.
  - a. Calculations required for pre and post development 10-year event. Plans shall demonstrate sufficient management of post development 10-year event.
  - b. Plans shall demonstrate sufficient conveyance facilities for a 100-year event.
  - c. Plans shall demonstrate drainage patterns which prevent diversion or inundation of neighboring properties.
27. A Stormwater Water Pollution Prevention Plan is required. The Plan shall detail all site-specific stormwater management, BMPs and erosion control measures shall be submitted for review and approval by the City Engineer prior to the issuance of a building permit (Building Permit Phase).
28. The plans shall be prepared in accordance with the latest edition of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual. Compliance with BASMAA "Regulated Project" requirements shall be demonstrated on a sheet in the plan set. The Plan will be reviewed with the building permit application. Plans shall detail all measures as required and indicated in the submitted stormwater control plan. A detailed Post-Construction Stormwater Control Plan (SWCP) that identifies and sizes all permanent post-construction stormwater treatment BMPs shall be prepared and submitted for review approval (Building Permit Phase).
29. Prior to Building Permit issuance, the applicant shall demonstrate that all proposed stormwater facilities comply with SHMC Sections 15.12.040 and 16.32.070. Excess or

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concentrated drainage shall be contained on site or directed to an approved drainage facility. Drainage improvements for runoff shall be engineered to minimize erosion through the use of rocked culvert inlets and outfalls, energy reducers, the correct location of culverts, etc.

30. All electrical energy and communication service laterals to any new building or structure shall be placed underground (SHMC 13.28.120) (Building Permit Phase).

Public Works Construction Conditions

31. Prior to Certificate of Occupancy for a building, the developer shall complete required improvements for that building in accordance with the approved improvement plans. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.
32. No grading or other construction shall be performed until the grading plans have been approved and signed by the City Engineer. Encroachment Permits and Building Permits will not be issued prior to the approval of the grading plans. An Encroachment Permit is required for any work within the City's rights of way.
33. A Stormwater Pollution Prevention Plan (SWPPP) is required and the contractor shall adhere to it at all times during construction. The developer shall keep adjoining public streets free and clean of project dirt, mud, materials, and debris during the construction period, as is found necessary by the City Engineer.
34. Prior to the issuance of a grading permit, the developer shall provide evidence that a Notice of Intent has been submitted and received by the Regional Water Quality Control Board for a General Construction Activity Storm Water Permit. A copy of the project Storm Water Pollution Protection Plan shall be submitted to the City.
35. If any hazardous waste is encountered during the construction of this project, all work shall be immediately stopped and the Napa County Environmental Health Department, the Fire Department, the Police Department, and the City Inspector shall be notified immediately. Work shall not proceed until clearance has been issued by all of these agencies.
36. Prior to final preparation of the subgrade and placement of base materials, all underground utilities shall be installed and service connections stubbed out behind the sidewalk. Public utilities, Cable TV, sanitary sewers, and water lines shall be installed in a manner which will not disturb the street pavement, curb, gutter and sidewalk, when future service connections or extensions are made.
37. Where soil or geologic conditions encountered in grading operations are different from that anticipated in the soil or geologic investigation report, or where such conditions warrant changes to the recommendations contained in the original soil investigation, a revised soil or geologic report shall be submitted for approval by the City Engineer. It shall be accompanied by an engineering and geological opinion as to the safety of the site from hazards of land slippage, erosion, settlement, and seismic activity. Additionally, if field conditions warrant installation of any subdrains, the location, size and construction details must be provided to the City for review and approval prior to construction.

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38. All streets, curbs, gutters, sidewalks or other public facilities damaged in the course of construction associated with this development shall be the responsibility of the Developer and shall be repaired to the satisfaction of the City at the Developer's expense.
39. Dust control must be maintained to the City's satisfaction.
40. A certificate of occupancy shall not be issued for any structure until required improvements are completed to the satisfaction of the City Engineer.
41. Prior to issuance of a building permit, an approved Grading Permit will be Required.
42. No City supplied water use is permitted for construction activities (Building Permit Phase).
43. Inspection by Public Works Staff is required for utility installations (Building Permit Phase).

Fire

44. Prior to issuance of future building permits, all construction plans for homes shall include NFPA13 fire sprinklers as required by the City of St. Helena Fire Department.
45. Prior to issuance of a building permit, plans shall, consistent with the VTMAP, continue to exhibit compliance with the current St. Helena Fire Code, as adopted and codified in St. Helena Municipal Code Chapter 15.36.
46. One hour minimum fire resistant construction on all exterior walls within 10' of property boundary is required. Fire resistant construction of interior walls shall be determined by type of occupancy.
47. Any gates installed to control vehicular access to a property are required to be setback 30-feet from the property line and/or edge of pavement, whichever is greater. No vehicle gates may be installed without Fire Department and Public Works Department review and explicit approval.

Building

48. The applicant will be required to comply with the CBC codes adopted at the time the applicant applies for a building permit, or as dictated by state law. The City of St. Helena will utilize the 2025 California Building Code series, starting January 1, 2026.
49. When submitting plans for a building permit, the plans shall include all documentation listed on the building permit application checklist, including a construction-level geotechnical report.
50. The applicant shall provide a Construction Waste Management Plan with the building permit application.
51. The plans for construction shall include a checklist for compliance with the California Green Building Standards Code, mandatory measures. Provide a reference on the checklist indicating where the mandatory measures can be found on the plans.
52. When submitting plans, the Title Page shall include all information referenced on the building permit application checklist Title Page requirements.

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53. Building permit application materials and plans shall include any documentation pertaining to special loads applicable to the design and the specified section of the code that addresses the condition; special inspections for any systems or components requiring special inspection; requirements for seismic resistance; and a complete list of deferred submittals at time of application.
54. Any deferral of the required submittal items shall have prior approval of the Building Official, however, deferral of the fire sprinkler design is not allowed.
55. A separate permit submittal is required for generators, fire sprinkler/standpipe systems, fire pumps, fire alarms, and PV-systems.
56. At the time of building permit submittal, EV parking shall be fully detailed to demonstrate compliance with required EV charging per 4.106.4.2.2 and 4.106.4 of the California Green Building Standards Code.
57. Plans shall comply with Chapter 11A CBC ADA requirements for residential units, and Chapter 11B CBC for common areas, as applicable.

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City of St. Helena  
Community Development  
Department 1088 College Avenue  
St. Helena, CA 94574

November 21, 2025

City Ventures  
Attn: Kelso Barnett  
1185 Mason Street  
San Francisco, CA 94123

VIA EMAIL: kbarnett@cityventures.com

**Re: Notice of Density Bonus Eligibility  
Spring Grove Multifamily (File #PL24-065) – SB 330 Minor Design Review and  
Density Bonus**

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**Density Bonus Eligibility**

Thank you for your application seeking a Density Bonus for the Spring Grove Multifamily project, a proposed 41-unit, 19% affordable, multifamily development in St. Helena for moderate income households earning 120% or less of Area Median Income (AMI). Planning staff has reviewed your Density Bonus application and deemed the application complete. In accordance with CA Gov't Code § 65915, subd. (a)(3) (D)(i), you are hereby notified that your project is eligible for a 14% State Density Bonus pursuant to CA Gov't Code § 65915, subd. (f)(4). State Density Bonus eligibility is calculated as follows:

**Project Profile**

The Spring Grove Multifamily project proposes 41 dwelling units for sale to persons and families earning less than 120% AMI.

Project Site Area:	2.53 gross acres
Total Units Proposed:	41 dwelling units (du)
Site Land Use Designation:	High Density Residential
Site Zoning District:	High Density Residential (HR)
Maximum Density per General Plan:	16.1-28 du/gross acre
Maximum Units per General Plan:	2.53 gross acres x 28 du/ac = 70.8
Density Desired:	16.2 du/ac

**Calculation of State Density Bonus of 80%**

Base Project, Total Units	41
Market Rate Units	33
Affordable Units	8
Percent Affordable	19.5% ¹
State Density Bonus	19% of the units for sale to moderate income households results in a 14% increase in the maximum allowable residential density and 1 incentives or concessions
Maximum Density Allowed	33 du/ac
Density Bonus Units Requested	0

**Requests for Concessions and Waivers**

In accordance with CA Gov't. Code § 65915, subd. (d)(2)(A), the proposed project is entitled to a maximum of one incentives or concessions. No concessions from current City of St. Helena development standards resulting in identifiable cost reductions have been requested pursuant to CA Gov't Code § 65915, subd. (d)(1). In addition, the applicant has requested 11 waivers to development standards that will have the effect of physically precluding construction of the development pursuant CA Gov't. Code § 65915, subd. (e)(1). The requested waivers are described below.

**Waivers**

1. **Interior Side Setback.** Per SHMC Table 17.16.030.B, the minimum interior side setback is 10 feet. The proposed interior side setback is 8 feet, which does not comply with this standard. The City acknowledges strict compliance with the side setback would physically preclude development of the project at the densities allowed under State Density Bonus Law. The project site is comprised of irregularly shaped parcels with a required 20-foot waterway setback, a required 26-foot-wide minimum Fire access lane, a required 12-foot minimum separation between rowhouse blocks, and pedestrian walkway requirements, that, collectively, constrain the ability to meet the interior side yard setback at Building 1, Building 2, and Building 5. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Table 17.16.030.B for interior side setback as adequate for the City to make a determination as to this waiver request.
2. **Private Ground Floor Open Space.** Per SHMC Table 17.16.030.B, 60 square feet of private ground floor open space per unit is required. While the project provides a total 5,595 square feet of private ground floor open space, four end units do not provide any. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, Buildings 1 and 6 contain end units with no private patios due to the irregular shape of the lots, minimum 26-foot-wide Fire access lane, minimum 10-foot interior side setback, and ability of the developer to provide garage parking and

¹ Per CA Gov't. Code § 65915, subd. (f)(4) 19% of the units, including total units and density bonus units, are for sale to moderate income households, as defined by Section 50079.5 of the Health and Safety Code, the project is eligible for an 14% increase in the maximum allowable residential density.



efficiently stacked units. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Table 17.16.030.B for private ground floor open space as adequate for the City to make a determination as to this waiver request.

3. **Minimum Landscape Area. Per SHMC Table 17.16.030.B,** the minimum landscape area is 25% of the lot area, or 27,552 square feet. This standard is not met as 23,030 square feet of landscaping is provided. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, the project is comprised of irregularly shaped parcels with a 26-foot-wide minimum Fire access lane and a minimum 3-foot-wide landscape planter requirement, that, collectively, constrain the ability to meet the minimum landscape area requirement. The project also provides additional hardscaped private open space areas that do not count toward the minimum landscape area including 5,595 square feet of private ground floor open space through patios and additional private open space through balconies. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Table 17.16.030.B for minimum landscape area as adequate for the City to make a determination as to this waiver request.
4. **Paved/Hardscaped Area. Per SHMC Table 17.16.030.B,** the maximum paved/hardscaped area within the required front setback is 30%. The project proposes 360 square feet of hardscape area within the front setback, or 41%, which exceeds this requirement. The City acknowledges strict compliance with the paved/hardscape area standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, the project site is comprised of irregularly shaped parcels with a required 26-foot-wide minimum Fire access lane that constrain the ability to reduce paved areas within the required front setback. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Table 17.16.030.B for paved/hardscaped area as adequate for the City to make a determination as to this waiver request.
5. **Minimum Distance to Interior Drive Aisle. Per SHMC Section 17.16.040.A.7.e,** the minimum distance from the back of any drive aisle or walkway interior to a site must be 10 feet to the garage door and five feet to any living area or covered porch. The project does not comply with this standard as 39 of the units do not provide at least 10 feet between the garage and the drive aisle. The City acknowledges strict compliance with the parking frontage standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, the project site is comprised of irregularly shaped parcels with a required 20-foot waterway setback and a required 26-foot-wide minimum Fire access that constrain the ability to provide at least 10 feet between the drive aisle and the garages. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16.040.A.7.e for minimum distance to drive aisle as adequate for the City to make a determination as to this waiver request.
6. **Driveway Curb Cuts. Per SHMC Section 17.16.040.A.7.g,** where individual driveways are accessed by a private or shared drive, a maximum of one driveway curb cut is allowed for each 50 feet of street frontage. The project provides private streets with individual curb cuts for each unit's garage, and does not meet this standard. The City acknowledges strict compliance with this standard would physically preclude development of the project

at the densities allowed under State Density Bonus Law. Specially, the project site is comprised of irregularly shaped parcels with a required 20-foot waterway setback and a required 26-foot-wide minimum Fire access lane that constrain the ability to provide at least 50 feet between curb cuts. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16.040.A.7.g for driveway curb cuts as adequate for the City to make a determination as to this waiver request.

7. **Full Height Recesses. Per SHMC Section 17.16.040.C.1.h**, where a new multifamily development is built adjacent to existing lower-scaled residential development, the facade opposite the existing lower-scaled residential development shall incorporate at least one full-height recess a minimum two feet in depth. While the primary elevations of each building contain at least one full-height recesses of at least 2 feet, there is one instance where the side elevation of Building 5, with a 1.5-foot full-height recess, faces existing lower-scaled development. The required 20-foot waterway setback, 10-foot side yard setback, and ability of the developer to provide garage parking and efficiently stacked units, collectively, constrain the ability to meet this standard. The City acknowledges strict compliance with full-height recess standard would physically preclude development of the project at the densities allowed under State Density Bonus law. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16.040.C.1.h for full-height recess as adequate for the City to make a determination as to this waiver request.
8. **Attached Rowhouse Block. Per SHMC Section 17.16.040.C.2.b**, blocks of attached rowhouses must be a minimum of three units and a maximum of eight units. Building 2 does not meet this standard as 9 units are proposed. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specially, the 12-foot minimum separation requirement between rowhouse blocks and pedestrian walkway requirements constrain the ability to shift units between buildings. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16.040.C.2.b to the maximum number of units in a rowhouse block as adequate for the City to make a determination as to this waiver request.
9. **Entry Design. Per SHMC Section 17.16.040.C.3.b.i**, individual ground floor entrances to units within a multifamily development must be visible and directly accessible from the right of way or a shared pathway. This standard is not met for two of the end units in Buildings 1 and 6 where direct pedestrian access is not provided from a walkway. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, the project site is comprised of irregularly shaped parcels with a required 26-foot-wide minimum Fire access lane that constrain the ability to provide additional walkways along Streets B and C. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16.040.C.3.b.i for entry design as adequate for the City to make a determination as to this waiver request.
10. **Common Outdoor Recreation Space Visibility. Per SHMC Section 17.16.040.C.4.c**, common outdoor recreation space must be visible from a minimum of 50% of the units and be visible to the residents of the project for which the space is provided. The project includes two common outdoor recreation spaces toward the front of the site that are visible from 29% of the units and does not comply with this standard. The City



acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, the project is required to provide common open space with a minimum dimension of 15-feet-wide, a minimum 26-foot-wide Fire access lane, and stormwater facilities that, collectively, constrain the ability to provide centralized common open space or additional perimeter common open space visible from at least 50% of the units. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.16040.C.4.c for common outdoor recreation space visibility as adequate for the City to make a determination as to this waiver request.

11. **Long-Term Bicycle Parking Size.** Per SHMC Section 17.26.080.B.4, two feet of clearance shall be provided between bicycle parking spaces and adjacent walls and five feet of clearance shall be provided from vehicle parking spaces. The project proposes long-term bicycle parking with private garages for each unit and does not meet the minimum clearance standards. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Specifically, this standard is intended for communal bike rooms and implementation is not practicable when applied to long-term bicycle parking within individual garages. The project will provide a wall-mounted bike rack within each individual garage. Therefore, the City accepts information regarding the requested Density Bonus waiver to SHMC Section 17.26.080.B.4 for minimum long-term bicycle parking size as adequate for the City to make a determination as to this waiver request.

Pursuant to CA Gov't Code § 65915(a)(3) (D)(i)(III) and SHMC Chapter 17.29, you are hereby notified that (1) the project is eligible for a 14% density bonus based on the project including a total of 41 units with 8 units being deed restricted to moderate income households; and (2) the information provided regarding the requests for waivers from developments standards is adequate for the City to make a determination as to those requested waivers for the reasons detailed above. Please note that this Notice of Density Bonus Eligibility should not be construed as a granting of those requested waivers.

An affordable housing agreement pursuant to SHMC Section 17.29.030 is required for the project.

Sincerely,

Mike Janusek, AICP  
 Senior Planner Consulting with M-Group  
 cc: Maya DeRosa, AICP, Community Development Director

Exhibit A: Written Statement Excerpt with Density Bonus Requests, prepared by City Ventures, dated November 14, 2025.

Entry Door	Fiberglass & Glass
Railings	Wood Rake
Windows	Vinyl (Milgard)
Downspouts	Aluminum
Lighting	Metal (Black Allenbury Downward)
Wire Vine Lines	Galvanized Metal
Accent	Standing Seam Metal

Further discussion of the proposed project's architectural design is below within the Design Review subsection.

#### **DENSITY BONUS**

Spring Grove is designed for first-time homebuyers and families who live and work in St. Helena. The project is designed to be consistent with the City of St. Helena's General Plan, adopted in 2019, and the Objective Design Standards codified in October 2023. Spring Grove is a Housing Development Project within the meaning of Government Code section 65589.5(h)(2) and has been designed to comply with applicable objective General Plan and subdivision standards and criteria as described in Government Code section 65589.5(j).

Spring Grove qualifies for the benefits of the State Density Bonus Law as it provides at least 10% of the units to be deed restricted for households at moderate incomes. Specifically, Per St. Helena's Inclusionary Housing ordinance, twenty percent (20%) of the housing units, 8.2 units, will be made available to households at moderate incomes. Four (4) units will be made available to households whose annual income does not exceed 100% of median income, and four (4) units will be made available to households whose annual income does not exceed 120% of median income. We propose to satisfy the remaining 0.2-unit through the payment of the in-lieu fee.

<b>Density Bonus Application</b>	
Density Bonus %	20%
Total Number of Proposed Units	41
<b>Inclusionary Units Required</b>	<b>8.2</b>
Total Inclusionary Units Proposed	8
Median Income (100% AMI)	4
Moderate Income (120% AMI)	4
Fractional Unit (Paid via In-Lieu Fee)	0.2
<b>Number of Density Bonus Units</b>	<b>0</b>

Because this for-sale project provides at least 20-percent deed-restricted homes for households with moderate incomes, Spring Grove is eligible for State Density Bonus Law (Gov. Code, §§ 65915–65918) benefits, including unlimited waivers and two concessions. City Ventures is requesting four density bonus



waivers. City Ventures reserves the right to request additional concessions (as we currently have the right to use two) or waivers/incentives under the State Density Bonus Law at a later time.

Per state law, waivers of development standards that would physically preclude the development of a project at the density permitted are allowed. Specifically, we are requesting the following waivers from the St. Helena Objective Design Standards (SHMC 17.16.040):

<b>Density Bonus Waiver Requests</b>	
<b>Waiver</b>	<b>St. Helena Municipal Code</b>
1. Full Height Recesses	17.16.040.C.1.h
2. Rowhouse: 8-unit Max	17.16.040.C.2.b
3. Units on Common Open Space	17.16.040.C.4.c
4. Minimum Distance: Drive Aisle/Walkway	17.16.040.A.7.e
5. Private Ground Floor Open Space	17.16.030.B
6. Driveway Curb Cuts	17.16.040.A.7.g
7. Entry Design	17.16.040.C.3.b.i
8. Maximum Paved/Hardscaped Area	17.16.030.B
9. Long-Term Bicycle Parking	17.26.080.B
10. Minimum Landscape Area	17.16.030.B
11. Interior Side Yard Setback	17.16.030.B

Our project program consists of 3+ bedroom townhome-style condominiums, more specifically defined as a “rowhouse” within the St. Helena Municipal Code. These proposed units range between 1,480 and 1,810 square feet, appropriate sizes for the “missing middle” – first time homebuyers and young families – for which the project is designed. At 41-units, the project is at minimum density per the code. The site, Site 9 in the Housing Element, is a unique and irregularly shaped parcel. Weighing design standards, including setbacks, fire access roads, height, open space, parking, and missing middle home sizes can be a balancing act and puzzle, and meeting the vast majority of the objective design standards is testament to skillful design. The eight waivers discussed below are requested as they would physically preclude the development of this project at the density permitted, which is already at the minimum density. Simply put, strict enforcement of these remaining design and zoning code standards would reduce the density of the project. Reducing the density of the project would both violate state law as well as the local development code, as the project would fall beneath the minimum density.

***1. SHMC 17.16.040.C.1.h: Where a new multifamily development is built adjacent to existing lower-scaled residential development, the facade opposite the existing lower-scaled residential development shall incorporate at least one full-height recess a minimum two feet in depth.***

Strict compliance with the design standard requiring that "Where a new multifamily development is built adjacent to existing lower-scaled residential development, the facade opposite the existing lower-scaled residential development shall incorporate at least one full-height recess a minimum two feet in depth" would physically preclude the density permitted on the site for the following reasons:

**Impact on Unit Layout and Efficiency:** A full-height recess of at least two feet disrupts the continuity of unit widths. Our townhome units are typically designed with standardized width, but even a single recess

along a row of units requires either: widening the building footprint, or reducing the number of units in that block to accommodate the recess. The result is that a recess effectively eliminates or compresses one unit's usable space, which must then be accommodated (enlarged) to meet market standards, thereby reducing density.

**No Viable Alternative Configuration:** Our site layout has already been optimized to provide the minimum number of units allowable under applicable zoning and General Plan density. Introducing required recesses would compromise the regular rectangular block format needed for the efficient stacking of units with garages below and living space above. Because townhomes are typically side-by-side units, interruptions in the façade translate directly into lost units, not just architectural shifts.

As Building 5 is the only building whose side façade is adjacent to existing lower scaled development, the waiver request only applies to this building, which also has a recess of 1'6", less than the required 2'. If a waiver was not granted, this would have the affect of pushing the building further south into the creek setback/flood zone, which would practically result in losing a unit. As a result, this would physically preclude the development of this project at the minimum density.

***2. SHMC 17.16.040.C.2.b: Blocks of attached rowhouses must be a minimum of three units and a maximum of eight units.***

Please note that this requirement is met for all buildings except Building 2, which has 9 units. However, strict compliance with the three-to-eight-unit block requirement prevents flexibility in unit layout that is necessary to meet ADA accessibility and site circulation standards. In particular, the required accessible path from guest parking (on the south) across the internal drive aisle to the perimeter path limits where units and driveways can be located, which forces breaks in rowhouse blocks at key circulation points. As a result, it becomes physically impossible to fit the minimum number of units while also satisfying the standard block length, circulation, and accessibility requirements.

Because strict enforcement of the 3–8-unit rowhouse rule would physically prevent the project from reaching the allowed density—due to the need to insert accessible pedestrian paths across the drive aisle—this design standard should be waived. The waiver is necessary to enable accessible circulation, preserve pedestrian connectivity, and allow the full build-out of the site to its intended density.

***3. SHMC 17.16.040.C.4.c: Visibility. Common outdoor recreation spaces must be visible from the primary living spaces of a minimum of fifty percent (50%) of units and be visible to the residents of the project for which the space is provided.***

Strict compliance with the design standard requiring that “common outdoor recreation spaces must be visible from the primary living spaces of a minimum of fifty percent (50%) of units and be visible to the residents of the project for which the space is provided” would physically preclude achieving the density permitted on the site due to the unique constraints of the parcel.

To meet the visibility requirement for 50% of units, the open space would need to be located in a central and unobstructed area, ideally surrounded by units on multiple sides. However, due to the irregular configuration of the parcel organizing buildings around a central open space visible to the majority of units is geometrically unfeasible. Such an arrangement would result in inefficient site layout and a loss of units.



Given these unique physical limitations and the irregular shape of the site, strict adherence to this design standard would physically preclude development at the allowable density. Therefore, a waiver is justified to allow for common open space that is still functional, accessible, and appropriately integrated into the project—just not visible from 50% of unit interiors—so long as it serves the recreational needs of residents and enhances overall project livability.

***4. SHMC 17.16.040.A.7.e: Minimum Distance – Driveway/Walkway. The minimum distance from the back of any drive aisle or walkway interior to a site must be ten (10) feet to the garage door and five feet to any living area or covered porch.***

The St. Helena Zoning Code requires a minimum distance from the back of any drive aisle or walkway interior to a site of ten (10) feet to the garage door and five (5) feet to any living area or covered porch. The proposed project complies with the required 5-foot setback to living areas but does not meet the 10-foot setback to garage doors for certain units accessed from the internal drive aisle.

Due to the irregular shape of the parcel and the need to efficiently organize garages along the internal driveway network, strict application of the 10-foot garage setback would necessitate larger individual townhome footprints. This would directly reduce the number of units that can be accommodated on the site. As a result, enforcing this standard would physically preclude the project from achieving the minimum permitted density under Government Code § 65915. A waiver of this development standard is therefore necessary to allow an efficient site layout that delivers the planned housing while maintaining safe and functional access.

***5. SHMC 17.16.030.B: Private Ground Floor Open Space: 60 square feet of private ground floor open space per unit is required.***

The St. Helena Zoning Code requires that each unit include a minimum of sixty (60) square feet of private ground floor open space. In the proposed project, 37 of the 41 townhome units meet or exceed this standard. Four smaller end units, however, do not include private patios. These units were intentionally designed and located to achieve the site's minimum permitted density while also accommodating the parcel's irregular shape and preserving the undisturbed riparian corridor.

Strict application of the private open space requirement to these four units would require significant redesign, eliminating them entirely or enlarging their footprints at the expense of other units or site features. Either option would reduce the total unit count and physically preclude the project from achieving the minimum density permitted under Government Code § 65915.

The proposed design provides ample shared open space and preserves valuable natural areas, ensuring all residents benefit from accessible outdoor amenities while meeting the City's and State's housing production goals. A waiver of this development standard is therefore necessary to maintain the project's planned density and site-sensitive design.

***6. SHMC 17.16.040.A.7.g: Driveway Curb Cuts. Where individual driveways are accessed by a private or shared drive, a maximum of one driveway curb cut is allowed for each fifty (50) feet of street frontage.***

The St. Helena Zoning Code limits developments in which individual driveways are accessed by a private or shared drive to a maximum of one driveway curb cut for every fifty (50) feet of street frontage. The proposed project includes more than one curb cuts within 50-foot frontage segments to provide adequate access to individual townhome garages and maintain functional circulation throughout the site.

The site's irregular configuration, coupled with the need to preserve an undisturbed riparian corridor along a substantial portion of the frontage, significantly constrains where curb cuts can be located. Concentrating all driveways into fewer curb cuts would require excessive internal maneuvering space, reduce the number of buildable units/footprints, and create awkward, inefficient driveway alignments. This would directly reduce the achievable unit count and physically preclude the project from meeting the minimum permitted density under Government Code § 65915.

The proposed curb cut configuration balances vehicular access needs with preservation of sensitive natural features, avoids excessive grading or disturbance to the riparian corridor, and maintains a safe, logical circulation network. A waiver of this standard is therefore necessary to ensure both environmental protection and the delivery of much-needed housing at the density allowed by state law.

***7. SHMC 17.16.040.C.3.b.i: Entry Design. Individual ground floor entrances to units within a multifamily development must be visible and directly accessible from the right of way or a shared pathway.***

The St. Helena Zoning Code requires that individual ground floor entrances to units within a multifamily development be visible and directly accessible from the public right-of-way or a shared pathway. In the proposed project, the vast majority of units—39 of 41—comply with this standard. However, two of the Plan 1 units, which are smaller homes specifically designed to help achieve the project's minimum permitted density, do not have entries directly visible from a shared pathway. These units are located at the ends of buildings opposite the shared pathway, a placement dictated by the unique shape and physical constraints of the site.

This layout allowed the inclusion of compact, efficiently designed homes that maximize the site's housing potential while maintaining architectural variety and preserving key site features such as the riparian corridor. Enforcing strict compliance with this standard would require a substantial redesign, eliminating these units and thereby reducing the overall unit count. This reduction would physically preclude the project from achieving the minimum density permitted under Government Code § 65915.

The proposed design maintains safe and convenient access to all units, preserves high-quality architecture, and supports the City's and State's shared objective of delivering housing at allowed densities. A waiver of this development standard is therefore necessary to retain these smaller, attainable units while respecting the site's constraints.

***8. SHMC 17.16.030.B: Maximum Paved/Hardscaped Area: The maximum paved/hardscaped area is 30% within the required front setback.***

The St. Helena Zoning Code limits paved or hardscaped surfaces within the front setback to no more than thirty percent (30%) of that area. Due to the unique configuration of the parcel, only a small portion of the site fronts Spring Street, and this limited frontage must serve as the primary vehicular access point as well



as accommodate multiple pedestrian pathways. These circulation elements are essential to provide safe, functional, and code-compliant access to all parts of the project.

Strict adherence to the 30% paving limitation would require narrowing the primary driveway from Spring Street, which would in turn fail to meet fire access standards. This would not only create life-safety concerns but would also render the project infeasible. In addition, reconfiguring the access to comply with the paving cap would require significant redesign that would either eliminate units or reduce buildable area, physically precluding the project from achieving the minimum permitted density under Government Code § 65915.

The proposed design balances the need for safe and efficient vehicular and pedestrian access with aesthetic considerations, incorporating landscaping wherever feasible while ensuring compliance with fire safety and accessibility requirements. A waiver of this standard is therefore necessary to maintain both site functionality and the project's housing production goals.

***9. SHMC 17.16.080.B.4: Long-term Bicycle Parking: Two feet of clearance shall be provided between bicycle parking spaces and adjacent walls, etc. Five feet of clearance shall be provided from vehicle parking spaces.***

The project requests a waiver from the required two- and five-foot clearance standards for long-term bicycle parking. The proposed design provides wall-mounted bicycle racks within individual private garages, allowing each homeowner to securely store bicycles within their own unit.

Strict application of the clearance standards would make it infeasible to provide the required number of long-term bicycle parking spaces without significantly increasing the size of the garages or the overall building footprint. This, in turn, would reduce the site's development potential below the minimum density permitted by the zoning and the Density Bonus Law, directly conflicting with the State's intent to facilitate the production of housing.

Furthermore, the clearance requirement appears to have been written for multifamily projects with common bicycle storage rooms, where multiple racks are placed in shared spaces and pedestrian maneuvering areas are needed. In this case, each bicycle space is privately located within a garage, without shared circulation. The intent of the code—to ensure safe, accessible, and secure bicycle storage—is fully achieved through the proposed design, even without the prescribed clearances.

For these reasons, the project qualifies for a waiver under Government Code §65915(e), as the clearance requirement would physically preclude the development of the site at the permitted density and is unnecessary given the design of the long-term bicycle parking system.

***10. SHMC 17.16.030.B: Minimum Landscape Area. Per the table, the minimum landscape area is 25% of the lot area, of 27,552 square feet.***

Spring Grove provides a total of 19,545 square feet of open space, which is slightly less than the 27,552 square feet required under the City's development standards. However, this modest deviation is justified under the State Density Bonus Law (Government Code § 65915(e)), which allows waivers of development standards that would physically preclude construction of a project with the granted density bonus, including affordable housing units.

In this case, the open space requirement would physically constrain the site's ability to achieve the planned mix of missing-middle homes and deed-restricted affordable units, both of which advance the City's adopted Housing Element goals. The project's overall design thoughtfully integrates a variety of open space types that together achieve the intent—and, functionally, the benefit—of the quantitative standard.

Specifically:

- Common Open Space: Landscaped paseos, a central gathering green, and small neighborhood pocket spaces provide communal outdoor areas that foster interaction, recreation, and a sense of community.
- Private Open Space: Every residence includes its own private yard, balcony, or patio, offering personal outdoor living areas that supplement shared amenities.
- Riparian Corridor and Natural Edge: The project preserves and enhances the existing riparian corridor, establishing a natural open-space buffer and habitat zone that exceeds the qualitative value of typical on-site open space. This area contributes to the visual openness and environmental character of the development, benefiting both residents and the public realm.

Collectively, these open space components deliver a balanced, high-quality living environment consistent with the City's open space objectives—promoting livability, connectivity, and environmental stewardship—even though the total area falls below the numerical requirement.

Strict application of the open space standard would physically preclude construction of the density bonus units and conflict with the project's broader public benefits, including attainable ownership housing and 8 deed-restricted affordable homes. For these reasons, the waiver is both necessary and appropriate under State Density Bonus Law and fully consistent with the intent of the City's General Plan and Housing Element policies.

***11. SHMC 17.16.030.B: Interior Side Yard Setback. Per the table, the interior side yard setback in the HR zoning district is 10-feet.***

The HR zoning district establishes a 10-foot interior side yard setback. Buildings 1 and 2 are fully compliant with this requirement; however, the associated utility cabinets extend approximately two feet into the setback area. These cabinets are essential service components, fixed in size, and required to be placed in accessible locations by the serving utility providers. Given the compact and highly constrained nature of the site—an infill parcel bordered by existing residential uses and shaped by the riparian corridor to the south—there is no feasible way to relocate or redesign these utility elements without materially reducing the project's buildable area and jeopardizing the minimum density required under the Housing Element designation. As allowed and encouraged under State Density Bonus Law, a waiver of the side setback standard for these minor encroachments is necessary to physically accommodate the project at a density consistent with the City's adopted housing obligations.

Similarly, Building 5 requires a waiver from the 10-foot interior side yard setback because the building sits approximately eight feet from the property line. This placement was the direct result of shifting the building north to fully respect and buffer the riparian corridor along the southern project edge—an environmentally beneficial design refinement made in response to both City feedback and biological resource considerations. Complying with the full 10-foot setback would require either decreasing the



number of homes or materially reconfiguring the site in a way that would reduce the project below the minimum density necessary to qualify under the Housing Element and Density Bonus provisions. Because State law expressly entitles applicants to waivers of development standards that would otherwise physically preclude a qualifying project from achieving its permitted density, this requested waiver is both appropriate and essential.

In summary, these setback waivers are modest in scale, arise directly from legitimate site constraints and environmental protections, and are necessary to allow the project to be developed at the minimum density contemplated by State housing law and the City's certified Housing Element. Granting the waivers ensures the City can realize needed missing-middle ownership housing without compromising environmental resources, life-safety infrastructure, or site functionality.

### Other Information Required for Special Projects

As the density bonus application is requested for a proposed housing development that would result in the removal or conversion of existing dwelling units, please find the requested information below:

Housing Units Proposed to be Demolished			
Address	Property Description	Current Tenant Income Levels	2018-2023 Monthly Rate
1447 Spring	3-bdrm Single Family Home	Vacant	N/A
1505 Spring	2-bdrm Single Family Home	120% AMI +	\$1,800
1515 Spring	4-bdrm Single Family Home	120% AMI +	\$3,000

### PRE-SUBMITTAL REVIEW

Per best practice in the City of St. Helena, a project of this size first goes before the Planning Commission for evaluation as part of the "pre-submittal review" application. Also known as a study session, this provides an important opportunity for the project to be introduced to the community and neighbors. This also provides an opportunity to receive feedback from the Planning Commission. For these reasons, a pre-submittal review is requested.

As this is a proposed construction project, all aspects of the project, including specific data points, are throughout this consolidated written statement and the submitted plan set. However, to specifically answer the questions posed within the pre-submittal review application:

- The maximum building height is 38-feet (within the high-density residential zone's 42-foot maximum)
- Each of the six buildings have three floors
- Floor area information is provided within the project submittal plan set.
- The first floor of each plan has a garage and either a bedroom, ADU or office/den, second floor has living areas, including kitchen, bathroom and family room, while the third floor has the bedrooms.
- The project has 93 parking spaces, 82 spaces within garages and 11 open spaces.
- Access to the property will be via a roadway off Spring Street at the current location of 1505 Spring Street, a single-family home proposed to be demolished.

City Ventures looks forward to working with the City of St. Helena to create a walkable housing development just a stone's throw from Main Street in which more St. Helena families can put down roots, just like the vineyards for which the area is world famous.

A handwritten signature in black ink, reading "Kelso G. Barnett" with a stylized flourish at the end.

---

Kelso G. Barnett, Senior Director of Development  
November 14, 2025





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**BIOLOGICAL RESOURCES ANALYSIS  
SPRING GROVE PROJECT  
ST. HELENA, CALIFORNIA**

**November 21, 2024**

**Prepared for**

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CEQA Biological Resources Analysis  
Spring Grove Project  
St. Helena, California



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Adobe Associates, Inc., October 1, 2024.

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## 1. INTRODUCTION

On behalf of City Ventures (the applicant), Monk & Associates, Inc. (M&A) has prepared this Biological Resources Analysis in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code §§ 21000 et seq.) and the CEQA Guidelines (14 Cal. Code Regs §§ 15000 et seq) for the proposed Spring Grove Project (hereinafter, the “Spring Grove project” or the “project”) located southwest of the intersection of Spring Street and St. James Drive in St. Helena, California (Figures 1, 2, and 3). The purpose of our analysis is to provide a description of existing biological resources on the project site and to identify potentially significant impacts that could occur to sensitive biological resources from the construction of a proposed residential housing development (the project).

Biological resources include common plant and animal species, and special-status plants and animals as designated by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), National Marine Fisheries Service (NMFS), and other resource organizations including the California Native Plant Society. Biological resources also include waters of the United States (U.S.) and State, as regulated by the U.S. Army Corps of Engineers (Corps), California Regional Water Quality Control Board (RWQCB), and CDFW.

This Biological Resources Analysis was prepared in accordance with CEQA Guidelines Sections 15183 and 15332 (Class 32). Section 15183 provides a streamlined review of the environmental impacts of the project by tiering from the program level analysis prepared for the City of St. Helena General Plan and its certified Environmental Impact Report (EIR), thereby focusing the analysis to potential environmental impacts of the project relative to the impacts analyzed in the General Plan EIR. Section 15183 of the CEQA Guidelines mandates that projects which are determined to be consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The analysis provided herein relies upon the program level analysis prepared for the 2040 City of St. Helena General Plan Update (City of St. Helena 2019) and its EIR (SCH No. 2010042001), which was certified in 2018.

Article 19 of the CEQA Guidelines includes a list of classes of projects that have been determined to not have a significant effect on the environment and as a result, are exempt from review under CEQA. Among the classes of projects that are exempt from CEQA review are Class 32 projects, which are projects characterized as in-fill development that meet the following conditions:

- Consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations;
- Occurs within city limits, on a project site of no more than five acres, substantially surrounded by urban uses;
- The project site has no value as habitat for endangered, rare or threatened species;
- Approval of the project would not result in any significant effects relating to traffic, noise, air quality or water quality; and
- The project site can be adequately served by all required utilities and public services.



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Even if a project meets all of the above conditions, it is ineligible for the Class 32 exemption if any of the following exceptions apply:

- Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
- Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

This CEQA Analysis describes the project and its environmental setting, including the project site's existing conditions and applicable regulatory requirements, and provides an assessment of the project's eligibility for the 15183 exemption and Class 32 exemption as related to biological resources. For Section 15183, this report analyzes consistency with the City of St. Helena General Plan. For the Class 32 analysis, this report examines whether the project site would have value as habitat for endangered, rare or threatened species.

All adopted mitigating General Plan policies and mitigation measures identified in the General Plan EIR that apply to the project are identified herein. Pursuant to local requirements, the project is required to incorporate or comply with all applicable mitigation measures identified in the City of St. Helena General Plan EIR, uniformly applied development standards, and other uniformly applied development standards. *Based on the analysis below, the project has no peculiar impacts on biological resources and qualifies for a General Plan Exemption pursuant to CEQA Guidelines Section 15183.* In addition, the project site does not contain habitat for threatened, endangered, or rare species.

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## 2. FINDINGS

The Spring Grove project site consists of three residential properties that are currently occupied. It does not provide potential habitat for any special-status plant or animal species. Additionally, there are no wetlands or other waters of the U.S./State on the project site. There is a seasonal drainage just south of the southern project site boundary. This drainage supports native oak trees and non-native ornamental bushes and trees (which would be considered a “riparian canopy”). The riparian canopy from these trees extends onto the project site. Under the current development proposal, there are no trees slated for trimming or removal within 25 feet of the top of bank of this drainage. If this changes in the future, any plans to alter or remove any of the trees located within the riparian corridor would need to be indicated on the site development plan submitted to the City of St. Helena. See Section 9 below for further details.

Under Section 1602 of California Fish and Game Code, California Department of Fish and Wildlife (CDFW) has jurisdiction over the bed, bank, and channel of a stream and its riparian vegetation. CDFW may also claim jurisdiction over any trees that are growing outside the creek bank that have a continuous riparian canopy with the trees growing along the stream (i.e., even trees which have trunks well outside the creek bank, if their canopy is continuous with the trees that grow along the creek, as these outer trees and their canopy are considered an extension of the riparian canopy). Therefore, impacts to any trees within this continuous riparian canopy along the drainage may require entering into a Streambed Alteration Agreement with the CDFW pursuant to Section 1602 of the Fish and Game Code. As designed, the project would not have such impacts. See Section 9 below for further details.

Lastly, as some of the existing trees on the project site provide nesting habitat for common birds, nesting bird surveys are required by General Plan Implementing Action OS1.O prior to the start of construction activity associated with the project, including but not limited to tree removal, site mobilization, and grading, if this work would take place during the nesting season (February 1 through August 31). These uniformly applied requirements are further detailed in this report.



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### **3. PROJECT LOCATION AND SETTING**

The approximately 2.5-acre Spring Grove Project Site is located roughly 0.2-mile southwest of Highway 29 at three adjacent street addresses (1447, 1505, and 1515 Spring Street) southeast of the intersection of Spring Street and St. James Drive in the City of St. Helena, California (Figures 1, 2, and 3). The project site is bounded by Spring Street to the west/northwest, St. James Drive to the north/northeast, and Mitchell Drive to the east. It is bordered by an unnamed seasonal drainage to the south. The project site is surrounded by high density residential development.

### **4. PROPOSED PROJECT**

The proposed project is to convert three existing single-family homes into 41 solar, all-electric townhouse-style 3- to 4-bedroom homes with private garages distributed throughout 6 buildings on the roughly 2.5-acre project site. The project includes 93 parking spaces, comprised of two dedicated spaces within each home's garage, as well as 11 surface parking stalls, over 50 bicycle parking spaces, and extensive landscaping, incorporating mature trees and vegetation along with new plantings chosen to complement the project design and setting. The project's Site Plan is provided as Attachment A.

### **5. ANALYSIS METHODS**

Prior to preparing this Biological Resources Analysis, M&A researched the most recent version of California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDDB) (RareFind 5 application) for records of special-status plants and wildlife within five miles of the project site (CNDDDB 2024). The CNDDDB is a database maintained by the CDFW that provides historic and recent records of special-status plant and animal species known from the state of California. M&A examined all known record locations for special-status species to determine if special-status species could occur on the project site or within an area of affect.

M&A biologist Mr. Mark Jasper visited the project site on November 4, 2024, for a field reconnaissance survey. Mr. Jasper walked the entire site, noting any biological resources present, including recording all wildlife and plant species observed. In addition to conducting a survey for different significant and sensitive biological resources, M&A conducted literature research to determine what significant and sensitive resources have been recorded in the area. This report details the results of M&A's background research and reconnaissance survey findings.

### **6. RESULTS OF RESEARCH AND PROJECT SITE ANALYSES**

#### **6.1 Topography and Hydrology**

The project site is made up entirely of residential structures, gravel and/or paved driveways, landscaped lawns and planted ornamental trees and shrubs. The site is almost completely flat with elevations onsite ranging from 245 to 250 feet above mean sea level. There is an offsite drainage adjacent to the southwest boundary of the project site that was dry during the November 4, 2024 site visit. There are no other hydrologic conditions throughout the highly disturbed project site.

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## 6.2 Plant Communities and Associated Wildlife Habitats

A complete list of plant species observed on the project site is presented in Table 1. Nomenclature used for plant names follows *The Jepson Manual* Second Edition (Baldwin 2012) and changes made to this manual as published on the Jepson Interchange Project website (<http://ucjeps.berkeley.edu/interchange/index.html>). Table 2 is a list of wildlife species observed on the project site. Nomenclature for wildlife follows the CDFW's *Complete List of Amphibian, Reptile, Bird, and Mammal Species in California* (2016) and any changes made to species nomenclature as published in scientific journals since the publication of the CDFW's list.

Past and current land use has heavily disturbed the project site, so that the vast majority of the project site consists of hardscape, landscaped lawns or hedges, and/or rows of planted ornamental trees and shrubs. There is a small area of riparian oak woodland near the southern project site boundary associated with an offsite seasonal drainage. Additionally, there are a couple of small untended backyards adjacent to the homes near the middle of the project site that are made up of a ruderal (weedy) herbaceous community.

### 6.2.1 ANTHROPOGENIC COMMUNITIES

Communities dominated by plants introduced by people and established or maintained by human disturbance are "anthropogenic communities." Some of these are entirely artificial communities such as cultivated row crops, lawns, vineyards, etc. Others are assemblages of weedy species that have invaded disturbed areas, sometimes in spite of human efforts to control them (Holland and Keil 1989 and 1995). There are many different types of anthropogenic communities; below we talk about ruderal communities and the "urban mix."

Often around commercial and residential developments, plant species that are not native to the region have been introduced and later become naturalized (the urban mix), often spreading aggressively and reducing local species diversity. In these areas, it is not uncommon to find mixtures of non-native and native vegetation in open areas. On the project site, several non-native ornamental trees such as glossy privet (*Ligustrum lucidum*), cherry plum (*Prunus cerasifera*), and silver maple (*Acer saccharinum*) as well as shrubs such as oleander (*Nerium oleander*) have been planted along the paved and gravel driveways leading up to the three residences off Spring Street and/or in the unpaved portions of the private yards surrounding each home. Native oaks such as coast live oak (*Quercus agrifolia* var. *agrifolia*) and valley oak (*Quercus lobata*) are scattered throughout the project site, with several oaks observed growing along the offsite seasonal drainage which is just south of the project site.

Typically, anthropogenic influenced communities provide habitat for those animal species adapted to humans and human-induced disturbances. Examples of animals associated with these communities observed on the project site include California Scrub-jay (*Aphelocoma californica*), California Towhee (*Melospiza crissalis*), and House Finch (*Haemorhous mexicanus*).



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#### 6.2.2 RIPARIAN WOODLAND

There is a small area of mixed riparian woodland at the southern end of the project site associated with an offsite seasonal drainage (Figure 3). The dominant trees in this habitat are coast live oak and valley oak. Other trees in this area are ornamentals such as glossy privet, olive (*Olea europaea*), and cherry plum.

Mixed oak woodlands are known to provide habitat for a variety of wildlife species. Insectivorous bird species such as American Robin (*Turdus migratorius*), California Scrub-Jay, Nuttall's Woodpecker (*Dryobates nuttallii*), and Oak Titmouse (*Parus inornatus*) thrive in oak woodlands on various insects and other invertebrates that live on oak leaves, burrow in oak bark, and that collect in the leaf litter and rotting logs. Mammal species expected to occur in the project site's small riparian woodland habitat includes those animals that frequent creeks and their environs in suburban areas such as Columbian black-tailed deer (*Odocoileus hemionus columbianus*), racoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), black rat (*Rattus rattus*), and deer mouse (*Peromyscus maniculatus*), among others.

#### 6.2.3 RUDERAL HERBACEOUS

The remainder of the project site consists of small, untended backyards associated with the houses near the center of the project site. These backyards are dominated by ruderal herbaceous species. Ruderal (weedy) communities are assemblages of plants that thrive in waste areas, roadsides, and other sites that have been disturbed by human activity. Ruderal vegetation is adapted to high levels of disturbance and persists almost indefinitely in areas with continuous disturbance.

Dominant vegetation in the small ruderal backyards onsite includes wild oat (*Avena barbata*), Italian rye grass (*Festuca perennis*), and Mediterranean barley (*Hordeum marinum gussoneanum*), among other annual grasses and forbs (broad-leaved plants).

Wildlife found in ruderal herbaceous communities are similar to the suburban adapted wildlife found in the riparian woodland community, with the addition of Botta's pocket gopher (*Thomomys bottae*) which frequents dry, upland herbaceous communities.

### 6.3 Wildlife Corridors

Wildlife corridors are linear and/or regional habitats that provide connectivity to other natural vegetation communities within a landscape fractured by urbanization and other development. Wildlife corridors have several functions: 1) they provide avenues along as which wide-ranging animals can travel, migrate, and breed, allowing genetic interchange to occur; 2) populations can move in response to environmental changes and natural disasters; and 3) individuals can recolonize habitats from which populations have been locally extirpated (Beier and Loe 1992). All three of these functions can be met if both regional and local wildlife corridors are accessible to wildlife. Regional wildlife corridors provide foraging, breeding, and retreat areas for migrating, dispersing, immigrating, and emigrating wildlife populations. Local wildlife corridors also provide access routes to food, cover, and water resources within restricted habitats.

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The project site is located in a high density residential community in a heavily developed region of St. Helena. The site is a fragment of altered landscape that provides limited capacity to serve as even a local, let alone a regional wildlife movement corridor since it is surrounded by roads and development on all sides. Thus, development of this project site will not interfere with the movement of native wildlife and should have minimal impacts on wildlife habitat. There should be no loss of area that functions as a wildlife corridor.

## 7. SPECIAL STATUS SPECIES

### 7.1 Definitions

For purposes of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code §2050 *et seq.*; 14 CCR §670.1 *et seq.*) or the FESA (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code §2068);
- plants and animals that meet the definition of endangered, rare, or threatened under the CEQA (14 CCR §15380) that may include species not found on either CESA or FESA lists;
- plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of the CNPS' electronic *Inventory* (CNPS 2001). The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and the CDFW requests their inclusion in EIRs. Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively (CNPS 2001). Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information (more on CNPS Rank species below);
- migratory nongame birds of management concern listed by the USFWS (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- animals that are designated as "species of special concern" by the CDFW (April 2023);
- animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515).

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- bat species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows: "Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment."

In the paragraphs below we provide further definitions of legal status as they pertain to the special-status species discussed in this report or in the attached tables.

Federal Endangered or Threatened Species. A species listed as endangered or threatened under the FESA is protected from unauthorized "take" (that is, harass, harm, pursue, hunt, shoot, trap) of that species. If it is necessary to take a federally listed endangered or threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the USFWS prior to initiating the take.

State Threatened Species. A species listed as threatened under the CESA (§2050 of California Fish and Game Code) is protected from unauthorized "take" (that is, harass, pursue, hunt, shoot, trap) of that species. If it is necessary to "take" a State-listed threatened species as part of an otherwise lawful activity, it would be necessary to receive permission from the CDFW prior to initiating the "take."

California Species of Special Concern. These are species in which their California breeding populations are seriously declining and extirpation from all or a portion of their range is possible. This designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR §15380), some species of special concern could be considered "rare." Pursuant to its rarity status, any unmitigated impacts to rare species could be considered a "significant effect on the environment" (§15382). Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species. The CNPS maintains an "Inventory" of special-status plant species. This inventory has four lists of plants with varying rarity. These lists are: Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also State or federally listed species), the CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other State and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:

- Rank 1A: Presumed extinct in California;
- Rank 1B: Rare, threatened, or endangered in California and elsewhere;
- Rank 2A: Plants presumed extirpated in California, but more common elsewhere;
- Rank 2B: Rare, threatened, or endangered in California, but more common elsewhere.



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All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (CESA) of the Fish and Game Code and are eligible for State listing (CNPS 2001). Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern and are reviewed by the CDFW and maintained on “watch lists.”

Additionally, in 2006, the CNPS updated their lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. These threat codes are defined as follows:

- .1 is considered “seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)”;
- .2 is “fairly endangered in California (20-80% of occurrences threatened)”;
- .3 is “not very endangered in California (less than 20% of occurrences threatened or no current threats known).”

Under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds. Fully protected birds, such as the White-tailed Kite (*Elanus leucurus*) and Golden Eagle (*Aquila chrysaetos*), are protected under California Fish and Game Code (§3511). Fully protected birds may not be “taken” or possessed (i.e., kept in captivity) at any time.

## **7.2 Potential Special-Status Species on the Project Site**

Due to the excessively disturbed and unnatural conditions found at the project site, which is entirely within an urban residential neighborhood, there is no suitable habitat for any special-status plants or wildlife onsite.

## **8. STATE AND FEDERAL REGULATIONS PERTINENT TO THE PROPOSED PROJECT**

There are many state and federal regulations in place that protect our waterways, native plants and wildlife and endangered species. Those regulations relevant to the project site and the proposed project are discussed below.

### **8.1 Federal Endangered Species Act**

The FESA forms the basis for the federal protection of threatened or endangered plants, insects, fish, and wildlife. FESA contains four main elements, they are as follows:

Section 4 (16 USCA §1533): Species listing, Critical Habitat Designation, and Recovery Planning: outlines the procedure for listing endangered plants and wildlife.

Section 7 (§1536): Federal Consultation Requirement: imposes limits on the actions of federal agencies that might impact listed species.

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Section 9 (§1538): Prohibition on Take: prohibits the "taking" of a listed species by anyone, including private individuals, and State and local agencies.

Section 10: Exceptions to the Take Prohibition: non-federal agencies can obtain an incidental take permit (ITP) through approval of a Habitat Conservation Plan (HCP).

In the case of saltwater fish and other marine organisms, the requirements of FESA are enforced by the NMFS. The USFWS enforces all other cases. Below, Sections 9, 7, and 10 of FESA are discussed since they are the sections most relevant to the proposed project.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3). A December 2001 decision by the 9th Circuit Court of Appeals (Arizona Cattle Growers' Association, Jeff Menges, vs. the U.S. Fish and Wildlife Service and Bureau of Land Management, and the Southwest Center for Biological Diversity) ruled that the USFWS must show that a threatened or endangered species is present on a project site and that it would be taken by the project activities. According to this ruling, the USFWS can no longer require mitigation based on the probability that the species could use the site. Rather they must show that it is "reasonably certain to occur."

Section 9 applies to any person, corporation, federal agency, or any local or State agency. If "take" of a listed species (other than a plant species) is necessary to complete an otherwise lawful activity, this triggers the need to obtain an ITP either through a Section 7 Consultation as discussed further below (for federal actions or private actions that are permitted or funded by a federal agency such as the Corps), or through Section 10 of FESA which requires preparation of an HCP (for State and local agencies, or individuals, and projects without a federal "nexus"; for example, projects that do not need a Corps permit).

Section 7(a)(2) of the Act requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean: (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species.

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The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects. Section 7 is by and between the NMFS and/or the USFWS and the federal agency contemplating a discretionary approval (that is, the federal “action agency,” for example, the Corps or the Federal Highway Administration). Private parties, cities, counties, etc. (i.e., applicants) may participate in the Section 7 consultation *at the discretion of the federal agencies conducting the Section 7 consultation*. The Section 7 consultation process is triggered by a determination of the “action agency” – that is, the federal agency that is carrying out, funding, or approving a project - that the project “may affect” a listed species or critical habitat. If an action is likely to adversely affect a listed species or designated critical habitat, formal consultation between the nexus agency and the USFWS/NMFS is required. As part of the formal consultation, the USFWS/NMFS may resolve any issues informally with the nexus agency or may prepare a formal Biological Opinion assessing whether the proposed action would be likely to result in “jeopardy” to a listed species or if it could adversely modify designated critical habitat. If the USFWS/NMFS prepares a Biological Opinion, it will contain either a “jeopardy” or “non-jeopardy” decision. If the USFWS/NMFS concludes that a proposed project would result in adverse modification of critical habitat or would jeopardize the continued existence of a federally listed species (that is, it will issue a jeopardy decision), the nexus federal agency would be most unlikely to authorize its discretionary permit. If the USFWS/NMFS prepares a “non-jeopardy” Biological Opinion, the nexus federal agency may authorize the discretionary permit making all conditions of the Biological Opinion conditions of its discretionary permit. A non-jeopardy Biological Opinion constitutes an “incidental take” permit that allows applicants to “take” federally listed species while otherwise carrying out legally sanctioned projects.

For non-federal entities, for example private parties, cities, and counties that are proposing a project that might result in incidental take, Section 10 provides the mechanism for obtaining that take authorization. Under Section 10 of FESA, for the applicant to obtain an ITP, the applicant is required to submit a "conservation plan" to the USFWS or NMFS that specifies the impacts that are likely to result to federally listed species, and the measures the applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by the USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an ITP can be issued.

#### 8.1.1 RESPONSIBLE AGENCY

FESA gives regulatory authority to the USFWS for federally listed terrestrial species and non-anadromous fish. The NMFS has regulatory authority over federally listed marine mammals and anadromous fish.

#### 8.1.2 APPLICABILITY TO THE PROPOSED PROJECT

There are no federally listed species expected to occur on the project site. The project site does not provide suitable habitat for any federally listed terrestrial species and does not provide fisheries habitat as there are no aquatic resources onsite. There is no critical habitat mapped on the project site. No impacts to dispersing or migrating federally listed animals or their habitats are expected. Finally, this urban, heavily landscaped, residential project site does not provide



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suitable habitat for federally listed plants. No impacts to federally listed species are expected from project implementation.

## **8.2 Federal Migratory Bird Treaty Act**

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the Code of Federal Regulations, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

### **8.2.1 APPLICABILITY TO THE PROPOSED PROJECT**

Raptors such as Red-shouldered Hawk could nest in trees on the project site. These raptors (birds of prey) would be protected by the Migratory Bird Treaty Act. Also, common songbirds would be protected pursuant to this Act. As long as there is no direct mortality of species (including their eggs or young) protected pursuant to this Act caused by development of the project site, there should be no constraints to development. To comply with the Migratory Bird Treaty Act (and General Plan Implementing Action OS1.O), preconstruction surveys would be conducted for nesting birds (including raptors) if any work is proposed during the nesting season (February 1 through August 31) and all active nest sites (nests with viable eggs or young) would have to be avoided while such birds were nesting. Upon completion of nesting, the work could commence as otherwise planned. Please review specific requirements for avoidance of nest sites for potentially occurring species in Section 14 below.

## **8.3 California Endangered Species Act**

### **8.3.1 SECTION 2081 OF THE CALIFORNIA ENDANGERED SPECIES ACT**

In 1984, the State legislated the CESA (Fish and Game Code §2050). The basic policy of CESA is to conserve and enhance endangered species and their habitats. State agencies will not approve private or public projects under their jurisdiction that would impact threatened or endangered species if reasonable and prudent alternatives are available. Because CESA does not have a provision for “harm” (see discussion of FESA, above), CDFW considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If the CDFW determines that a proposed project could impact a State-listed threatened or endangered species, the CDFW will provide recommendations for “reasonable and prudent” project alternatives. The CEQA lead agency can only approve a project if these alternatives are implemented, unless it finds that the project’s benefits clearly outweigh the costs, reasonable mitigation measures are adopted, there has been no “irreversible or irretrievable” commitment of resources made in the interim, and the resulting project would not result in the extinction of the species. In addition, if there would be impacts to threatened or endangered species, the lead agency typically requires project applicants to demonstrate that they have acquired “incidental take” permits from the CDFW and/or USFWS (if it is a federally listed species) prior to allowing/permitting impacts to such species.

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If proposed projects would result in impacts to a State-listed species, an "incidental take" permit pursuant to §2081 of the Fish and Game Code would be necessary (versus a federal ITP for federally listed species). The CDFW will issue an ITP only if:

- 1) The authorized take is incidental to an otherwise lawful activity;
- 2) the impacts of the authorized take are minimized and fully mitigated;
- 3) measures required to minimize and fully mitigate the impacts of the authorized take:
  - a) are roughly proportional in extent to the impact of the taking on the species;
  - b) maintain the project applicant's objectives to the greatest extent possible; and,
  - c) capable of successful implementation; and,
- 4) adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with, and the effectiveness of, the measures.

If an applicant is preparing an HCP as part of the federal 10(a) permit process, the HCP might be incorporated into the §2081 permit if it meets the substantive criteria of §2081(b). To ensure that an HCP meets the mitigation and monitoring standards in Section 2081(b), an applicant should involve CDFW staff in development of the HCP. If a final Biological Opinion (federal action) has been issued for the project pursuant to Section 7 of the FESA, it might also be incorporated into the §2081 permit if it meets the standards of §2081(b).

No §2081 permit may authorize the take of a species for which the Legislature has imposed strict prohibitions on all forms of "take." These species are listed in several statutes that identify "fully protected" species and "specified birds." See Fish and Game Code §§ 3505, 3511, 4700, 5050, 5515, and 5517. If a project is planned in an area where a "fully protected" species or a "specified bird" occurs, an applicant must design the project to avoid all take.

Fish and Game Code §2080.1 allows an applicant who has obtained a "non-jeopardy" federal Biological Opinion pursuant to Section 7 of the FESA, or who has received a federal 10(a) permit (federal ITP) pursuant to the FESA, to submit the federal opinion or permit to the CDFW for a determination as to whether the federal document is "consistent" with CESA. If after 30 days the CDFW determines that the federal ITP is consistent with state law, and that all State-listed species under consideration have been considered in the federal Biological Opinion, then no further permit or consultation is required under CESA for the project. However, if the CDFW determines that the federal opinion or permit is not consistent with CESA, or that there are State-listed species that were not considered in the federal Biological Opinion, then the applicant must apply for a CESA permit under Section 2081(b). Section 2080.1 is of no use if an affected species is State-listed, but not federally listed.

State and federal ITPs are issued on a discretionary basis and are typically only authorized if applicants are able to demonstrate that impacts to the listed species in question are unavoidable and can be mitigated to an extent that the reviewing agency can conclude that the proposed impacts would not jeopardize the continued existence of the listed species under review. Typically, if there would be impacts to a listed species, mitigation that includes habitat avoidance, preservation, and creation of endangered species habitat is necessary to demonstrate that projects would not threaten the continued existence of a species. In addition, management endowment fees are usually collected as part of the agreement for the ITP(s). The endowment is

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used to manage any lands set-aside to protect listed species, and for biological mitigation monitoring of these lands over (typically) a five-year period.

#### 8.3.2 APPLICABILITY TO THE PROPOSED PROJECT

There is no aquatic habitat onsite, so the project site does not provide fisheries habitat. Based on M&A's background research and site survey, it has been concluded that no State-listed plant or animal species have potential to occur on the project site or to be impacted by the proposed project.

### 8.4 The Clean Water Act

#### 8.4.1 SECTION 404 OF THE CLEAN WATER ACT

Congress enacted the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (33 U.S.C. §1251(a)). Pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), the U.S. Army Corps of Engineers (Corps) regulates the disposal of dredged or fill material into "waters of the United States" (33 CFR Parts 328 through 330). This requires project applicants to obtain authorization from the Corps prior to discharging dredged or "fill" materials into any water of the United States.

In the published 2023 rule from the Federal Register, the term "waters of the United States" is defined as:

1. Waters which are:
  - a. currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
  - b. The territorial seas; or
  - c. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under the definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
3. Tributaries of waters identified in (a)(1) or (2), (4), or (6) of this section that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
  - i. Waters identified in paragraph (a)(1) of this section; or
  - ii. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

#### 8.4.2 SECTION 401 OF THE CLEAN WATER ACT

The State Water Resources Control Board (SWRCB) and the California Regional Water Quality Control Board (RWQCB) regulate activities in "waters of the State" (which includes wetlands)



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through Section 401 of the Clean Water Act. While the Corps administers a permitting program that authorizes impacts to waters of the U.S., including wetlands and other waters, any Corps permit authorized for a proposed project would be inoperative unless it is a Nationwide Permit (NWP) that has been certified for use in California by the SWRCB, or if the RWQCB has issued a project specific certification of water quality. Where a project will result in dredge or fill of non-federal waters of the State (that is, a water outside of the Corps' jurisdiction), the RWQCB will authorize those fills through waste discharge requirements issued under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State-level definition of "wetlands," which definition is broader than the federal definition in that unvegetated areas may be considered a wetland water of the State. As a part of the same policy, the SWRCB adopted permit procedures and standards governing the discharge of dredged or fill material into wetlands and other waters of the State. The policy includes, among other things, requirements for analyses to identify the least environmentally damaging practicable alternative (LEDPA) and compensatory mitigation standards including a minimum 1:1 ratio for wetlands and streams, and full functional replacement of all waters on top of this minimum where applicable.

#### 8.4.3 APPLICABILITY TO THE PROPOSED PROJECT

There are no wetlands or other waters of the U.S./State on the project site. However, there is an offsite seasonal drainage along the southern project site boundary that may meet the definition of a water of the U.S. pursuant to Section 404 of the Clean Water Act and a water of the State pursuant to Section 401 of the Clean Water Act. The development has been planned so that it is 25 feet away from the offsite creek's top of bank and outside of the drainage's riparian drip line.

## 9. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE PROTECTIONS

### 9.1.1 SECTION 1602 OF CALIFORNIA FISH AND GAME CODE

Pursuant to Section 1602 of the California Fish and Game Code: "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless all of the following occur:

- (1) CDFW receives written notification regarding the activity in the manner prescribed by CDFW. The notification shall include, but is not limited to, all of the following:
  - (A) A detailed description of the project's location and a map.
  - (B) The name, if any, of the river, stream, or lake affected.
  - (C) A detailed project description, including, but not limited to, construction plans and drawings, if applicable.
  - (D) A copy of any document prepared pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.
  - (E) A copy of any other applicable local, State, or federal permit or agreement already issued.
  - (F) Any other information required by CDFW" (Fish & Game Code 2023).

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Please see Section 1602 of the current California Fish and Game Code for further details as to the next steps once a written notification is submitted.

Please also note that while not stated in the regulations above, the CDFW typically considers its jurisdiction to include riparian vegetation (that is, the trees and bushes growing along the stream). Thus, any proposed activity in a natural stream channel that would substantially adversely affect an existing fish and/or wildlife resource, including its riparian vegetation, may require entering into a Streambed Alteration Agreement (SBAA) with the CDFW prior to commencing with work in the stream. However, prior to authorizing such permits, the CDFW typically reviews an analysis of the expected biological impacts, any reviews engineering and erosion control plans as well as any proposed mitigation plans that would be implemented to offset biological impacts.

#### 9.1.2 APPLICABILITY TO THE PROPOSED PROJECT

As stated in Section 2 above, though there are no streams or tributaries on the project site, there is an offsite seasonal drainage adjacent to the project site's southern boundary. While this drainage is not within the project site boundaries, its riparian canopy extends onto the project site. The development has been planned so that it is 25 feet away from the offsite creek's top of bank and outside of the riparian drip line.

### 9.2 California Fish and Game Code § 3503, 3503.5, 3511, and 3513

California Fish and Game Code §3503, 3503.5, 3511, and 3513 prohibit the "take, possession, or destruction of birds, their nests or eggs." Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered "take." All raptors (that is, hawks, eagles, owls) their active nests, eggs, and young are protected under California Fish and Game Code (§3503.5). Additionally, "fully protected" birds are protected under California Fish and Game Code (§3511). "Fully protected" birds may not be taken or possessed (that is, kept in captivity) at any time.

#### 9.2.1 APPLICABILITY TO THE PROPOSED PROJECT

During the November field reconnaissance, no special-status birds or nesting birds were noted on the project site. The project site provides suitable tree-nesting habitat for raptors and tree and ground-nesting habitat for songbirds known from the area (e.g., Red-shouldered Hawk, California Towhee, Mourning Dove). No old nests were noted anywhere on the project site, in any tree, bush, or on the ground. However, M&A's site survey was conducted outside of the nesting bird season (which is February 1-August 31) and birds can change nesting locations from year to year. To ensure that nesting birds are not impacted by construction activity, the city requires all development projects to comply with General Plan Implementing Action OS1.O, which requires a preconstruction nesting bird survey if work would take place between the dates of February 1 and August 31 to ensure that there are no direct impacts to nesting birds, their eggs or young, during development of the project site. Any active nests that are found during preconstruction surveys would have to be avoided by the proposed project. Suitable non-disturbance buffers would be established around any nest sites, with the size of the buffer determined by a qualified biologist. Once the nesting cycle is complete, a qualified biologist will confirm that the young have successfully fledged. Once the nesting cycle is confirmed to be complete, there would be no further impediments to development from nesting birds.

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## 10. CITY OF ST. HELENA GENERAL PLAN

The City of St. Helena General Plan was originally adopted in 1975, updated in 1993, and most recently updated in 2019 (known as the 2040 General Plan Update). This General Plan serves as the document that guides future development citywide and expresses the community's development goals and public policies relative to land uses. The primary goal of the City of St. Helena General Plan is to preserve the rural, small town quality and agricultural character of St. Helena. According to the City of St. Helena's website: "The St. Helena General Plan serves as the City's constitution. The General Plan is a statement of the community's collective vision for the City's future, expressing the quality of life it strives to maintain, and the common interests of the community."

### 10.1 Open Space and Conservation Element

The Open Space and Conservation Element of the General Plan presents a framework for governing future decisions about how St. Helena will sustain open space and natural resources.

The goals of the Open Space and Conservation Element are:

- **Preserve, Enhance, and Restore Natural Resources:** St. Helena is committed to preserving, enhancing, and restoring its abundance of natural habitat, wildlife, and open space resources.
- **Ensure Stewardship of Water Resources:** St. Helena is dedicated to promoting water conservation and ensuring its natural supply of water is properly managed and securely maintained, improving water quality.
- **Expand Sustainable Agricultural Practices:** St. Helena is committed to continuing and enhancing its agricultural traditions by promoting and reinforcing sustainable agricultural practices.
- **Create access opportunities to enjoy natural resources responsibly.**

The Open Space and Conservation Element of the General Plan includes a range of policies and implementing actions that are organized into the following topic areas:

1. Natural Habitat and Biodiversity
2. Open Space
3. Water Resource Protection and Conservation
4. A Healthy Living Environment

The following policies and implementing actions mandate, encourage, or allow certain initiatives to be pursued throughout the duration of the General Plan to meet the goals of the Open Space and Conservation Element. Together, they serve as strategic directions for City of St. Helena staff and partners, highlighting where time and resources should be focused.

Open Space and Conservation Element policies and their associated implementing actions relevant to this project are discussed in the following sections.

#### 10.1.1 TOPIC 1: NATURAL HABITAT AND BIODIVERSITY



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#### 10.1.1.1 Policies

**OS1.1:** Preserve and enhance St. Helena's riparian corridors for their value in providing wildlife habitat, biodiversity, natural drainage, and visual amenity.

**OS1.2:** Prohibit development, alteration, and/or removal of native vegetation from riparian areas. Disallow invasive species that degrade habitat quality.

**OS1.3:** Protect and enhance contiguous corridors of riparian vegetation along the Napa River and its tributaries in order to support regional wildlife movement and enhance aquatic habitat.

**OS1.4:** Protect natural habitats that have the potential to support rare, endangered, or special status wildlife and plant species. Control invasive species that degrade habitat quality.

**OS1.5:** Restrict development of hillside areas in order to protect wildlife, vegetation, viewsheds, and open space characteristics.

**OS1.6:** Manage invasive species that degrade habitat quality, especially along the Napa River and its tributaries.

**OS1.7:** Promote, encourage, and require sustainable agricultural practices that are sensitive to natural habitat and do not harm wildlife.

#### 10.1.1.2 Implementing Actions

**OS1.A:** Develop and adopt an ordinance for the protection, restoration, and enhancement of creek corridors. The relevant portions of this implementing action include the following:

- Establish setbacks for all new development projects to protect stream function and riparian habitat, while allowing for limited recreational uses and access to the stream corridor for maintenance and flood control.

**Applicability:** The project has been designed to maintain a 25-foot no-disturbance setback from the offsite drainage that runs along the southern project site boundary. There are no streams, creeks, or seasonal drainages on the project site.

- Limit use of herbicides and insecticides associated with aquatic toxicity in areas near and adjacent to creeks and ensure best environmental management practices for all developments and industries.

**Applicability:** The project applicant has been instructed that no herbicides or insecticides with aquatic toxicity should be used in areas near and/or adjacent to creeks on or adjacent to the project site.

- Provide access for creek maintenance and public use through easements and cooperative agreements with landowners.

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**Applicability:** The seasonal drainage adjacent to the project site's southern boundary can be accessed from Mitchell Drive. This access route will not be altered by project activities.

- Encourage the use of bioswales, off-stream detention ponds, and other green best practices for stormwater management.

**Applicability:** Bioswales and bioretention basins are incorporated into the project's stormwater control plan to protect water quality.

**OS1.C:** Coordinate with the California Department of Fish and Game, the Living Rivers Council, the Regional Water Quality Control Board and other federal, State, and local regional agencies with regulatory authority for water quality, protected plant and animal species, and streams and wetlands to restore and maintain creek corridors.

**Applicability:** There are no wetlands or other aquatic resources under the jurisdiction of these resource agencies on the project site. Therefore, coordination with these agencies regarding wetlands or other aquatic resources is not required. However, as discussed above, there is riparian vegetation associated with the offsite drainage that extends onto the project site. If the project proposes to remove or alter this riparian vegetation, CDFW should be contacted as necessary.

**OS1.F:** Create a set of guidelines for the protection of special-status species and sensitive natural communities. Guidelines can include appropriate survey methods consistent with the California Department of Fish and Game, the U.S. Fish and Wildlife Service, NOAA Fisheries, and CEQA requirements.

**Applicability:** The project site does not provide habitat for any special-status species. Additionally, there are no sensitive natural communities, wetlands, or other waters of the U.S./State on the project site.

**OS1.G:** Require a biological assessment of any proposed project site where species or the habitat is defined as sensitive or special-status by the California Department of Fish and Game, NOAA Fisheries, or the U.S. Fish and Wildlife Service might be present, including the installation of new wind turbines for alternate energy. Avoid potential impacts of sensitive resources as part of new development to the maximum extent feasible. Where complete avoidance is not possible, the project applicant must secure any required authorizations from jurisdictional agencies and provide adequate replacement mitigation to ensure there is no net loss in habitat acreage or values.

**Applicability:** This report is a Biological Resources Analysis of the project site and provides a complete analysis of the proposed project's impact on special-status species. There are no sensitive natural communities, habitats for special-status species, wetlands, or other waters of the U.S./State on the project site.

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**OS1.H:** Require all proposed projects adjacent to a creek corridor or located in the city's hillside areas to submit a management plan for protecting natural habitats, including provisions to:

- Employ supplemental planting and maintenance of grasses, shrubs, and trees of similar quality and quantity to provide adequate vegetation cover to keep the watersheds on steep slopes and along streams in good condition, and to provide shelter and food for wildlife.
- Provide protection for wildlife habitat.

**Applicability:** Native trees and riparian vegetation onsite will be preserved to the greatest extent possible. No native trees along the offsite seasonal drainage will be impacted as all work will remain at least 25 feet from this drainage's top of bank. Therefore, a management plan is not necessary.

**OS1.I:** Require new development to be sited to maximize the protection of native tree species, riparian vegetation, important concentrations of natural plants, and sensitive wildlife habitat.

**Applicability:** Native trees and riparian vegetation will be preserved to the greatest extent possible.

**OS1.J:** Discourage and minimize the installation of deer fencing to maintain wildlife corridors and support regional wildlife movement.

**Applicability:** The project site does not currently serve as a regional deer movement corridor as the site is surrounded by urban development. No deer movement is expected to be impeded by project site development.

**OS1.O:** As part of new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non-nesting season (September through January) or by conducting a preconstruction survey by a qualified biologist if vegetation removal and construction is initiated during the nesting season (February through August). Surveys for nesting birds will be conducted no earlier than 14 days prior to tree removal and/or breaking ground. In the event that nesting birds are found, the project applicant will consult with CDFG [now known as CDFW] and obtain approval for nest-protection buffers prior to tree removal and/or ground-breeding activities. Nest protection buffers will remain in effect until the young have fledged.

**Applicability:** A preconstruction nesting bird survey will be conducted by a qualified biologist within 14 days of commencing with grading, construction work, or tree removal if this work would commence between February 1st and August 31st. If birds are identified nesting on or within the zone of influence of the project site, prior to the commencement of construction that could impact the active nest(s), a qualified biologist will consult with CDFG (now known as CDFW) to establish a temporary protective no-disturbance nest buffer around the nest(s). See Section 13 below for further details.



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**OS1.P:** Avoid potential impacts on jurisdictional wetlands and other waters as part of new development to the maximum extent feasible. Where complete avoidance is not possible, the project applicant must secure any required authorizations from jurisdictional agencies and provide adequate replacement mitigation to ensure there is not less in habitat acreage or values.

**Applicability:** There are no wetlands or other waters on the project site. The seasonal drainage immediately offsite would fall under the jurisdiction of the federal and state agencies; however, there are no plans related to this project to impact this drainage (e.g., no outfall structure discharging into the drainage is proposed). Therefore, authorizations from jurisdictional agencies regarding wetlands/other waters is not necessary.

#### 10.1.2 TOPIC 2: OPEN SPACE

##### 10.1.2.1 Policies

**OS2.1:** Maintain agriculture as the mainstay of the local economy by preserving agricultural lands as an invaluable and irreplaceable open space resource.

**OS2.2:** Preserve open space for mineral resources. Ensure compliance with State requirements in the preservation of known locations of mineral resources.

**OS2.3:** Preserve open space for recreational uses, including a bicycle and pedestrian trail system along creek corridors when compatible with riparian vegetation and wildlife habitat. Where possible, integrate stream corridors with trails and other recreational open space, provided that the vegetation, habitat value, and water quality is not significantly impacted.

**OS2.4:** Ensure convenient public access between developed areas and stream corridors by providing access at frequent intervals.

**OS2.5:** Limit public access to habitat areas when public access will significantly impact the sensitivity of the habitat area.

**OS2.6:** Support floodplain management strategies that ensure adequate open space for flood management consistent with Living River Principles, FEMA, and State requirements at a minimum.

**Applicability:** The project site is small and currently does not provide open space areas and is not of a sufficient size to dedicate open space areas. The project as proposed would not impact floodplain management.

#### 10.1.3 TOPIC 3: WATER QUALITY AND CONSERVATION

##### 10.1.3.1 Policies

**OS3.1:** Promote stormwater management techniques that minimize surface water runoff in public and private developments. Utilize low impact development techniques to best manage

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stormwater through conservation, on-site filtration and water recycling, and ensure compliance with the National Pollution Discharge Elimination System (NPDES) permit.

**OS3.2:** Reduce stormwater runoff in developed areas to protect water quality in creeks. Incorporate sustainable low impact design features in the design of infrastructure.

#### 10.1.3.2 Implementing Actions

**OS3.A:** Manage stormwater runoff in compliance with the City's Stormwater and Runoff Pollution Control Ordinance, Stormwater Management Standards for Construction and Post-Construction, and the Development Manual Stormwater Standards, to ensure compliance with the City's NPDES permit. Implement a surface water quality monitoring program to evaluate the effectiveness of stormwater management program activities in reducing the discharge of pollutants to receiving waters to the maximum extent practicable.

**Applicability:** Bioswales and bioretention basins are incorporated into the project site plans and Stormwater Control Plan to protect water quality.

**OS3.C:** Minimize stormwater runoff and pollution by encouraging low impact design features, such as pervious parking surfaces, bioswales, and filter strips in new development projects. The City should be a model for incorporating low-impact design elements as it implements streetscape and landscape improvements. In addition, the City of St. Helena should retrofit the existing public landscape with natural vegetative coverings or drainage systems that promote infiltration into the ground that can help detain stormwater and reduce pollution attributable to runoff.

**Applicability:** Bioswales and bioretention basins are incorporated into the project site plans and Stormwater Control Plan to protect water quality.

**OS3.E:** Promote the installation of drought tolerant and native plants in landscaping throughout the city.

**Applicability:** The applicant has been made aware that the City requires drought tolerant and native plants incorporated into the landscape design.

#### 10.1.4 TOPIC 4: A HEALTHY LIVING ENVIRONMENT

##### 10.1.4.1 Policies

**OS4.1:** Protect and enhance tree resources in developed and undeveloped areas. Efforts should include adequate maintenance of street trees, requiring replacement trees where existing significant trees cannot be saved, and requiring street trees as a condition of new development.

**OS4.2:** Encourage the clean-up of contaminated sites to protect the environment and public well-being.

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**OS4.3:** Promote best management practices that encourage protection of soil, groundwater, and surface water resources from industrial, agricultural, and other uses that produce or dispose of hazardous or toxic substances.

#### 10.1.4.2 Implementing Actions

**OS4.C:** Develop and adopt a Tree Ordinance for the purpose of protecting trees and identifying replacement trees. In coordination with an urban forestry program, existing, significant trees should be integrated into future development. In cases where existing trees cannot be saved, require the planting of replacement trees consistent with guidelines included in the Master Tree List.

**Applicability:** The project would not impact any tree species that are included on the Master Tree List.

### **11. CITY OF ST. HELENA TREE ORDINANCE - CHAPTER 12.24 TREES AND OTHER VEGETATION**

The City of St. Helena's Tree Ordinance can be found in the City of St. Helena's Municipal code chapter 12.24. Below are key provisions of the City of St. Helena's Tree Ordinance. Since the project will impact both native and non-native (i.e., landscape) trees, this ordinance will apply.

#### **11.1 Chapter 12.24.010 Findings and Purpose**

The city council finds and declares that trees contribute greatly to the health, safety, and general welfare of all of the city's citizens and that the preservation and proper maintenance of trees is a matter of city-wide concern. The city council further finds and determines that it is necessary to enact regulations prohibiting unnecessary damage, removal, or destruction of trees.

A purpose of the city council in enacting the following regulations is to protect certain trees that are an essential part of the city's natural heritage, referred to in this chapter as heritage trees and other protected trees, wherever they may be growing in the city, while at the same time, recognizing an individual property owner's right to utilize his or her land in a way that is otherwise allowed by law.

#### **11.2 Chapter 12.24.020 Definitions**

Definitions from the tree ordinance that are relevant to this project are the following:

- "Protected tree" means a tree that is a heritage tree, protected replacement tree, street tree, and/or a city tree.
- "Heritage tree" means any tree or grove of trees within the city boundaries designated by a resolution of the city council and having met the requirements set forth in this chapter.
- "Protected replacement tree" means any tree that is planted on public or private property as a condition of mitigation for the removal of any existing native or heritage tree(s). The intent of this designation is to insure that trees planted as replacement trees for heritage trees or significant native trees that have to be removed will be protected and preserved so that over the course of time these replacement trees will mature to the size and uniqueness of the trees they replace. Protected replacement trees by definition are



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subject to all of the conditions and protections as those for heritage trees as set forth in this chapter.

- “Street tree” means a tree planted in a planting strip or planting easement.
- “City tree” means any tree growing on any city-owned property, right-of-way or easement dedicated to the city.
- “Master street tree list” means the list of trees approved for planting in planting strips and planting easements, as approved by the city council.

### **11.3 Chapter 12.24.090 General Provisions**

- A. No person, other than the director or his or her authorized representative, shall plant or prune any tree within the planting strip or planting easement along any street without first obtaining a written permit to do so from the director. The request for such a permit shall state the type and number of trees, planting and pruning procedures, the location and such other information as may from time to time be required by the director.
- B. Any tree work or tree removal within the city right-of-way requires an encroachment permit. Encroachment permit fees for pruning or removal of street trees will be waived.
- C. All maintenance, removal, and replacement of trees shall be performed in compliance with the requirements of this chapter and any tree standards adopted by the city.

### **11.4 Chapter 12.24.130 Pruning, Maintenance and Removal of Protected Trees**

- A. No person shall cut or prune, below or above ground, brace, move, remove, cause to cut, alter, or perform such other acts with respect to any protected tree without first obtaining a written permit to do so from the director. The application shall state the number and identify the location of each protected tree for which a permit is sought and shall contain other pertinent information as the director may require. The application may also include documentation of any type, including written recommendations from a certified arborist concerning the health, quality and desirability of alternatives to the tree or trees in question. The necessity for the requested action shall be demonstrated to the director by the applicant.

### **11.5 Chapter 12.24.140 Damage to Protected Trees**

- A. Except as permitted in this chapter, no person shall break, injure, deface, mutilate, kill, remove or destroy any protected tree; or knowingly cause or permit any wire charged with electricity to come into contact with any protected tree; or place, apply, attach or keep attached to any such tree a guard or stake intended for the protection thereof, any wire, rope, sign, paint or other substance, structure, thing or device of any kind or nature whatsoever; or place or maintain any stone, cement or other substance so that it shall impede the free access of water or air to the roots of any protected tree.
- B. Any party determined to have caused damage to any protected tree as described in subsection A of this section shall be liable for the cost of repair or replacement of the tree. Costs shall be based on Napa County landscape industry costs and on tree valuation standards set by the International Society of Arboriculture. Such moneys shall be paid to the city and shall be used to repair or replace the damaged tree.

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#### **11.6 Chapter 12.24.150 Protection of Protected Trees During and After Construction Activity**

- A. During any construction activity within the drip line of a protected tree, inside or outside the public right-of-way, no person shall, without permission from the director of public works, do the following:
  - 1. Change the amount of irrigation provided to any protected tree from that which was provided prior to the commencement of construction activity.
  - 2. Trench, grade or pave into the root zone of a protected tree;
  - 3. Change, by more than two feet, grade elevations within an area from the drip line of a protected tree outward to thirty (30) feet in distance;
  - 4. Park or operate any motor vehicle within the drip line area of any protected tree except in designated parking areas;
  - 5. Place or store any equipment or construction materials within the drip line area of any protected tree except in designated parking areas;
  - 6. Attach any signs, ropes, cables or any other items to any protected tree;
  - 7. Cut or trim any branch of a protected tree for temporary construction purposes;
  - 8. Place or allow to flow into or over the root zone area of any protected tree any oil, fuel, concrete mix or other deleterious substance.
- B. Where written permission of the director is sought under this section, the director may grant such permission with such reasonable conditions as may be necessary to effectuate the intent and purpose of this chapter.
- C. A protected tree shall be protected after construction activity in accordance with conditions imposed by the city and/or specifications adopted by the tree committee.

##### **11.6.1 APPLICABILITY TO THE PROPOSED PROJECT**

None of the trees on the project site would be considered as Protected Trees, as none of the trees meet the definition (pursuant to Chapter 12.24.020 of the Municipal Code and described above) of a heritage tree, protected replacement tree, street tree, and/or a city tree. Therefore, no tree removal permits or other mitigation for tree impacts are required.

#### **12. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REGULATIONS**

A CEQA lead agency must determine if a proposed activity constitutes a project requiring further review pursuant to the CEQA. Pursuant to CEQA, a lead agency would have to determine if there could be significant adverse impacts to the environment from a proposed project. Typically, if within the city limits, the city would be the CEQA lead agency. If a discretionary

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permit (i.e., conditional use permit) providing sufficient discretion to allow meaningful input into the project design would be required for a project, the lead agency must comply with CEQA. In some cases, there are “Categorical Exemptions” that apply to the proposed activity; thus, the activity is exempt from CEQA. The Categorical Exemptions are provided in the CEQA Guidelines. There are also Statutory Exemptions in CEQA that must be investigated for any proposed project. Further, “CEQA mandates that projects which are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.” (14 Cal. Code Regs. § 15183.) Thus, Section 15183 provides another type of exemption. If the project is not exempt from CEQA, the lowest level of review typically reserved for projects with no significant effects on the environment would be for the lead agency to prepare a “Negative Declaration.” If a proposed project would have only minimal impacts that can be mitigated to a level of no significance pursuant to the CEQA, then a “Mitigated Negative Declaration” (MND) is typically prepared by the lead agency. Finally, those projects that may have significant effects on the environment, or that have impacts that can’t be mitigated to a level considered less than significant pursuant to the CEQA, typically must be reviewed via an Environmental Impact Report (EIR). All CEQA review documents are subject to public circulation, and comment periods.

Section 15380 of CEQA defines “endangered” species as those whose survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors. “Rare” species are defined by CEQA as those who are in such low numbers that they could become endangered if their environment worsens; or the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered “threatened” as that term is used in FESA. The CEQA Guidelines also state that a project will normally have a significant effect on the environment if it will “substantially affect a rare or endangered species of animal or plant or the habitat of the species.” The significance of impacts to a species under CEQA, therefore, must be based on analyzing actual rarity and threat of extinction to that species despite its legal status or lack thereof.

#### 12.1.1 APPLICABILITY TO THE PROPOSED PROJECT

This report has been prepared as a Biology section that is suitable for incorporation by the CEQA lead agency (in this case, City of St. Helena) into a Consistency Determination pursuant to CEQA Section 15183. This document addresses potential impacts to species that would be defined as endangered or rare pursuant to Section 15380 of the CEQA.



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### 13. IMPACTS ANALYSIS

Below the criteria used in assessing impacts to Biological Resources is presented.

#### 13.1 Significance Criteria

A significant impact is determined using CEQA and CEQA Guidelines. Pursuant to CEQA §21068, a significant effect on the environment means a substantial, or potentially substantial, adverse change in the environment. Pursuant to CEQA Guideline §15382, a significant effect on the environment is further defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. Other federal, State, and local agencies' considerations and regulations are also used in the evaluation of significance of proposed actions.

Direct and indirect adverse impacts to biological resources are classified as "significant," "potentially significant," or "less than significant." Biological resources are broken down into four categories: vegetation, wildlife, threatened and endangered species, and regulated "waters of the United States" and/or stream channels.

##### 13.1.1 THRESHOLDS OF SIGNIFICANCE

###### 13.1.1.1 Plants, Wildlife, Waters

In accordance with Appendix G (Environmental Checklist Form) of the CEQA Guidelines, implementing the project would have a significant biological impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.
- Have a substantial adverse effect on state or federally protected "wetlands" (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or State HCP.

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#### 13.1.1.2 Waters of the United States and State.

Pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), the Corps regulates the discharge of dredged or fill material into waters of the U.S., which includes wetlands, as discussed in the bulleted item above, and also includes “other waters” (stream channels, rivers) (33 CFR Parts 328 through 330). Substantial impacts to Corps regulated areas on a project site would be considered a significant adverse impact. Similarly, pursuant to Section 401 of the Clean Water Act, and to the Porter-Cologne Water Quality Control Act, the RWQCB regulates impacts to waters of the State. Thus, substantial impacts to RWQCB regulated areas on a project site would also be considered a significant adverse impact.

#### 13.1.1.3 Stream Channels

Pursuant to Section 1602 of the California Fish and Game Code, the CDFW regulates activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank of a stream which the CDFW typically considers to include riparian vegetation. Any proposed activity that would result in substantial modifications to a natural stream channel would be considered a significant adverse impact.

### **14. IMPACT ASSESSMENT AND STANDARD CONDITIONS OF APPROVAL**

The project site was previously developed and because it has been heavily disturbed, it does not provide much value in terms of biological resources. The most significant biological resource on or near the project site is the offsite seasonal drainage along the southern project site boundary that supports riparian woodland habitat. The riparian trees provide nesting, foraging, resting and stopover habitat for birds and resting and foraging habitat for disturbance-adapted mammals. In this section we provide recommendations to protect the significant biological resources near the project site and in the landscaping design to meet the policies of the City of St. Helena’s General Plan.

In this section we discuss potential impacts to sensitive biological resources that could occur from project development as shown on the Site Plan (Attachment A). We follow each impact with a condition of project approval that, when implemented, would reduce impacts to the greatest extent possible.

Checklist Items are listed below. Where there would be significant impacts to checklist categories, these impacts and required conditions of project approval are fully discussed in the sections below.

*Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*

No. The site has been previously developed, is heavily disturbed, and vegetated with ornamental landscaping and ruderal herbaceous vegetation. It does not provide habitat for any candidate, sensitive, or special-status species.

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*Would the Proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?*

No. The riparian vegetation that extends onto the project site from the offsite creek would not be impacted under the current development proposal. There are no other significant or sensitive communities onsite.

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

No. There are no state or federally protected “wetlands” (including, but not limited to, marsh, vernal pool, coastal, etc.) on the project site.

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

No. The Proposed Project would not adversely impact or interfere with wildlife movement corridors. The project site is an anthropogenic habitat that is surrounded by developed properties on all sides. The project site does not serve as a wildlife movement corridor.

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

No. There are no proposed impacts to trees considered to be Protected Trees under the City of St. Helena Tree Ordinance.

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

No. There are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of St. Helena.

**14.1 Impact BIO-1: With Compliance with Applicable General Plan Policies, Development of the Proposed Project Would Not Have a Potentially Significant Impact on Nesting Raptors and Passerine Birds (No Peculiar Impact)**

Nesting raptors (birds of prey) and passerine (perching) birds are protected pursuant to California Fish and Game Code (Sections 3503, 3503.5, 3513), and the Federal Migratory Bird Treaty Act. The oaks present on the project site provide suitable nesting habitat for raptors and passerine birds. In addition, the ruderal herbaceous cover on the project site provides suitable nesting habitat for ground-nesting birds. Since, typically, most birds can fly out of harm’s way, development of the project site would not be expected to harm adult birds. However, nesting birds are susceptible to take through disturbance that harms eggs or young. Pursuant to General



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Plan Implementing Action OS1.O, the project proponent must avoid impacts to nesting birds by conducting preconstruction nesting bird surveys and implementing avoidance measures. The city will impose its standard condition based on Implementing Action OS1.O, which is listed below as BIO-1.

#### **14.2 Standard Condition of Approval BIO-1. Nesting Birds**

To avoid impacts to nesting birds, a nesting bird survey must be conducted no earlier than 14 days prior to commencing with construction work if this work would begin between February 1 and August 31. The nesting bird survey must be conducted on the project site and within a zone of influence around the project site. The zone of influence includes those areas off the project site where raptors could be disturbed by earth-moving vibrations or noise. The nesting bird survey should include examination of all suitable nesting habitats within 300 feet of the entire project site. Adjacent properties will not be surveyed. A nesting bird survey report should be prepared upon completion of the survey and provided to the City of St. Helena with any recommendations required for establishment of protective buffers as necessary to protect nesting birds.

If birds are identified nesting on or within the zone of influence of the construction project, a qualified biologist should establish a temporary protective buffer around the nest(s). The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and should be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 75 feet from the nest site or nest tree dripline for small birds and up to 300 feet for sensitive nesting birds that include several raptor species known from the region of the project site. The nest buffer should be staked with orange construction fencing.

No construction or earth-moving activity should occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified ornithologist/biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by the qualified biologist. At the end of the nesting cycle, or abandonment of the nest by its occupants, as determined by a qualified biologist, temporary nesting buffers may be removed, and construction may commence in established nesting buffer areas without further regard for the nest site.

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MONK & ASSOCIATES



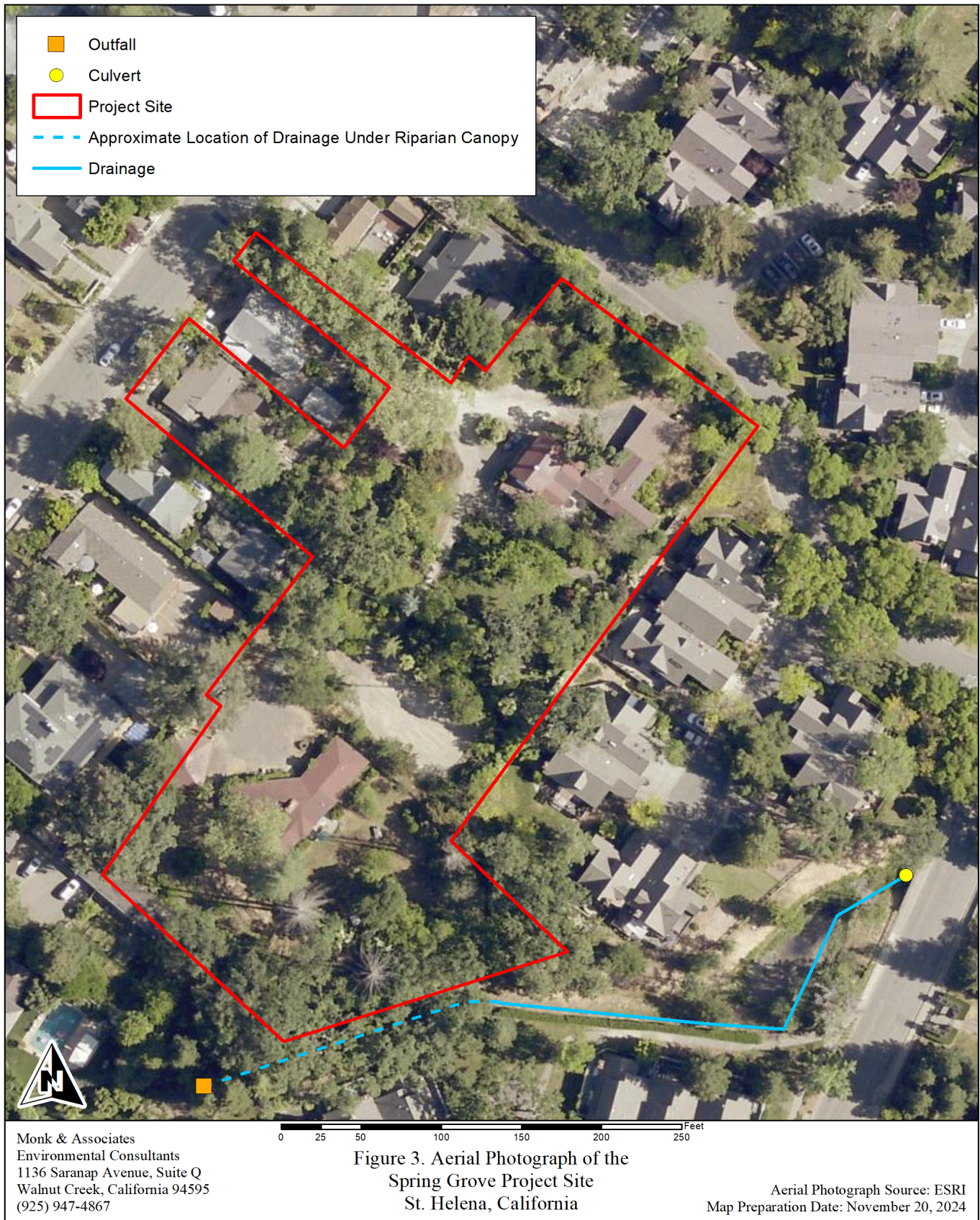
Monk & Associates  
Environmental Consultants  
1136 Saranap Avenue, Suite Q  
Walnut Creek, California 94595  
(925) 947-4867

Figure 2. Spring Grove Project Site  
Location Map  
St. Helena, California

38.500895 -122.470324  
Section: 36; T8N R6W  
7.5-Minute Saint Helena quadrangle  
Aerial Photograph Source: ESRI  
Map Preparation Date: November 20, 2024



MONK & ASSOCIATES





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**Table 1**  
**Plant Species Observed on the Spring Grove Project Site**

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**Gymnosperms**


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**Cupressaceae**

<i>Sequoia sempervirens</i>	Redwood
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**Angiosperms - Dicots**


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**Apocynaceae**

<i>*Nerium oleander</i>	Oleander
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**Fagaceae**

<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast live oak
<i>Quercus lobata</i>	Valley oak

**Lythraceae**

<i>*Punica granatum</i>	Pomegranate
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**Moraceae**

<i>*Ficus carica</i>	Fig
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**Myrtaceae**

<i>*Eucalyptus</i> sp.	Eucalyptus
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**Oleaceae**

<i>*Ligustrum japonicum</i>	Japanese privet
<i>*Ligustrum lucidum</i>	Glossy privet
<i>*Olea europaea</i>	Olive

**Rosaceae**

<i>*Prunus cerasifera</i>	Cherry plum
<i>*Pyracantha coccinea</i>	Scarlet firethorn

**Sapindaceae**

<i>*Acer palmatum</i>	Japanese maple
<i>*Acer saccharinum</i>	Silver maple

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**Angiosperms - Monocots**


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**Poaceae**

<i>*Avena barbata</i>	Slender wild oat
<i>*Bromus diandrus</i>	Ripgut grass
<i>*Bromus hordeaceus</i>	Soft chess
<i>*Phyllostachys aurea</i>	Fishpole bamboo

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* Indicates a non-native species



MONK &amp; ASSOCIATES

**Table 2**  
**Wildlife Species Observed on the Spring Grove Project Site**

<b>Reptiles</b>	
Western fence lizard	<i>Sceloporus occidentalis</i>
<b>Birds</b>	
Northern Flicker	<i>Colaptes auratus</i>
Turkey Vulture	<i>Streptopelia decaocto</i>
California Quail	<i>Callipepla californica</i>
Anna's Hummingbird	<i>Calypte anna</i>
Acorn Woodpecker	<i>Melanerpes formicivorus</i>
Nuttall's Woodpecker	<i>Picoides nuttallii</i>
California Scrub Jay	<i>Aphelocoma californica</i>
Oak Titmouse	<i>Baeolophus inornatus</i>
Bushtit	<i>Psaltiriparus minimus</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
American Robin	<i>Turdus migratorius</i>
Yellow-rumped Warbler	<i>Setophaga coronata</i>
California Towhee	<i>Melospiza crissalis</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
House Finch	<i>Haemorhous mexicanus</i>
Lesser Goldfinch	<i>Spinus psaltria</i>
<b>Mammals</b>	
Fox squirrel	<i>Sciurus niger</i>





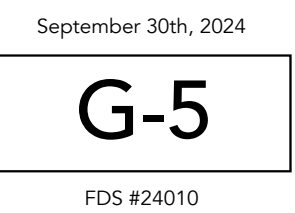
ILLUSTRATIVE SITE PLAN



Spring Grove

APN: 009-590-003, -005, -010  
1447~1505~1515 Spring Street  
St. Helena, CA

TARRAR  
UTILITY CONSULTANTS











November 19, 2025

Mr. Mike Janusek, AICP  
Senior Planner  
City of St. Helena  
Community Development Department  
1088 College Avenue  
St. Helena, CA 94574

Mike,

We appreciate your thorough review of the Spring Grove project. Please find below our response to how we have addressed public input and Planning Commission early feedback since the Planning Commission meeting of January 21, 2025.

Thank you,



Kelso G. Barnett

cc. Maya DeRosa  
Xinia Gamero  
Michael Brewer



### **Project Screening**

The entire community will be enclosed by a wood perimeter fence designed to provide both privacy and a consistent visual edge. The fence height will be 6 feet in most areas; however, within the 50 feet of the property line/right of way on Spring Street, fencing will be reduced to 3 feet to maintain open sightlines in order to comply with the city's vision triangle and applicable design standards.

Beyond fencing, the landscape plan incorporates significant new planting to create a natural, attractive, and effective vegetative screen. Along the eastern boundary—where Spring Grove is adjacent to St. James Drive—the project will install six 36-inch-box Carolina Cherry Laurels. These evergreen trees are fast-growing, typically reaching heights of 20–35 feet and widths of 15–20 feet, with a dense pyramidal canopy that provides year-round privacy.

The southern property line will be softened and screened with a combination of four Western Sycamores and three Western Redbuds. The Western Sycamore is a fast-growing deciduous tree, commonly growing 2–3 feet per year. At maturity it can reach 40–80 feet in height with a broad 30–50-foot spread. While it drops leaves in winter, this location is adjacent to the open-space interface on the St. Helena Park development, where seasonal leaf-off is appropriate and helps maintain a more open feel toward the shared open area. The Western Redbud is a moderate-growing deciduous tree, typically reaching 15–20 feet in height and 15–20 feet in width. It grows roughly 1–2 feet per year and is valued for its dense branching, spring blossoms, and summer privacy. Although deciduous, its branching structure still provides some winter screening.

Along Spring Street, the project will be screened primarily through the preservation of existing mature redwoods and sycamores, supplemented with additional understory and mid-story plantings, including Vine Maples, Rocky Mountain Maples, Coast Live Oaks, and Engelmann Oaks. The Vine Maple is a moderate-growing deciduous tree or large shrub, typically growing 1–2 feet per year. Mature size ranges from 10–20 feet tall and wide, forming layered, multi-stemmed screening. The Coast Live Oak is a slow-to-moderate growing evergreen oak, adding roughly 12–24 inches of growth per year. At maturity it can reach 20–70 feet tall with a broad 20–30-foot canopy. Its year-round foliage provides consistent evergreen screening. Also in the oak family, the Engelmann Oak is a slow-growing semi-evergreen oak, usually adding less than 12 inches of growth per year. Mature height ranges from 20–60 feet with a 20–40-foot spread. Though technically semi-deciduous, it generally retains most of its leaves year-round in our climate, making it effective for long-term screening.

Additional shrub layers will reinforce the project's planting design, including Woodleaf Privet and Toyon. These shrubs are fast-growing and evergreen, typically adding 2 feet per year, maturing at 8-12 feet tall and 6-10 feet wide.

Taken together, this combination of fencing, preserved mature trees, new evergreen and deciduous plantings, and layered shrub material will provide a robust, attractive, and context-appropriate screening strategy for Spring Grove on all sides.



### **Feedback: Neighborhood Outreach, Providing Smaller Units & Community Gardens**

We received extensive community input during the January 21, 2025 Planning Commission study session. We took that feedback seriously and immediately followed up with a dedicated Open House on February 20, 2025 at the Native Sons Hall on Spring Street, just steps from the project site. This informal setting allowed neighbors to speak with us one-on-one, walk through the plans in detail, and share both their support and their concerns directly.

Across all of these engagements; emails, in-person conversations, comments at public meetings, and comments on Next Door, the community's feedback has been mixed. Many residents expressed support for increasing "missing-middle" homeownership opportunities in St. Helena, especially for young families and first-time homebuyers. Others shared concerns about the project's density, height, and architectural expression. We listened carefully and committed to making meaningful improvements in the areas where adjustments were feasible.

Density is set by the municipal code and the Housing Element designation for this site, which has a direct effect on our overall building height and our required unit sizes; as such, those parameters could not be reduced without undermining both the City's housing obligations and the core purpose of this project. However, within those constraints, we made a series of targeted design refinements aimed at softening the buildings, improving compatibility with nearby homes, and enhancing the visual character of the neighborhood. These enhancements include:

#### *Architectural and Aesthetic Improvements*

- Increased the primary roof pitch from 8:12 to 11:12 to create a more traditional residential profile and reduce the appearance of massing.
- Removed the top parapet wall to improve roof articulation and achieve a cleaner, more refined ridgeline.
- Introduced undulating ridgelines with gable peaks raised approximately 3 feet to create variation and visual interest.
- Added accent metal roof sheds at key elevations to break up facades and add high-quality material expression.
- Added second- and third-floor balcony decks to create depth, shadow lines, and more human-scaled architecture.
- Increased the level of siding detail throughout the elevations to enrich texture and avoid flat or monolithic façades.
- Added vine-trellis systems along garage walls to introduce greenery and soften the appearance of auto-oriented elements.
- Added enhanced architectural fixtures at gable ends and other focal points for additional craftsmanship and detail.
- Provided varied garage-door styles to better individualize units and reduce visual repetition.





- Engaged a professional colorist to refine and diversify the color palette in a way that complements the existing neighborhood fabric.

After considering the feedback received during the January study session, we evaluated the idea of incorporating community garden beds into the common open space. While community gardens can be successful in some developments, our experience across multiple City Ventures communities shows that they tend to be highly variable; some are heavily utilized, while others are quickly abandoned, becoming maintenance challenges and detracting from the quality of shared spaces. Rather than installing garden beds that may not reflect the preferences or lifestyles of the future residents, we believe the most responsible and community-oriented approach is to allow the future HOA to make this decision once the neighborhood is established. This ensures that any garden areas created will reflect genuine resident interest, be maintained appropriately, and become an amenity that truly adds value to the community.

While we could not change every aspect raised by neighbors, we worked within the boundaries of the development code and Housing Element requirements to make improvements that materially enhance the project's compatibility with its surroundings. Our goal has always been to design a neighborhood that feels at home in St. Helena—respectful of the community's character, aligned with the City's long-range housing policies, and accessible to the households this project is intended to serve.

### **Circulation & Fire Access**

The project's circulation system and fire access design have been reviewed and approved by the St. Helena Fire Department, including the City's Fire Inspector. The site plan meets all applicable requirements of the California Fire Code, including turning radii, street widths, hydrant placement, emergency access routes, and unobstructed fire-lane clearances. While feedback was received adding a secondary point of egress (EVA/fire access), state fire code allows an exemption for up to 200 units if all units are equipped with fire sprinklers. The project will be designed with an NFPA-13 system and all units will have fire sprinklers.

In addition, we commissioned a Transportation Impact Study to evaluate on-site circulation, emergency vehicle operations, driveway performance, and interaction with the public street network. Technical review confirm that the project is safe, functional, and capable of supporting timely emergency response:

- While private streets are not subject to city standards, the internal streets are 28 feet wide, which exceeds City standards for public streets and accommodating two-way travel and emergency access.
- While no on-street parking is permitted on these internal streets, ensuring clear and unobstructed fire lanes, the project will exceed parking requirements. Two side-by-side parking spaces within garages will be provided for each unit, exceeding the 1.5 parking spaces required by code. Guest parking also exceeds code requirements by providing 11 spaces.
- A 200-foot driveway connects the site to Spring Street. Although the internal circulation pattern resembles a parking-lot drive aisle rather than a public street, both vehicle speeds and vehicle



volumes will be low and drivers are expected to proceed cautiously—conditions that reduce conflict potential and improve overall safety.

- The perpendicular guest parking spaces create typical interactions found in commercial and residential lots throughout the Bay Area; the Transportation Impact Study found no unique or unacceptable safety concerns.
- Wayfinding and delivery-parking signage will be installed to prevent delivery vehicles from obstructing garages or internal circulation routes, further supporting safe operations and unimpaired access for fire responders.

Both the Fire Department and the transportation study confirm that the project is fully compliant, safe, and operationally sound. Emergency access meets or exceeds all City and California Fire Code standards; internal circulation is appropriate for a residential environment with low speeds and low volumes; and no unique hazards or conflicts were identified.

Taken together, the evidence demonstrates that the development will function safely from both a circulation and fire-response perspective and will not adversely affect emergency response times.

#### **Lighting / Off-Site Glare**

The project's lighting plan was carefully designed to prevent off-site glare and minimize light spillover onto neighboring residential properties along Spring Street, St. James Drive, and the surrounding areas. The photometric layout shows that all illumination levels taper down to near-zero at the property boundaries. This is achieved through the use of fully shielded and house-side-shielded fixtures, including cutoff post-top luminaires, wall-mounted LED fixtures with controlled distribution patterns, and low-height bollards located away from sensitive edges. The placement of fixtures is oriented inward toward internal drive aisles, walkways, and common areas, ensuring light is directed only where needed for safety and not toward adjacent homes.

In addition to shielding and directional control, the lighting plan incorporates appropriately warm-temperature LEDs, and precise photometric modeling to ensure compliance with modern lighting standards and to maintain a residential character. The combination of controlled optics, house-side shielding, and low-intensity fixture selection results in extremely limited light trespass. Together, these measures ensure that the project provides safe, adequate illumination for residents and visitors while protecting the privacy, comfort, and nighttime environment of the surrounding neighborhood.



## SPRING GROVE WATER NEUTRALITY REPORT

Updated  
November 10, 2025

### A. BACKGROUND

To ensure compliance with the City of St. Helena's [Water Neutral Policy for Development](#), City Ventures is submitting a water neutrality analysis for the proposed Spring Grove Subdivision.

This analysis outlines the anticipated water consumption for the development (*per St. Helena's water neutral policy*) and presents potential options for water off-set mitigation.

### B. CURRENT THEORETICAL DOMESTIC WATER DEMAND

There are currently three homes on the property: one 4-bedroom, one 3-bedroom, and one 2-bedroom.

According to the St. Helena Water Neutral Policy for Development section on water demand analysis for existing water use, the analysis should use 150 gpd/bedroom. This equates to a theoretical domestic water demand to be 1,350 gallons per day for the current homes.

Address	Bedrooms	Gal/Bdrm
1447 Spring	4	150
1505 Spring	2	150
1515 Spring	3	150
	<b>Gal/Day</b>	<b>1,350</b>
	<b>Gal/Year</b>	<b>492,750</b>

** Current landscape irrigation not supplied by city water but by well onsite*

### C. PROPOSED THEORETICAL DOMESTIC WATER DEMAND

The proposed development includes 41 lots with side-by-side townhomes, consisting of 41 3+ bedroom units. Water demand for the project is calculated based on the water usage of fixtures and appliances, determined by the number of occupants, in accordance with the City of St. Helena's Water Neutral Policy for Development.





The following outlines the water performance requirements for fixtures and appliances.

Fixture	#	Unit	Days	Occupant
Toilet	3	Flushes	1	1
Sink Faucet	0.25	Minute	3	1
Showerhead	8	Minute	1	1
Kitchen Faucet	4	Minute	1	1
Clothes Washer	0.37	Load	1	1
Dish Washer	0.1	Load	1	1

Water usage from fixtures and appliances will comply with the minimum standards set by the 2010 California Green Building Standards Code (Title 24, Part 11) and the City of St. Helena's Water Neutral Policy.

Fixture	Gal	Unit
Toilet	1.3	Flushes
Sink Faucet	1.5	Minute
Showerhead	2	Minute
Kitchen Faucet	1.5	Minute
Clothes Washer	19.7	Load
Dish Washer	6.3	Load

In accordance with the City of St. Helena's policy, the analysis assumes two occupants per bedroom (including a den/office/optional bedroom). Following the City's Water Neutral Policy for Development, the estimated domestic water demand for the proposed project is 11,182 gallons per day. The calculations are included below.

Unit	Number of Rooms			Number of Occupants			
	Bdrm	Other	Total	Per Rm.	Per Unit	# Units	Total
Plan 1	3	0	3	2	6	4	24
Plan 2	3	1	4	2	8	5	40
Plan 3	3	1	4	2	8	15	120
Plan 4	3	1	4	2	8	17	136
<b>Total Number of Occupants*</b>							<b>320</b>

** Total number of occupants per St. Helena Water Neutral Policy; even if the total number of residents per home exceeds St. Helena's average household size, the projected number of actual occupants in a real world scenario is projected to be significantly lower.*



Fixture	Unit	Times/Day	Gal/Unit	Occupants	Gal/Day
Toilet	1	3	1	320	1,248
Sink Faucet	0	3	2	320	360
Showerhead	8	1	2	320	5,120
Kitchen Faucet	4	1	2	320	1,920
Clothes Washer	0	1	20	320	2,332
Dish Washer	0	1	6	320	202
<b>Total Gal/Day</b>					<b>11,182</b>
<b>Total Gal/Year</b>					<b>4,081,459</b>

#### D. THEORETICAL LANDSCAPE WATER DEMAND

Landscape irrigation will be provided by the City of St. Helena and the current well will be abandoned. Per Landscape Sheet L-7, the estimated total water usage per year (ETWU) is 285,008 gallons, or 781 gallons per day.

#### E. PROPOSED WATER NEUTRALITY MITIGATION

The existing theoretical water usage on the property is 1,350 gallons per day, and the proposed developments theoretical water usage is 11,963 gallons per day. Therefore, to comply with water neutrality the development must offset 10,613 gallons per day.

Spring Grove Theoretical Water Usage	Gal/Day
Homes	11,182
Landscape	781
Total	11,963
Existing Theoretical Water Usage	1,350
Gal/Day to Offset	<b>10,613</b>

This can be done by either retrofitting residential and non-residential properties with low flow devices or by paying an in-lieu fee that is equivalent to the cost of retrofitting enough homes, as provided by Municipal Code 13.12.020. The calculation of the in-lieu fee is attached below.

#### F. IN-LIEU RETROFIT FEES

The proposed project will increase water usage by 10,613 gallons per day. Therefore, per city policy, the project proposes to pay an in-lieu fee equivalent to the cost of retrofitting showerheads, faucets, and toilets in existing homes to comply with the required water savings.



The theoretical water use for homes with retrofitted low flow fixtures are summarized in the table below:

**Theoretical Water use with retrofitted low flow fixtures per residence**

Fixture	Flow		Occupants		Gal/Day
	Rate	Duration	Daily Uses	Number*	
Toilet	2	8	1	7.8	125
Sink Faucet	1.5	0.25	3	7.8	9
Showerhead	1.5	4	1	7.8	47
Kitchen Faucet	1.3	1	3	7.8	30
Clothes Washer	19.7	1	0.37	7.8	57
Dish Washer	6.3	1	0.1	7.8	5
<i>Total Gal/Day - 1 Home (Rooms - Spring Grove Blended Avg.)</i>					<b>273</b>
<i>Total Gal/Day - 41 Homes (Rooms - Spring Grove Blended Avg.)</i>					<b>11,182</b>

*Number of occupants (7.8) is a blended average of the proposed project's number of residents per unit

**Theoretical Water Use Saving per Residence**

	Gal/Rm	Rooms*	Total
Theoretical Water Use - Old Fixtures	150	3.9	585
Theoretical Water Use - New Fixtures			273
Savings			<b>312</b>

*Number of rooms (3.9) is a blended average of the proposed project's number of rooms per unit

To offset the anticipated water demand of the proposed project, 34 residences will need retrofitting with low flow fixtures.

**Required Residences needing retrofitting**

	Gal/Day
New Water Demand	10,613
Water Savings per Home (Retrofit)	312
Residences Needing Retrofit	<b>34</b>





The expected cost of retrofitting existing homes with new low flow fixtures are summarized in the table below:

#### Retrofit Material Cost per residence

Fixture	Qty	Cost/Unit	Total
Showerhead	2	\$139.06	\$278.12
Sink Faucet	2	\$247.98	\$495.96
Kitchen Faucet	1	\$341.08	\$341.08
Toilet	2	\$114.69	\$229.38
Clothes Washer	1	\$698.00	\$698.00
Dish Washer	1	\$449.00	\$449.00
Total Estimated Material Cost Per Home			<b>\$2,491.54</b>

#### Retrofit Labor Cost Per residence

Fixture	Hours	Qty	Hourly Rate	Total Cost
Showerhead	1	2	\$110.00	\$220.00
Sink Faucet	1	2	\$110.00	\$220.00
Kitchen Faucet	1	1	\$110.00	\$110.00
Toilet	2	2	\$110.00	\$440.00
Clothes Washer	2	1	\$110.00	\$220.00
Dish Washer	2	1	\$110.00	\$220.00
Total Estimated Labor Cost per Residence				<b>\$1,430.00</b>

The total estimated cost is the sum of the estimated material and labor cost per residence.

#### Total Retrofit Cost

Material Cost	\$2,492
Labor Cost	\$1,430
Total Cost	\$3,922
Residences Needing Retrofit	34
<b>Total Estimated In-Lieu Fee</b>	<b>\$133,348</b>



Proposed low flow fixture costs are listed below. Please find links below; prices are current as of November 10, 2025

- [Showerhead](#)- Delta, Kayra, Monitor 14 Series Shower Trim in Chrome- Model#: T14233
- [Sink Faucet](#)- Delta, Kayra, Two Handle Widespread Bathroom Faucet in Chrome- Model#: 3533LF-MPU
- [Kitchen Faucet](#)- Delta, Coranto, Single Handle Pull-Down Kitchen Faucet in Chrome- Model#: 9179-DST
- [Toilet](#)- Western Pottery- 1.28G Elongated Bowl Easy Height- Model#: 832-T8ULF-HP
- [Clothes Washer](#) - Samsung - 4.5 Cu. Ft. High-Efficiency Stackable Smart Front Load Washer with Steam and Super Speed Wash - Platinum
- [Dish Washer](#)- LG - 24 in. in Stainless Steel Front Control Dishwasher- Model #: LDFN3432T
- Labor Cost cited in table 6 are estimates for contractors in the St. Helena area found on <https://www.taskrabbit.com>

## G. CONCLUSION

The proposed project theoretical water usage is **11,963** gallons per day.

The existing theoretical water usage on site is **1,350** gallons per day.

Therefore, the project must save **10,613** gallons per day or pay an in-lieu fee to comply with St. Helena water neutrality policy for development.

The project will pay an in-lieu fee of **\$133,348**, equal to the cost of retrofitting enough residences with low flow fixtures to offset the proposed theoretical water use.

## **Response to Public Comments from the January 13, 2026 City Council Public Hearing:**

### **Spring Grove Vesting Tentative Map and Water Neutrality In-Lieu Retrofit Fee**

Public Comments are grouped by theme and a single response prepared for related comments.

#### **Concern that the project has not been processed in compliance with the St. Helena Municipal Code.**

The development application was submitted on November 22, 2024 and routed for review to Planning, Fire, Building, Public Works, City Arborist, and applicable outside agencies. The applicant was deemed to have submitted a complete application on May 13, 2025 and a subsequent consistency review commenced in compliance with SB 330. The project underwent multiple rounds of consistency analysis before the project was determined to be consistent with all applicable state and local standards. Comment letters were posted to the project webpage on the City website. City staff have applied the State and Municipal Codes where applicable. If commentors wish to disagree with this assertion, they need to specify which Code they believe to have been violated before Council may consider their claim.

#### **Concern that the Applicant has not satisfied all requirements of the Municipal Code.**

Some provisions of the Municipal Code become applicable to the project at Building Permit and Final Inspection stages of the review process. The Public Works Department concurs that there are outstanding issues that will need to be addressed during subsequent phases of the development process. However, the outstanding issues are not prerequisites to Council approval of the Tentative Map or Water Neutrality In-Lieu Retrofit Fee. All outstanding issues will be resolved either before Building Permit issuance or Final Inspection, as appropriate.

For example, during the consideration of a tentative map application, Public Works staff will only review a preliminary stormwater management plan, and more detailed analysis of construction drawings is performed by Public Works staff during the building permit review. Post-construction storm water management remains an outstanding issue, but find there are multiple design options available to the applicant to mitigate the issue. Staff will ensure that the project incorporates a reasonable solution in the plan prior to approving the Building Permit. As conditioned, resolution of this matter is not needed for Council to approve the Vesting Tentative Map or Water Neutrality In-Lieu Fee Retrofit request.

#### **Site Layout and Irregular Lot**

SHMC Section 16.32.050 requires new lots created by subdivisions to meet minimum lot dimensions. SHMC Table 17.16.030 (Development Standards) establishes the



standards for residential lots. The project proposes a 2.43-acre (105,851 square feet) lot for development, which exceeds the required minimum lot area of 7,000 square feet. In addition, the subdivision consolidates three existing parcels to create a 66-foot-wide public frontage, improving site access, and exceeding the required minimum lot width of 45 feet. While the resultant parcel is irregularly shaped, it exceeds the minimum dimensional requirements for lot area and lot width as required by the City Code, is buildable, and provides adequate access.

### **Fire Access**

The project plans, dated November 10, 2025 (Attachment 5 of the January 13 City Council staff report) were reviewed for compliance with applicable state and local Fire codes by the Fire Department. The Vesting Tentative Map proposes a minimum 26-foot-wide Emergency Vehicle Access Easement (28-feet-wide in most places), which meets the minimum 26-foot-wide fire access width standard pursuant to California Fire Code Appendix D Section D105.2. In addition, the Minor Design Review application for the project proposes a 40-foot-tall building height, which requires aerial fire apparatus pursuant to California Fire Code Appendix D Section D105.2. Fire has verified aerial equipment can access the third story windows and turning radii are adequate. Lastly, the project is conditioned to install NFPA13 fire sprinklers in each unit prior to building permit issuance. Per the 2025 California Fire Code, Appendix D, Section D107.1, developments where the number of units exceeds 30 shall be provided with two separate fire access roads, except that where all units are equipped with an approved automatic fire sprinkler system, access from two directions shall not be required. Therefore, as designed and conditioned, the single means of access from Spring Street fully complies with the 2025 California Fire Code, and a secondary means of access is not required.

### **Height**

Proposed building elevations are not under purview of the City Council and were reviewed and found to be in compliance with all applicable zoning standards as part of the Minor Design Review. The project proposes a building height of 40 feet, which is less than the required maximum building height of 42 feet per SHMC Table 17.16.030(B).

### **Number of Affordable Units**

Pursuant to the City's Inclusionary Housing Ordinance, SHMC Section 17.30.030, the Project will provide at least 20% affordable units. Per SHMC Section 17.30.030.G.1, for owner-occupied affordable units, at least half of the required affordable units shall be available to households earning less than 100% of annual median income (AMI). The Project proposes a 41-unit, 19% affordable, multifamily development for moderate

income households earning 120% or less of AMI, with four units available to households earning less than 100% AMI and four units available to households earning less than 120% AMI. Pursuant to SHMC Section 17.30.030(A), Vesting Tentative Map condition of approval #26 requires the developer to pay the housing in-lieu fee for the remaining 0.2 fractional units of affordable to achieve the 20% minimum requirement of the Inclusionary Housing Ordinance. Please note, the City Council will consider the affordable housing agreement for the project at a future date.

### **Architecture**

Project architecture is not under City Council review and was reviewed and approved with the Minor Design Review. Pursuant to SHMC Section 17.05.080.B.2, new multifamily development consistent with the applicable development and design standards provided in SHMC Section 17.16.040 (objective design standards) are subject to Minor Design Review by the Community Development Director. The Minor Design Review for site plan layout, architecture, parking, and landscaping has been reviewed and found to be consistent with the objective design standards and ministerially approved by the Community Development Director. The administrative Notice of Action is included in Attachment 8 of the January 13 City Council staff report. No appeal was filed and the Minor Design Review approval is final.

Also it is important to note that as part of the last Housing Element cycle, the State required the City to streamline the review of multi-family housing and eliminate the zoning requirement of a discretionary Conditional Use Permit for multi-family housing.

### **Occupancy of Existing Homes**

Some commenters have indicated that the applicant must replace the three existing homes on the property, indicating that those units provide existing affordable housing. State law requires that if a new housing development requires the demolition of existing residential units, the new development must produce at least as many units as are being demolished. This project meets that requirement, since it will demolish 3 units, but produce 41. State law also requires that any “protected units” that are demolished must be replaced with an equal number of “protected units”. Protected units are units that are either (1) subject to local rent control requirements, (2) are subject to a recorded covenant, ordinance or law restricting rents to levels affordable to low or very low income household (i.e., households earning 80% or 50% of the Napa County area median income, adjusted for household size), or (3) were actually rented to a low or very-low income household within the past 5 years. One of the homes (at 1447) was used by the owners as a weekend home, and has not been rented. Further, the City has not obtained any information indicating that either of the remaining homes has be

rented to a low or very low income household within the past five years. Nevertheless, in order to ensure compliance with this requirement, a modification to Vesting Tentative Map condition of approval #25 is included in the Vesting Tentative Map resolution to make clear that the affordable housing agreement must comply with all applicable laws, including those related to demolition of existing housing units. In the event that the City determines that one of the existing units was rented to a low or very low income household, the City will require as part of the Affordable Housing Agreement that one of the affordable housing units included as part of the project be sold or rented to a household at an equivalent income level.

### **Construction Impacts to Neighbors**

Vesting Tentative Map condition of approval #38 limits construction hours to 8:00 a.m. to 5:00 p.m. Monday through Saturday to reduce the disturbance to residents in the vicinity. The project would retain 35 existing trees, most of which are mature trees located along the perimeter of the site that would provide screening to adjacent properties. In addition, the project would provide 59 new trees, mostly along the perimeter of the project site to provide enhanced screening in combination with continuous 6-foot-tall wood fencing.

### **Play Area**

Common outdoor recreation spaces are not under review of the City Council and were reviewed for compliance with SHMC Section 17.16.040 as part of the Minor Design Review. The project proposes 18,548 square feet of common open space, which exceeds the 6,150 square foot common open space requirement. Passive and active recreational amenities within the common open space area include walking paths, community seating, a picnic area, and a vineyard trellis with fruiting vines. Per SHMC Section 17.16.040.A.10.f, the play area requirement does not apply to any development that is age-restricted to senior citizens or located within 300 feet of a public park. The project is located less than 300 feet from Mary Fryer Park. Per Vesting Tentative Map condition of approval #13, the project is required to pay all development impact fees, including park impact fees and parkland fees, prior to building permit issuance.

### **Entry Design**

Entry design is not under purview of the City Council and was reviewed for compliance with SHMC Section 17.16.040.C.3 with the Minor Design Review. Each unit contains a separate, primary entry. Per SHMC Section 17.16.040.C.3.b.i, individual ground floor entrances to units within a multifamily development must be visible and directly accessible from the right of way or a shared pathway. This standard is not met for two of the end units in Buildings 1 and 6 where direct pedestrian access is not provided from a walkway, but is accessible from the private street. The City acknowledges strict



compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law and has accepted a Density Bonus waiver requested by the applicant as documented in the Density Bonus Eligibility Letter (Attachment 8 of the January 13, 2026 City Council staff report).

### **General Plan Consistency**

The project implements 2023-2031 Housing Element Site #9. Because the Housing Element is a part of the General Plan, the project is consistent with the General Plan. In addition, while strict compliance with all General Plan policies is not required for development projects, an analysis of consistency with other General Plan policies is included in Attachment 7 of the January 13, 2026 City Council staff report. It should also be noted that the application has been submitted under SB 330, which limits the ability of the City to apply subjective standards to the project. As stated in Chapter 1.6 of the General Plan, the role of the General Plan “sets forth the City’s policies to guide future land use decisions and provides the needed framework to preserve the character and quality of development that the community desires.” Policies that guide development based on character and quality reflecting community desires are commonly subjective in nature.

### **Concerns that the Project has not demonstrated compliance with the Water Neutrality Policy.**

Staff have reviewed the water neutrality calculation and find the most recent version (11/19/2025) to comply with the Policy. The estimated water use, volume to be mitigated and the in-lieu fee to be paid all conform to the Policy guidelines.

The developer has requested use of the in-lieu fee process and has demonstrated that strict compliance with the Policy presents an “unusual hardship”. Public Works has reviewed this claim and finds it to be valid for this project. As a result of this finding, the Project has not been required to provide a list of parcels to retrofit, or fixtures lists since these items are not relevant should Council allow payment of an in-lieu fee. Please note that this is not a waiver from these Policy requirements. The Developer will still have to comply with these requirements should Council disallow payment of an in-lieu fee. Council retains the discretionary right to grant or deny the applicant use of the In-Lieu fee option.

### **Concerns that the in-lieu fee does not ensure there is adequate water capacity to serve the Project.**

The In-Lieu fee is paid by developers when the Council determines that directly offset water use is impractical or poses an unusual hardship. Compliance with the water neutrality policy is separate from an evaluation of existing infrastructure. Developers are subject to separate requirements to prepare calculations showing that they will not

exceed the capacity of the service mains to which they will connect. This evaluation is not Citywide nor intended to be. Citywide infrastructure evaluation is performed by the City through periodic studies and development of the Capital Improvement Program (CIP). These studies are made available to all residents as a reference tool for planning their projects big and small.

It is important to note that the Bell Canyon Forecast, periodically presented to Council, is not a measure of "safe yield". The Bell Canyon Forecast is a snapshot of short-term water reserves only and not a long-term planning document. The City has separate "safe yield" studies, the latest of which was completed 2024. Staff began referencing the latest Safe Yield study in decision making following its initial presentation to the ATSC at the July, 2024 meeting.

Spring Grove has adequately demonstrated that the project will not negatively impact public health and safety either on or off the property. Post-Construction storm water management will need to be addressed prior to issuance of building permits, but Staff has determined that there are multiple design options available to the applicant to mitigate this outstanding issue. Staff will ensure that the project incorporates a reasonable solution in the plan prior to approving the Building Permit. Resolution of this matter is not needed for Council to approve the Vesting Tentative Subdivision Map or the In-Lieu Fee request.

**Third-Party review of the Spring Grove water neutrality report.**

Public Works is responsible for reviewing water neutrality calculations. The water neutrality calculation is not complex, requiring only basic math skills to prepare and review. Third-Party review of this calculation is not a requirement of the municipal code and would not add benefit to the review process.

**In-lieu fee only reflects water use for a single year, and should be collected annually.**

The in-lieu fee is not based on water use. It is a fee that may be charged in lieu of providing retrofitted toilets or other fixtures to reduce water use, and as a consequence, the fee amount is based on the cost to the developer of conducting such retrofits, were they able to do so. Given that the fee is structured as an alternative to a one time obligation, the fee also should not be recurring. Actual water usage by Spring Grove residents will be paid through water bills like all other water customers.

**Concern that the Project will exacerbate water quality issues the City currently experiences.**

Taste, odor and discoloration issues with City water have persisted for over 100 years. These issues are caused by naturally occurring iron and manganese in the City's water sources. The presence of these metals is independent of water demand. Similarly, issues with HAA5 compounds are the result of the interactions between the chemistry of our water sources and the disinfection process. The presence or absence of HAA5 in our water is independent of water demand. The anticipated water demand of the Spring

Grove project has no influence on the chemistry of the City's water sources, the treatment processes, or the formation of HAA5 compounds.

**Concern of a connection between wastewater treatment cost and Spring Grove.**

The wastewater treatment plant has nearly completed installation of a new treatment process. Part of this new process is the continuous removal of solids from wastewater and weekly disposal. The new process does not represent a reduced level of treatment or limit on discharge volume. The level of treatment is substantially higher and creates water safe for irrigating food crops, in part because of new solids removal process. In addition, the treated water meets the requirements for direct discharge to the Napa River and, if discharged directly (not stored in a pond), does not require disinfection with chlorine. Approval of the Spring Grove project, or any project, has no influence on the treatment process or the need to dispose of solids. Cost of disposal is based on volume and additional volume from the Spring Grove Project will be paid by the new residents via their water bill like all other residents.

**Fines paid by the City for wastewater discharge violations.**

Fines paid by the City are the result of the old treatment process combined with severe weather events and delays in delivery of the new treatment process. Now that the new treatment process is fully operational, future violations should be significantly reduced or eliminated. The Spring Grove development has no impact on this issue.

**Alternative Water Neutrality and In-Lieu Fee calculations.**

Ms. Covell has issued multiple comment letters regarding the accuracy and lawfulness of the Water Neutrality and In-lieu Fee calculations prepared by the Spring Grove development team. Ms. Covell has prepared alternative calculations and cited the calculations prepared by other projects to support her comments. Some of Ms. Covell's comments were erroneously based on early Spring Grove submittals which had already been rejected by Staff. These early comments have been superseded by Ms. Covell's comments dated 1/9/2026. Staff have prepared responses to the 1/9/2026 comments only.

1. The Policy relies on an occupancy/bedroom metric for estimating water usage in residential development. This metric allows comparison of the estimated maximum number of people who could reasonably occupy the development. Ms. Covell's comments reference a "per home" metric that does not consider the number of people who could live in the home. This metric is not supported by the policy and is less accurate. Public Works has relied on the Policy for evaluating the Spring Grove project and finds that the calculation prepared by Spring Grove meets the requirements of the Policy.
2. The Policy Guideline includes a "typical calculation" table for use by developers. The table is provided as a formatting reference for preparing their calculation. The table also includes the estimated water usage for each



standard fixture or appliance. The water usage figures are based on the 2010 LEED standards in effect at the time of the Policy's adoption. These Policy standards have not been updated. However, they remain mostly consistent with the 2022 California Green Building Standard applicable to the project today. Public Works accepts the Policy Guideline standards without additional documentation.

3. Some developers achieve water neutrality by specifying hyper-efficient appliances that exceed the Policy standards. Public Works allows this method but requires that the developer document the claimed efficiency by providing the specification sheet for the specific appliance. The appliance is then incorporated into the building permit so that the Building Official or Public Works can verify its installation before final inspection. Spring Grove did not use this option and elected to incorporate conventional water efficient fixtures/appliances into the Water Neutrality and In-Lieu Fee calculations for the project. This approach is in strict conformance with the Policy.
4. Ms. Covell asserts that the developer did not use the calculation method required by the Policy. The Developer did use unique formatting, but their methodology adheres to the Policy. Public Works performed its own calculation, which incorporates all decimal values required by the Policy, during review and found that the developer correctly estimated daily water usage for the anticipated 320 residents at the property. The City's independent calculation also established that Ms. Covell's concerns regarding miscalculation, blended averages, or potential "rounding errors" are immaterial.
5. Ms. Covell asserts that the calculation for "kitchen faucet" should be 1.8 gallons per minute. Ms. Covell's value relies on alternative standards. While these alternative standards are acceptable to Public Works, they remain optional. The Policy allows 1.5 gallons per minute for this fixture, so the developer's calculation is acceptable.
6. Ms. Covell asserts that the water "savings" calculation, prepared for the Hunter Subdivision is a more accurate method for calculating the in-lieu fee. Public Works disagrees. The Hunter Subdivision calculation omits dishwasher or clothes washer use. The Spring Grove calculation includes these appliances and is the more complete methodology. The Hunter Subdivision also relies on well water as a compliance method and is significantly larger than the Spring Grove project. Any comparison between these two projects is not apples-to-apples.

7. Ms. Covell asserts that the "baseline" (i.e. "water budget") water calculation should use the average number of bedrooms from the 3 (three) original homes. This assertion has no basis in either the Policy or any outside standard applicable to the Policy. The Policy relies on a formula which allows 150 GPD for each existing bedroom. Public Works confirmed, via County tax records, that the 3 (three) original homes have a combined total of 9 bedrooms which equates to a "baseline" water usage of 1,350 GPD. Public Works finds that the "baseline" calculation prepared by Spring Grove conforms to the Policy.
  
8. Ms. Covell expressed concern that dens/home offices/optional bedrooms had been omitted from the Spring Grove calculations. Public Works had expressed similar concerns over early drafts of the floor plans and the purpose of an additional room located adjacent to the garage of some units. The plan was revised to clearly identify these rooms and the Water Neutrality calculations updated. Public Works finds that all bedrooms applicable to the Policy have been correctly identified and occupancy correctly calculated.

**Concern that the City has not made the findings needed to approve Spring Grove.**

At the December 2, 2025 regularly scheduled Planning Commission meeting, the Planning Commission held a public hearing and adopted findings and a recommendation for approval to City Council pursuant to SHMC Section 16.16.060 (Attachment 3 of the January 13 City Council staff report).

SHMC Section 16.16.080(A) includes the findings that must be made by City Council to approve a Tentative Map. While there are a number of concerns that have been expressed by the community, a Tentative Map may only be denied if it is found to be inconsistent with the findings of SHMC Section 16.16.080(A) of the St Helena Municipal Code. Applicable findings are included in the January 13, 2025 City Council staff report and the draft City Council resolution for the Vesting Tentative Map (Attachment 2 of the January 13 City Council staff report).

**Other Comments from Councilmembers at January 13 CC Hearing**

**What will prevent on-street parking on private streets?**

The project proposes 93 off-street parking spaces, which exceeds the 77 parking space minimum requirement per SHMC Table 17.26.040(A). No on-street parking is proposed within the private streets. The project includes a combination of two-car garages for each unit and 11 perpendicular parking stalls. Per Vesting Tentative Map condition of approval #19, the project must include provide wayfinding signs along the project's internal roadway and at the sidewalk connections, and identify a short-term parking area for delivery vehicles. In addition, the frequency of driveway curb cuts will discourage any unauthorized on-street parking. The applicant has confirmed the HOA and CC&R's will prohibit on-street parking within the development.

**Can the City impose a condition of approval that would require partial retrofits, as demanded, and partial payment of the in-lieu fee for the balance of the required offset?**

Yes, the City Council and applicant may consider a condition of approval to require some retrofits and a partial payment of the in-lieu retrofit fee to the extent the applicant is able to find existing demand for retrofits within the community. However, after discussing this with the applicant, given the challenges of finding demand (e.g. survey) and the uncertainty of how the City would enforce such a condition, the applicant indicated they would not be amenable to a partial retrofit.



## Spring Grove Key Issues FAQs

Issue	Response
<b>Concern that the project has not been processed in compliance with the St. Helena Municipal Code.</b>	The project underwent multiple rounds of consistency analysis before the project was determined to be consistent with all applicable state and local standards. Comment letters are posted to the project webpage on the City website here: <a href="https://www.cityofsthenana.gov/797/PL24-065-1447-1505-1515-Spring-St--Sprin">https://www.cityofsthenana.gov/797/PL24-065-1447-1505-1515-Spring-St--Sprin</a>
<b>Concern that the Applicant has not satisfied all requirements of the Municipal Code.</b>	Some provisions of the Municipal Code become applicable to the project at Building Permit and Final Inspection stages of the development review process. For example, during the consideration of a Tentative Map application, Public Works staff reviews a preliminary stormwater management plan, and more detailed analysis of construction drawings is performed by Public Works staff during the building permit review (see condition of approval #54 in <b>Attachment 2</b> ). Any outstanding issues will be resolved either before Building Permit issuance or Final Inspection, as appropriate.
<b>Site Layout and Irregular Lot</b>	While the resultant parcel is irregularly shaped, it exceeds the minimum dimensional requirements for lot area and lot width per SHMC Table 17.16.030 (see <b>Attachment 5</b> ).
<b>Fire Access</b>	The Vesting Tentative Map ( <b>Attachment 5</b> ) proposes a minimum 26-foot-wide Emergency Vehicle Access Easement (28-feet-wide in most places), which meets the minimum 26-foot-wide fire access width standard pursuant to California Fire Code Appendix D Section D105.2. Fire has verified aerial equipment can access the third story windows and turning radii are adequate. Lastly, the project is conditioned to install NFPA13 fire sprinklers in each unit prior to building permit issuance (see condition of approval #72 in <b>Attachment 2</b> ).
<b>Height</b>	Proposed building elevations are not under purview of the City Council and were reviewed and found to be in compliance with all applicable zoning standards as part of the Minor Design Review ( <b>Attachment 8</b> ).

<b>Number of Affordable Units</b>	The location of the eight affordable units are shown on the plans (see <b>Attachment 5</b> , sheet A-1). The project is conditioned to pay the housing in-lieu fee for the remaining 0.2 fractional units of affordable housing to achieve the 20% minimum requirement of the Inclusionary Housing Ordinance (see condition of approval #26 in <b>Attachment 2</b> ).
<b>Architecture</b>	Project architecture is not under City Council review and was reviewed and approved with the Minor Design Review ( <b>Attachment 8</b> ).
<b>Occupancy of Existing Homes</b>	State law also requires that any “protected units” that are demolished must be replaced with an equal number of “protected units.” While the City has not obtained any information indicating that any of the remaining homes have been rented to a low or very low income household within the past five years, a modification to condition of approval #25 is included in <b>Attachment 2</b> to ensure the affordable housing agreement complies with all applicable laws, including those related to demolition of existing units. <b>Therefore, there is no legal requirement to have the unit status resolved prior to approval of the Subdivision Map.</b>
<b>Construction Impacts to Neighbors</b>	Condition of approval #38 limits construction hours to 8:00 a.m. to 5:00 p.m. Monday through Saturday to reduce the disturbance to residents in the vicinity ( <b>Attachment 2</b> ). The project would propose 59 new trees and retain 35 existing trees, most of which are located along the perimeter of the site to screen adjacent properties ( <b>Attachment 5</b> ).
<b>Play Area</b>	Common outdoor recreation spaces are not under review of the City Council and were reviewed for compliance with SHMC Section 17.16.040 as part of the Minor Design Review ( <b>Attachment 8</b> ).
<b>Entry Design</b>	Entry design is not under purview of the City Council and was reviewed for compliance with SHMC Section 17.16.040.C.3 with the Minor Design Review ( <b>Attachment 8</b> ).
<b>General Plan Consistency</b>	The project implements 2023-2031 Housing Element Site #9. Because the Housing Element is a part of the General Plan, the project is consistent with the General Plan. In addition, while strict compliance with all General Plan policies is not required for development projects, an analysis of consistency with General Plan policies is included in <b>Attachment 7</b> .
<b>Water Neutrality Policy</b>	Public Works has reviewed the water neutrality

<b>Compliance</b>	calculation in <b>Attachment 11</b> and finds it complies with the Policy. The estimated water use, volume to be mitigated, and in-lieu fee to be paid all conform to the Policy guidelines.
<b>Concerns that the in-lieu fee does not ensure there is adequate water capacity to serve the Project.</b>	The In-Lieu fee is paid by developers when the Council determines that directly offset water use is impractical or poses an unusual hardship pursuant to SHMC Section 13.12.030. Compliance with the water neutrality policy is separate from an evaluation of existing infrastructure.
<b>Third-Party review of the Spring Grove water neutrality report.</b>	Public Works is responsible for reviewing water neutrality calculations pursuant to SHMC 13.12.030. Public Works' analysis is included in the <b>Staff Report</b> , pages 12-13.
<b>In-lieu fee only reflects water use for a single year, and should be collected annually.</b>	The in-lieu fee is not based on water use. It is a fee that may be charged in lieu of providing retrofitted toilets or other fixtures to reduce water use pursuant to SHMC Section 13.12.030. Therefore, the fee amount is based on the cost to the developer of conducting such retrofits, were they able to do so.
<b>Concern that the Project will exacerbate water quality issues the City currently experiences.</b>	Taste, odor and discoloration issues with City water have persisted for over 100 years. These issues are caused by naturally occurring iron and manganese in the City's water sources. The presence of these metals is independent of water demand of individual developments.
<b>Concern of a connection between wastewater treatment cost and Spring Grove.</b>	The wastewater treatment plant has nearly completed installation of a new treatment process. Part of this new process is the continuous removal of solids from wastewater and weekly disposal. Approval of the Spring Grove project, or any project, has no influence on the treatment process or the need to dispose of solids. Cost of disposal is based on volume and additional volume from the Spring Grove Project will be paid by the new residents via their water bill like all other residents.
<b>Fines paid by the City for wastewater discharge violations.</b>	Now that the new treatment process is fully operational, future violations should be significantly reduced or eliminated. The Spring Grove development has no impact on this issue.
<b>Alternative Water Neutrality and In-Lieu Fee calculations.</b>	See <b>Attachment 12</b> for Public Works' response to concerns regarding alternative fee calculations.
<b>Concern that the City has not made the findings needed to approve Spring Grove.</b>	Applicable findings are included in the <b>Staff Report</b> , pages 10-11 as well as the draft City Council resolution for the Vesting Tentative Map ( <b>Attachment 2</b> ).
<b>What will prevent on-street</b>	The project proposes 93 off-street parking spaces



<b>parking on private streets?</b>	<b>(Attachment 5)</b> , which exceeds the 77 parking space minimum requirement per SHMC Table 17.26.040(A). The applicant has confirmed the HOA and CC&R's will prohibit on-street parking within the development.
<b>How does AB 130 apply to this project?</b>	If there is no action by the City Council to approve or deny the project by March 10, 2026, the project is deemed approved.



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## Memorandum

### VIA E-MAIL

**To:** Mayor and City Council  
City of St. Helena

**File No.:** 83578.00132

**From:** Ethan J. Walsh

**Date:** January 27, 2026

**Re:** Response to Comments from DP&F Law dated January 23, 2026 and January 26, 2026

This memo responds to the comment letter submitted by Joshua Devore of DP&F Law on behalf of Julie Dickson on January 23, 2026 and the follow-up email from Mr. Devore to Councilmember Barak dated 26, 2026 related to the application from City Ventures for a vesting tentative subdivision map and to pay a water neutrality in lieu retrofit fee for the Spring Grove housing development. The City Attorney's office prepared this memo in collaboration with City staff.

### 1. Standard of Review

At the outset of the letter, Mr. Devore correctly notes that in order for the City Council to disapprove or reduce the density of the Spring Grove housing development, the City Council must find that the project will have a "specific, adverse impact upon the public health or safety" of the community and there is no feasible method to satisfactorily mitigate or avoid the adverse impact other than to disapprove or reduce the density of the project. (Gov't Code §65589.5(j)(1).) A "specific adverse impact" is defined as a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete. (Id. §65589.5(j)(1)(A).) However, it is also important to note that a Council decision to disapprove the project based on a specific, adverse impact upon public health and safety would need to be based on writing findings supported by a preponderance of the evidence on the record. (Id. §65589.5(j)(1).) This means that the evidence in the record finding that there is a specific adverse impact upon public health or safety needs to outweigh the evidence in the record to the contrary.

## 2. Design Review Application

In both the January 23 and 26 correspondence, Mr. Devore argues that the project does not comply with the City's objective design standards and should have been subject to a Major Design Review under the City's code. In support of this assertion, he points to the correspondence from the City confirming density bonus eligibility and the waivers granted by the City pursuant to State Density Bonus Law ("SDBL"). (Staff Report, Attachment 8A.) He asserts that because the project, with the waivers included, does not comply with the City's objective standards, it should have been subject to Major Design Review.

*Staff Response:* First, it is important to note that the Design Review application is not under consideration by the Council. The application was reviewed by the Community Development Director in accordance with the City's Zoning Code, and a Notice of Action was issued. That action was not appealed, and the action is final. That is not a part of the action under consideration by the Council.

Nevertheless, it was appropriate to find that the project is consistent with the City's objective standards, notwithstanding the request for waivers under the SDBL. A housing development where at least ten percent of the dwelling units are sold to persons and families of moderate income is eligible for a density bonus, incentive and waivers in accordance with the SDBL. (Gov't Code §65915(b)(1)(E).) This project meets those requirements and is therefore eligible for waivers that may be granted under the SDBL. Further, as noted in the January 13, staff report, the Housing Accountability Act specifically states that State Density Bonus eligibility or density bonus incentives, concessions, or waivers do not provide a valid basis to find that a qualifying housing development project is inconsistent or not in compliance with applicable standards. (Gov't Code §65589.5(j)(3).) In other words, the City staff must determine whether the project is consistent with the City's objective standards, except those that have been waived as is permitted under the SDBL. The City staff appropriately made this finding as part of the completed design review process.

Additionally, in the January 26 email, Mr. Devore alleges that the City has decided to waive fire and building code provisions. That is incorrect. The waivers granted are listed in Attachment 8A to the Staff Report, and they are all waivers of requirements set forth in the City's Zoning Code.

## 3. Garage Setback

The letter notes that the project does not meet the required setback distance between garage doors and the street and there are not individual unit driveways and states that there is nowhere for a car to stop out of the lane of travel if the garage door is not open. This means that there is zero parking adjacent to any of the units; and not even any stopping without blocking the street.

*Staff Response:* Under the SDBL, the City is required to grant waivers to development standards that will have the effect of physically precluding construction of the development, unless the waiver would have a specific adverse impact to public health or safety, under the standard described above. (Gov't Code §65915(e).) For each of the eleven waivers granted as documented in Attachment 8A, the City has provided a response as a basis for granting the waiver which was published both as an attachment to the December 2, 2025 Planning Commission staff report as



well as the City Council staff reports dated January 13th and 27th, 2026. The referenced deviation from the zoning code is one of the granted waivers.

The requirement regarding minimum distance from a drive aisle to a garage (SHMC §17.16.040(A)(7)(e)), this is an urban design standard within the zoning code intended to reduce the visual impacts of “snout houses,” those with protruding garages that visually dominate the street frontage. As noted in Attachment 8A, the project qualifies for a waiver from the minimum distance to interior drive aisle as strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law. Further, as described in Staff Report Attachment 12, the project proposes 93 off-street parking spaces, which exceeds the 77 parking space minimum requirement per SHMC Table 17.26.040(A). No on-street parking is proposed within the private streets. The project includes a combination of two-car garages for each unit and 11 perpendicular off-street, surface parking stalls. Per Vesting Tentative Map condition of approval #19, the project must provide wayfinding signs along the project’s internal roadway and at the sidewalk connections, and identify a short-term parking area for delivery vehicles. In addition, the frequency of driveway curb cuts will discourage any unauthorized on-street parking. The applicant has confirmed the HOA and CC&R’s will prohibit on-street parking within the development.

#### **4. Egress Requirements**

The letter asserts that the building code mandates egress routes to the public way, citing California Building Code sections 1022.2.2 and 1028.5, and asserts that the units do not meet this requirement because the homes do not have egress doors faced toward the street. The letter also asserts that for many of the units the only doors are directly adjacent to “potential fire corridors of the creek” adjacent to the project. The letter asserts that this is a critical safety failure.

*Staff Response:* The project did include a waiver to the required entry design under the Zoning Code Section 17.16.040(C)(3)(b)(i). This is an urban design standard within the zoning code intended to provide convenient pedestrian access while enhancing building aesthetics as viewed from the public right of way. As described in Attachment 8A of the January 27, 2026 City Council Staff Report, this standard is not met for two of the end units in Buildings 1 and 6 where direct pedestrian access is not provided from a walkway. The City acknowledges strict compliance with this standard would physically preclude development of the project at the densities allowed under State Density Bonus Law.

This waiver does not violate the California Building Code. The Building Official reviewed this comment and noted that the code sections cited out of the California Building Code generally apply to commercial buildings where we are expecting high occupant loads. This project is governed by the California Residential Code as it fits into the scope of R101.2 CRC. Even if the City did apply Chapter 10 CBC requirements to this project, only one exit is required for rooms or spaces with 49 persons (or less) and a travel distance of not more than 200’ for sprinklered buildings. It would be reasonable to expect that these dwelling units do not exceed a 200’ travel distance from anywhere within the unit to the exterior, and we do not anticipate more than 5 or 6 persons (probably less) per unit. It is reasonable to conclude that occupants will be able to exit out of the main entry door, the balcony door on the second floor, or a bedroom egress window. Section 1022 & 1028.5 CBC does not apply to this project, however, if it did, the City is not aware of any

obstructions that would prevent an individual from accessing the public way. Also, Chapter 2 of the CBC defines “Public Way”; (it is not necessarily a public street such as Spring Street that qualifies as a public way.

Further, in response to the characterization of the adjacent creek as a “fire corridor”, City Public Works staff noted that the creek adjacent to the project is part of the City's hybrid municipal separate storm sewer system (MS4). The portion of the MS4 located immediately upstream of the development is a concrete channel, of which a significant portion is fully underground. Because of the interrupted surface exposure, the MS4 lacks a contiguous fuel corridor to the wildland urban interface. Downstream of the development, the MS4 opens to a short string of manmade ponds located adjacent to Mitchell Drive. These ponds form a natural fuel break from its outfall at Sulphur Creek. Additionally, the Spring Grove parcel is located about 2,600 feet from the nearest Fire Hazard Severity Zone. Therefore the characterization of this area (without supporting evidence) as a fire corridor is inaccurate.

## 5. Size of Units

The January 26 letter asserts that the developer sought to maximize the size of the units and that the minor design review waived numerous requirements on the basis that such adjustments were necessary to build the number of units proposed; but it cites no evidence that the units could not have been made smaller and met the objective standards without waivers.

*Staff Response:* The City cannot condition the granting of waivers on a reduction in the size of the proposed residential units. The size of the proposed units is consistent with the Zoning Code. Under the SDBL, the City is required to grant requested waivers if failure to grant the waivers would physically preclude the construction of the project *as it is designed*. (*Bankers Hill 150 v. City of San Diego* (2022) 74 Cal.App.5th 755, 775; *Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329, 1347.) The Courts have clearly held that a City cannot condition waivers on adjustments to the design of the project (such as the reduction of unit) size. The City may only deny a waiver request if it (1) would not physically preclude the construction of the project as designed, or (2) it would have a specific adverse impact to public health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact or “would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. (Gov’t Code §65915(e)(1).) The City could not require that the units be smaller as a condition of granting a waiver.

## 6. Water Supply

The January 23 letter asserts that the City has not demonstrated capacity to expand water service to an additional 40+ units, and questions whether there is substantial evidence in the record that the City’s water neutrality policy is valid or that there is sufficient water to serve the project. The letter also asserts that the in-lieu fee would appear to be arbitrary and not supported by evidence in the record. On this same topic, the January 26 email refers to an “acknowledgement that the City is out of compliance with its water supply Safe Yield”, and that “there appear to be unaddressed questions as to whether the City is exceeding the sustainable yield of the

groundwater basin, potentially violating the Sustainable Groundwater Management Act (SGMA) by appropriating groundwater from people who have the rights to it, and creating a larger concern of limiting the groundwater resources over time.” The email also asserts that there is no Water Availability Analysis provided with the Staff Report. Under Napa County’s current implementation of SGMA for the Napa Valley Subbasin, the parcel is entitled to only 0.3 acre-feet of water per acre under the Groundwater Sustainability Plan. The 2.53 acre parcel is entitled to only 0.76 acre feet of water – but the proposed water use is more than 12.5 acre feet.

*Staff Response:* First, as noted in the Staff Report, this project is not required to do a Water Availability Analysis due to its size. This project is contemplated in the City’s General Plan and Zoning Code for residential use and as stated previously, City staff does believe that the City has capacity to serve this project. The City is in the process of updating its safe yield estimate and based on the analysis conducted by the City’s engineering consultants, the City is currently within the existing safe yield as project in the City’s draft report.

With regard to the allegations related to the water neutrality requirement, the City is applying the water neutrality requirement in conformance with the City Code, which grants the option of accepting an in-lieu fee rather than retrofitting units. The City’s water neutrality policy provides the method of calculating the in-lieu fee, which was in place at the time the application for this project was received. City staff do not believe that the Water Neutrality Ordinance or Policy, or the methodology for calculating the in-lieu fee are arbitrary. If they were, however, the result would be that the Water Neutrality requirements would be stricken from the Code, and this project would not be subject to water neutrality requirements. The City disagrees with this position and does believe that the project is subject to water neutrality requirements.

Finally, the references to SGMA do not apply to this project. The Sustainable Groundwater Management Act is a statewide law that creates a framework to ensure long-term sustainable management of groundwater resources. SGMA does not include specific limitations on water use. Further, the standards referenced in the email (that this parcel is entitled to only 0.76 acre feet of water) refer to the standards that Napa County uses when issuing permits for a new well or improvements to an existing well. This project is connecting to City water and is not drilling a new well or improving an existing well. These standards therefore do not apply.

## **7. Water Quality**

The letter asserts that the City has “failed in quality of its water”, citing concerns about discolored and malodorous water and the City’s disclosure that haloacetic acid levels in the water supply exceeded state drinking water standards.

*Staff Response:* City staff does acknowledge that color and odor issues with City water do arise periodically, but these are the result of minerals naturally occurring in some of the City’s water sources. The presence of these minerals is entirely independent of water demand and would occur regardless of any development. The proposed Spring Grove development has no effect on the severity of this issue. Further, the haloacetic acid (HAA5) compounds are formed when organic matter reacts with chlorine. The City uses chlorine in its disinfection process. The presence of organic matter in the City’s water sources is entirely independent of demand and



would occur regardless of any development. The proposed Spring Grove development has no effect on the severity of this issue.

## **8. Sewer System**

The letter cites recent discharge violations at the City's wastewater treatment plant and suggests that these violations indicate that the City cannot support additional development. The letter also asserts that based on a recent budget amendment to increase sludge hauling due to higher than anticipated operational needs, the City wastewater treatment system does not have capacity to support this project.

*Staff Response:* Discharge exceedances over the last two years are the result of severe storm events which occurred during construction of a new treatment process. Storm severity is entirely independent of sewage generation, and the exceedances would have occurred regardless of any development. The proposed Spring Grove development has no effect on the severity of this issue.

Additionally, the need to haul additional sludge does not indicate a lack of capacity in the treatment facility. Solids disposal is not a new process or expense for the WWTP. The old process retained solids in the treatment ponds, and these would have to be removed with excavation equipment at great, but infrequent, expense. The new treatment process relies, in part, on the continuous removal of solids which occur semi-automatically. This results in a more frequent disposal cycle but requires no excavation or interruption to operations. The recent budget amendments to accommodate the disposal of these solids are a direct result in the change in treatment process and would have occurred regardless of any development.

## **9. CEQA Concerns**

The letter asserts that there is a reasonable possibility that the project will have a significant effect on the environment, and therefore the project is not actually exempt from CEQA, citing CEQA Guidelines Section 15300.2(c).

*Staff Response:* As detailed in the Staff Report for the project, the City has determined that the project is statutorily exempt from CEQA review under Public Resources Code section 21080.66. This statutory exemption is not subject to the provisions of CEQA Guidelines section 15300.2, including those provisions regarding unusual circumstances. Statutory exemptions, such as Public Resources Code section 21080.66, are enacted to lift the burden of environmental review from specified classes of projects. The sole question is whether the project fits within the language of the exemption. (Napa Valley Wine Train, Inc. v. Public Utilities Commission (1990) 50 Cal.3d 370.) As substantial evidence in the record for the Project confirms that the Project fits within the elements of Public Resource Code section 21080.66, no CEQA review is required.



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## Memorandum

### VIA E-MAIL

**To:** Mayor and City Council  
City of St. Helena

**File No.:** 83578.00132

**From:** Ethan J. Walsh

**Date:** February 5, 2026

**Re:** Response to Comments from Mark Wolfe dated January 27, 2026

### Introduction

On January 27, 2026, the city received a comment letter from Mark Wolfe regarding the Spring Grove development. The letter focused in large part on site access and compliance with the St. Helena Municipal Code, stating that with only one point of access to the site, the Project does not comply with the local implementation of the California Fire Code.

For the reasons outlined below, the local amendments to the 2022 California Fire Code that Mr. Wolfe states the Project does not comply with are no longer in effect. Furthermore, even if these local amendments were still in effect, Mr. Wolfe is misinterpreting the relevant SHMC section and the Project would still be compliant with the 2022 Fire Code as it was amended.

Therefore, staff respectfully disagrees with Mr. Wolfe's analysis of this issue and is satisfied that the Project complies with all applicable laws by providing a single access route and including fire sprinklers throughout the project.

### Background & Analysis

#### 1. *Relevant Attributes of the Spring Grove Project*

The Project is a 41-unit multi-family development. Through its Vesting Tentative Map, the Project is designed to provide an Emergency Vehicle Access Easement that meets the state-mandated minimum width of 26', though is 28' wide in most places along the easement. Furthermore, the project will provide NFPA13 rated fire sprinklers in each unit.

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2. *Applicability of the 2025 California Building Standards Code and the 2025 California Fire Code*

The California Fire Code, a part of the State Building Standards Code, is a triennially adopted regulatory scheme adopted by the California Building Standards Commission to govern fire safety issues throughout the state. While these codes are adopted by the state, Health and Safety Code § 17960 requires that local jurisdictions enforce the State Building Standards Code.

The California Building Standards Commission most recently updated the State Building Standards Code in 2025. This updated was published by the Commission on July 1, 2025 and—pursuant to Health and Safety Code Section 17958—took effect on January 1, 2026.

While the Spring Grove project is subject to vesting due to the submission of a Preliminary Application by the applicant, that vesting does not apply to the California Building Standards Code because Government Code Section 65589.5(o) limits vesting to local regulations, not state standards. Per Health and Safety Code Section 18938.5(a), only those California Building Standards in effect at the time of *building permit application* “shall apply to the plans and specifications for, and to the construction performed under, that building permit.”

Therefore, the Project will have to comply with the California Building Standards Code in effect at the time building permits are sought for the project, presumably that will be the 2025 California Building Standards Code.

3. *Local Modifications of the California Building Standards Code*

Health and Safety Code Section 17958(a) allows for local modifications of the California Building Standards Code. Health and Safety Code Section 17958(b) restricts the scope and purposes for which local amendments may be adopted where they apply to residential units.

Critically for purposes of the analysis of which codes apply to the Project, local amendments only apply to the currently adopted California Building Standards Code. In other words, local amendments to the 2022 California Building Standards Code are no longer effective as of the effective date of the 2025 California Building Standards Code.

City Council introduced local modifications to the 2025 California Building Standards Code at the January 13 Council meeting but those local modifications have not yet been adopted by the City. The city’s currently adopted local modifications were applicable to the 2022 California Building Standards Code, which ceased being effective on December 31, 2025. Therefore, none of the City’s local amendments to the California Building Standards Code are currently in effect for any project seeking building permits at this time.



#### 4. 2025 California Fire Code Sections on Multi-Family Access

The 2025 California Fire Code sections relevant to access routes to multi-family developments is found in Appendix D, Section 106, which reads as follows:

***D106.1 Projects having more than 100 dwelling units.*** Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

***Exception:*** Projects having up to 200 dwelling units shall have not fewer than one approved fire apparatus access road where all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1 or 903.3.1.2.

***D106.2 Projects having more than 200 dwelling units.*** Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

***D106.3 Remoteness.*** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

As discussed above, the 2025 California Fire Code applies to this Project. Since the Project only proposes to develop 41 multi-family units, the 100 dwelling unit threshold for providing “two separate and approved fire apparatus access roads” required by Section D106.1 is not met and the Project is not obligated to provide more than one access route.

Furthermore, Section D106.1 provides an exception to this multiple access road requirement for projects with more than 100 dwelling units but less than 201 dwelling units where those units are equipped with approved fire sprinkler systems. Here, the Project is providing such a sprinkler systems and therefore could have up to 200 units without having to provide a secondary access road.

#### 5. Additional Considerations

For the reasons discussed above, the city’s local amendments to the California Building Standards Code are not currently in effect. However, even if the city’s prior local amendments were still in effect, the project would nevertheless be compliant for several reasons.

a. *Only Modified Language is Included in the SHMC for California Building Standard Code Adoption*

First, Mr. Wolfe misreads how the city adopts local amendments to the California Building Standards Code. Mr. Wolfe points to SHMC Section 15.36.100-D, which reads as follows:

*Section D107.1, One or two-family dwelling residential developments, California Fire Code 2022, Appendix B, is amended to read as follows:*

*Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.*

Mr. Wolfe makes much of the fact that the Exception that appears in the California Fire Code's Section D107.1 allowing for fire sprinklers in lieu of a secondary access route is not included in SHMC Section 15.346.100-D. However, City staff has confirmed that it is the city's routine practice to only list language actually being modified when listing the local amendments. Put another way, the City's local amendments only expressly include exceptions where the exceptions themselves are being modified in some fashion.

In this instance, the modification to Section D107.1 is the addition of "or multi family" to the list of types of structures subject to Section D107.1. Nothing in the ordinance or staff reports that adopted this local modification as far back as 2007 when it was first included in the municipal code made any mention of a deliberate intention to delete the exception to Section D107.1.

b. *Section D106.1 was Not Modified in the SHMC for the 2022 Fire Code Adoption*

When adopting the 2022 California Fire Code, the City did not modify the provisions of Section D106.1 (regulating access to multifamily developments). Section D106.1 remained functionally unchanged from the 2022 California Fire Code to the 2025 California Fire Code. Since the project is a multifamily development, it is subject to Section D106.1 for the reasons outlined above. As also discussed above, it complies with the requirements prescribed by D106.1 for larger multifamily developments even though the Project is not large enough to actually trigger the secondary access requirement.

It should also be noted that because Section D106.1 governs multifamily projects, in preparing the local modifications to the 2025 Building Standards Code adoption and local modifications, staff intends to strike the local modification to Section D107.1 adding "or multi family" as unnecessarily duplicative.

c. *Interpreting the Exception to D107.1 as Being Removed Runs Counter to the City's Housing Element and Zoning*

Site constraints preclude a secondary access to the Project without the developer acquiring additional land from other private property owners. The zoning for the site allows for a density between 37 and 68 units on the Site, and the Housing Element contemplated that 48 units would be developed on the site. If the City were to interpret its code to require secondary access for the Project, it would mean that the Site could not be developed at the current minimum density, nor could it be developed consistent with the Housing Element, unless secondary access were acquired. We believe it is appropriate to interpret the City's local amendments to the Fire Code consistent with the City's other planning documents, and that staff's interpretation of the local amendments is appropriate.

d. *Time to Raise Objections to Objective Standards Has Run*

The Project is subject to streamlining under the Housing Accountability Act. Under that streamlining, the City must raise objections to a project's lack of compliance with objective standards within 30 days of the date the application for the Project is determined to be complete. (Gov't Code §65589.5(j)(2)(A)(i)¹.) The City did not notify the applicant of a requirement that secondary access would be required, because City staff believed that the Exception in Section D107.1 applied. The time to raise any objection based on a failure to comply with objective standard expired months ago and there is no longer a basis to reject the project based on an objective standard under the HAA.

### **Conclusion**

For the reasons outlined above, the Project complies with all applicable fire access requirements set forth in the 2025 California Fire Code. While the City's local amendments are currently not in effect, even if the City's formerly adopted local amendments to the California Fire Code were in effect, the Project would nevertheless be compliant with the access requirements that were set forth in those amendments.

---

¹ This timeline applies to projects of 150 units or less. For larger projects, the City has 60 days to object.





## 3rd PARTY PLAN REVIEW

### PHASE 1

## Spring Grove

1447, 1505, and 1515 Spring Street St. Helena, CA



January 26, 2026  
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## INTRODUCTION

This report provides a third-party fire protection engineering review of the proposed "Spring Grove" residential subdivision. The analysis, findings, and technical recommendations are based upon the California Fire Code (CFC), relevant NFPA (National Fire Protection Association) general requirements, and established fire protection engineering best practices. Furthermore, this review evaluates the project's compliance with the St. Helena Municipal Code (SHMC) Chapter 15.36, which adopts and amends the California Fire Code to address the unique challenges of the St. Helena area.

The objective of this report is to verify that the site layout, access roads, and fire service features provide a level of safety that protects the existing residence, future residents and the emergency responders. Per SHMC 15.36.010, the city recognizes that response time and effective fire mitigation are critical to public health and safety. These municipal and state codes are not arbitrary and are based on recent California wildfires. These highlight the necessity of safe evacuation routes, adequate emergency access, and the ability of firefighters to operate effectively under chaotic, high-stress conditions.

Given the project's location near a documented high-hazard wildland-urban interface (WUI) zone, the application of these codes is interpreted through a conservative lens focused on life safety. This review serves as a technical check to ensure that the "minimum code" is not treated as the ceiling for safety, but rather the floor. In a region prone to rapid-fire development and wind-driven ember storms, adhering only to the bare minimum standards without considering the physical reality of the site's constraints can introduce safety risks that compromise the community.

## PROPOSED SITE DESCRIPTION

Spring Grove is a high-density residential development. This project is designated as a Housing Development Project per Government Code section 65589.5(h)(2), emphasizing all-electric living.

**Site Location:** The project site encompasses three distinct parcels totaling approximately 2.52 acres at 1447, 1505, and 1515 Spring Street. Situated on the west side of St. Helena, the site is bordered by Spring Street and St. James Drive. The parcels at 1447 and 1515 Spring create "Site 9" within the 2023-31 Housing Element. While 1505 Spring serves as the primary medium-density access corridor, the main residential footprint is zoned for high-density residential (HR).

This specific configuration creates a "flag-pole" style layout, where the primary access road (Street A) traverses a relatively narrow strip to reach the bulk of the development. This complicates fire apparatus maneuvers and limits the visibility of responders entering the site. The constrained nature of the "flag" portion of the lot means that any incident occurring at the entrance (Street A) would effectively isolate the 41 homes from emergency services.

**FD Response:** The proposed Spring Grove Subdivision meets minimum lot width dimensional requirements and therefore does not meet the definition of a "flag lot". Therefore, Fire Department access is not constrained.



**Building and Occupancy Details:** The development proposes 41 solar-powered townhome-style condominiums distributed across six building groups (Buildings 1–6).

- **Total Units:** 41 residential units (4 P1, 5 P2, 15 P3, and 17 P4 units).
- **Occupancy Classification:** Group R-2 (Multi-family Residential).
- **Estimated Population:** Based on configurations of 3 to 4 bedrooms per unit, the subdivision is expected to house between 112 and 143 residents. This density significantly increases the "life load" on the site's egress infrastructure; during an emergency, over 100 people and dozens of vehicles would be attempting to exit via a single road while fire engines are attempting to stage and deploy.

**FD Response:** This proposed private street network is two lanes (26'-28' in width) allowing one lane for egress and one lane for Fire Dept. apparatus deployment.

- **Construction Type:** Type V-B (non-rated wood-frame), utilizing combustible structural members. This construction type is particularly vulnerable to fire spread between buildings if access for suppression is delayed.

**FD Response:** All units are required to have independent automatic fire sprinkler systems installed in accordance with SHMC 15.36.060 and CFC Chapter 9.

- **Building Height:** 3-story structures reaching a maximum peak height of 40 feet. The height of these buildings relative to the narrow access ways presents challenges for ground-based laddering and aerial operations.

**FD Response:** The proposed Spring Grove conceptual plan shows the second story windowsill at 21 ft. from grade. Comparing this height to Turley Flats, a comparable building design located at 1105 Pope Street in St. Helena. The windowsill is located at 23 ft. from grade which is 2 ft. higher than the proposed Spring Grove design. The ground ladder used for deployment is a standard 24 ft. extension ladder used on all SHFD type one engines and Ladder Truck.

Photo of ladder deployment at  
1105 Pope Street St.  
St. Helena  
Friday January 30, 2026



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January 30, 2026  
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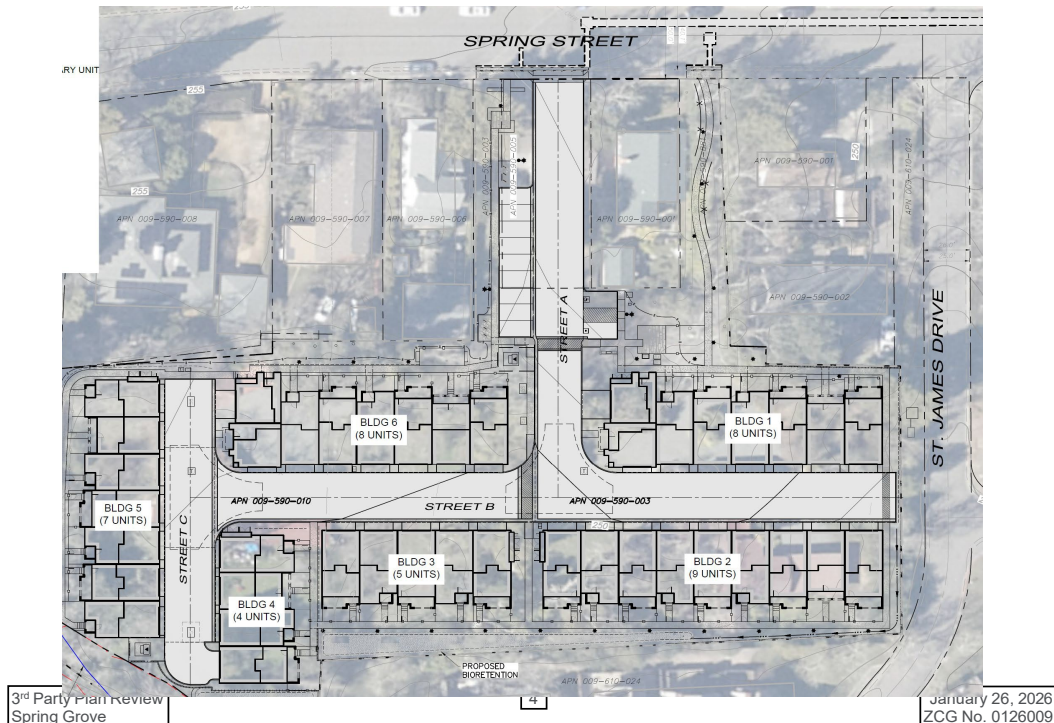
**Site Tabulation and Assumptions (Sheet G-1):** The Site Tabulation Matrix highlights design choices that adhere strictly to absolute minimums:

- **Street Width:** The primary entrance (Street A) is confirmed to provide a 26-foot clear width. While internal streets (B and C) provide a 28-foot width, these measurements provide zero margin for error.

**FD Response:** As stated, the width of each road provides at least 26 ft of clearance (28 ft in most places), which meets the minimum standard according to the California Fire Code.

- **Parking:** The development is designed without street parking. This "zero-margin" approach to parking often leads to illegal street parking. On a 28-foot road, even one illegally parked vehicle reduces the clear width to roughly 18–20 feet, which falls below the legal minimum for fire access and can prevent a large apparatus from reaching the scene of a fire.

**FD Response:** An illegally parked vehicle **could potentially** inhibit a quick response. However, an illegally parked vehicle still provides the above stated 18-20 feet of road clearance. This is enough clearance for an 8' 6" wide ladder truck or engine to proceed to the incident. The minimum width requirement of 26 ft. accounts for illegally parked vehicles. Also in the event of an emergency response, first responders are equipped to break vehicle windows, if necessary, put cars in neutral and move them aside, or nudge vehicles out of the way with the fire engine to clear a path. Additionally, the subdivision design with frequent driveway cutouts would prevent street parking in the development.



## FIRE HAZARD HISTORY

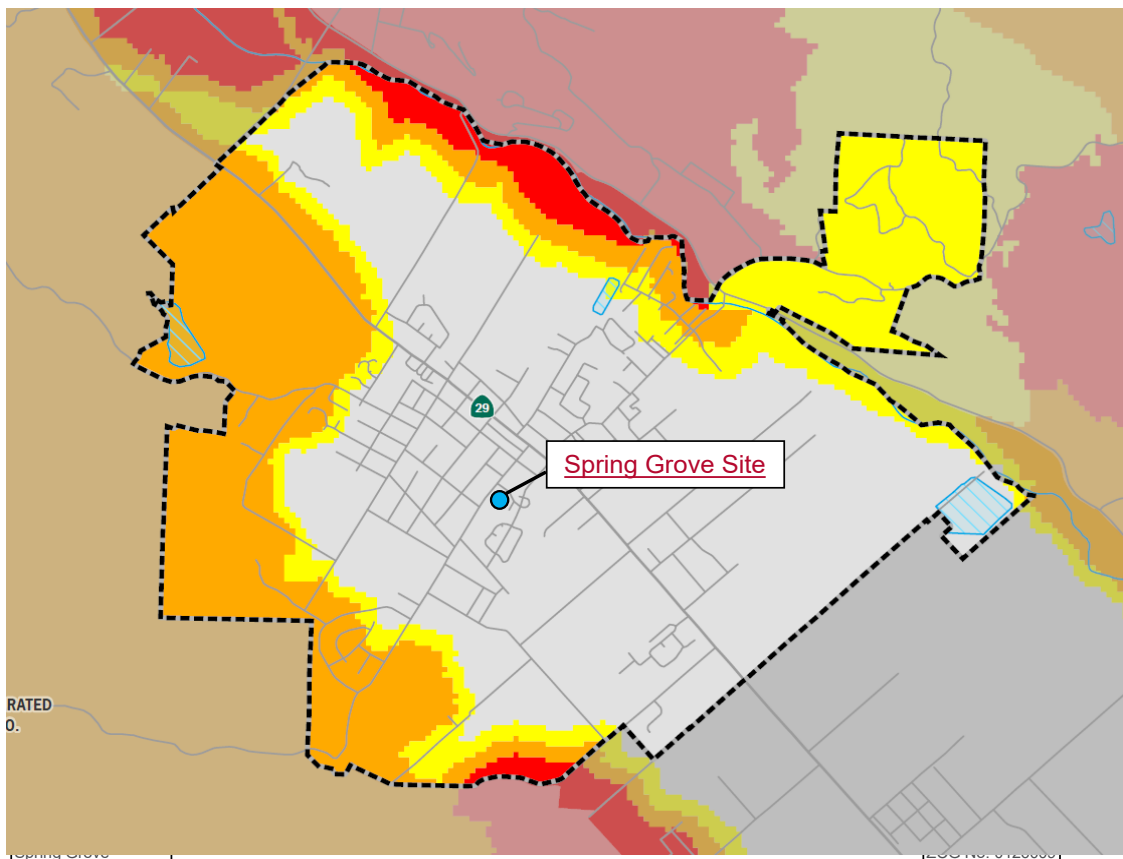
Overall, St. Helena is categorized as a **high hazard area** for wildfires. The City of St. Helena "Fire Resilience" website explicitly states that "**residents live and work in a fire-prone area.**" According to Cal Fire Hazard Severity Zone map, the high severity zone is located 0.5 miles from the proposed Spring Grove site.

**FD Response: The Spring Grove project site is not located in any state or local fire severity zone.** The map below is the St. Helena City Fire Hazard Severity Zone Map.

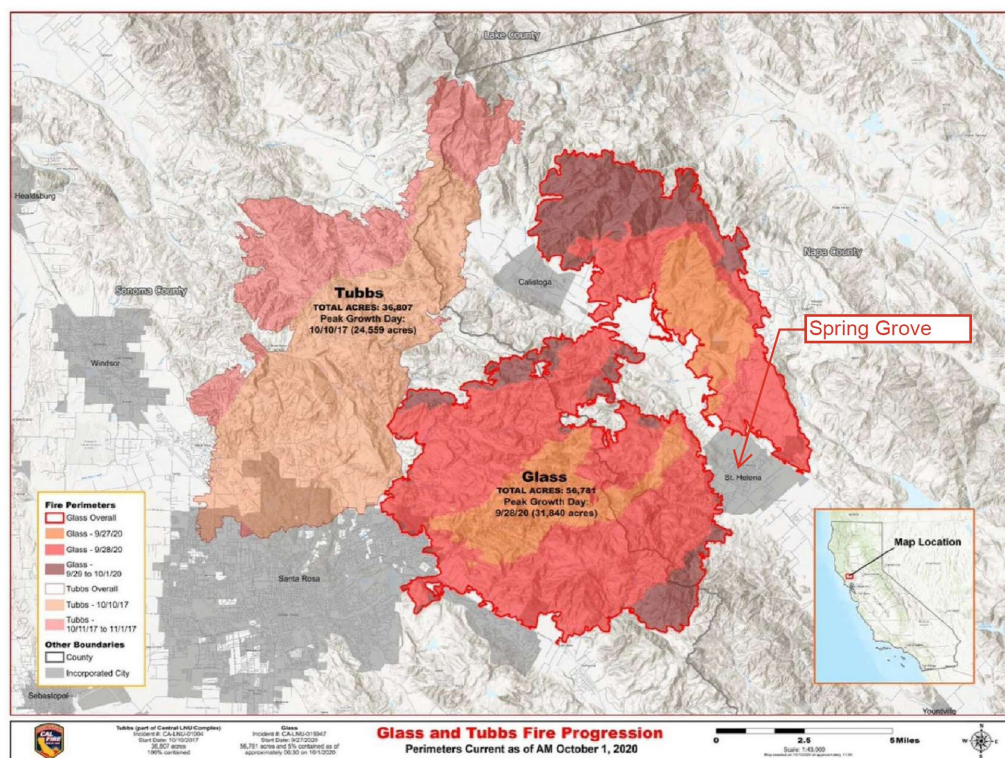
Currently in St. Helena, 8 structures are in Very High (red) zones. 220 structures are in High (orange) zones. 290 structures are in Moderate (yellow) zones.

2,846 Structures in St. Helena (including the Spring Grove site) are not located in a fire severity zone (grey)

Of the 3,364 structures currently in City limits, 518 (15.3%) are in either Moderate, High or Very High zones.







*Major Fire Events the last 10 years:*

- **2025 Pickett Fire (not shown above):** Napa County. The fire spread rapidly through terrain fueled dry vegetation typical in this area. Reaching a final size of 6,819 acres (10.3 sq. miles)
- **2020 Glass Fire:** Burned over 56,701 acres (88.7 sq. miles) and destroyed 1,555 structures, jumping the Napa River and Highway 29.
- **2017 Tubbs Fire:** Demonstrated the "urban conflagration" effect, where fires starting in wildlands penetrated city limits and destroyed homes in "lower risk" urban areas through massive ember storms in neighboring Sonoma County. 36,807 acres (57.5 sq. miles)

**Vulnerability:** According to CAL FIRE, **nearly 99%** of properties in St. Helena face wildfire risk over the next 30 years. St. Helena has a higher risk of wildfire than 85% of communities in the United States. The inherent danger of this location requires the site to not only meet minimum requirements, but all Needs deleted replaced

**FD Response:** The actual burn acreage of the 2020 Glass Fire totaled 67,484 acres according to the CalFire website. Not 56,701 as stated above.

The St. Helena Fire Department reached out to CAL Fire to confirm the following statement: "According to CAL FIRE, nearly 99% of properties in St. Helena face wildfire risk over the next 30 years"

The following email provides CAL Fire Lake Napa Unit (LNU) Chief Matt Ryan's response:

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January 26, 2026  
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RE: Emailing: Zari Consulting statement



Ryan, Matt@CALFIRE <Matt.Ryan@fire.ca.gov>

To ● Chief170

Cc ○ Greenberg, JC@CALFIRE; ○ Ham, Brian@CALFIRE; ○ Wink, Mike@CALFIRE

This sender Matt.Ryan@fire.ca.gov is from outside your organization.

Reply Reply All Forward

Tue 2/3/2026 3:01 PM

Chief Sorensen,

We've looked into the statement and cannot identify it as a direct CAL FIRE quote or position. It appears to be derived from third-party risk modeling, and we would request that the consultant either remove the statement or clearly attribute it to its third-party source.

[FirstStreet.org](https://www.firststreet.org)

[Wildfirerisk.org](https://www.wildfirerisk.org)



**Matt Ryan**

Unit and Fire Chief – Sonoma Lake Napa Unit

Napa County Fire Department

South Lake County Fire Protection District

1199 Big Tree Rd. St. Helena, Ca. 94574

(707) 738-4148 Cell



## ACCESS AND SECONDARY ENTRANCE

**Requirement (CFC Appendix D104.3 / SHMC 15.36.100):** Section D104.3 requires that multiple-family residential projects having more than 30 dwelling units shall be equipped with two separate and approved fire apparatus access roads.

**Analysis:** The project proposes 41 units (36% over the 30-unit threshold). A single point of access is a critical life-safety flaw in a "fire-prone area." Per CFC D106.3, where two fire apparatus access roads are required, they shall be placed a distance apart equal to at least one-half of the diagonal dimension of the property. The current plan does not show a secondary access point. The project submittal shall be updated to include a secondary access road that meets this remoteness requirement, and its specific location and distance must be verified on the revised plans.

**FD Response:** CFC Appendix D107.1 includes an exception that allows up to 100 one or two-family dwelling units before requiring secondary access as long as all the units are equipped with automatic fire sprinkler systems. Fire Sprinklers are required for every unit per SHMC & CFC.

- It has been the Fire Department's stance that if any local amendment to the California Fire Code does not specifically negate an exception in the fire code, such exception remains applicable.
- **SHMC – 15.36.060 B** is a clear example of this existing practice:  
*“B. Chapter 9, subsection 903.2, is amended by repealing the entire subsection 903.2 (with the exception of subsections 903.2.12, 903.2.17 and Tables 903.2.11.6 and 903.2.5.2, which shall remain in effect), and replacing it with the following”*
- Such language makes it very clear which sections of an existing code remain in effect, and which ones have been “repealed” and/or “replaced”.
- Neighboring Municipalities such as Calistoga, Healdsburg and City of Sonoma use the same kind of clear language in their code amendments.

See excerpts below:

- **City of Calistoga:**  
*Appendix D Fire Apparatus Access Roads. California Fire Code Appendix D107.1 is amended as follows:*  
**D107.1** One- or two-family dwelling residential developments.  
*Developments of one- or two-family dwellings where the number of dwelling units exceeds 20 shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Appendix D104.3.*  
*Exceptions 1 and 2 are deleted.*  
*(Ord. 757 § 4 (Exh. A), 2022)*
- **City of Healdsburg:**  
**15.08.020 California Fire Code (CFC) Amendments**  
*CFC Appendix D, Section D106.2, is deleted.*  
*CFC Appendix D, Section D107.1, Exceptions Nos. 1 and 2, are deleted.*



(Ord. 1222 § 3, 2022)

- **City of Sonoma:**  
**Amend Appendix D, subsection D106.1 to read as follows:**  
*D106.1 Projects having more than 50 dwelling units. Multiple-family residential projects having more than 50 dwelling units shall be provided with two separate and approved fire apparatus access roads.*  
*(The exception to D106.1 is deleted)*
- No such language exists in SHMC 15.36.100 D. Excerpt below:
  - **“D. Section D107.1, One or two-family dwelling residential developments, California Fire Code 2022, Appendix B, is amended to read as follows:”**

For this reason, the Fire Department defaults back to the referenced California Fire Code and all exceptions remain in force. Excerpt below:

- **CFC 2025 – D107.1 - Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.**  
**Exceptions:**
  1. *Where there are more than 30 dwelling units accessed from a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.*

## TURNAROUNDS AND STAGING

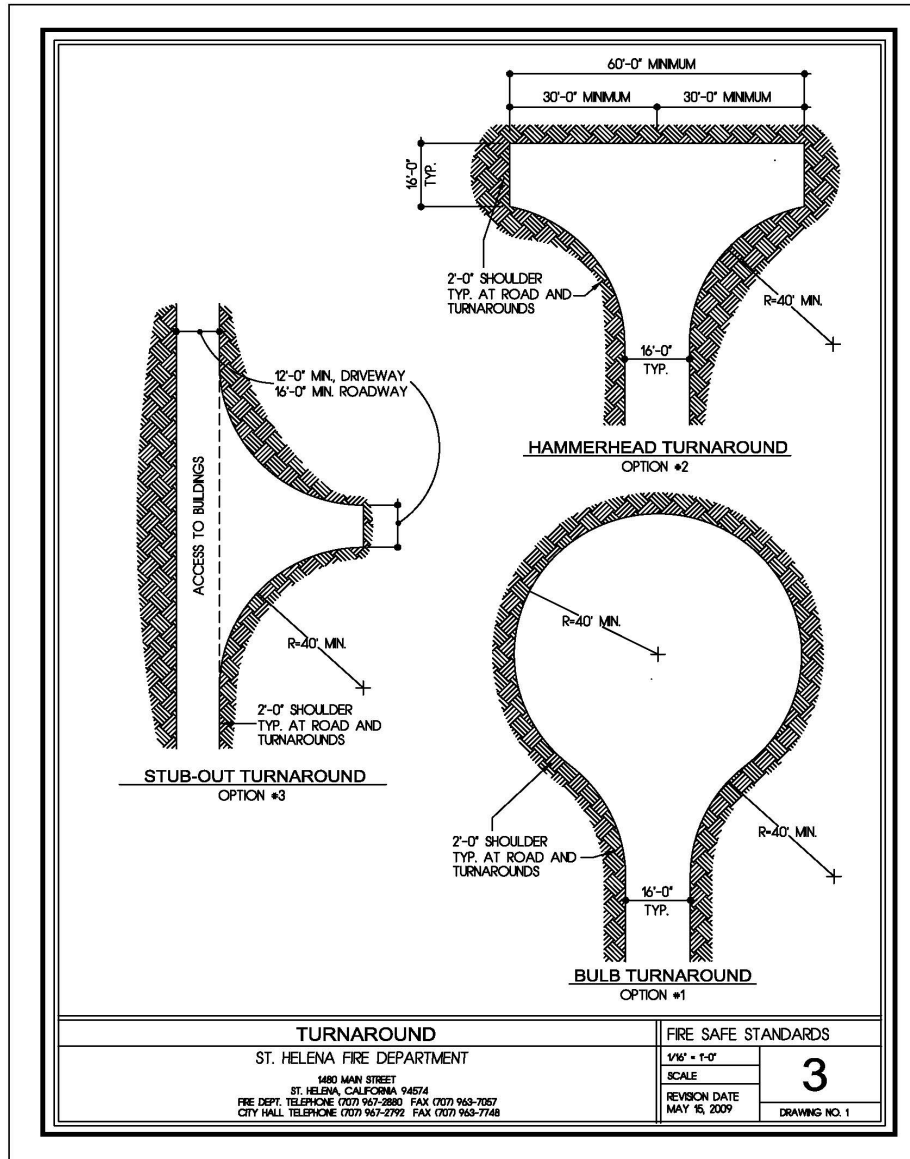
**Observation:** The internal roadway system includes "Street B," which terminates in a dead end to the plan East. This leg extends **171 feet**, highlighted in red in the figure below.

**Requirement (CFC 503.2.5):** Dead-end fire apparatus access roads in excess of 150 feet shall be provided with an approved turnaround (hammerhead or cul-de-sac).

**Staging Analysis:** The current dead-end layout on Street B creates a significant tactical risk for the Fire Department. If a fire engine hooks to the hydrant at the Eastern terminus of Street B, it effectively blocks the only access path for additional responding engines to reach Buildings 3, 4, 5, and 6. This "choke point" makes bypass impossible without substantial reconfiguration. During an emergency, this lack of staging and bypass capacity prevents the simultaneous operation of multiple fire apparatus, which is essential for a high-density wood-frame community. Additional consideration for a bypass or widened staging area should be considered and approved by the local AHJ.

**FD Response:** The access drive provides 2 hammerhead turnarounds. During the initial planning phase of this project, the Fire Department had very specific requirements to address the needs for apparatus turnarounds. Both intersections (Streets A & B, streets B & C) were required to meet the

width and turning radius standards of a hammerhead turnaround (see diagram below). This design provides 2 separate, and approved hammerhead turnarounds that exceed the minimum requirements.



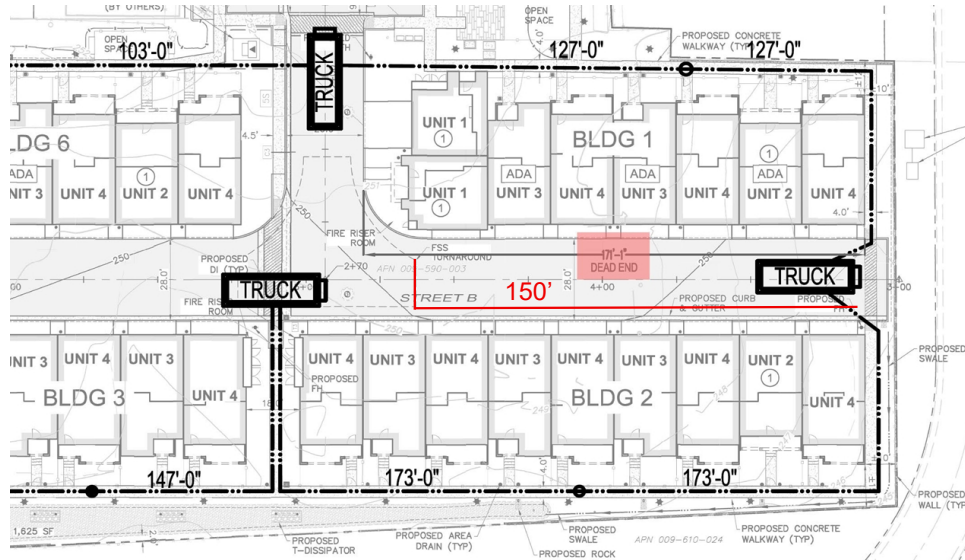
**CFC 2025 - 503.2.5 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

The Fire Department measures from the end of the hammerhead return to the dead end rather than the return of the intersecting road as pictured below. Therefore, the design of the access road and turnaround is in compliance.

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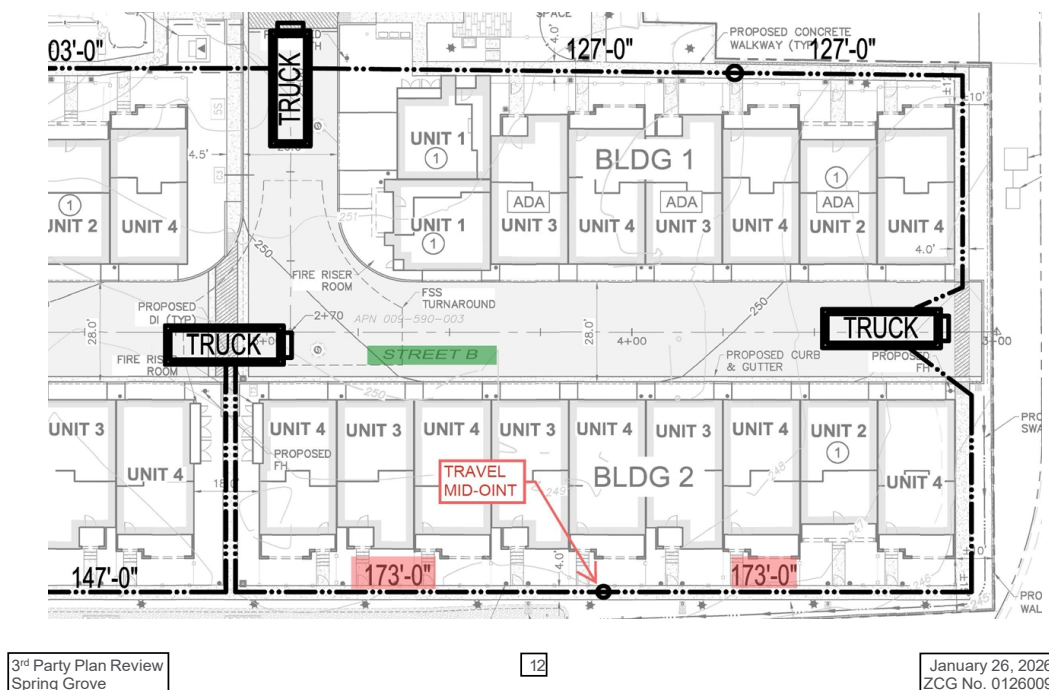
## FIRE HOSE TRAVEL DISTANCE AND REACH

**Requirement (CFC Section 503.1.1):** Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

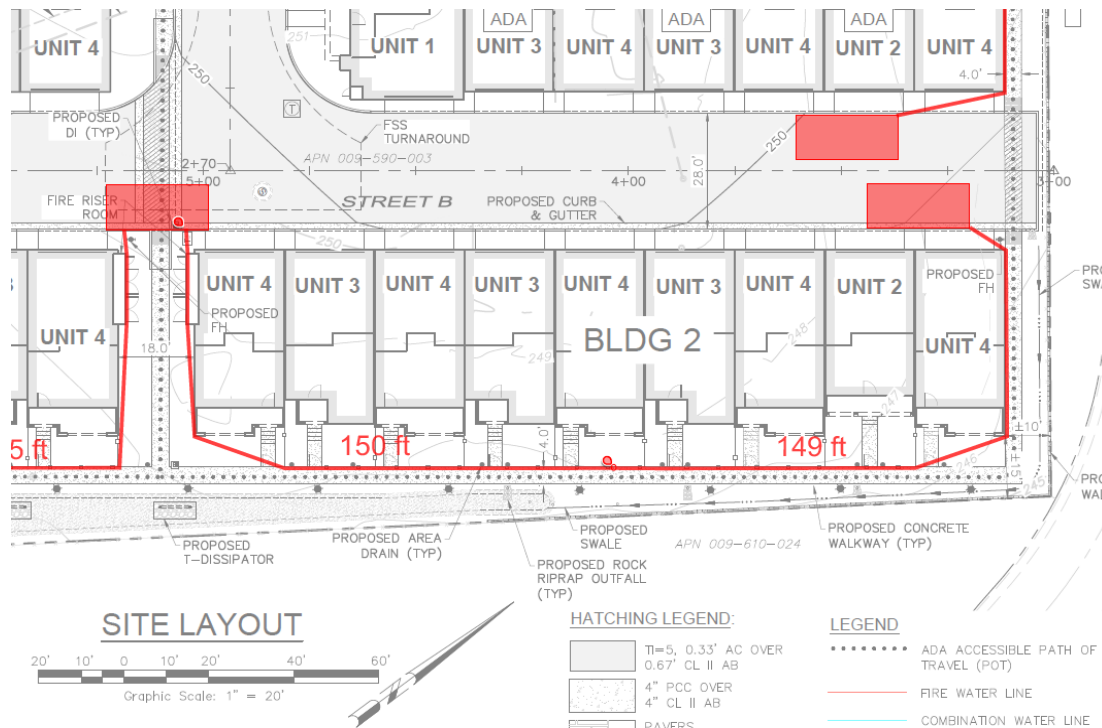
**Analysis:** This requirement ensures that every portion of the building's exterior is reachable with a standard 150-foot hose lay from a fire apparatus parked on an approved access road. Based on our review of the current site plan and building configurations:

- **Building 2 Accessibility Issues:** According to the plans, Building 2 has insufficient fire department access. The travel distance from the nearest point on the approved fire apparatus access road to the most remote portion of the exterior walls for Building 2 is measured at **173 feet**. Shown in red in the figure below. This exceeds the 150-foot maximum allowable distance by 23 feet and limits fire department access to portions of the building.
- **Excessive Reach:** Forcing firefighters to extend hose lines beyond standard lengths or navigate complex routes to reach the rear of Building 2 introduces dangerous delays in suppression efforts.

The site layout or building footprint for Building 2 must be revised to ensure that all exterior portions of the structure fall within the mandatory 150-foot hose travel distance from an approved fire apparatus access road. See Attachment A – Hose Reach Plan at the end of this report for details.



**FD Response:** The fire hose paths of travel are determined by the shortest unobstructed path. They are not determined by walkways and/or ADA pathways. The Project Developer has removed the exterior fences on both Southern corners of Building 2 to achieve the CFC requirement of 150 ft.



## AERIAL APPARATUS ACCESS

**Requirement (CFC D105.1 and D105.2):** Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet, approved aerial fire apparatus access roads shall be provided.

**Analysis:** The proposed buildings are 3 stories and reach a maximum height of 40 feet, thus triggering the requirements of CFC D105. To comply, the following must be met and clearly shown on the plans:

1. **Width:** Aerial access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of the buildings.
2. **Proximity:** At least one of the required access routes for each building shall be located within a minimum of 15 feet and a maximum of 30 feet from the building. The current site plan must be updated to show the specific positioning of the aerial apparatus (staging area) relative to each 40-foot building to confirm that these reach and width parameters are achievable given the tight site constraints.

**FD Response:** The minimum width requirement of 26 ft. is achieved on all proposed roads. This requirement ensures that the above stated requirements about proximity are always attainable. The St. Helena Fire Department ladder truck has an 85 ft. long aerial ladder.

## FIRE FLOW AND WATER SUPPLY

**Requirement:** Per SHMC 15.36.090, fire flow requirements for buildings shall be determined in accordance with CFC Appendix B.

**Analysis:** Given the high-density wood construction and the significant square footage of these residential occupancies, it is possible that the required GPM (gallons per minute) and PSI (water pressure) may exceed the capacity of the current municipal mains.

**Recommendation:** We recommend a preliminary fire water analysis and formal fire flow test be performed for this site immediately. This analysis should confirm the feasibility of the municipal water supply providing both the necessary volume and the required pressure for the hydrant system and residential sprinkler systems. This must be confirmed before further site development to ensure the infrastructure can support a wood-frame subdivision of this density.

**FD Response:** Fire flow tests are performed when fire sprinkler plans are drawn and submitted. If the flow requirements are not met with existing infrastructure, a fire pump is required to make up any deficiencies before the project may proceed.

## VEGETATION MANAGEMENT PLAN

**Requirement (CFC Section 4906):** Hazardous vegetation and fuels shall be managed to reduce the risk of ignition and fire spread.

**Analysis:** According to the California Fire Code, we suggest a formal Vegetation Management Plan be provided at this stage as a condition of approval. This plan must evaluate the existing conditions, particularly the adjacent creek corridor, and detail how the developer proposes to maintain a safe, fire-resilient environment for the high-density community.

**FD Response:** This property is not located in the Wildland Urban Interface (WUI) and is not rated in the State adopted Fire Hazard Severity Zone map. Therefore, it is not required to have a Hazardous Vegetation and Fuels Plan. It may be “suggested” above, but it is not required. See excerpt from 2022 California Fire Code:

### SECTION 4906

#### VEGETATION MANAGEMENT

**4906.1 General.** *Planting of vegetation for new landscaping shall be selected to reduce non-fire-resistant vegetation in proximity to a structure and to maintain vegetation as it matures.*

**4906.2 Application.** *All new plantings of vegetation in State Responsibility Areas (SRA) and Local Responsibility Areas (LRA) designated as a Very High Fire Hazard Severity Zone shall comply with Sections 4906.3 through 4906.5.3.*

Excerpt from 2025 California Wildland Urban Interface Code:

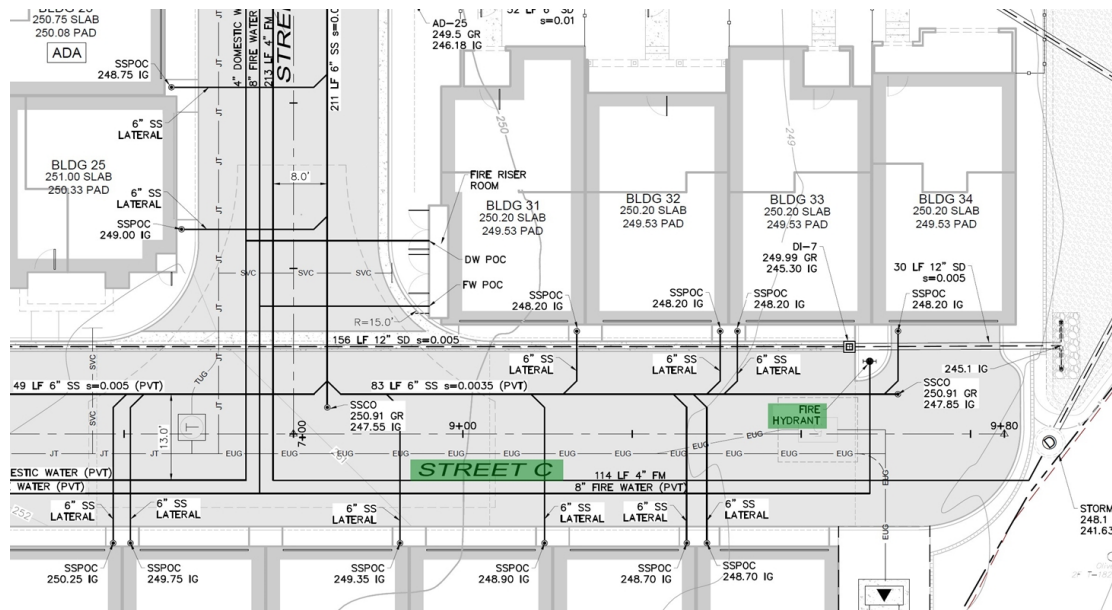
### SECTION 603 – VEGETATION PLAN



**603.2 Application.** *All new plantings of vegetation in State Responsibility Area (SRA) and Local Responsibility Areas (LRA) designated as a Fire Hazard Severity Zone shall comply with sections 603.3 through 603.4.2.1*

## FIRE SERVICE FEATURES

**Observation:** A fire hydrant on Street C appears to encroach into the roadway and minimum road width for a fire apparatus access road. See object highlighted in green below.



### Analysis:

1. **Hydrant Protection:** The fire hydrant on the Eastern end of Street B extends into the roadway and is not located on a sidewalk or path. Per CFC 507.5.6, this hydrant requires bollard protection. This protection must be shown on the plans to ensure it does not further reduce the effective clear width of the roadway.
2. **Fire Lane Marking:** Because internal roads (Streets B and C) are at the 28-foot minimum, CFC 503.3 requires that they be strictly marked as "Fire Lanes" with "No Parking" signage or red-curb painting on both sides to prevent street parking from reducing the required width.

**FD Response:** Placement of bollards, red zone painting, no parking and fire lane signage are determined at a later stage in the building permit review process. Such details are not determined on a tentative map. They are also inspected for adherence throughout the lifespan of the project.

## CONCLUSION

Our review has identified fundamental non-code-compliant issues per the CFC and SHMC 15.36 that present safety concerns. The following table summarizes the primary violations:

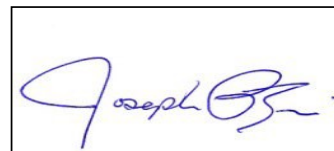
Topic	Description	Code Ref.
<b>Secondary Access Points</b>	The project proposes 41 residential units with only a single point of ingress/egress. Developments exceeding 30 units require two separate and remote access roads to ensure safe evacuation and emergency vehicle access during a fire event.	<b>CFC D104.3; SHMC 15.36.100</b>
<b>Dead End</b>	Street B extends more than 170 feet to the plan East without an approved hammerhead or turnaround. Dead-end fire access roads exceeding 150 feet must provide a code-compliant turnaround to prevent apparatus from being trapped.	<b>CFC 503.2.5; Appendix D Table D103.4</b>
<b>Fire Hose Reach</b>	Building 2 contains exterior wall portions that are 173 feet from the nearest access road. This exceeds the 150-foot limit, creating dangerous operational delays for fire suppression.	<b>CFC 503.1.1</b>
<b>Water Supply and Fire Flow</b>	Given the high density of wood-frame construction, a formal analysis is required to confirm that the municipal water supply can provide the necessary volume (GPM) and pressure (PSI) for fire suppression.	<b>SHMC 15.36.090; CFC Appendix B</b>
<b>Staging Constraints</b>	The narrow layout and hydrant placement create significant tactical bottlenecks. Bollard protection for the hydrant and strict "Fire Lane" conditions are required to maintain clear access for multiple apparatus.	<b>CFC 503.3; CFC 507.5.6; CFC Chapter 5</b>
<b>Aerial Apparatus Access</b>	With building heights reaching 40 feet, the site must accommodate aerial ladder trucks. Current plans do not demonstrate the required unobstructed width or vertical clearance. The specific scaled conditions are required to be shown and verified for safe aerial operations.	<b>CFC D105.1; CFC D105.2</b>

*Please don't hesitate to contact our office if you have any questions or would like to discuss our comments in further detail.*

**ZARI CONSULTING GROUP, INC.**



Duran Muniz  
Project Manager



Joseph P. Zari, PE  
Principal

**INC.**









# City of St. Helena City Council

**Project: Spring Grove  
Vesting Tentative Map & Water Neutrality In-Lieu Fee  
Staff: Mike Janusek, Contract Planner**

File No. PL24-065 and TSM25-001  
Community Development Department

February 10, 2026  
(continued from  
January 27, 2026)





# Overview

- Background
- Required Findings
- Staff Recommendation
- Key Issues



# Location







# 2023-2031 Housing Element Site #9







## General Plan Land Use

- High Density Residential (1447 and 1515 Spring St)
- Medium Density Residential (1505 Spring St)

Project Site

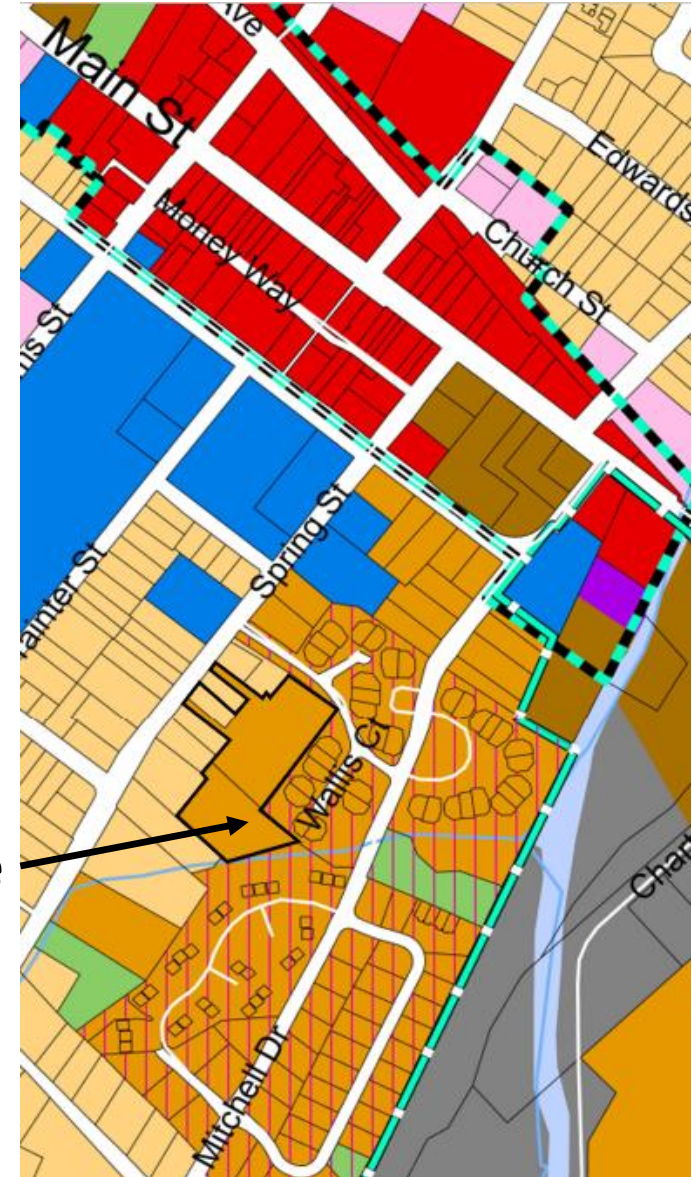




## Zoning Map

- High Density Residential (HR) (1447 and 1515 Spring St)
- Medium Density Residential (MR) (1505 Spring St)
- HR development standards and density apply to the site

**Project Site**





## Required Entitlements

- Vesting Tentative Map (**Attachment 2**)
  - 41 condominium “airspace” lots
  - 1 common area lot owned by the HOA
  - 1 lettered lot for the riparian corridor not for development
- Planning Commission recommended City Council approval by a vote of 4-0 at the December 2 Public Hearing (**Attachment 3**)
- Contingent upon City Council authorization of the Water Neutrality In-Lieu Retrofit Fee (**Attachment 1**)





## Required Entitlements

- Demolition Permit approved by Planning Commission by a vote of 4-0 on December 2, 2025 (**Attachment 4**)
  - Demolition of 3 existing single-family homes
  - No appeals filed
- Minor Design Review with Density Bonus approved ministerially on November 21, 2025 (**Attachment 8**)
  - No appeals filed
- Future actions by City Council



# Regulatory Context

## Senate Bill (SB) 330

- Amends the Housing Accountability Act (HAA)
- Vests zoning and objective design standards with a Preliminary Application
- Limits the number of public hearings to five
- Prohibits a local government from disapproving or reducing the density of qualifying housing development project based on subjective standards
- Requires health and safety finding to deny or condition the project to reduce density



# Regulatory Context

SB 330 (cont.)

- Denial requires written findings that:
  - There is a specific adverse impact on public health or safety
  - Impact is based on objective public health or safety standards
  - Impact is significant, quantifiable, direct and unavoidable
  - There is no feasible method to mitigate or avoid the impact other than denial

Gov't Code sec. 65589.5(j)(1)





# Regulatory Context

SB 330 (cont.)

- Housing project is consistent with objective standards if there is substantial evidence that would allow a reasonable person to conclude that the project is compliant with applicable standards (Sec. 65589.5(f)(4).)
- Legislature has directed that this law be interpreted to afford the “fullest possible weight” to the approval of housing. (Sec. 65589.5(a)(2)(L).)
- In the event of a denial, City has the burden of proof to show it complied with applicable law. (Sec. 65589.6.)



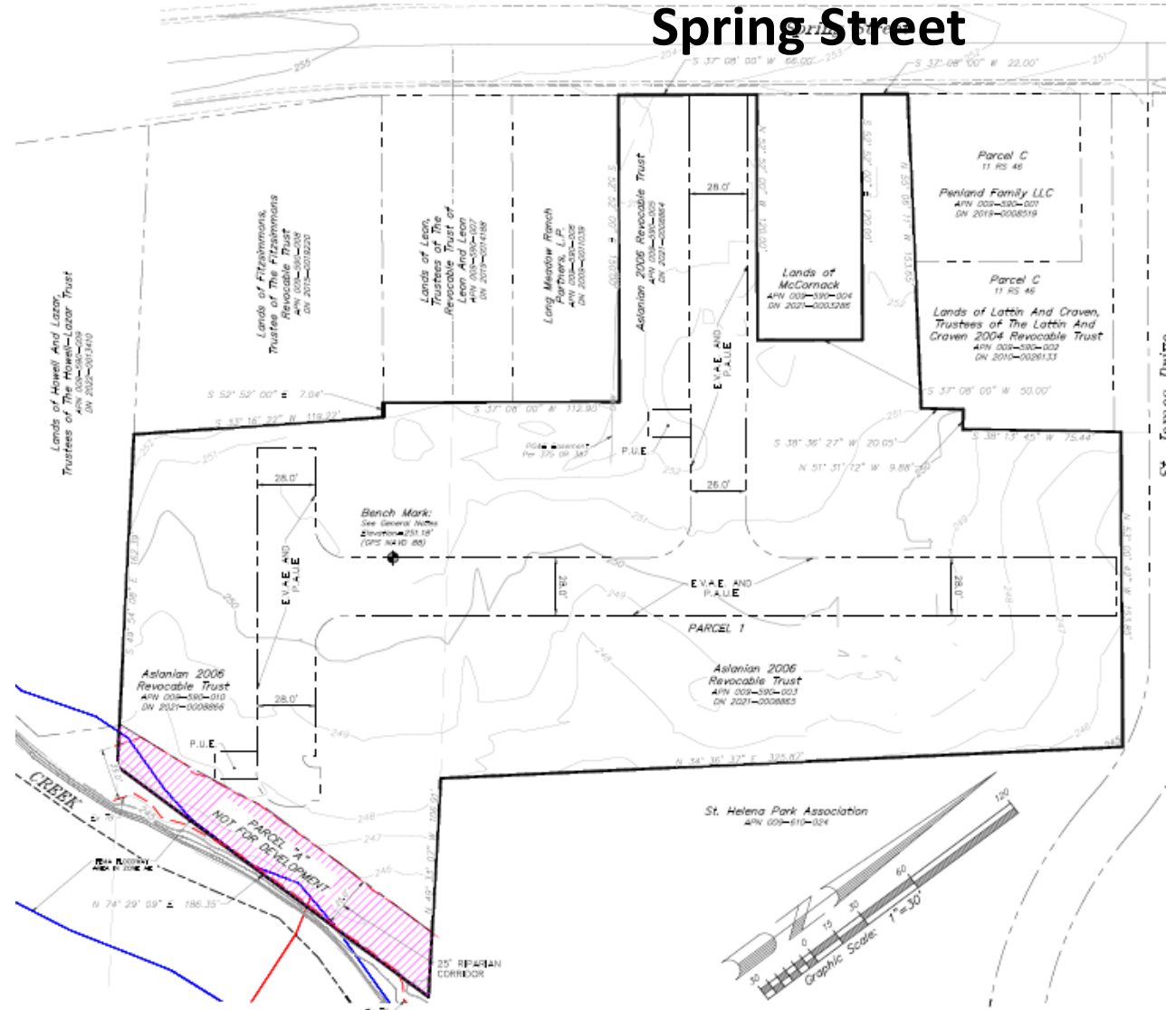
# Regulatory Context

## Assembly Bill (AB) 130

- Effective June 30, 2025, AB 130 made significant modifications to the California Environmental Quality Act
- Creation of a new statutory CEQA exemption, PRC Section 21080.66, for infill housing developments that meet certain site conditions (**Attachment 9**)
- If there is no action by the City Council to approve or deny the project by March 10, 2026, the project is deemed approved



# Project Description: Vesting Tentative Map







## Vesting Tentative Map Findings (SHMC 16.16.080.A)

1. The proposed subdivision, together with the provision for its design and improvement, is consistent with the general plan, any applicable specific plan, and applicable provisions of this code in that the proposed subdivision is consistent with the allowable density of the General Plan land use designation as well as applicable General Plan policies as demonstrated in **Attachment 7**. No Specific Plans apply to the site. In addition, the proposed subdivision complies with the minimum lot dimensions and applicable building setbacks of the HR zoning district per SHMC Table 17.16.030 and the lot design requirements of SHMC Section 16.32.050.
2. The proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, as described in the state Subdivision Map Act and any guidelines promulgated by the city council in that the proposed subdivision meets minimum lot dimensional requirements of SHMC Table 17.16.030 and SHMC Section 16.32.050, the majority of units are oriented to provide southeastern solar exposure, and the majority of units would allow for prevailing upvalley breeze to provide for natural cooling if front and rear doors and windows were opened. In addition, the proposed subdivision layout would provide an internal network of private streets that would be shaded by the Project buildings. The Project also provides open space areas that would be landscaped with future construction.



## Recommendation

1. Adopt the attached Resolution (**Attachment 1**) authorizing the applicant to pay the Water Neutrality In-Lieu Retrofit Fee pursuant to SHMC 13.12.030; and
2. Recommend that the City Council adopt the attached Resolution (**Attachment 2**) recommending, pursuant to a statutory exemption under PRC 21080.66, approval of the requested Vesting Tentative Map No. TSM25-001, File #PL24-065 for the Spring Grove Project.



## January 13, 2026 & January 27, 2026 City Council Hearings

- The item was continued to a date certain, January 27, 2026 and February 10, to address council concerns and public comments
- Public comments and council concerns were on the following topics (**Attachments 12 & 13**)
  - Occupancy of existing homes
  - Water neutrality compliance
  - On-street parking concern
  - Partial retrofit option
  - Fire Access





## Existing Occupancy

- State law requires new housing development must produce at least as many units as are being demolished
- Project would demolish 3 units, but produce 41
- State law also requires that any “protected units” that are demolished must be replaced with an equal number of “protected units”
- COA #25 is included to ensure the affordable housing agreement complies with all applicable laws, including those related to demolition of existing housing units
- “Protected Unit” status will be confirmed prior to City Council approval of Affordable Housing Agreement. (Not necessary to delay action on Vesting Tentative Map.)



## Water Neutrality

- City Council has the authority over granting the Water Neutrality In-lieu Retrofit Fee request (**Attachment 1**)
- Fee estimate is calculated in Water Neutrality Report, prepared by City Ventures, dated November 10, 2025 (**Attachment 11**)
- Public Works has reviewed the fee estimate and accepts the fee estimate calculation



## On-Street Parking

- The project proposes 93 off-street parking spaces, which exceeds the 77 parking space minimum requirement per SHMC Table 17.26.040(A)
- Condition of approval #19 requires the project to include wayfinding signs along the project's internal roadway and at the sidewalk connections, and identify a short-term parking area for delivery vehicles
- The HOA and CC&R's will prohibit on-street parking within the development





## Partial Retrofit Option-Water Neutrality

- The City Council may consider a condition of approval to require some retrofits and a partial payment of the in-lieu retrofit fee to the extent the applicant is able to find existing demand for retrofits within the community
- However, after discussing this with the applicant, given the challenges of finding demand (e.g. survey) and the uncertainty of how the City would enforce such a condition, the applicant indicated they would not be amenable to a partial retrofit option



## Fire Access

- The Vesting Tentative Map proposes a minimum 26-foot-wide (28 ft. in most proposed roadways) Emergency Vehicle Access Easement.
- The project is conditioned to install NFPA13 fire sprinklers in each unit prior to building permit issuance.
- Per California Fire Code, access from two directions is not required for projects with less than 200 units when automatic fire sprinkler system is provided.



# Fire Safety Related Concerns

- **Dead-End Road Without Turnaround** - The 2 intersections are required to meet the width and turning radius requirements of a hammerhead. The entirety of Streets A, B and C are designated as fire lanes and parking is prohibited.
- **Fire Hose Reach** - Fire Apparatus access roads must extend to within 150 ft. of all portions of the buildings proposed per CFC. Based off the tentative map, this has been achieved on all buildings.
- **Water Supply and Fire Flow** - Adequate water and fire flow must be established at the time of sprinkler plans submittal. If existing water supply is not adequate, fire department requires fire pumps to be installed to make up the deficiencies. This project will not be approved without adequate water flow rates. (Note: **Before** a building permit can be issued, there must be an approved sprinkler plan).
- **Staging Constraints** - The majority of Roads A, B and C exceed the minimum requirement of 26 ft. wide. There will be no on street approved parking, allowing emergency vehicles full access to entire width of the proposed roadway. Precise placement of 5 proposed fire hydrants and bollards will be discussed and approved during the permit phase of the project, to address any access constraints. This is standard procedure.
- **Aerial Apparatus Access** - These concerns have been addressed and reviewed. The proposed roadways meets the standard CFC requirements for aerial apparatus.





# Questions?







VIEW FROM SPRING ST.

### SPRING GROVE: WHAT IS ACTUALLY PROPOSED

A 41-unit, three-story townhouse project on Spring Street—shown as submitted

SPRING GROVE

City Ventures

1447-1505-1515 Spring St. - St. Helena - CA - 94574





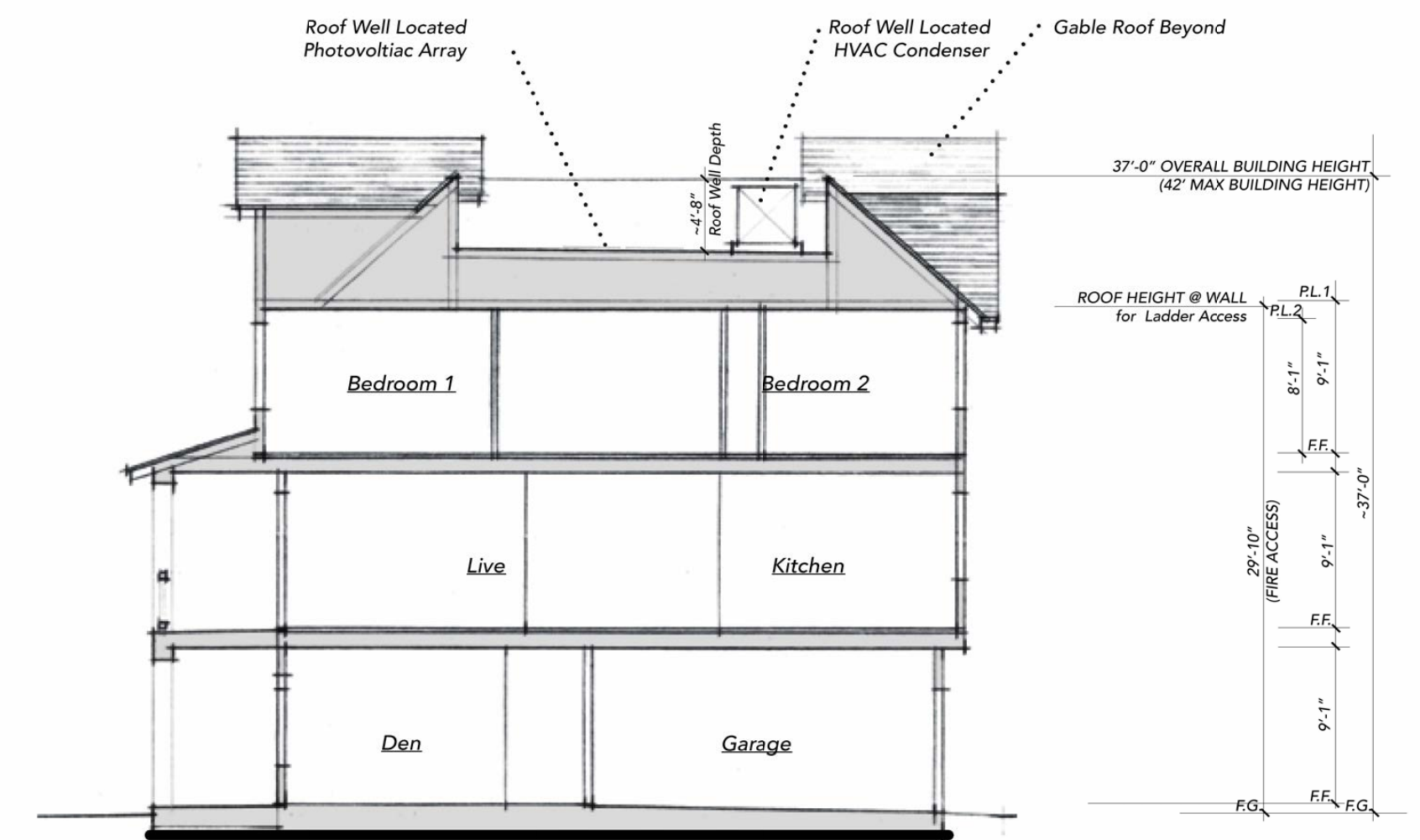
VIEW FROM ST. JAMES CT.

## SPRING GROVE: WHAT IS ACTUALLY PROPOSED

SPRING GROVE  
City Ventures

1447-1505-1515 Spring St. - St. Helena - CA - 94574





Typical Building Cross Section  
(Plan 4)

PLAN 4  
CONCEPTUAL BUILDING CROSS SECTION

SCALE 0' 8' 16' 32'



Spring Grove  
APN: 009-590-003, -005, -010  
1447~1505~1515 Spring Street  
St. Helena, CA

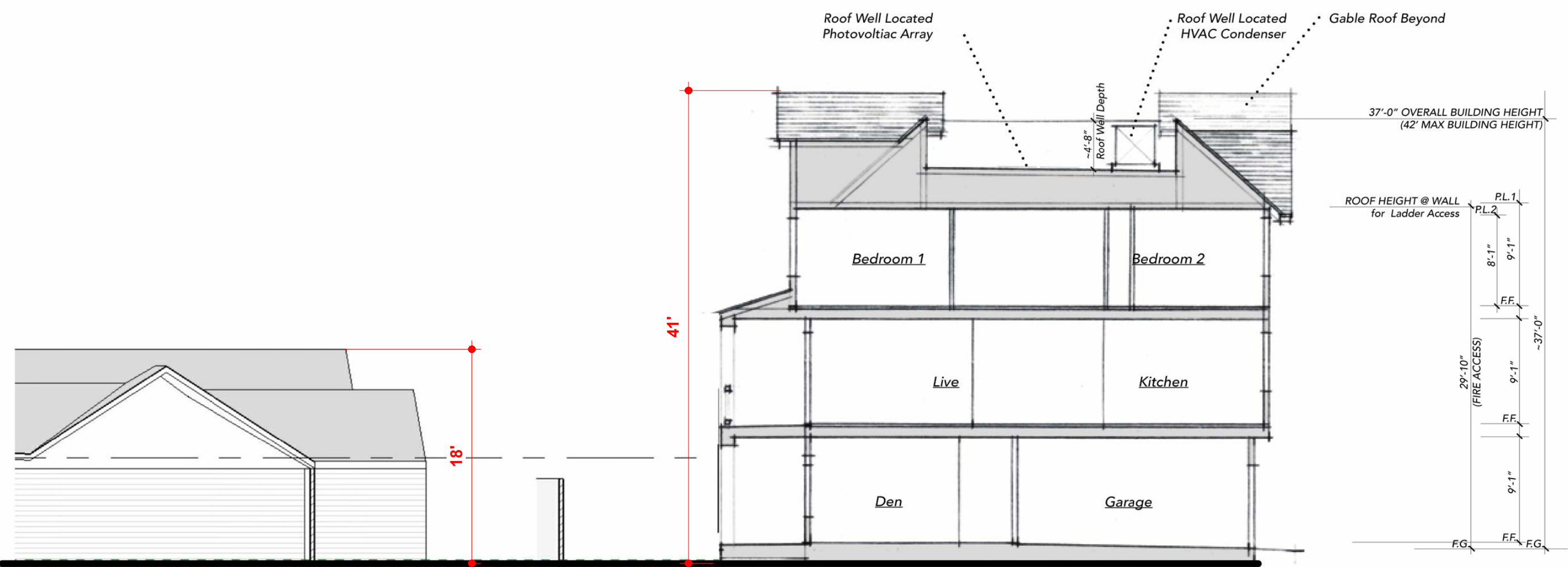
TARRAR  
UTILITY CONSULTANTS



FDS  
FOURNIER DESIGN STUDIO  
Planning | Design | Collaboration  
Roland@FournierDesign.Studio (562) 719-4650

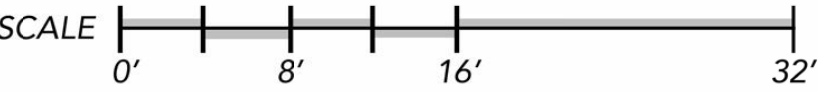
November 10, 2025  
September 26, 2025  
A-8  
FDS #24010





Typical Building Cross Section  
(Plan 4)

PLAN 4  
CONCEPTUAL BUILDING CROSS SECTION



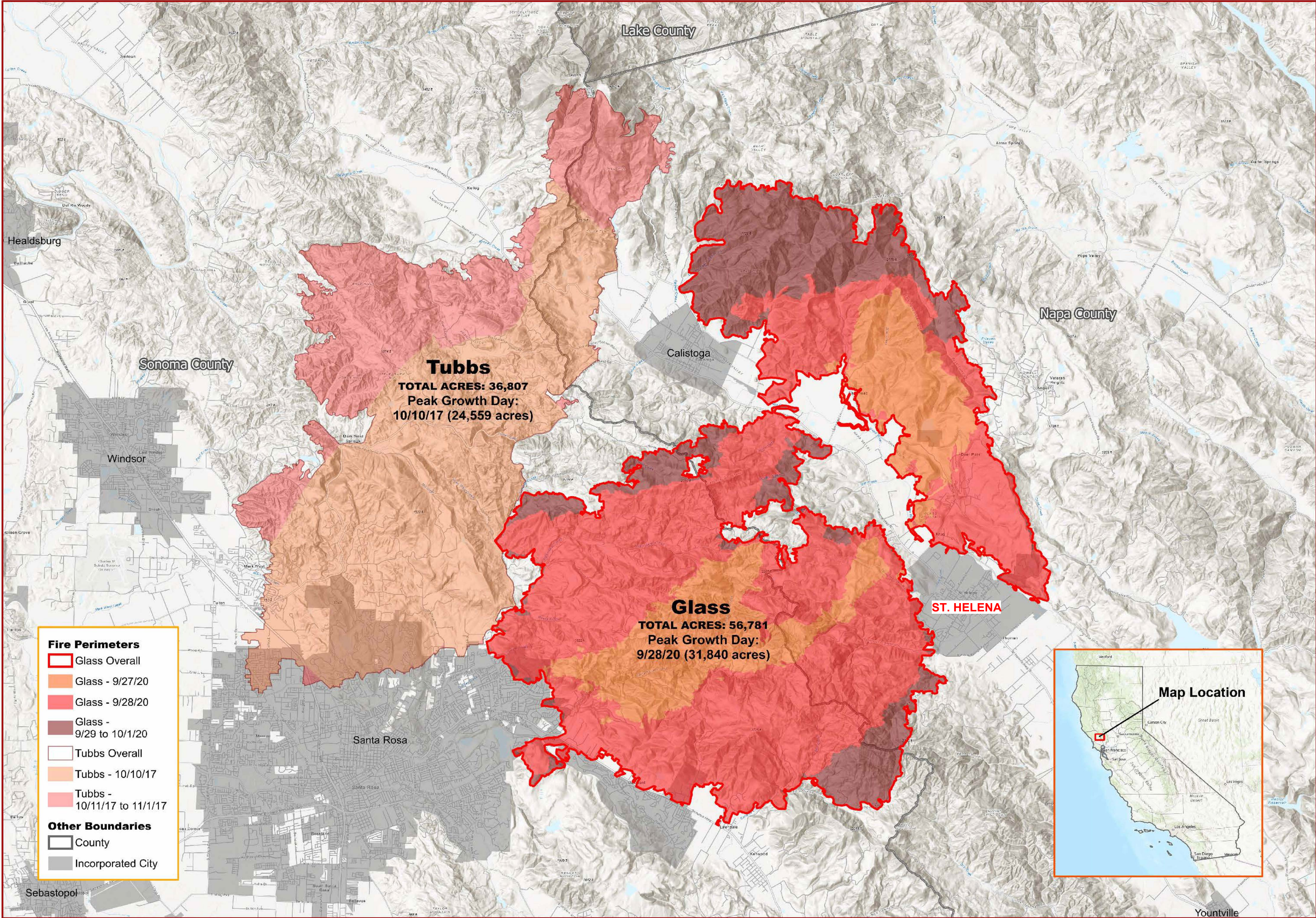
Spring Grove  
APN: 009-590-003, -005, -010  
1447~1505~1515 Spring Street  
St. Helena, CA

November 10, 2025  
September 26, 2025

**A-8**

FDS #24010





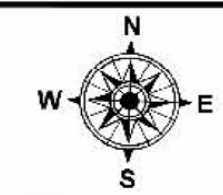
**Tubbs (part of Central LNU Complex)**  
Incident #: CA-LNU-01004  
Start Date: 10/10/2017  
36,807 acres  
100% contained

**Glass**  
Incident #: CA-LNU-015947  
Start Date: 9/27/2020  
56,781 acres and 5% contained as of  
approximately 06:30 on 10/1/2020

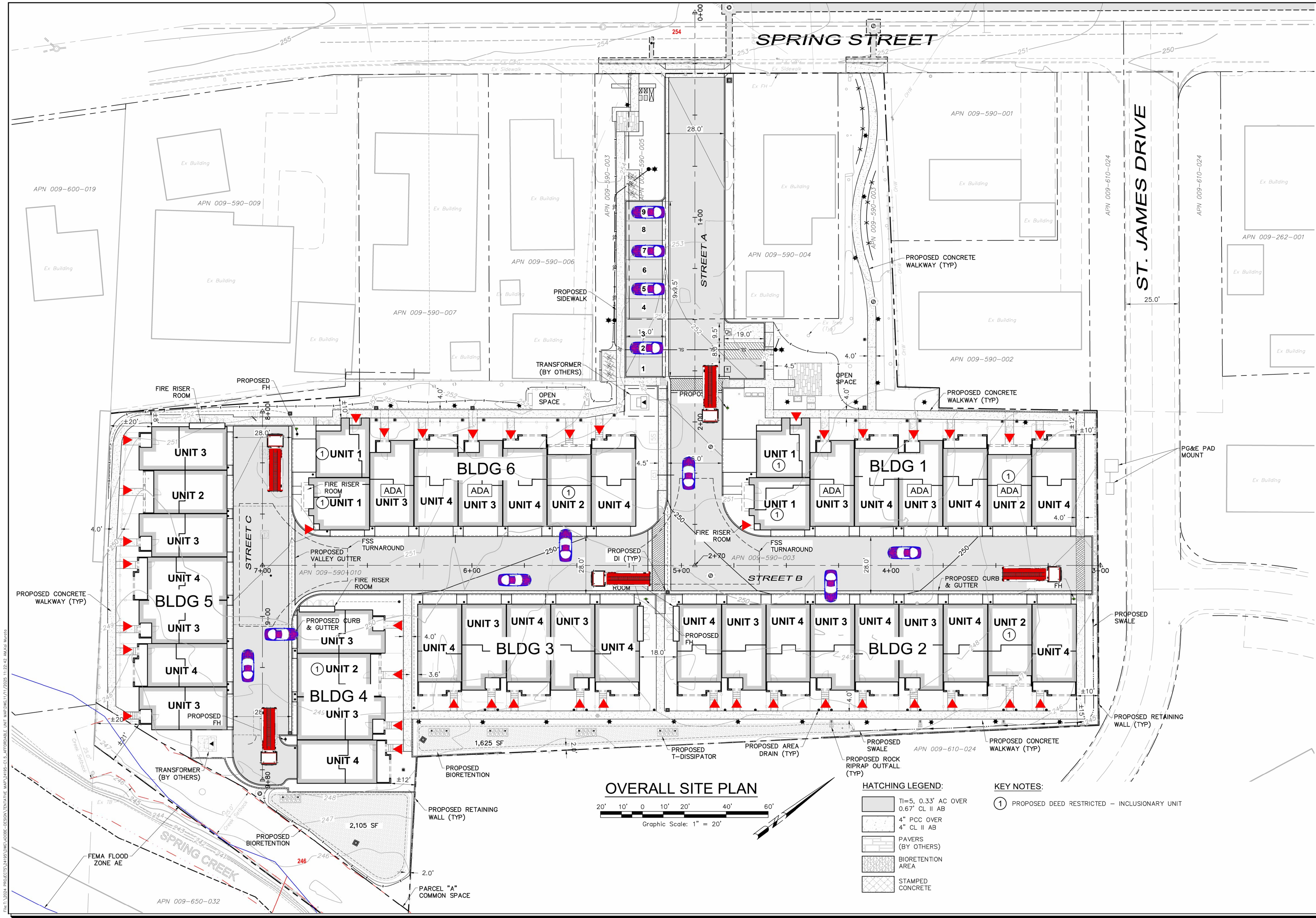
## Glass and Tubbs Fire Progression

Perimeters Current as of AM October 1, 2020

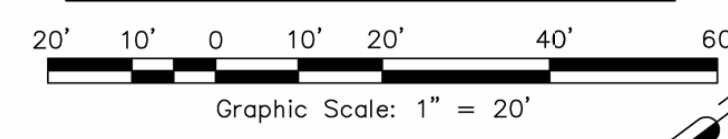
0 2.5 5 Miles  
Scale: 1:43,000  
Map created on 10/1/2020 at approximately 17:30







OVERALL SITE PLAN



HATCHING LEGEND:

- TI=5, 0.33' AC OVER 0.67' CL II AB
- 4" PCC OVER 4" CL II AB
- PAVERS (BY OTHERS)
- BIORETENTION AREA
- STAMPED CONCRETE

KEY NOTES:

- 1 PROPOSED DEED RESTRICTED - INCLUSIONARY UNIT

SCALE: AS SHOWN

Date: November 11, 2025

Design by: KM/JAL

Drawn by: KM/JAL

Checked by: CT

Sheet

C1.6

7 of 18 Sheets

Job 24195

TENTATIVE MAP

SPRING GROVE

PROPOSED DEED RESTRICTED - INCLUSIONARY UNIT

1447, 1505, 1515 Spring Street

St Helena, California

APN 009-590-003, -005, -010

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civil engineering | land surveying | wastewater

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P. (707) 541-2300 F. (707) 541-2301

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PROFESSIONAL ENGINEER - CIVIL

DAVID R. BROWN

No. 41833

Exp. 3/31/2026

STATE OF CALIFORNIA

Revisions

No.	Date	Description	Approved

My license expires 3/31/2026

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**Public Comment and Research Attachments Regarding Zoning and Housing Outcomes**


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**From** Michelle Covell <michelle@covellarchitects.com>

**Date** Tue 2/3/2026 12:11 PM

**To** Michelle Covell <michelle@covellarchitects.com>

14 attachments (16 MB)

PUBLIC COMMENT - MLC.pdf; ATTACHMENT 1.pdf; ATTACHMENT 2.pdf; ATTACHMENT 3.pdf; ATTACHMENT 4.pdf; ATTACHMENT 5.pdf; ATTACHMENT 6.pdf; ATTACHMENT 7.pdf; ATTACHMENT 8.pdf; ATTACHMENT 9.pdf; ATTACHMENT 10.pdf; ATTACHMENT 11.pdf; ATTACHMENT 12.pdf; ATTACHMENT 13.pdf;

Hi all,

Thank you for your time and for your service to our community.

I am sharing the attached document, "public comment – MLC," along with thirteen supporting attachments. I am sending this to both state legislators and local leaders because the issues involved sit at the intersection of state mandates and local implementation.

I value your perspectives and your work, and I hope you will not see me as a thorn in your side.  
My intent is to contribute constructively.

The research reflected in these attachments, together with my letter, is meant to clearly explain my concerns as a resident and to support more informed discussion.

I recognize that we are dealing with both state mandate requirements and local constraints.  
My hope is that we can continue refining our zoning code to create better long term outcomes for our town.

Toward the end of the attachments, I have included my own analysis of local conditions and impacts. With strong teamwork and careful review of the details, I believe improvements are possible. Because timing is critical, I hope you are able to review these materials before the next council meeting.

I also want to share a personal example that informs my concern. I live next door to a two-story apartment building with many residents who work in local restaurants and services. A neighbor who has lived there for twenty two years is now moving out. She works as a housekeeper, her husband is in landscaping, their daughter works for Parks and Recreation, and their son also works locally. After more than two decades, they found a place that costs slightly more but offers a small front and back yard. Their two bedroom apartment rent had risen to more than our mortgage, and their new rent will be close to one and a half times our mortgage, not including the utilities. We have shared lemons, tomatoes, tamales, and tacos over the years, and she has watched my garden grow from her window. She told me she sees projects happening but does not feel comfortable speaking publicly about them. I encouraged her that her voice matters and that I would try to support her. Residents like her are part of the fabric of this town.

One of the studies included in the attachments notes that small towns often lack the resources to conduct this level of analysis, which is why their research was undertaken. I hope these materials are helpful as you evaluate next steps.



Thank you again for your time and consideration, and for reviewing the attached letter and supporting documents before the upcoming meeting.

Respectfully,  
As resident, not in any other role.

**Michelle Liu Covell**

Dear Governor Gavin Newsom, Senator Calbadon, Assembly Member Aguiar-Curry, Mayor Dohring, Vice Mayor Deasey, Councilmembers Spadorato, Barak, and Summers, District 3 Board of Supervisor Anne Cottrell, Attorney General Rob Bonta, and State legislators, civic leaders, and whom this concerns,



I'm writing to express deep concern about the one size fits all RHNA mandates and the real-world danger they create for fire prone communities. Have we already forgotten the devastation of recent catastrophic wildfires and the lives lost when evacuation planning failed? "An evacuation disaster was years in the making" is poor city and regional planning, lack of foresight, and negligence of leaders. (See attachments 6, 7, 8, 9)

I have evacuated multiple times. The memory that stays with me most is the 2017 Atlas Peak Fire driving down Highway 29 as both sides of the valley glowed with fire. I am a licensed architect in the State of California and recently appointed as Planning Commissioner for our town. Today, I am speaking as a resident solely, someone who has seen firsthand how quickly conditions turn deadly and how current housing laws are increasing risk rather than reducing it. In 2019, we had to evacuate from the poor air quality with our 3-week-old due to the Kincaide fire, and in 2020, we had to evacuate the Glass Mountain Fire, flames visible from our backyard.

Removing the Growth Management chapter from General Plans is a profound failure of responsibility at the state level. According to a national study by StreetLight, of the U.S. cities, they gathered a list of the top 675 communities with the most limited evacuation routes, St. Helena ranks 267 based on population, exit load, and number of exits (see attachment 4). Increasing population in small towns with constrained evacuation capacity, high fire severity zones, and limited cumulative exits is not a theoretical planning issue. It is a public health and life safety issue (see attachment 1, 2, 3, 4, 5) To strip away local jurisdictions the Growth Management chapter of the General Plans is to strip away what is protecting the town from complete failure. Putting aside long-term sustainable growth management, with infrastructure and capacity in mind, for a State mandate is like putting a potential death sentence to many towns where these issues could be the tipping point. And what was written to incentivize more housing could likely end with towns failing and more housing lost. What is the most troubling is that "we" are doing this to ourselves through poor leadership, narrow-sighted one-size-fits all laws that when applied to all cities/towns without the lack of attention to the local constraints, we will all suffer.

I am seeing the lesson of The Death and Life of Great American Cities by Jane Jacobs play out again. Top-down decisions that ignore local conditions ultimately destroy what they intend to improve. The book is ultimately a warning that cities cannot be engineered like machines. Towns are not like computers where we can simply apply a system update across all. They must be understood as complex ecosystems where safety, vitality, and community emerge from local knowledge and everyday life. We need housing solutions where planning is honest about risk, responsive to place, and grounded in life safety.

If the state requires increased housing thereby increasing population, it must also require increased evacuation capacity. Governor Newsom, I know you know Napa Valley. You know the roads are narrow, the lanes are limited, and the valley is long. Requiring additional population without first expanding road capacity and exit routes does not balance needs. It increases the likelihood of people being trapped during the next major fire. That is not acceptable, this is malpractice and negligence in a major scale.

I understand the need for affordable housing. That is not the issue. The issue is that the current laws, as written and implemented, are failing to deliver truly affordable housing while simultaneously amplifying risk. (See attachments 10, 11, 12, 13)

Under our 2023 to 2031 Housing Element, St. Helena is required to plan for 256 housing units, 163 of which are categorized as very low or low income. Yet our zoning code allows "for sale developments" to meet affordability requirements with only 20 percent affordable units without requiring any very low or low income units at all. In practice, this has created a loophole where developments labeled as affordable while mostly are market rate, with the remaining 20 percent priced at 100 percent to 120 percent of AMI which in Napa County is already out of reach for many working residents. (See attachments 10, 11, 12, 13)

The result is predictable. Developers follow the incentives while maximizing profit. More market rate housing is built than actual affordable housing. Population increases. Evacuation capacity does not. For a town of roughly 4,000 housing units, this math produces growth without safety and that is a severe life safety failure.

SB 330 allows projects to be denied only when they pose an adverse risk to public health and safety. Life safety must be included in that definition. Yet local jurisdictions are forced to evaluate projects in isolation without any cumulative analysis and long-term projection of evacuation capacity, infrastructure strain, or population growth. What I see instead is fragmented review, narrowed departmental silos, and a system structurally incapable of addressing the scale of risk being created. (See attachments 1, 2, 3, 4, 5)

As the laws and codes are currently written, they prioritize speed and profit over safety and foresight. They protect those who benefit financially while stripping local jurisdictions of the tools needed to protect their residents. That is not fulfilling the intent of the housing laws. It is failing the people of California.

The New York Times headline says it plainly. **In the Palisades, an Evacuation Disaster Was Years in the Making.** In St. Helena, we are watching the same conditions assemble in real time. At a Special Joint Meeting on August 19, 2025, I asked whether any cumulative exit analysis had been done to understand what increased population would mean during evacuation. Others asked the same question. I raised it again and again at Planning Commission and City Council meetings. I contacted Napa County building officials. There has been no answer. This is all documented.

I am raising this red flag now because one size fits all mandates do not account for towns with limited roads, high fire severity zones, aging water and sewer systems, and constrained evacuation routes. Increasing population under these conditions is not neutral. It compounds risk. If risk is measured on population, exit capacity, and number of exits, (see attachments 1, 2, 3, 4) by increasing population without addressing exit capacity and number of exits, by simple logical math, is increasing risk.

This is not a NIMBY argument. If housing policies were producing genuinely affordable homes and aligning growth with infrastructure and safety, this conversation would be different. Instead, the current framework increases population, increases strain, and increases danger while delivering mostly market rate housing. What I am asking you all, is to think about the intent of these laws, the big picture, and then look at the details and see if the outcome is meeting your intent. If it doesn't, then it is time to take a deep dive into the reasons why they are not, and fix those things before it is too late. I'm not saying affordable housing cannot be achieved. What I'm saying is affordable housing is not what's being built, please look at the detail. And what we need to fix is the language in order to achieve the desired outcome, and ensure that the unintended consequences are not potential loss of



lives, and or death of more great cities. Massive wildfires are our new normal. Our laws need to take that into account, seriously.

I was very much inspired by a story about a young girl who recognized the warning signs of a tsunami and saved lives because someone listened. I am asking you to listen now before the warning becomes the headline. See story included below.

Sincerely,  
Michelle Liu Covell, Resident of St. Helena, Architect. Not representing any other role.  
1/30/2026

#### **List of Attachments**

Please find the attached documents for your reference, some have been highlighted and commented on.

1. KQED: Data Pinpoints 14 California Towns Where an Emergency Escape could be a Problem
2. Institute of Transportation Studies: Testing Wildfire Evacuation Strategies and Coordination Plans for Wildland-Urban Interface (WUI) Communities in California
3. White Paper: Bay Area Wildland Urban Interface – Review of Risks, Plans, and Strategies
4. U.S. Communities with Limited Evacuation Routes (top 675 towns in the US) Streetlight Data
5. Fire Safety Journal – The analysis of traffic data of wildfire evacuation: the case study of the 2020 Glass Fire
6. St. Helena 2040 General Plan – Growth Management
7. The Planning Commissioner Handbook: Institute for Local Government – Excerpt on Good Infrastructure
8. The Planning Commissioner Handbook: Institute for Local Government – Excerpt on Public Service Ethics
9. New York Times: Jan 8, 2025 “Some Pacific Palisades residents said the community had long asked for more detailed fire preparation plans. When a fire raged through the community this week, gridlock ensued.”
10. The Zoning Code – my observations
11. On Math – My observations
12. This is Not a Nimby-Yimby situation – my observations
13. Take a look at these two plans – my observations

A story about Tilly who saved lives by being observant, and others listened to her, rather than dismissed her. And she saved lives.



Jaime Tanna – Substack Post

On the morning of 26 December 2004, Tilly was walking along Mai Khao Beach in Phuket with her family, enjoying their first overseas holiday together. The day was calm, bright, ordinary.

Then Tilly noticed something wasn't right.

The sea wasn't moving in its familiar rhythm. It wasn't gently coming and going.

It was only coming in.

Frothy. Bubbling. Sizzling — "like beer foam," she later said.

Two weeks earlier, in a geography lesson at Danes Hill School in Surrey, Tilly's teacher, Andrew Kearney, had shown the class footage of a tsunami and explained the warning signs: unusual sea behavior, receding or surging water, froth and turbulence where there should be calm.

Standing on that beach, Tilly recognized every sign and began shouting at her parents: "There's going to be a tsunami!"

There was no visible wave. The sky was blue.

But Tilly wouldn't stop. She became more insistent.

Eventually her father, Colin, heard something deeper than fear — he heard certainty. And he chose to trust his daughter.

Nearby, an English-speaking Japanese man overheard the word tsunami. He had just learned of a powerful earthquake off Sumatra. "I think your daughter's right," he said.

Hotel staff were alerted. The beach was immediately evacuated.

Tilly's mother, Penny, was among the last to leave, sprinting as the water surged in behind her. They reached the second floor with seconds to spare.

**Then the wave hit.**

A massive wall of water — **around 30 feet high** — tore through the beach, ripping up trees, furniture, and debris, hurling everything forward with devastating force.

Across 14 countries, the Indian Ocean tsunami killed more than 230,000 people.

But on Mai Khao Beach, not a single life was lost.

Because a 10-year-old paid attention in class.

Tilly was later called the "Angel of the Beach." She received international recognition, spoke at the United Nations, and her story became part of disaster-education curricula worldwide.

Today, Tilly lives quietly in London. She still credits her teacher.

"If it wasn't for Mr. Kearney," she once said, "I'd probably be dead — and so would my family."

This isn't just a story about a tsunami.

It's a reminder

Sometimes the smallest lesson becomes the loudest lifesaver.

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<https://www.kqed.org/science/1946668/data-pinpoints-14-california-communities-with-most-limited-emergency-escape-routes#:~:text=California%20has%20the%20second%2Dlargest,Chief%20Technical%20Officer%20Paul%20Friedman>

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**SCIENCE**

# Data Pinpoints 14 California Towns Where an Emergency Escape Could Be a Problem

By [Jeremy Siegel](#)  Aug 22, 2019

Updated Jan 9, 2024

 Article Saved

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 **Live Radio** **Forum** 





Vehicle abandoned by fleeing residents of the Butte County town of Paradise during the Camp Fire in November 2018. (Josh Edelson/AFP/Getty Images)

<

California has the second-largest number of small communities with limited evacuation routes when compared to other states, according to a new nationwide analysis of towns with populations under 40,000.

The study, conducted by San Francisco-based traffic analytics company StreetLight Data, identified 100 communities across the country with the most limited means of escaping disasters like wildfires and hurricanes. It found that 14 of those communities are in California, second only to Florida's 20.

The study comes on the heels of the deadliest and most destructive blaze in California history, last November's Camp Fire, which killed 86 people and put into perspective some of the challenges facing rural communities with limited escape routes.

When the fast-moving blaze swept through Paradise — a Butte County town of roughly 27,000 — on an early Thursday morning, fleeing residents ended up caught in gridlocked traffic along Skyway, the main route out of town. Many people abandoned their vehicles and fled on foot. Some were found dead in their cars.

The new analysis marks an attempt to highlight the potential for similar situations in other small towns, according to StreetLight's Chief Technical Officer Paul Friedman.

Sponsored

“Transportation infrastructure, and sharing information about transportation options, is one part of the complex requirements of disaster and evacuation preparation,” Friedman said. “We hope this data can be a useful support to those working in this challenging field.”

In order to identify evacuation-challenged communities, StreetLight analyzed location data points from smartphones and GPS navigation devices in cars and trucks to identify trends in what routes people tend to use to exit their communities. They

^

only one main exit, while also taking into account the number of alternative exits and the total population of an area, according to U.S. Census data.

What's not included in the analysis is the potential for natural disasters in a given area, according to StreetLight CEO Laura Schewel.

"This is purely the transportation data, because that's where we're really the experts, and we want to stay in our lane," she said. "What we hope is that this data can be mixed with people who have expertise about other risk factors ... and be part of the full picture of data-driven evacuation preparedness."

In essence, Schewel said, an emergency manager in a small town that's on the list could use the data from the analysis as a launching point for drawing up wildfire evacuation routes.

The following is a list of the California communities among the 100 most evacuation-limited in the country, according to StreetLight, in order:



# Limited Evacuation Routes

The 14 California communities rated as having the most limited evacuation routes based on analysis on data from smartphones and GPS devices.

Community	County	Population	Exits
Coto de Caza	Orange	15,294	3
Bell Canyon	Ventura	2,049	2
Lompico	Santa Cruz	1,137	2
Ladera	San Mateo	1,426	2
Temescal Valley	Riverside	22,542	5
Knights Landing	Yolo	1,006	2
Coronado	San Diego	24,582	7
Oak Park	Ventura	13,811	4
Pine Canyon	Monterey	1,816	3
Fetters Hot Springs	Sonoma	4,099	3
Los Osos	San Luis Obispo	14,259	4
Brooktrails	Mendocino	3,251	4
Lake California	Tehama	3,054	4
Fillmore	Ventura	14,923	4

California’s two most evacuation-constrained communities — Coto de Caza in Orange County and Bell Canyon in Ventura County — are both in the southern portion of the state and are both at-risk for wildfire: Coto de Caza is surrounded by burnable open space; Bell Canyon was **hit hard** by the Woolsey Fire in 2018.

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StreetLight identified some small communities in the region with limited evacuation routes, including Ladera, a development adjacent to Portola Valley, near the Alpine Road exit off Interstate 280 on the edge of Silicon Valley, and Feters Hot Springs, on Highway 12 just north of the town of Sonoma.

But because the analysis was limited to communities with populations under 40,000, larger towns and cities that may have areas with limited escape routes are missing from the list.

Oakland, for example, has some areas with the potential for both limited exit routes and high risk for fire.

During the **East Bay Hills fire** in October 1991, which killed 25 people, congestion was a major problem. A **report** on the blaze conducted by the U.S. Fire Administration found that as some roads were blocked down due to the spread of the fire, others “became clogged with cars and pedestrians.” As in Paradise, some victims died after being trapped on narrow, blocked roads.

StreetLight’s Schewel said the company chose to analyze only small towns because it feels those communities will benefit most from the research.

“We figured if we’re going to put a bunch of information on the internet for free, the small towns who don’t have the resources to do their own studies might get the most benefit out of that type of exercise,” she said.

Schewel said this type of analysis could be conducted for a larger population center like Oakland, but in that case, it might be more helpful to analyze the area in smaller sections.

^

“Data-driven planning is important, but we want to be very clear that this is not a magical robot that tells evacuation professionals what to do,” she said. “It’s — we hope — a helpful extra tool in the toolkit.”



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RESEARCH REPORT

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# Testing Wildfire Evacuation Strategies and Coordination Plans for Wildland-Urban Interface (WUI) Communities in California

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April 2024

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# Testing Wildfire Evacuation Strategies and Coordination Plans for Wildland-Urban Interface (WUI) Communities in California

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# Executive Summary

Testing Wildfire Evacuation Strategies and Coordination Plans for Wildland-Urban Interface (WUI) Communities in California



## Executive Summary

Due to the combination of warmer temperatures and drought brought on by climate change, wildfires have become an ongoing crisis particularly in transitional Wildland Urban Interface (WUI) areas where residential development has been expanding into forested regions of California. Where lives are at risk, mass evacuation is frequently the sole feasible way to ensure people's safety. Current evacuation strategies rely on standard, but static, approaches such as designating evacuation zones to notify residents in the event of a fire. The most at-risk zones can be evacuated first which helps emergency personnel manage the traffic flow and more easily prevent the traffic jams that could occur when everyone tries to leave the area at the same time. However, these procedures may be difficult to implement in the case of rapidly moving fires and where the community lacks robust communication infrastructure, such as local radio and emergency alert systems.



Many small, resource-strapped communities in WUI zones do not have resources to conduct detailed evacuation studies and many such studies do not consider the impact of background traffic on evacuation processes. Therefore, this study explores the likely performance of a set of generalizable evacuation strategies incorporating background traffic for several areas in Marin County: the Ross Valley, Woodacre Bowl, Tamalpais Valley, and an area near Highway 101 and Ignacio Boulevard in Novato (hereafter referred to as 'Novato Neighborhood'). Using a wildfire-traffic simulation framework several strategies were tested including reducing the number of vehicles involved through carpooling, phased evacuations, and off-street parking prohibitions.

## Wildfire-Traffic Simulation Framework

The proposed framework has three parts: (i) wildfire spread simulation, (ii) evacuation behavior, (iii) and traffic evacuation simulation. For the wildfire spread simulation, the model considers terrain topography, fuel, and meteorological conditions along with fire ignition location and time. The results show how the fire is likely to progress over time in one-hour time steps. These data subsequently become inputs for the traffic simulation which provides information to develop a plan of evacuation. For the evacuation behavior portion, three kinds of strategies were considered in this study: (a) vehicle reduction, (b) phased evacuation, and (c) prohibiting vehicles from remaining on the streets (and moving vehicles off the street). These strategies can affect the number of vehicles participating in the evacuation, their respective departure times, and the available road capacity needed for them to reach safety.

For evaluating the *vehicle reduction* strategy, five different options were tested, including one person/vehicle, two persons/vehicle, three persons/vehicle, four persons/vehicle, and five persons/vehicle. For *phased evacuation*, four options were tested, including simultaneous departure, 15-minute departure intervals in the daytime scenario or 20-minute departure interval in the nighttime scenario, 30-minute departure intervals in the daytime scenario or 40-minute departure intervals in the nighttime scenario, 45-minute departure intervals in the daytime scenario or 60-minute departure intervals in the nighttime scenario. For *parking prohibition*

strategies, we assume that if street parking is allowed, road capacity would be reduced by 15 percent compared with prohibiting street parking. The information from these scenarios is used to inform the traffic simulation model. The traffic simulation model is a mesoscopic traffic model, which examines small groups of vehicles and can track the trajectory of each vehicle during the evacuation. For the traffic simulation, the model produces various metrics of evacuation efficiency, such as the time needed for vehicles to reach two miles away from the fire area, the number of vehicles exposed to fire risk at different times, average evacuation travel time, and average exposure time to the fire hazard, to evaluate the performance of the different evacuation strategies.

## Case Studies

The four study sites represent diverse fire and traffic characteristics in high-risk communities. For each site, two different evacuation scenarios were designed: one at 1 a.m., when all the residents are at home, another at 9 a.m., when background traffic is heavy.

The estimated number of residents who need to evacuate is different between the morning and nighttime scenarios because many residents are at work during the day, while most are at home at night. The background Origin-Destination (OD) data from the Metropolitan Transportation Commission identifies the location where each person begins their travel day, and this place is regarded as their residence. Using this information, it is possible to determine how many residents are at home when the fire ignites, and need to evacuate. For Ross Valley, the number of evacuees is 1,965 in the daytime scenario and 4,893 in the nighttime scenario. For Woodacre Bowl, the number of evacuees is 1,356 in the daytime scenario and 2,196 in the nighttime scenario. For Tamalpais Valley, the number of evacuees in the daytime scenario is 2,010 and 5,492 in the nighttime scenario and for Novato Neighborhood, there are 7,662 evacuees in the daytime scenario and 17,519 in the nighttime scenario.

The analysis showed that different strategies perform better or worse in different areas and times due to differences in road networks, fire ignition points and progression, number of evacuees, and the normal traffic around the areas.

Generally, sharing a vehicle among multiple persons is a good strategy in each case, as this can greatly reduce traffic congestion and speed up the evacuation process. However, it is difficult and time-consuming to coordinate having persons from different households share one vehicle in emergency situations. On the contrary, it is quite easy to encourage persons to share one or two vehicles among their own family members. We recommend a policy that at least two persons should be in each car during the evacuation.

Phasing the evacuation process improves evacuation efficiency, however, a longer departure interval does not necessarily result in a more efficient evacuation. This is because over time fires may spread quickly and approach zones that were initially far from the initial ignition points. Therefore, it is not advisable to make the persons in these zones wait too long before issuing an evacuation order if the fire is predicted to move quickly.

The effect of street parking on evacuation varies with the situation. In some cases, such as the nighttime scenario for Ross Valley and the daytime scenario for Woodacre Bowl, where we found little impact on evacuation. While in the other cases, prohibiting street parking can result in a significant increase in evacuation efficiency. The difference results from having different numbers of evacuees and numbers of exit routes. When the number of evacuees is relatively small compared with the number of background vehicles and the number of exits is high, the effect of street parking is small. Yet, if there are more evacuees and fewer exits, the impact of street parking is high. Overall, prohibiting street parking on fire danger days can effectively reduce evacuees' travel time. If possible, this strategy should be implemented in all cases. However, where that is not feasible, we recommend at a minimum prohibiting on-street parking during the daytime for Ross Valley, at night for Woodacre Bowl, during both the daytime and nighttime for Tamalpais Valley, and at night for the Novato Neighborhood. Prohibiting street parking on days when fire danger is high could significantly improve evacuation performance.



# Contents

Testing Wildfire Evacuation Strategies and Coordination Plans for Wildland-Urban Interface (WUI) Communities in California

## Introduction

Wildfire evacuations have posed persistent challenges in California in recent years particularly in Wildland Urban Interface (WUI) communities where there is a significant mix of residences and flammable vegetation. Current strategies rely on standard, but static approaches such as issuing evacuation orders by designated zones. However, these approaches are likely to be problematic in actual incidents, given the difficulties implementing them under rapidly moving fire conditions and fragile communications infrastructures.

Most small, resource-strapped WUI communities in Marin County do not have the resources to conduct dedicated evacuation studies. This research evaluates a set of generalizable evacuation strategies for four areas in Marin County: Ross Valley, Woodacre Bowl, Tamalpais Valley, and an area near Highway 101 and Ignacio Boulevard in Novato (hereafter referred to as “Novato Neighborhood”). The strategies include *vehicle reduction* from carpooling, *off-street parking prohibitions*, and *phased evacuations*, which were tested using a wildfire-traffic simulation framework. The strategies were evaluated based on their outcomes in several evacuation scenarios for each of the study communities, as well as their ease of incorporation into standard procedures. Additionally, the impact of background traffic, which refers to the normal traffic passing through the case study areas when evacuations occur, was taken into account during the evaluation. This is important because the presence of background traffic can cause significant delays in evacuation, and previous research has not adequately considered its impact (Soga et al., 2021). Therefore, this research includes background traffic in the traffic simulation to more accurately evaluate the potential strategies. Based on our results, we provide recommendations for the different responses and strategies.

## Evaluating Wildfire Evacuation Strategies

Wildfire evacuation strategies have been largely informed by the experiences learnt from other types of disasters (e.g., hurricanes, tsunamis), but also have specific considerations given the dynamic characteristics of wildfire and the spatial areas they impact. Most strategies focus on how to improve evacuation efficiency to reduce evacuation time given the speed and short notice of wildfires, through measures such as temporarily widening lanes (e.g., by using shoulders and medians for vehicle travel). Other evacuation strategies are designed to (i) improve road network capacity through measures such as contraflow (reversing the direction of traffic on individual lanes) (Araujo et al, 2014, Chen et al., 2020) or prohibiting street parking, or (ii) optimize road use by evacuees through strategies such as carpooling, which reduces the number of departing vehicles, and phased evacuations that lower peak traffic volumes on roadways by spreading out evacuees.(Zhao and Wong 2021). On-street parking restrictions can increase the capacity of low-capacity roads (Cova 2005). Phased evacuations can be staggered to permit those closer to fire danger to leave first and prevent bottlenecks (So and Daganzo 2010). Chen and Zhan (2008) tested all phased sequences in a road network with four evacuation zones and found that if the affected area has a high population density and the road network follows a grid structure, implementing a phased evacuation strategy that involves alternating non-adjacent zones can effectively reduce the overall evacuation time. Encouraging carpooling can also reduce the number of vehicles involved in an evacuation and effectively mitigate resulting traffic congestion (Zhao and Wong 2021).

Although there are many evacuation strategies proposed in existing research, there is no comprehensive study that compares the applicability and relative gains from each type of wildfire evacuation strategies under different network topology, evacuation demand, and fire spread dynamic situations. For many communities affected by wildfires, a preliminary understanding of the potential applicability of previously proposed strategies can still be greatly helpful for developing preliminary plans before carrying out further detailed investigations. One area that has often not received sufficient attention has been the effect of background traffic, which refers to the traffic that was unable to be redirected and passes through the evacuation area, despite its potentially huge impact on evacuation efficiency. For many fire-prone communities along major highways, discussions regarding background traffic are crucial, as during peak hours highways may lack capacity to accommodate the additional evacuation traffic.

Traffic simulations can be useful in testing the performance of various evacuation strategies, as shown in Table 1. Microscopic simulation software, such as Paramics (Cova and Johnson, 2002), can provide fast setup for the simulation model. A dedicated agent-based simulation model can provide greater flexibility and higher simulation efficiency (Soga et al., 2021; Zhao and Wong 2021). Quick, simplified manual calculations (Cova and Johnson, 2002) and adjusted four-step models (de Araujo et al., 2014), can be useful for developing a conceptual understanding of the evacuation situation and potential bottlenecks. The data required for running simulation models are often readily available from sources such as OpenStreetMap and digitized aerial imagery for network inputs, and regional parcel maps can be used for identifying residential locations for estimating the



number of persons needing to be evacuated. Models can generate aggregated metrics such as travel time, fire exposure time, and link-level congestion status. Altogether, traffic simulation is frequently applied across hazards, with a focus on investigating changes in evacuation performance metrics through parametric studies that analyze detailed evacuation choices, such as departure time, route, and destination (Zhao and Wong, 2021).

Other keys to developing wildfire evacuation strategies concern gathering information on evacuation behavior, which can be obtained through observations and surveys (Gwynne et al., 2023), mathematical models (Lovreglio et al., 2019; McCaffrey et al., 2018), and recently the application of emerging technology such as GPS (Zhao et al., 2022). One important consideration is when evacuees need to be notified of the evacuation warning or order which can be aided by information on how fires spread, and the operation of communication systems, which can be integrated into the evacuation simulations for a more comprehensive depiction of possible scenarios (Soga et al., 2021).

**Table 1. Selected Studies That Employ Simulations or Traffic Models for Studying Wildfire Evacuation (adapted from Zhao and Wong, 2021)**

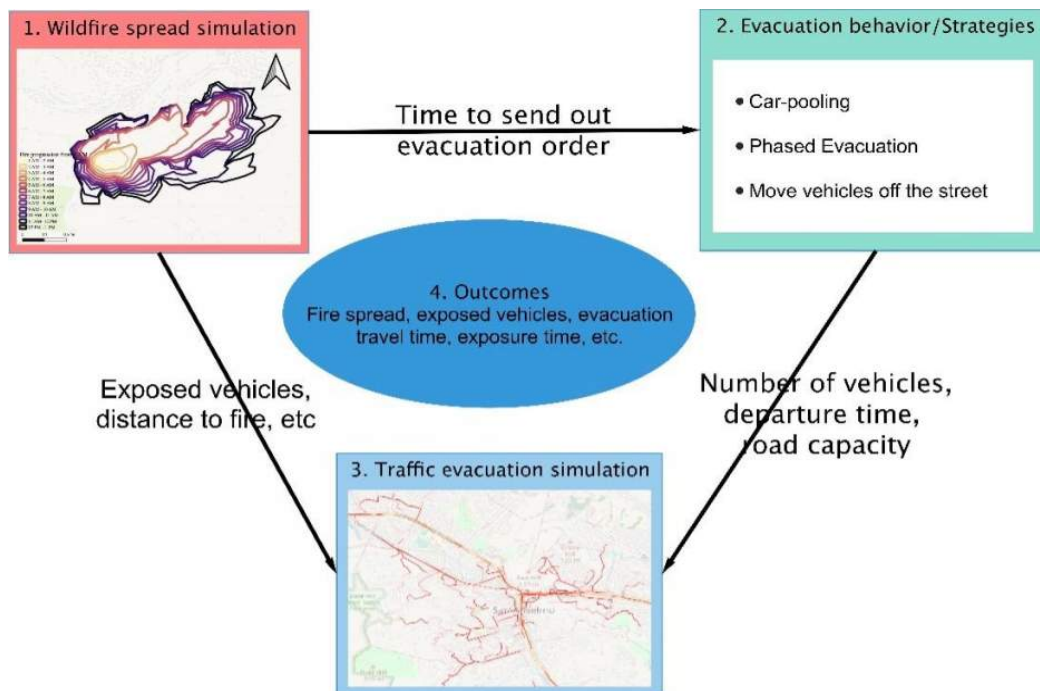
Reference	Model Characteristics				Metrics	Strategies or Scenarios
	Traffic generation	Departure time	Destination and route choices	Simulation type		
Cova and Johnson (2002)	250 households; vehicles per household follows Poisson distribution (mean: 0.5-3 vehicles/household)	Departure time follows Poisson distribution (mean: 5-25 min after fire occurs)	The neighborhood exits or shelters; dynamically updated lowest-cost route	Microscopic (Paramics)	Clearance time, mean vehicle/household travel time	Setting different number of evacuee vehicles and departure time
Cova and Johnson (2003)	30-150 vehicles per zone	Uniformly generated within 15 min	Various static routing (minimizing total travel distance, minimize merging or balanced)	Microscopic (Paramics) and manual capacity analysis	Clearance time, total travel distance, number of merges	Reducing intersection merge delays with turn restrictions
Sbayti and Mahmassani (2006)	1,794-5,692 vehicles	Simultaneous or optimal departure time solved by an optimization model	System-optimal traffic assignment	Microscopic (DYNASMART-P)	Clearance time, mean travel time	Phased evacuation

Reference	Model Characteristics				Metrics	Strategies or Scenarios
Li et al. (2022)	47,410 vehicles	Simultaneous or optimal departure time solved by an optimization model	System-optimal traffic assignment	Non-simulation, solved by an optimization model	Mean travel time, average fire exposure time	Phased evacuation
Zhao and Wong (2021)	7,438 households; 44%/43%/13% households leave with 1/2/3 vehicles	Departure time follows normal distribution (40 min $\pm$ 20 min)	Outside the fire threat area, updated lowest-cost route	Spatial-queue-based dynamic simulation model	Mean evacuation time, total exposure time	Slowing fire speed, number of evacuating vehicles, phased evacuation



## Developing Evacuation Scenarios

The framework of the wildfire and traffic simulation used in this study is shown in Figure 1. The proposed framework covers three parts: (i) wildfire spread simulation, (ii) evacuation behavior, (iii) and traffic evacuation simulation. For the wildfire spread simulation, inputs include terrain topography, fuel (amount and condition of burnable material), and meteorological conditions along with fire ignition location and time. The outputs from this step analyze different aspects of the fire simulation, specifically, fire propagation divided into one-hour time intervals. These data provide fire information for evacuation planning. For the evacuation behavior step, three types of strategies were considered in this study: (a) vehicle reduction, (b) phased evacuation, and (c) prohibition of parking vehicles on the streets (and providing alternative parking to help move vehicles off the street). These strategies can reduce the number of vehicles needed for evacuation, quicken departure times, and increase road capacity, respectively. Such information also become inputs to the traffic simulation step. For the traffic simulation, the model produces various evacuation efficiency evaluation metrics, such as the number of exposed vehicles at different times, average evacuation travel time, and average exposure time to the fire hazard. These metrics are used to evaluate the performance of the different evacuation strategies.



**Figure 1. Study Flowchart**

## Wildfire Spread Simulation

The fire simulation provides information on how quickly the fire may propagate through an area under different meteorological, topographical, and fuel conditions (Finney and Andrews, 1999). For this study, fire simulations were conducted using FARSITE software designed by M.A. Finney for spatial and temporal simulation of fire behavior under various conditions (Finney, 1998). The software requires a variety of input data regarding terrain topography, fuel, and meteorological conditions that are fundamental factors affecting fire behavior. The framework of the fire simulation is shown in Figure 2.

The first step was to define ignition points for each fire both by geography, identifying the areas involved in the fires, and timing, determined by analyzing data for specific days taken from the nearest weather stations. Following that, data including terrain topography, fuel, and meteorology are collected to run the simulations. Topographic data refers to the structure and shape of the terrain (such as elevation, slope, and aspect). Tree cover data includes canopy cover, stand height, canopy base height, and canopy bulk density. Fuel data was determined by using the 40 Scott and Burgan Fire Behavior Fuel Model (FBFM40), which divides the area into 40 different fuel types. For meteorological metrics, data on wind speed, wind direction, air temperature, humidity, and solar radiation data were collected and entered into FARSITE. Simulation-related parameters, such as simulation duration, are also set at this step. These steps lead to the fire simulation output, which is the fire propagation status (e.g., areas with active fires, flame length) at each timestamp.

Fire Simulation Flowchart

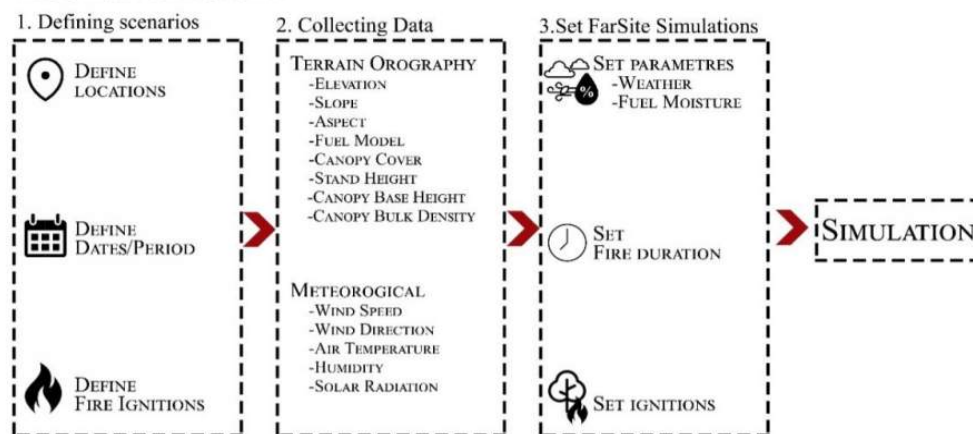


Figure 2. Framework of Fire Simulation

## Spatial-Queue Based Traffic Simulation

A spatial queue based traffic model, developed by the research team ([https://github.com/cb-cities/spatial_queue](https://github.com/cb-cities/spatial_queue)), was used to simulate the evacuation process. We used this model rather than popular microscopic simulators based on car-following and lane-changing behavior since it is less data intensive and easier to program. The simulation model consists of three basic elements: (i) vehicles, (ii) intersections (nodes), and (iii) road links. Figures 3-4 illustrate features of the node model and the link model.

Each vehicle is treated as an independent actor. Each vehicle is assigned an initial evacuation route, and the routes are updated every 10 seconds based on the evolving traffic status (e.g., level of congestion), in a manner that imitates how route recommendations are updated in real time in navigation apps like Google Maps, Apple Maps, and Waze.

Each link in the road network corresponds to a stretch of road between two intersections. The model simulates the time that it takes for a vehicle to move from the upstream node to the downstream node, creating queues and spillbacks, according to the actions of all other vehicles. Vehicles spend at least as long as the free flow travel time on a link before leaving the link or joining a queue at the downstream end. When the end of the queue formed by vehicles reaches back to the upstream end of the link, spillback occurs, and no more vehicles can enter this link.

The link flow capacity is assumed to be 1,900 vehicles/(hour·lane), and link capacities are imposed in a flip-coin probability manner at each one-second time step, with a probability of a queuing vehicle at the front leaving the current link or entering the next link at 0.53 vehicles/(second·lane). The model moves vehicles at the front of each link to the next link at each one-second time step, if there is room in that link, and they do not conflict with other vehicles moving through the intersection at that time step, such as those turning left or entering from perpendicular directions.

Vehicles entering an intersection are assumed to have equal priority, except for vehicles already in roundabouts, which have higher priority than vehicles feeding into the roundabouts. All intersections were modeled as non-signalized in anticipation of power failures.



## The rule-based node model

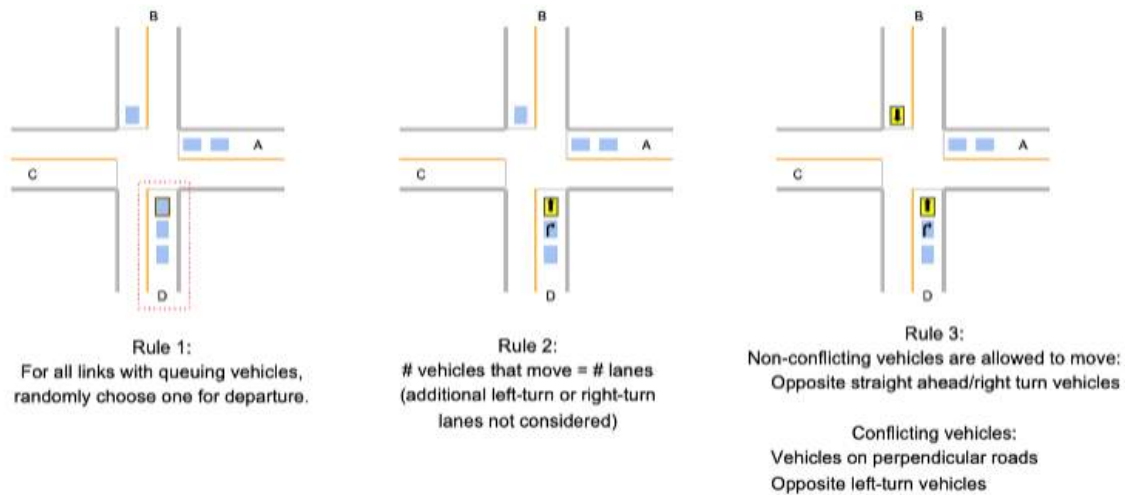


Figure 3. An Illustrative Node Model

## The queue-based link model

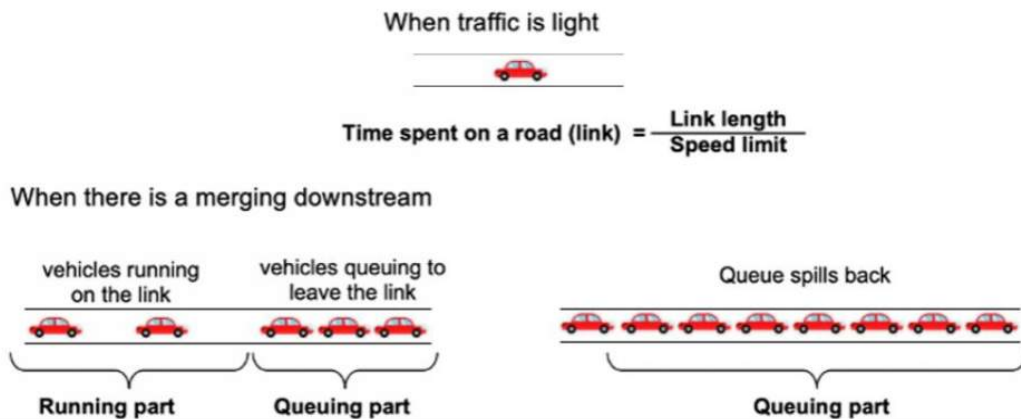


Figure 4. An Illustrative Link Model

## Evacuation Strategies and Scenario Development

This study compared the effectiveness of various evacuation strategies/policy options by testing different scenarios under specified conditions. The scenarios consisted of three types:

- **Vehicle reduction.** As a small increase in the number of vehicles on the roads during the evacuation can significantly increase congestion, this scenario tests whether and how much carpooling can make a difference on evacuation efficiency (Wong and Shaheen, 2019).
- **Phased evacuation.** Many studies have demonstrated the effectiveness of phased evacuation, as it can reduce the traffic congestion during the evacuation (So and Daganzo, 2010, Chen and Zhan, 2008). While some evacuees further from the fire danger are delayed, allowing those closer to the fire to leave first reduces exposure time and limits the amount of downstream congestion so those leaving later can evacuate more quickly. In this study, we quantify the effects of the phased evacuation strategy on evacuation.
- **Prohibiting on-street parking on "Red Flag" days.** On-street parking reduces the number of accessible lanes, which in turn reduces road capacity and storage, causing delays in the evacuation progress (Cao et al., 2017, Wijayaratna and Wijayaratna, 2016). Therefore, this scenario analyzes the quantitative impact of prohibiting on-street parking when fire danger is high (i.e., Red Flag Days).

For each set of strategy variables, base case values were chosen for comparison. Details of each strategy are given in Table 2.

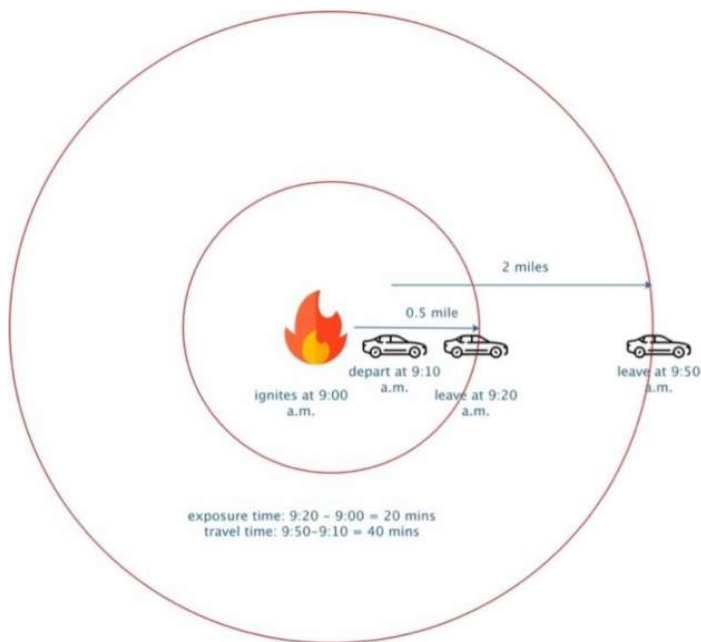
**Table 2. Description of Scenarios**

Strategy	Options (baseline value <u>underlined</u> )	Description
Vehicle reduction	<u>1 person/vehicle</u>	1. Reduce the number of vehicles used for evacuation, mainly through carpooling by each household or several nearby households.
	2 persons/vehicle	2. The baseline case assumes that there is no car-pooling, everyone drives a vehicle.
	3 persons/vehicle	3. The alternative cases assume increasing levels of carpooling.
	4 persons/vehicle	
	5 persons/vehicle	
Phased evacuation	<u>0 min</u>	1. Evacuation zone is divided into three zones based on distance to the fire origin.
	15 mins (day) or 20 mins (night)	2. During the day, it is assumed that people can receive the warnings quickly and prepare for the evacuation swiftly, while during the night, evacuee's response time of becomes longer as they need more time to prepare.
	30 mins (day) or 40 mins (night)	3. The baseline case assumes "no phased evacuation:" all vehicles in the three zones have the same departure time.
	45 mins (day) or 60 mins (night)	4. The alternative cases assume that the evacuation orders are staggered for the three zones at certain time intervals with those zones closest to the fire going first.
Prohibiting on-street parking	<u>No street parking</u>	1. On-street parking can affect the number of lanes of roads and further limit road capacity (vehicles/hour) and road storage (vehicles/km).
	With street parking	2. The baseline case assumes there is no on-street parking. 3. The alternative case assumes that all residential roads have on-street parking. According to some studies, street parking can reduce the road capacity by 16-35% (Biswas et al., 2017, Wijyaratna, 2015). As there is no research on street parking in Marin County, we used the average of the reduction values from the existing studies, which is 25%.



## Evaluation of Evacuation Strategies

In this study, two commonly used evaluation performance indicators were employed to evaluate the outcomes under different evacuation strategies: average travel time and average exposure time to the fire hazard. The first metric represents the average time spent in the evacuation process, from leaving the origin to reaching a point at least two miles away from the dynamic fire area. We assumed that reaching two miles away guarantees the evacuees' safety. The second metric is the average fire exposure time, which is represented by the average duration of time that evacuees are within a half-mile radius of the active fire front. Since this area is considered especially dangerous, it is crucial to know how long an evacuee stays in such a hazardous zone, which reflects the average level of threat that they face. Figure 5 illustrates an example of how to calculate the travel time and exposure time.

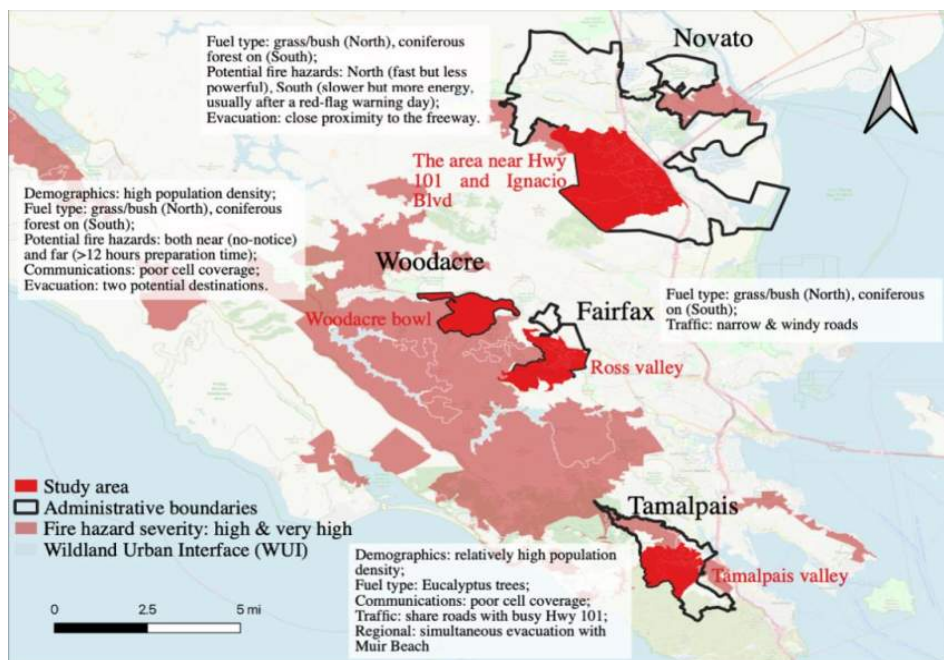


**Figure 5. Illustration of Evacuation Time and Exposure Time Calculations**

## Case Studies

Given the multiplicity of small communities in WUI areas in California and their susceptibility to wildfire threats and losses each year, it is imperative to work with local communities and their planning and fire prevention agencies to find practical and generalizable solutions to address wildfire threats. This study compared the effectiveness of different evacuation response/policy options through scenario testing with control variables.

In previous research, we recognized that the randomness and unpredictability of wildfires, insufficient communications options, as well as the disproportional high evacuation demand in WUI areas are the main factors causing bottlenecks in the evacuation process (Zhao and Wong, 2021). Recognizing the need for designing and upgrading wildfire evacuation strategies for small WUI communities, we partnered with the Marin Wildfire Prevention Authority (MWPA), the single agency in Marin County responsible for preventing wildfire threats, to test the applicability of some commonly adopted evacuation measures over a wide set of case study characteristics and scenarios. MWPA identified four neighborhoods in Marin County as representative case study areas (Figure 6). These four sites represent diverse fire, and traffic characteristics in high-risk communities.



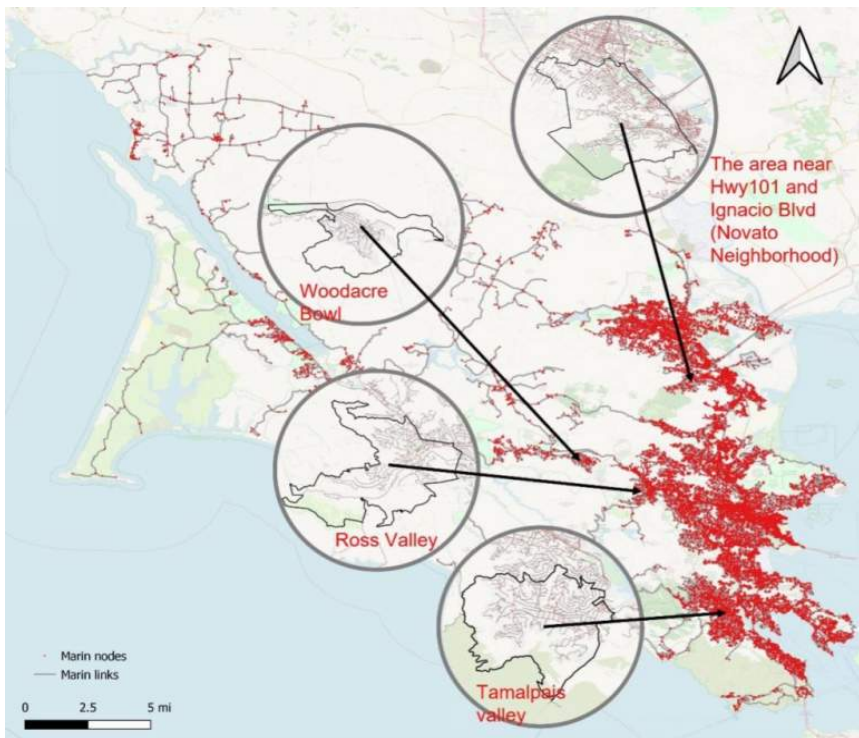
**Figure 6. Four Study Areas in Marin County and Fire Hazard Areas**

## Scenario Development

This section explains the development of the various scenarios. We first constructed a model of the existing road network. We then chose a fire ignition location for each study area and developed a model to simulate the fire's propagation and obtained data on the background traffic travelling through Marin County. Finally, we calculated the number of persons and vehicles that would be evacuating each study area during the daytime and nighttime scenarios.

### Road Network

The simulated evacuations occur in Marin County, CA. Since background traffic may significantly affect evacuation efficiency the road network used in the simulation models includes not only the four study areas, but all roads in Marin County. The road network for the study area was obtained from OSMnx, a python package (<https://osmnx.readthedocs.io/>), and then a directed node-and-link-based road network for Marin County was obtained (see Figure 7). Nodes and links are commonly used structures to represent a network, where a node represents one road intersection, and a link represents the stretch of road between two intersections. The final Marin County Road network consists of 40,209 links and 17,857 nodes.



**Figure 7. The Road Network of Marin County**



## Fire Propagation

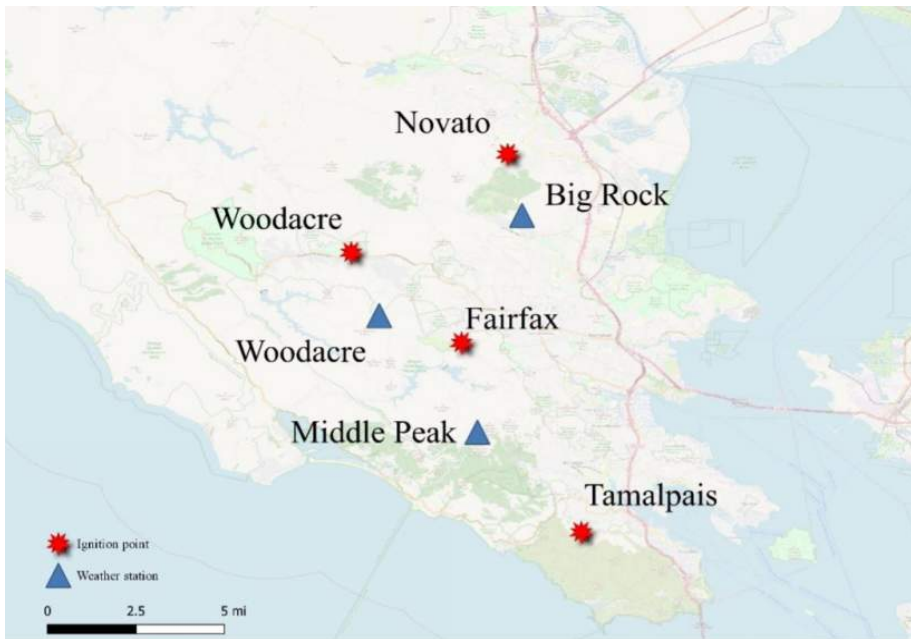
As introduced in the section entitled Wildfire Spread Simulation, several inputs are required to run the fire propagation simulations for the Marin County cases, including ignition locations, day and time of the fire (to retrieve meteorological information), data on terrain topography, and vegetation/fuel status. The ignition points (shown in Figure 8) were chosen to be within a two-mile radius from selected city boundaries and contain fuels such as grass or shrubs. Terrain topography and fuel data were collected from the LandFire database (<http://landfire.gov/>). The meteorological data were obtained from the FAMWeb Data Warehouse database (<http://www.wildfire.gov/application/famweb-data-warehouse>) for three stations: Station 042312 - Middle Peak; Station 042309 - Woodacre; Station 042310 - Big Rock. These stations were considered the most suitable for the proposed scenarios due to their proximity and data availability. The locations of these weather stations are also shown in Figure 8.

The typical wildfire season runs from May to November in California, though recently year-long fire threats are becoming more common. For this study, the hypothetical fire event was set to occur on August 8, 2020, the day when the Lightning Complex Fires occurred. The meteorological data for the study areas were extracted from the above identified weather stations for this day.

For the four study areas in Marin County most residents typically work outside the area during the day and return in the evening. Given this, we chose two ignition times: 1 am, when most people are at home and the evacuation travel demand is the highest, and 9 am, when most people have left for work or other places and fewer evacuation vehicles are needed. This produced a total of eight simulations for the four case study areas, with two scenarios per area (daytime and nighttime).

The meteorological conditions for the fire simulations were slightly adjusted for some scenarios to produce 'dangerous' or 'worst case' scenarios, which would trigger evacuations. In some cases, the fire simulations using the actual recorded data would generate fire propagation scenarios that reach the city's boundaries; in others, this was not possible within the simulation time window of 12 hours. In the case of Ross Valley, fire simulations using the actual recorded meteorological data were a half mile away from the WUI boundary of the town, which likely would not trigger an evacuation. For this reason, the wind direction was slightly adjusted to create fire spread that reaches the Ross Valley boundary. The actual recorded meteorological parameters for Ross Valley on

August 8, 2020, and the modified inputs for the fire simulation are given in Table 3. Figures 9-12 illustrate the fire progression for Ross Valley, Woodacre Bowl, Tamalpais Valley, and the Novato Neighborhood, respectively.

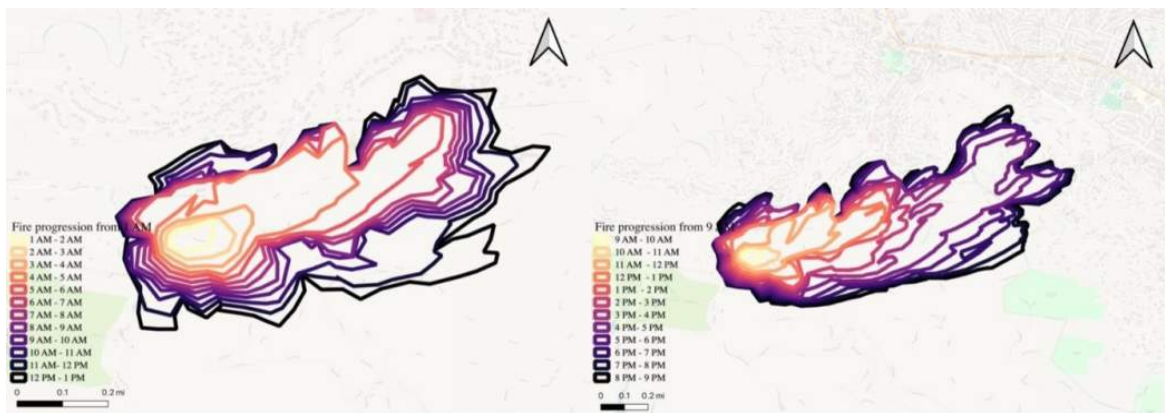


**Figure 8. Ignition Points for the Four Cases and the Locations of Weather Stations**

**Table 3. Modified Meteorological Parameters for the Ross Valley Scenario**

Date	Time	Temperature (°F)	RH (%)	Wind Speed (GUTS) mph	Real Wind Direction (°)	Used Wind Direction (°)
2020/8/18	01:00 a.m.	82	36	18	304	218
2020/8/18	02:00 a.m.	82	36	18	297	215
2020/8/18	03:00 a.m.	81	39	16	311	221
2020/8/18	04:00 a.m.	80	41	18	297	215
2020/8/18	05:00 a.m.	80	39	18	324	234
2020/8/18	06:00 a.m.	80	37	19	324	234
2020/8/18	07:00 a.m.	80	41	19	305	215

Date	Time	Temperature (°F)	RH (%)	Wind Speed (GUTS) mph	Real Wind Direction (°)	Used Wind Direction (°)
2020/8/18	08:00 a.m.	82	42	17	335	245
2020/8/18	09:00 a.m.	86	31	16	322	232
2020/8/18	10:00 a.m.	88	22	18	313	223
2020/8/18	11:00 a.m.	93	26	17	324	234
2020/8/18	12:00 p.m.	91	25	14	330	240
2020/8/18	01:00 p.m.	93	23	19	332	242
2020/8/18	02:00 p.m.	94	20	21	314	224
2020/8/18	03:00 p.m.	92	20	22	298	215
2020/8/18	04:00 p.m.	88	22	28	309	219
2020/8/18	05:00 p.m.	87	17	36	303	215
2020/8/18	06:00 p.m.	84	16	39	311	221
2020/8/18	07:00 p.m.	82	15	36	327	237
2020/8/18	08:00 p.m.	80	17	39	283	230

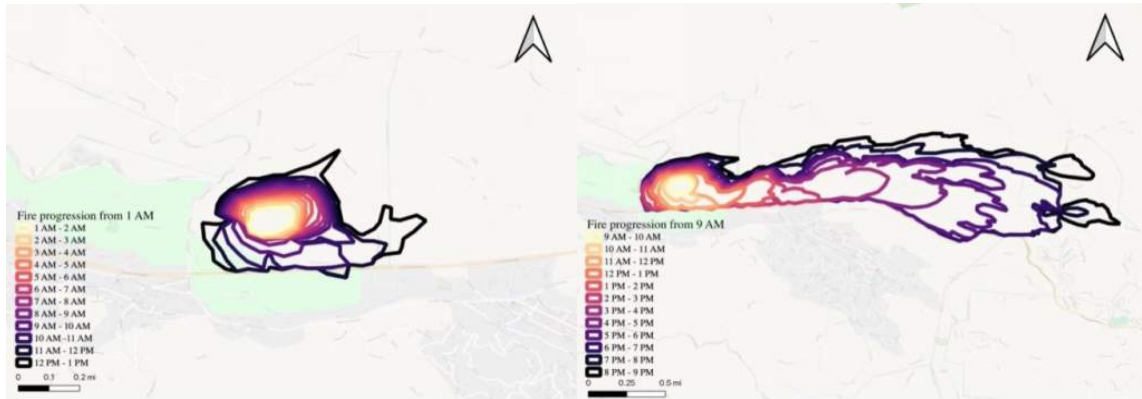


(a) Fire Progression from 1 a.m.

(b) Fire Progression from 9 a.m.

**Figure 9. Fire Propagation for Ross Valley Scenarios**

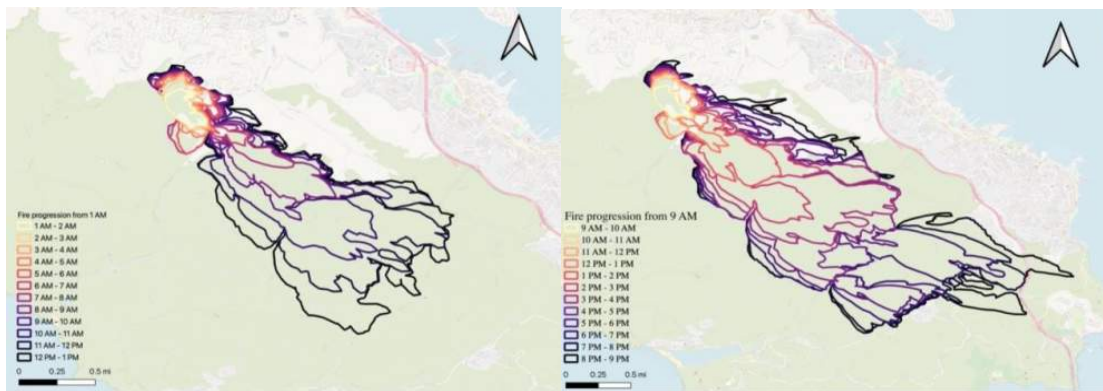




(a) Fire Propagation from 1 a.m.

(b) Fire Propagation from 9 a.m.

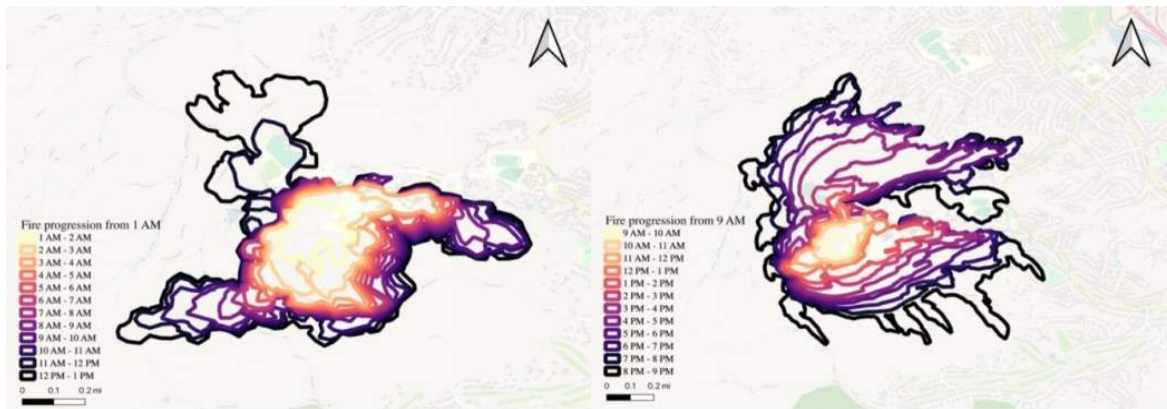
**Figure 10. Fire Propagation for Woodacre Bowl Scenarios**



(a) Fire Propagation from 1 a.m.

(b) Fire Propagation from 9 a.m.

**Figure 11. Fire Propagation for Tamalpais Valley Scenarios**



(a) Fire Propagation from 1 a.m.

(b) Fire Propagation from 9 a.m.

**Figure 12. Fire Propagation for Novato Neighborhood Scenarios****Background Traffic**

The background traffic origin/destination (OD) demand data was obtained from the Metropolitan Transportation Commission (MTC) at <https://mtcdrive.app.box.com/v/pba50-2015-TM152-IPA-17>. An activity-based travel model was used to simulate the travel-related choices of Bay Area residents. The model used data from the MTC 2015 Bay Area Travel Behavior survey, which included two-day travel diaries from over 15,000 households. The model's unit of analysis was a "tour" which represents a closed or half-closed chain of trips starting and ending at home or the workplace; it includes at least one destination and at least two successive trips. The model generated tour and trip lists for each resident. The individual and joint trips were later aggregated into origin-destination metrics.

The MTC traffic OD data covers trips in the whole Bay Area. However, in this study, our focus was limited to Marin County. Therefore, trips which do not pass through Marin County were filtered out. The remaining trips that did pass through Marin County were truncated to keep only the trip segments within Marin County to reduce the subsequent computing time. This process is illustrated in Figure 13. After the pre-processing, the number of background OD trips during one modeled day was 823,916. The spatial and temporal distributions of the background traffic OD is shown in Figures 14-15. The ODs are concentrated in the eastern part of the Marin County. The largest number of trips were those originating from/destined to the Golden Gate Bridge and Richmond-San Rafael Bridge. During the peak hours from 7 a.m.-10 a.m. and 3 p.m.-6 p.m., the number of vehicles accounted for around 50 percent of the total background vehicles in a day. If a wildfire occurs during peak hours, then the presence of background vehicle traffic could have a major impact on the evacuating vehicles.

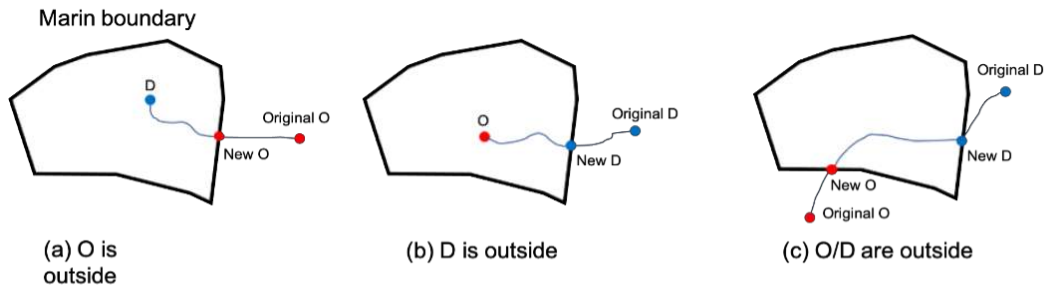


Figure 13. Change of O/D which are outside Marin County to the border of Marin

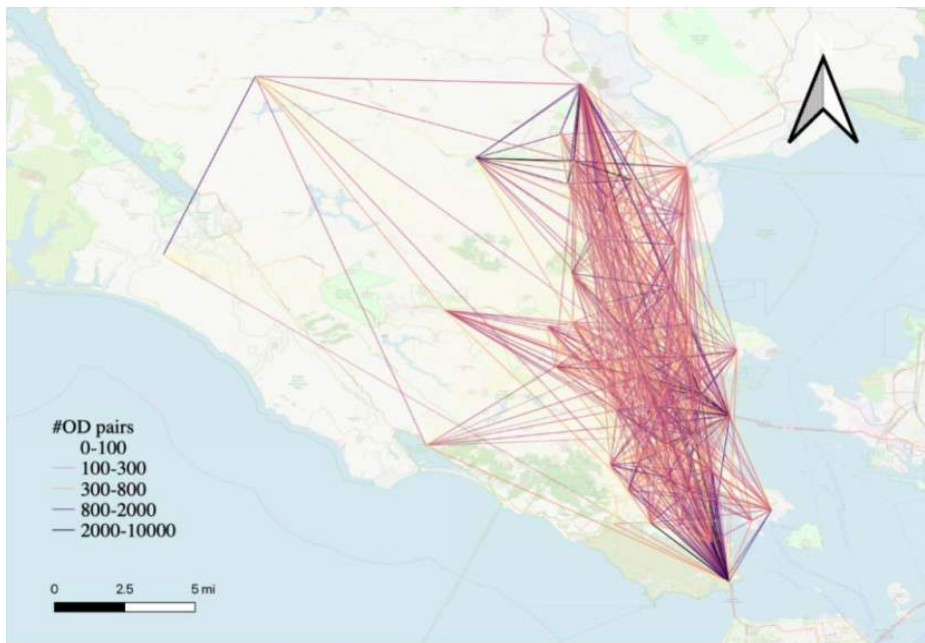
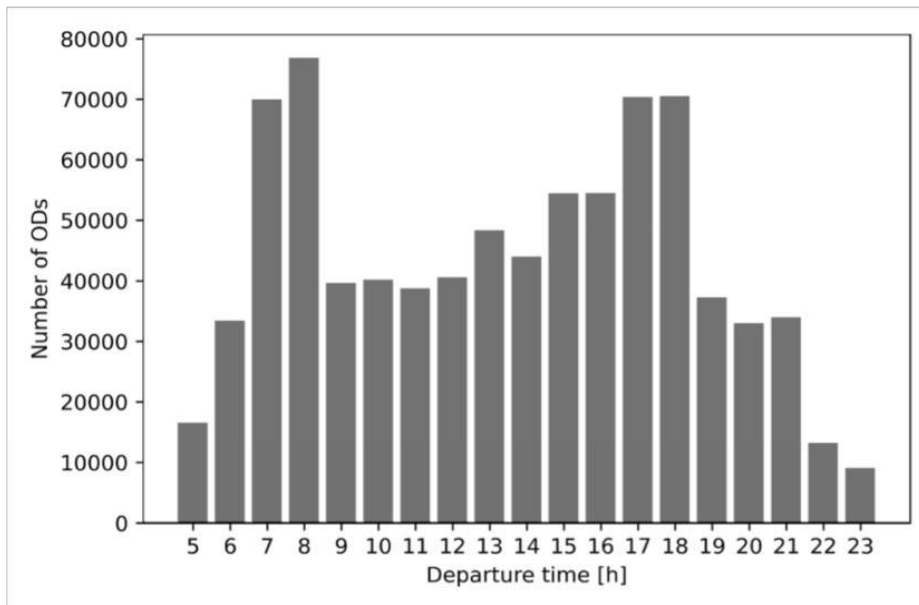


Figure 14. The Spatial Distribution of Background OD pairs within Marin County





**Figure 15. Temporal Distribution of Background OD Pairs within Marin County**

### Evacuee OD Demand

The number of residents who need to be evacuated is different between the daytime scenario and the nighttime scenario because many residents would be at work during the day, while most would be at home at night. From the background OD data, the location where each person begins their day is known and this place is regarded as their residence. Using the background OD data, it was possible to determine how many residents were at home when the fire ignited, and these residents were classified as evacuees.

Table 4 provides a summary of the number of evacuees for each scenario.

The simulated evacuation destinations were set on the border of Marin County and other counties, as depicted in Figure 16. Four evacuation destinations were available for evacuees to choose from, and the assumption was that individuals would select the closest option to them. Generally, the evacuees from Tamalpais Valley would choose the southern two destinations (Golden Gate Bridge and Richmond-San-Rafael Bridge) as their destinations; evacuees from Ross Valley and Woodacre Bowl would choose the middle destination; and evacuees from the Novato Neighborhood would choose the northern two destinations (Redwood Highway and Sears Point Bridge) and the middle destination (Richmond-San-Rafael Bridge). The treatment of destination choices is simplistic and does not consider factors such as shelter availability, proximity to resources, and destination safety, which all may affect an evacuee's decision. To minimize these outside influences, this study focused mainly on the most dangerous part of the trip, the time taken to reach a point two miles away from the

final fire extent. (The time taken to reach the destination is not reported here, as it provides minimal information on the evacuees' risks due to the proximity to the fires.)

The evacuees' departure times were based on a truncated normal distribution (i.e., truncated around the mean  $\pm$  one standard deviation). The means and the standard deviations of the departure times are different for the nighttime evacuation and daytime evacuation scenarios. We assumed that during the day people are more likely to receive fire alert messages from various media promptly and take action more quickly. Conversely, in the late evening people are likely asleep and less likely to be aware of such messages. Therefore, for the daytime evacuation, the mean departure time was set to 9:10 a.m.  $\pm$  10 minutes, while for the nighttime evacuation, the mean departure time was set to 1:20 a.m.  $\pm$  20 minutes.

**Table 4. Summary of Number of Evacuees for Different Scenarios**

Study area	Fire ignition time	# residents	# residents who have departed to other places before the fire occurs	# evacuees
Ross Valley	9 a.m.	4,893	2,928	1,965
	1 a.m.	4,893	0	4,893
Woodacre	9 a.m.	2,196	840	1,356
	1 a.m.	2,196	0	2,196
Bowl	9 a.m.	5,492	3,482	2,010
	1 a.m.	5,492	0	5,492
Valley	9 a.m.	17,519	9,857	7,662
	1 a.m.	17,519	0	17,519

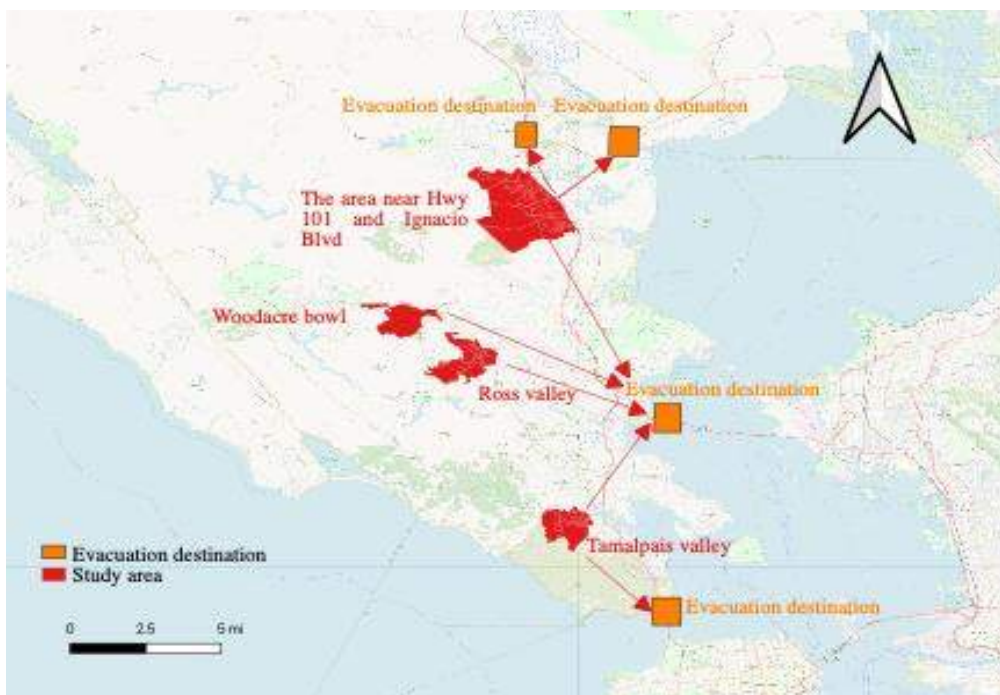


Figure 16. Evacuation Destinations



## Validation of the Simulation

Before evaluating the evacuation strategies, we conducted a validation analysis on the "no evacuation" scenario, where only background traffic OD data was used to run the traffic simulations, and the simulated traffic volumes at key locations on several main roads at different times were compared with real observations (traffic count data) collected by Fehr&Peers (<https://www.fehrandpeers.com/>). The comparison results are presented in Table 6 and 6. These two tables show the differences between the traffic volume generated by simulation and count data during morning peak hours and afternoon peak hours. As shown, the percentage difference in volume on most roads is less than 20 percent. According to the 2017 California Regional Transportation Plan Guidelines, a commonly used criterion for volume-count validation is a percentage root mean square error less than 40 percent (Commission, 2017). The value of the percentage root mean square error of our simulation is 18.9 percent, much less than the threshold. Therefore, our simulation performs well.

**Table 5. Comparison of Model Traffic and Counts from Roadside Detectors during Morning Peak**

#	Type	Direction	Location	# vehicles during morning peak period (6 a.m.-10 a.m.)		Percentage difference
				Model	Count	
1	Mainline	North bound	US 101 at San Francisco /Marin County Line	12,784	10,000	27.84%
2	Mainline	South bound		21,094	17,984	17.29%
3	Mainline	North bound	US 101 at Corte Madera Creek	16,591	13,000	27.60%
4	Mainline	South bound		25,718	20,000	28.59%
5	Mainline	North bound	US 101 at San Rafael Creek	16,042	19,000	-15.57%
6	Mainline	South bound		23,148	28,000	-17.33%
7	Mainline	East bound	I-580 at Contra	8,601	7,900	8.87%
8	Mainline	West bound	Costa/Marin County Line	13,947	12,800	8.96%
9	Mainline	North bound	US 101 at Sonoma /Marin County Line	6,607	8,100	-18.43%
10	Mainline	South bound		11,031	11,000	0.28%

**Table 6. Comparison of Model Traffic and Counts from Roadside Detectors during Afternoon Peak**

#	Type	Direction	Location	# vehicles during afternoon peak period (3 p.m.-7 p.m.)		Percentage of the difference
				Model	Count	
1	Mainline	North bound	US 101 at San Francisco /Marin County Line	17,201	19,000	-9.47%
2	Mainline	South bound		13,364	13,000	2.80%
3	Mainline	North bound	US 101 at Corte Madera Creek	20,304	21,000	-3.31%
4	Mainline	South bound		21,212	20,000	6.06%
5	Mainline	North bound	US 101 at San Rafael Creek	20,522	22,000	-6.72%
6	Mainline	South bound		17,477	20,000	-12.62%
7	Mainline	East bound	I-580 at Contra Costa/Marin County Line	12,802	12,700	0.80%
8	Mainline	West bound		9,537	8,600	10.90%
9	Mainline	North bound	US 101 at Sonoma /Marin County Line	8,576	11,900	-27.93%
10	Mainline	South bound		5,756	8,000	-28.05%

## Impact of Background Traffic

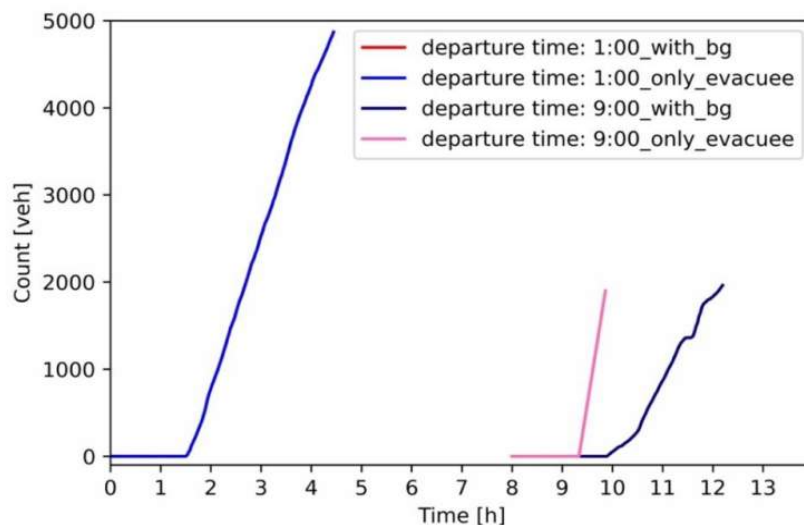
This section analyzes the impact of background traffic on evacuation efficiency. We conducted comparative experiments to show the difference in evacuation time between the scenarios with background traffic and without background traffic at each of the four study sites. The results are shown in Figures 17-20. These figures show the number of evacuees that reach their destinations over time with/without background traffic and during the daytime and nighttime scenarios for the four study sites. Table 7 shows the average travel times for each scenario.

These figures show that background traffic has almost no impact on nighttime evacuations (the nighttime curve is entirely covered up by daytime curve) but has a significant impact on daytime evacuations. The results

make sense as there is little background traffic at 1 a.m. and consequently, there would be little effect on evacuation times. In daytime, there are many more commuting vehicles than evacuating vehicles; therefore, the background traffic would have a large influence. Table 7 shows that, when the evacuation/fire ignition starts at 9 a.m., the average evacuation times with background traffic are one and a half hours more for Ross Valley, one- and three-quarter hours more for Woodacre Bowl, one third of an hour more for Tamalpais Valley, and a half hour more for the Novato Neighborhood than without background traffic. These differences highlight the importance of taking background traffic into account when developing evacuation strategies, as it can significantly affect evacuation efficiency.

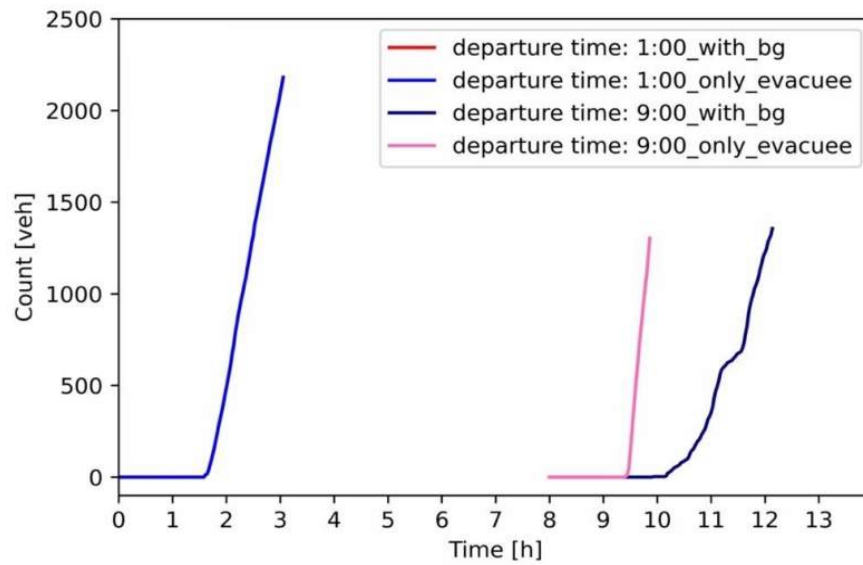
The impact of background traffic on the evacuation of Ross Valley and Woodacre Bowl is much larger than that of Tamalpais Valley and the Novato Neighborhood. Figure 21 shows that the exits for Ross Valley and Woodacre are concentrated on Sir Francis Drake Blvd, which is a very busy main road. When an evacuation is ordered, it will cause a heavy traffic jam on this road. Compared with these two places, Tamalpais Valley and Novato Neighborhood have many widely dispersed exits. Even if the background traffic volume is high, the evacuees can find many exit routes, hence, the impact of background traffic on the evacuation is comparatively small in these areas.

Overall, background traffic needs to be taken into account when planning for daytime evacuations, but its impact differs with the topology of the road networks.

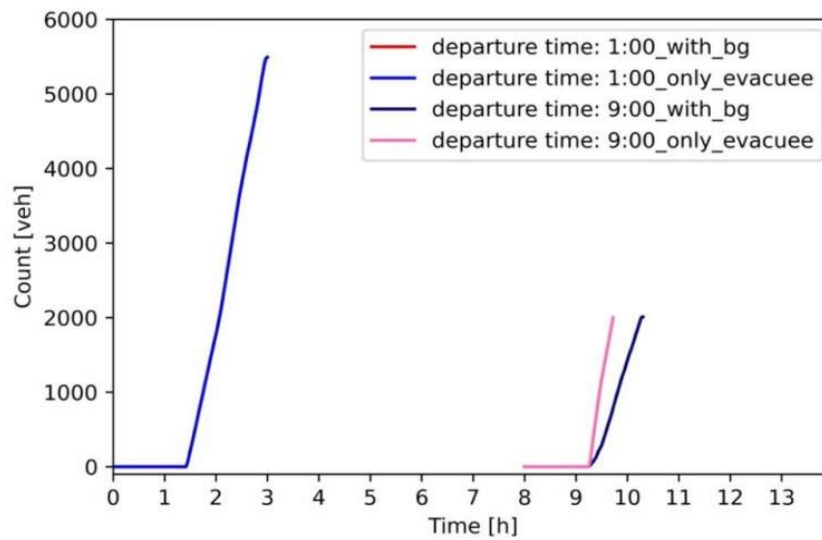


**Figure 17. Arrival Times for Ross Valley**





**Figure 18. The Arrival Times for Woodacre Bowl**



**Figure 19. The Arrival Times for Tamalpais Valley**

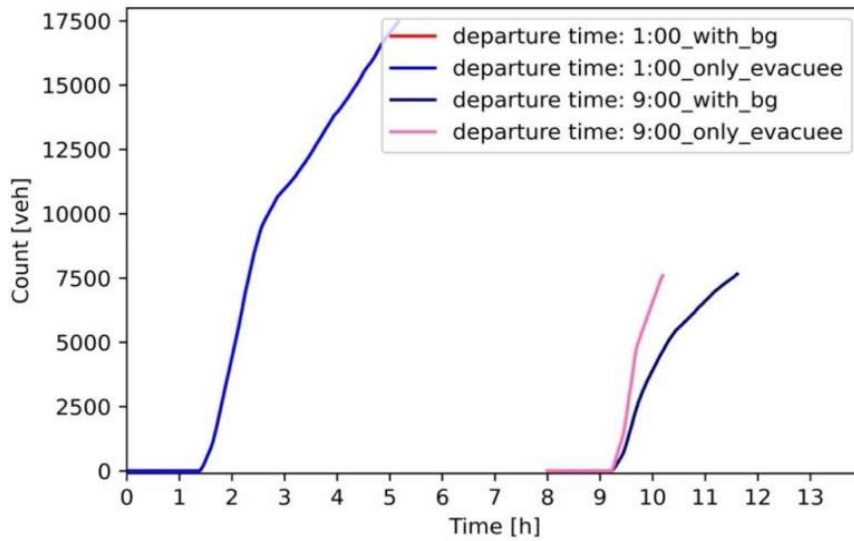
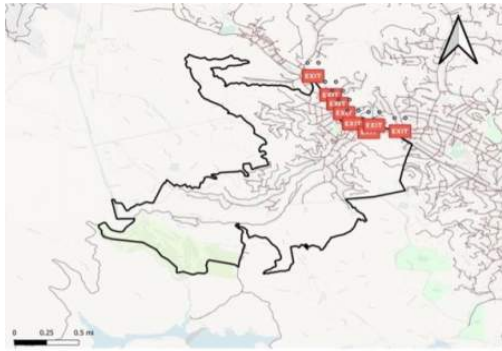


Figure 20. Arrival Times for Novato Neighborhood

Table 7. Comparison of Average Evacuation Time With and Without Background Traffic

Study site	Fire ignition time	Average evacuation time [h]		Difference	
		With background	Without background	Absolute	Percent
Ross Valley	1 a.m.	1.30	1.30	0	0%
	9 a.m.	1.79	0.28	1.51	532%
Woodacre Bowl	1 a.m.	0.71	0.71	0	0%
	9 a.m.	2.04	0.33	1.71	518%
Tamalpais Valley	1 a.m.	0.58	0.58	0	0%
	9 a.m.	0.49	0.16	0.33	206%
Novato Neighborhood	1 a.m.	1.21	1.21	0	0%
	9 a.m.	0.82	0.34	0.48	141%



(a) topology and exits for Ross Valley.



(b) topology and exits for Woodacre Bowl



(c) topology and exits for Tamalpais Valley



(d) topology and exits for Novato Nhbd

**Figure 21. Network Topologies and Exits for the Four Case Study Areas**

## Strategy Analysis

The purpose of this study was to understand the applicability of commonly used evacuation strategies under different settings. These strategies, including vehicle reduction, phased evacuation, and banning on-street parking were shown in Table 2 above. Each alternative strategy option was simulated, and the results compared against the base scenario (the underlined values in Table 2). The following sections present evacuation performance metrics and other results for the baseline scenario and the various alternative scenarios. Recommendations are given at the end.

### Baseline

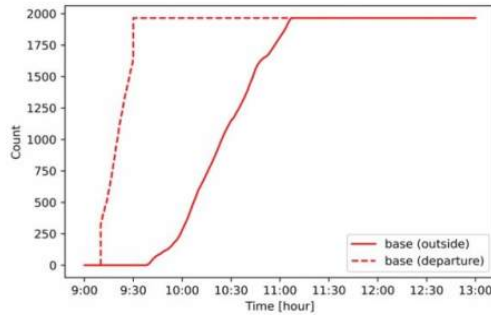
The base cases for the wildfire simulation for the four case studies are: no car-pooling, no phased evacuation, and no on-street parking. Figures 22-26 show the number of evacuees that reach a point at least two miles



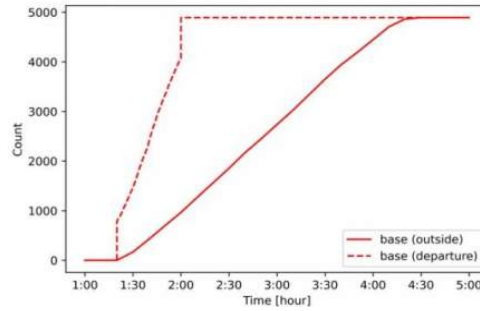
outside the fire area over time, number of evacuees still within a half mile of the fire area over time, and the cumulative person-hours of exposure to the fire over time for the four case studies.

For the daytime evacuation, the distribution of departure times follows a normal distribution with a mean value of 9 hours 20 minutes and a standard deviation of 10 minutes. For the nighttime evacuation, the distribution follows a normal distribution with a mean of 1 hour 40 minutes and a standard deviation of 20 minutes. This is consistent with the research of Zhao et al. (2021) which assumed that departure time would follow a normal distribution since once residents receive an evacuation notification, most will need time to prepare to leave and this will delay the peak departure time.

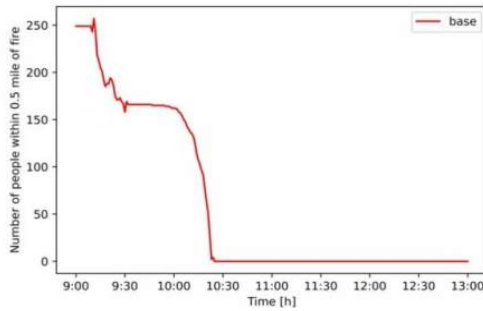
Figures 22(a)-(f) illustrate how the evacuation process for the Ross Valley proceeds. For the daytime evacuation scenario (fire ignites at 9 a.m.), all vehicles would reach two miles away from the fire area before 11:11 a.m. (solid blue line in Figures 22(a)-(b), and the average evacuation time would be one and a quarter hour. For the nighttime evacuation scenario (fire ignites at 1 a.m.), all vehicles would reach two miles away from the fire area before 4:15 a.m. (solid blue line in Figure 22(b)), and the average evacuation time would also be about one and a quarter hour. The average evacuation time for the nighttime scenario is similar to that during the day despite the much-reduced background traffic, mainly because of the higher number of evacuees in the nighttime scenario. The impact of the background traffic is nevertheless observed in another of the daytime scenarios. Figure 22(c) shows that, during the period of 9:30 a.m.-10 a.m., very few additional vehicles leaving the fire danger area make it beyond one half mile of the fire because background vehicles block the evacuation routes during these morning peak hours. However, this does not occur in the nighttime case (Figure 22(d)) when background traffic is far less. Figures 22(e)-(f) present the cumulative exposure time of all the evacuees for the daytime and nighttime cases. The cumulative exposure time when all the evacuees reach the destination is about 230 hours for the daytime scenario and 1050 hours in nighttime scenario. On average, though, evacuees in the nighttime scenario are less exposed to the fire, about seven minutes per person compared to 13 minutes for those in the daytime scenario.



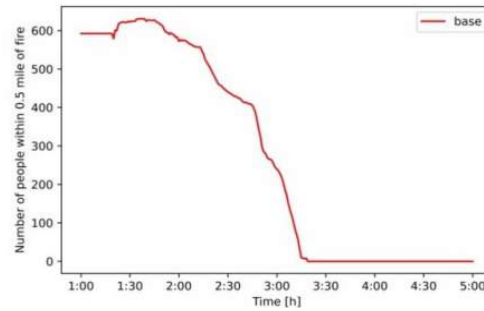
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



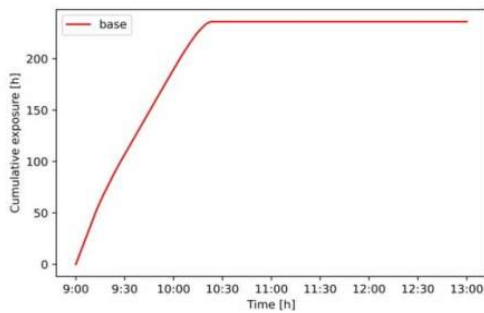
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



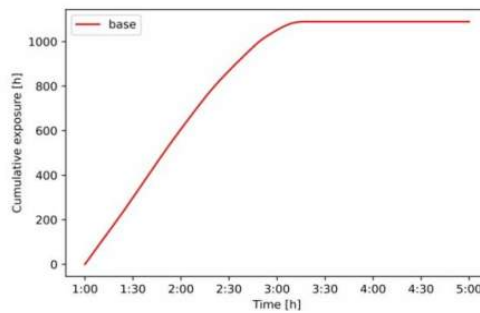
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative fire exposure (hours) (daytime scenario)

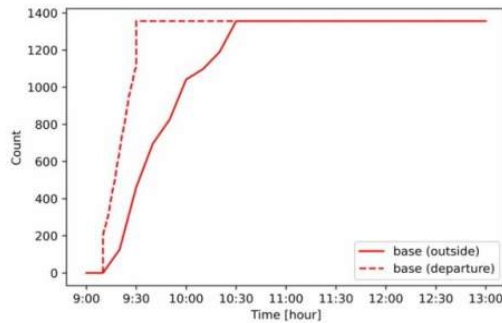


(f) Cumulative fire exposure (hours) (nighttime scenario)

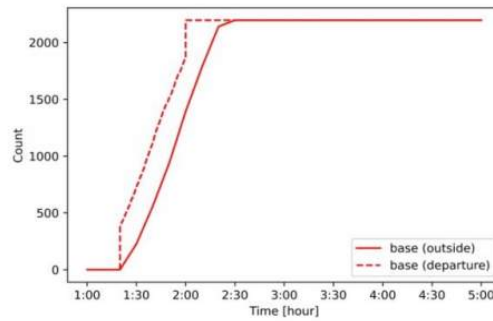
**Figure 22. Baseline Case for Ross Valley**

For the Woodacre Bowl case, if the fire ignites at 9 a.m., all vehicles reach two miles away from the fire area before 10:30 a.m., while if the fire ignites at 1 a.m., all vehicles reach two miles away before 2:30 a.m. Figures 23(c)-(d) show that the number of evacuees within a half mile of the fire first increases and then plummets. The reason for the initial increase is that the fire ignites one mile away from the residential area but covers the sole evacuation road. Therefore, evacuees need, first, to enter the fire area and then evacuate to the safe locations. Figures (e)-(f) present the cumulative exposure time of all the evacuees for the daytime and nighttime scenarios. Cumulative exposure when all the evacuees reach the safe destination is about 100 hours in the daytime scenario and 120 hours in the nighttime scenario. On average, each evacuee is exposed to the fire for around four and a half minutes in the daytime scenario and just over three minutes in the nighttime scenario.

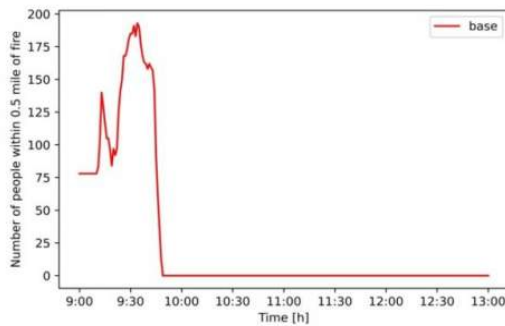




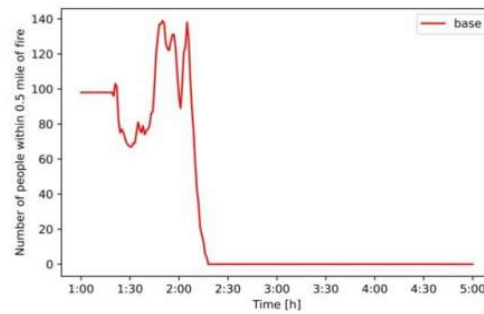
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



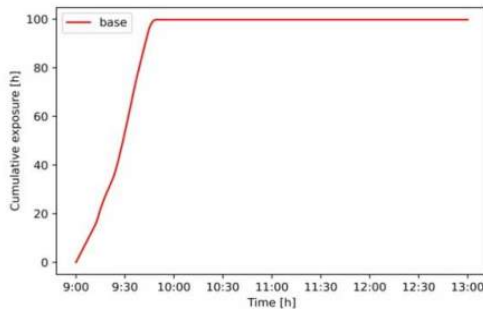
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



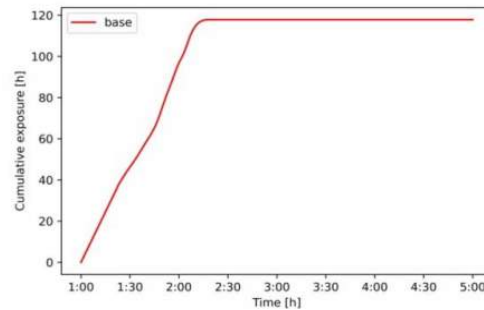
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



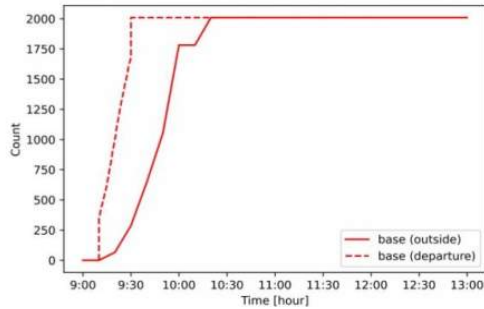
(e) Cumulative fire exposure (hours) (daytime scenario)



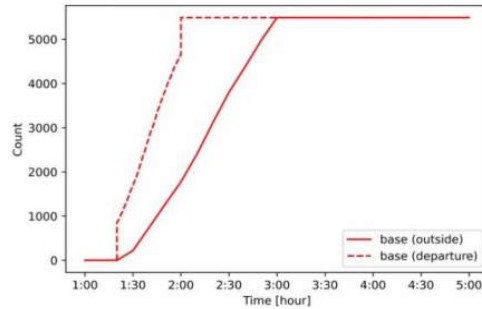
(f) Cumulative fire exposure (hours) (nighttime scenario)

**Figure 23. Baseline Case for Woodacre Bowl**

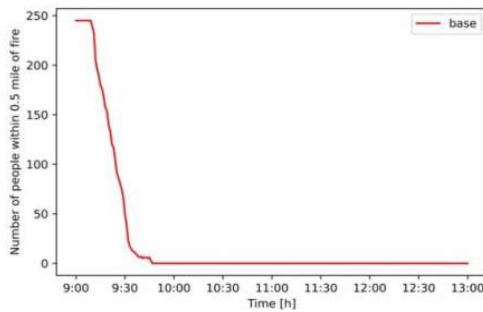
For the Tamalpais Valley case, if the fire ignites at 9 a.m., all vehicles will reach two miles from the fire before 10:20 a.m., while if the fire ignites at 1 a.m., all vehicles reach two miles away before 3 a.m. The evacuation time in the nighttime scenario is longer than in the daytime scenario because the number of evacuees is larger in the nighttime scenario. Even though there is little background traffic in the nighttime, the combined effect of having so many evacuees severely affect evacuation efficiency. Figures 24(c)-(d) illustrate that the evacuees move out of the danger area quickly within 45 minutes in the daytime, but it takes 100 minutes after the fire ignites in the nighttime. Figures 24(e)-(f) present the cumulative exposure time of all evacuees for the daytime and nighttime cases. The cumulative exposure when all evacuees reach the safe destination is about 90 hours in the daytime scenario and 650 hours in the nighttime scenario. On average, the evacuees in the nighttime scenario are exposed to the fire longer, for around three minutes, compared to seven minutes for those in the daytime scenario.



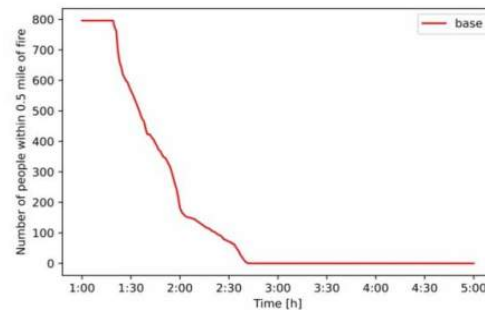
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



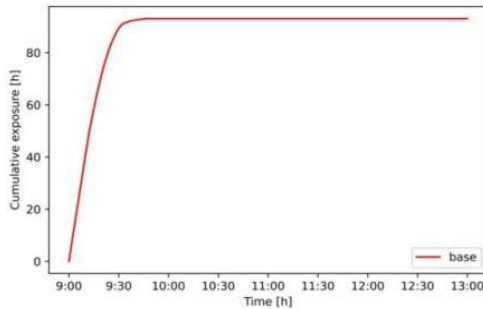
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



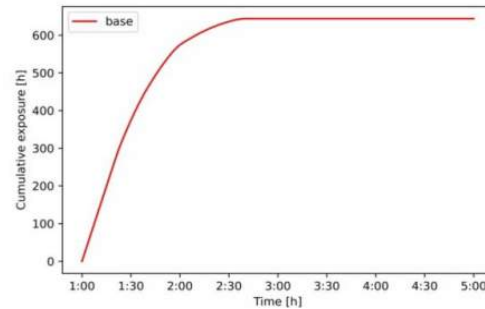
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)

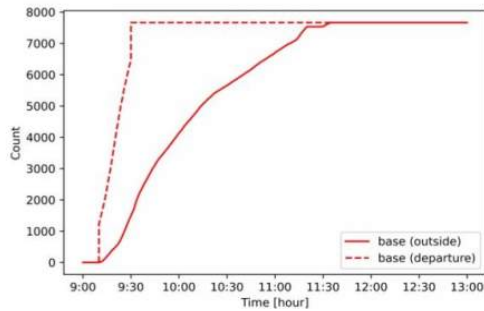


(f) Cumulative exposure (hours) (nighttime scenario)

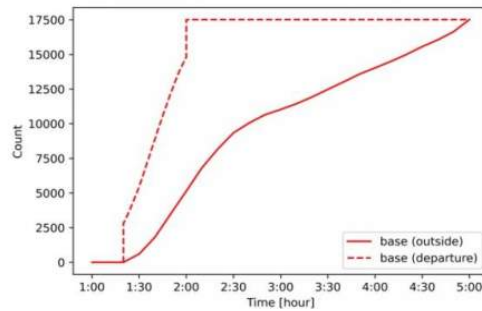
**Figure 24. Baseline Case for Tamalpais Valley**



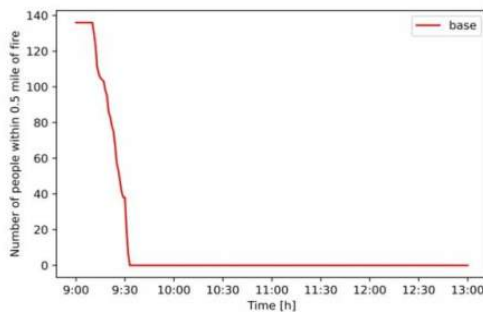
For the Novato Neighborhood case, if the fire ignites at 9 a.m., all vehicles reach two miles away before 11:40 a.m., while if the fire ignites at 1 a.m., all vehicles reach two miles away before 5:00 a.m. Figures 25(c)-(d) show that some evacuees become blocked from 2:00-3:00 a.m. Since there is little background traffic at this time, the backup is presumably due to downstream evacuating vehicles blocking the way of the upstream vehicles. Figures 25(e)-(f) present the cumulative exposure time for all evacuees to reach the designated safe destination in the daytime is about 50 hours and 500 hours in the nighttime. On average, each evacuee is exposed to the fire for around one minute in the daytime and two minutes in the nighttime.



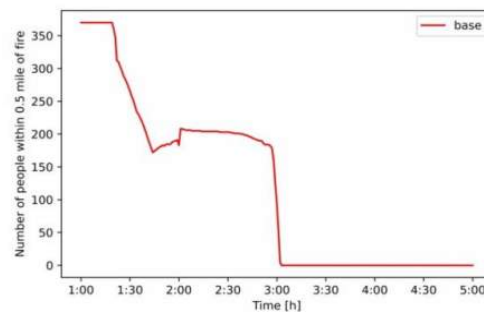
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



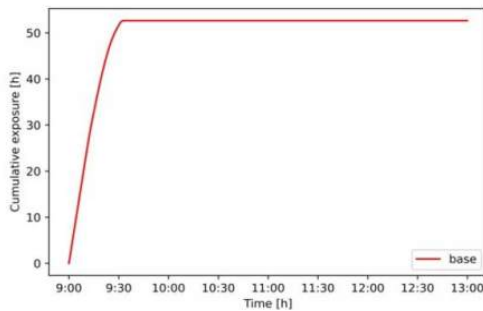
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



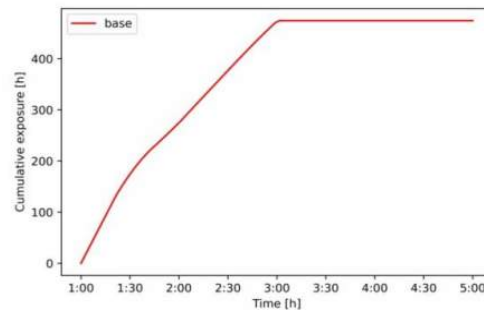
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 25. Baseline Case for Novato Neighborhood**

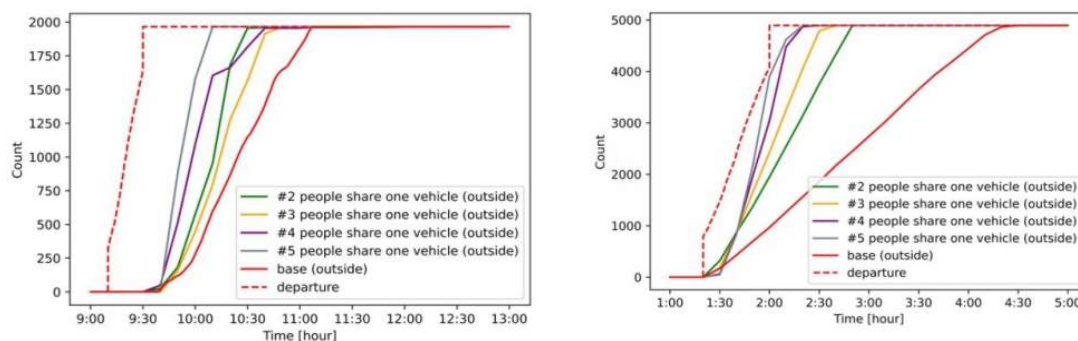
## Vehicle Reduction

In this section we analyze the impact of reducing the number of vehicles involved in an evacuation through carpooling based on our model. Figures 26-29 show the number of evacuees that would reach two miles away from the fire area over time from the fire's ignition, number of evacuees still within a half mile of the fire area over time, and cumulative exposure time to the fire over time depending on whether one, two, three, four or five persons share a single vehicle for each of the four case studies. Table 8 and Figures 30-31 present the average travel time and average exposure time for each of the five different carpooling assumptions.

For the Ross Valley case, Figure 26 shows that if each vehicle has an average of one, two, or five persons, all evacuees will reach two miles away from the fire area before 11:10 a.m., 10:40 a.m., and 10:10 a.m., respectively in the daytime scenario and all evacuees will reach two miles away from the fire area before 4:20 a.m., 2:50 a.m., and 2:20 a.m., respectively in the nighttime scenario. The number of persons who remain within a half mile of the fire area is lowest with four or five persons sharing one vehicle and nearly all leave the danger area much more quickly, while having only one person in each vehicle strands most evacuees in the congested danger area for around one and a half hours in the daytime scenario and two and a half hours in the nighttime scenario.

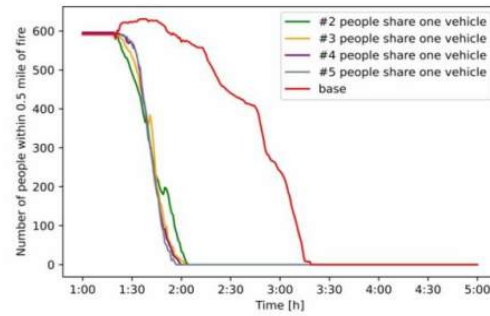
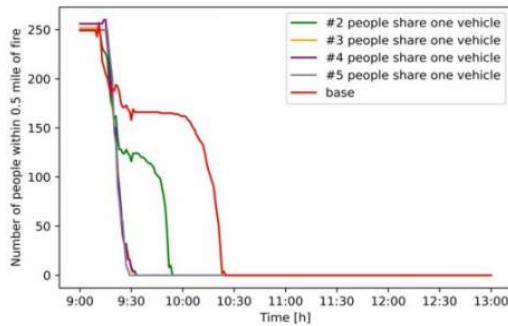
Table 8 shows that the average evacuation time decreases with more carpoolers. For each additional person sharing a vehicle, the average travel time will be reduced by about 10 percent. Further, average fire exposure time is reduced from about seven minutes without carpooling to about four minutes with two persons sharing one vehicle. When three or more persons share one vehicle, the average exposure time drops to about three minutes. With three or more persons per vehicle the fire exposure threat for all evacuees is a bit less than three minutes.

For the nighttime scenario, the average travel time significantly decreases to about 32 minutes if an average of two persons shares one vehicle, compared with around 74 minutes when there is no carpooling. Further, the average exposure time is reduced to about 5 minutes. When every vehicle is shared by three or more persons, the average travel time is reduced to a little over 15 minutes and the average exposure time stays the same at about 5 minutes.



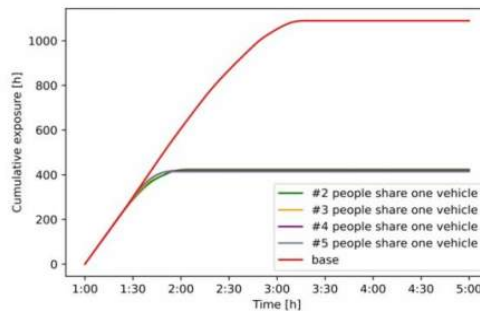
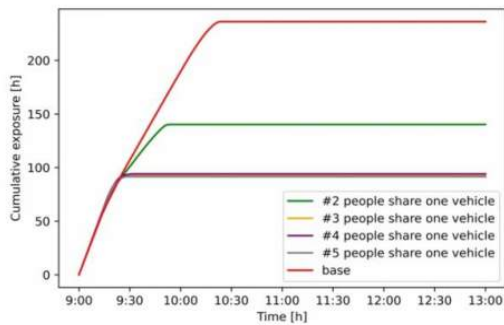


- (a) #vehicles that reach 2 miles away from the fire area (daytime scenario) (b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



- (c) #persons within 0.5 mile of fire (daytime scenario)

- (d) #persons within 0.5 mile of fire (nighttime scenario)



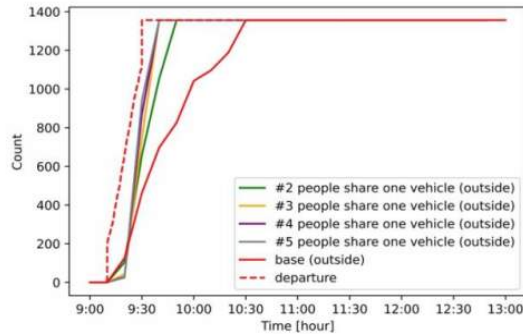
- (e) Cumulative exposure (hours) (daytime scenario)

- (f) Cumulative exposure (hours) (nighttime scenario)

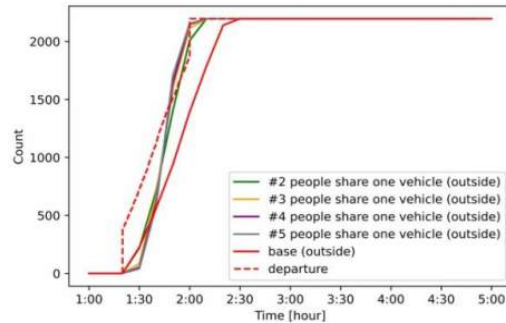
**Figure 26. Vehicle Reduction Strategy Performance Measures for Ross Valley**

For the Woodacre Bowl case, Figure 27 shows that if each vehicle carries an average of one, two, three, four or five persons, all evacuees reach two miles away from the fire area before 10:30 a.m., 9:50 a.m., 9:40 a.m., 9:40 a.m., and 9:40 a.m., respectively in the daytime scenario and two miles away from the fire area before 2:30 a.m., 2:25 a.m., 2:25 a.m., 2:25 a.m. and 2:25 a.m., respectively in the nighttime scenario. The number of persons who remain within a half mile of the fire area is lower if there are at least two persons per vehicle and nearly all evacuees leave the fire danger area much more quickly, while the having only one person in each vehicle strands most evacuees in the congested danger area for around 0.75 hour and 1.5 hours, respectively in the daytime and nighttime scenarios.

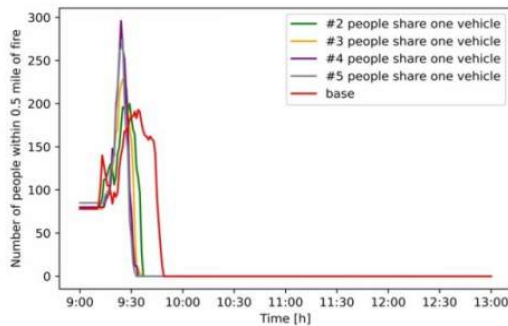
Table 8 shows that in the daytime scenario, the average evacuation time is reduced nearly half when there are at least two persons per vehicle. When there are three persons per vehicle the time for everyone to reach a safe location is reduced by over half, though there is not much additional improvement in evacuation efficiency when there are four or more persons per vehicle. The same is true for average exposure time which remains about three minutes when there are more than three persons per vehicle. In the nighttime scenario, attaining at least two persons per vehicle can already significantly reduce traffic jams and speed up the evacuation progress; reducing the average evacuation time by about 47 percent and limiting the average exposure time by around 30 percent. Again, any additional increase in carpooling provides only marginal improvement.



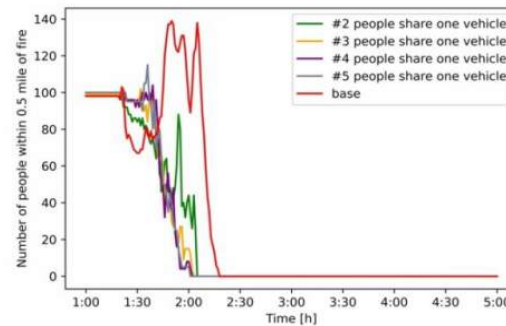
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



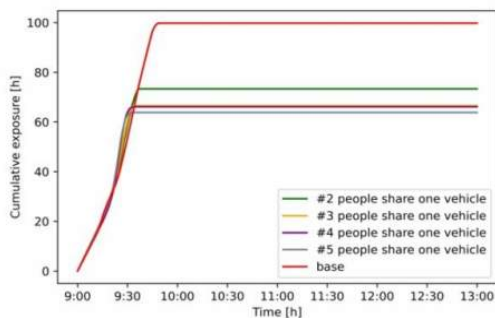
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



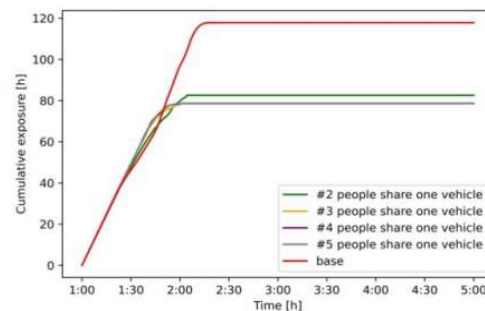
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



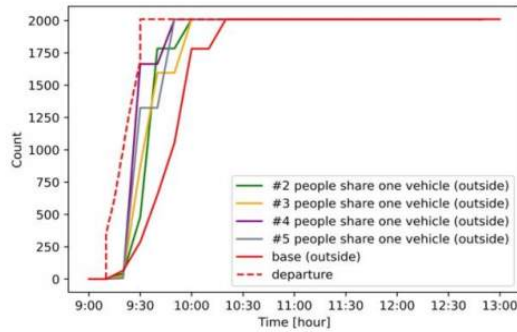
(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 27. Vehicle Reduction Strategy Performance Measures for Woodacre Bowl**

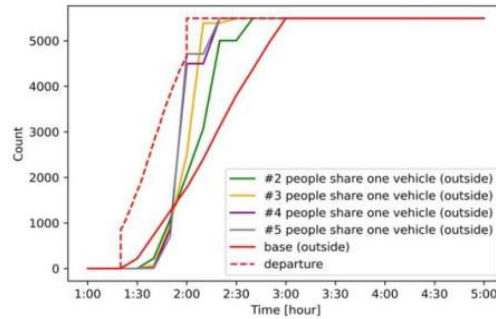


For the Tamalpais Valley case, Figure 28 shows that if evacuating vehicles carry an average of one, two, three, four or five persons, all evacuees will reach two miles away from the fire area before 10:20 a.m., 10:00 a.m., 10:00 a.m., 9:50 a.m., and 9:50 a.m., respectively in the daytime scenario and will reach two miles away from the fire area before 3:00 a.m., 2:40 a.m., 2:30 a.m., 2:20 a.m. and 2:20 a.m., respectively in the nighttime scenario. With at least two persons per vehicle nearly all evacuees leave the fire danger area much more quickly, while having only one person in each vehicle strands most evacuees in the fire danger area for around three quarters of an hour in the daytime scenario and one and three quarters hours in the nighttime scenario.

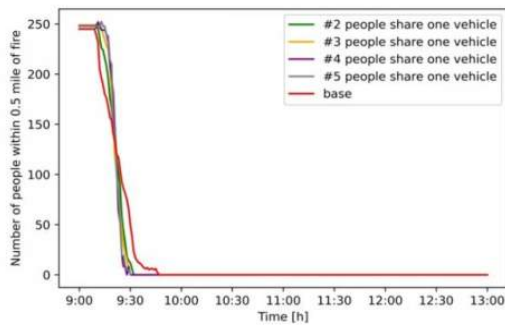
Table 8 shows that, in the daytime scenario, carpooling improves evacuation efficiency. With an average of two persons sharing one vehicle the average evacuation time is 21 minutes, about 16 minutes less than without carpooling. Little improvement results from having three persons per vehicle but having five riders per vehicle can shave an additional seven minutes off the evacuation time. Average exposure time is less than three minutes for all alternatives. Simulation results indicate that even without carpooling there is almost no heavy congestion within a half mile of the fire center. In the nighttime scenario, having an average of two persons sharing one vehicle reduces the average evacuation time by half from 44 minutes to 22 minutes and average exposure time from seven minutes to six minutes. With more persons per vehicle, the average evacuation time continues to decrease to about 13 minutes when all vehicles carry five persons. However, the average exposure time remains about six minutes which suggests that evacuation efficiency is maximized with an average of just two persons per vehicle.



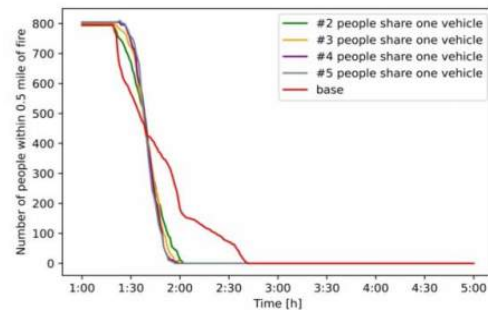
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



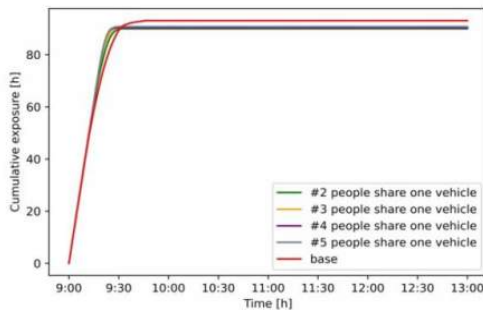
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



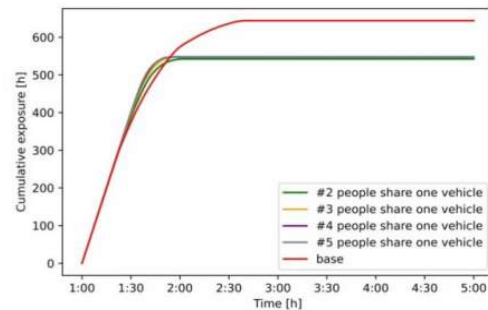
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 28. Vehicle Reduction Strategy Performance Measures for Tamalpais Valley**

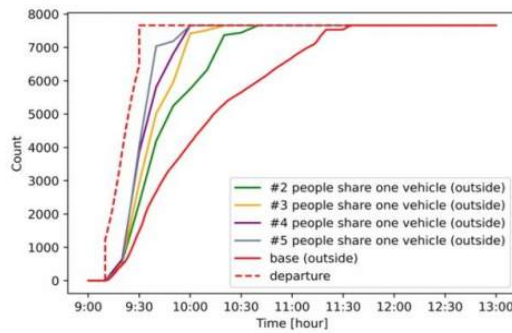
For the Novato Neighborhood case, Figure 29 shows that if the evacuating vehicles carry an average of one, two, three, four or five persons, all evacuees will reach two miles away from the fire area before 11:40 a.m., 10:40 a.m., 10:20 a.m., 10:00 a.m., and 10:00 a.m., respectively in the daytime scenario and will reach two miles away from the fire area before 5:00 a.m., 3:20 a.m., 3:00 a.m., 2:50 a.m. and 2:40 a.m., respectively in the nighttime scenario. For the daytime strategy, carpooling has little effect on the number of evacuees reaching a half mile from the fire area over time or the cumulative exposure time. However, for the nighttime scenario, having only one person per vehicle traps over 150 persons within the fire danger area for almost 1.5 hours.

Table 8 show that for both the daytime and nighttime scenarios average evacuation times decrease with more than two persons per vehicle, but average fire exposure times do not. Having an average of at least three persons per vehicle in the daytime scenario and a least two persons per vehicle in the nighttime scenario can reduce the average evacuation time by over 50 percent.

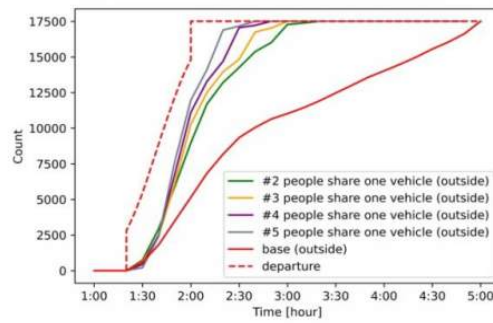
Overall, the modeling shows that when the number of evacuating vehicles is reduced by 1/2, 1/3, 1/4, and 1/5, evacuation times can be reduced by 50, 66.7, 75, and 80 percent, respectively. The only exception is the scenario for the Ross Valley case study. Beyond a certain level, average evacuation times will not continue to decrease in some circumstances (e.g., from two persons/vehicle to five persons/vehicle in Woodacre Bowl nighttime scenario) because, other factors, such as the amount of background traffic, may be difficult to overcome. For example, there are only three exits in Woodacre Bowl (see Figure 21), and most of the evacuees will use the middle exit, which leads to congestion.

In summary, the value of reducing the number of evacuating vehicles depends on various factors. For instance, if there is a high level of background traffic (e.g., Ross Valley daytime scenario) or if there are only a few escape routes (e.g., Woodacre Bowl) reducing the number of evacuating vehicles may have little effect.

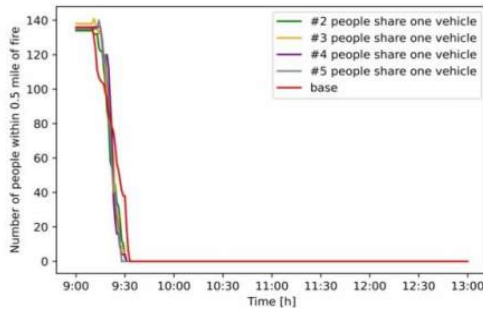




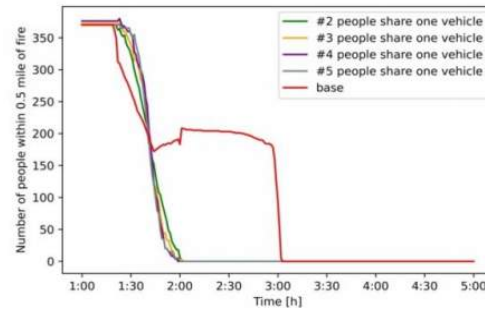
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



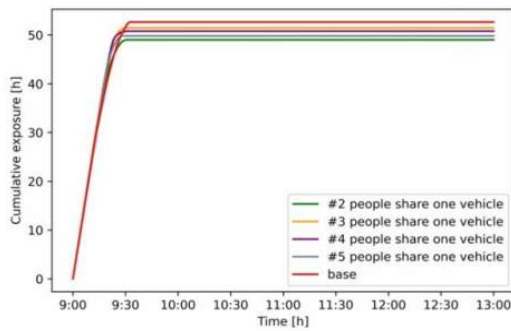
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



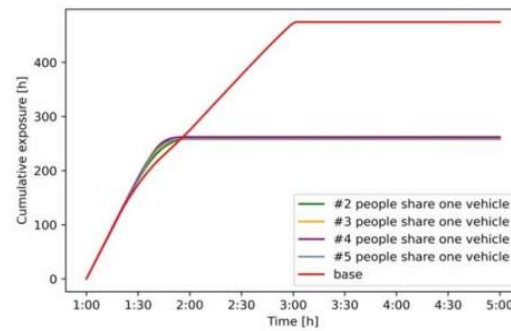
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)

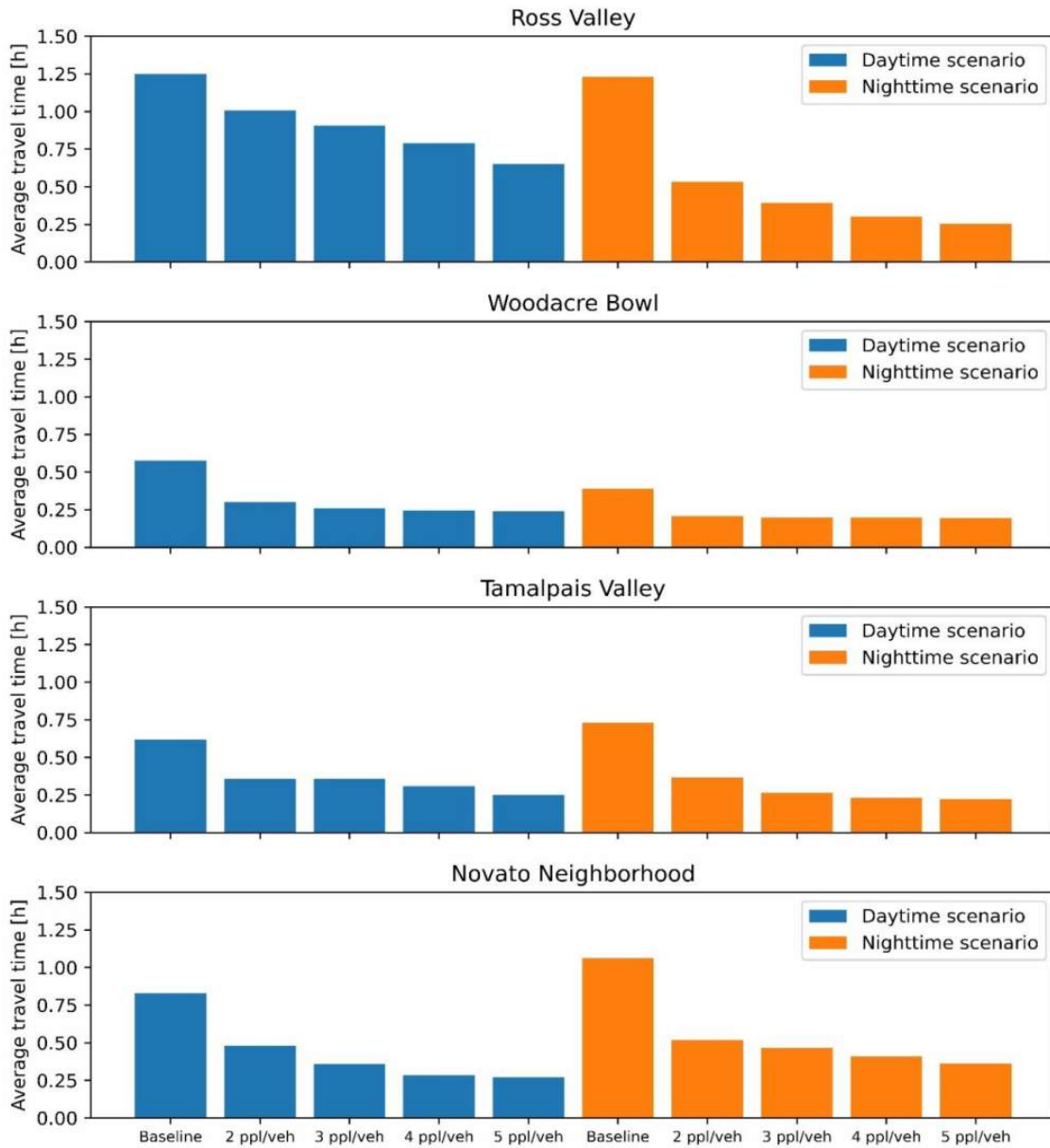


(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 29. Vehicle Reduction Strategy Performance Measures for Novato Neighborhood**

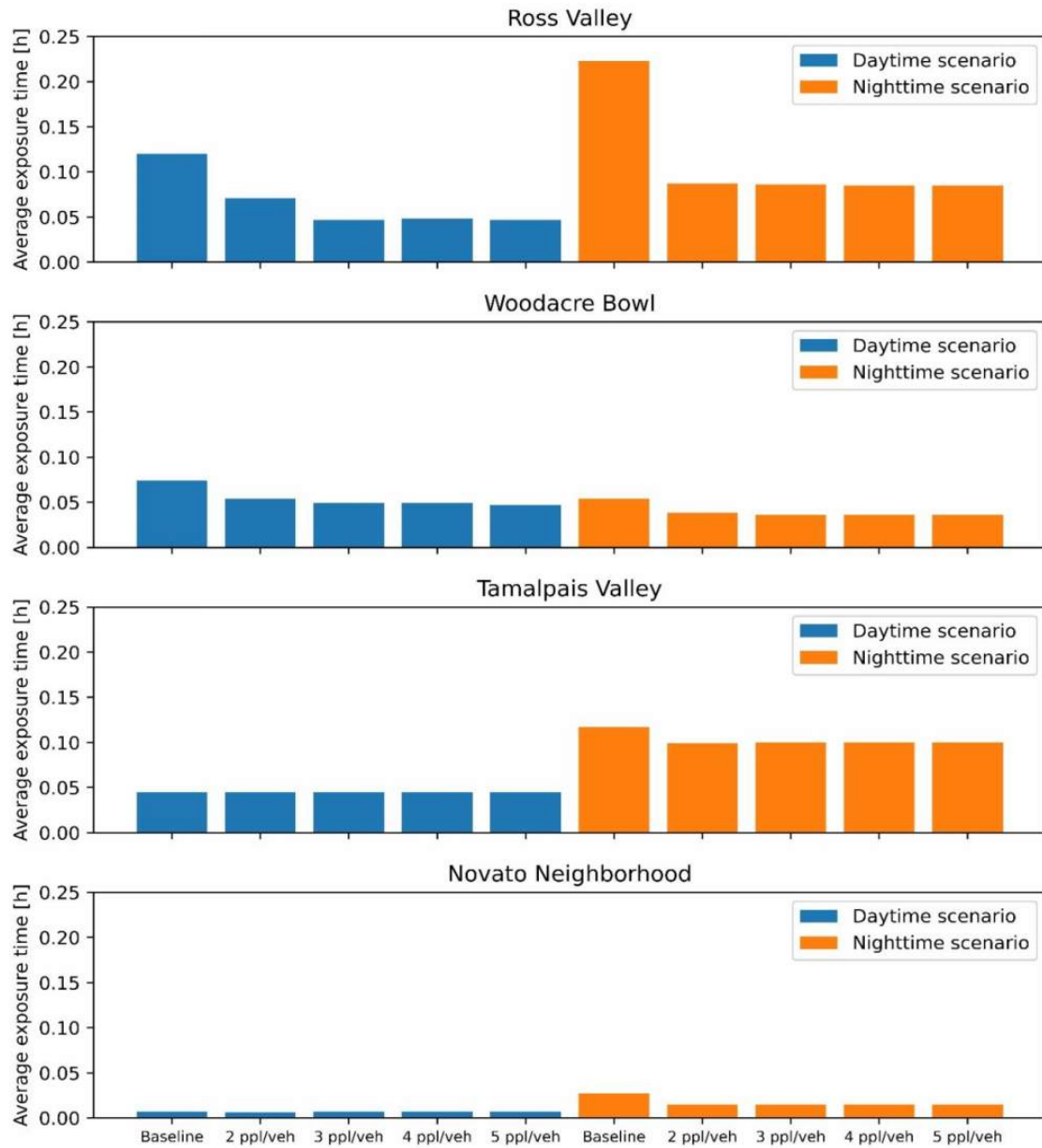
**Table 8. Average Evacuation Time and Exposure Time for Vehicle Reduction Strategy, All Case Studies**

Indicators	Average travel time [h]	%change from baseline	Average exposure time [h]	%change from baseline	Average travel time from [h]	%change from baseline	Average exposure time [h]	%change from baseline
Ross Valley	Daytime case				Nighttime case			
Baseline	1.250	-	0.120	-	1.230	0	0.223	-
2 persons/veh	1.005	19.6%	0.071	40.8%	0.532	56.7%	0.087	61.0%
3 persons/veh	0.906	27.5%	0.047	60.8%	0.391	68.2%	0.086	61.4%
4 persons/veh	0.790	36.8%	0.048	60.0%	0.301	75.5%	0.085	61.9%
5 persons/veh	0.651	47.9%	0.047	60.8%	0.254	79.3%	0.085	61.9%
Woodacre Bowl	Daytime case				Nighttime case			
Baseline	0.577	-	0.074	-	0.389	-	0.054	-
2 persons/veh	0.300	48.0%	0.054	27.0%	0.206	47.0%	0.038	29.6%
3 persons/veh	0.260	54.9%	0.049	33.8%	0.196	49.6%	0.036	33.3%
4 persons/veh	0.246	57.4%	0.049	33.8%	0.197	49.4%	0.036	33.3%
5 persons/veh	0.238	58.8%	0.047	36.5%	0.195	49.9%	0.036	33.3%
Tamalpais Valley	Daytime case				Nighttime case			
Baseline	0.618	-	0.045	-	0.731	-	0.117	-
2 persons/veh	0.356	42.4%	0.045	0.0%	0.365	50.1%	0.099	15.4%
3 persons/veh	0.356	42.4%	0.045	0.0%	0.263	64.0%	0.100	14.5%
4 persons/veh	0.308	50.2%	0.045	0.0%	0.230	68.5%	0.100	14.5%
5 persons/veh	0.252	59.2%	0.045	0.0%	0.222	69.6%	0.100	14.5%
Novato Neighborhood	Daytime case				Nighttime case			
Baseline	0.830	-	0.007	-	1.061	-	0.027	-
2 persons/veh	0.480	42.2%	0.006	14.3%	0.519	51.1%	0.015	44.4%
3 persons/veh	0.359	56.7%	0.007	0.0%	0.464	56.3%	0.015	44.4%
4 persons/veh	0.282	66.0%	0.007	0.0%	0.407	61.6%	0.015	44.4%
5 persons/veh	0.271	67.3%	0.007	0.0%	0.361	66.0%	0.015	44.4%



**Figure 30. Average Evacuation Times for Different Carpooling Scenarios, All Case Studies**



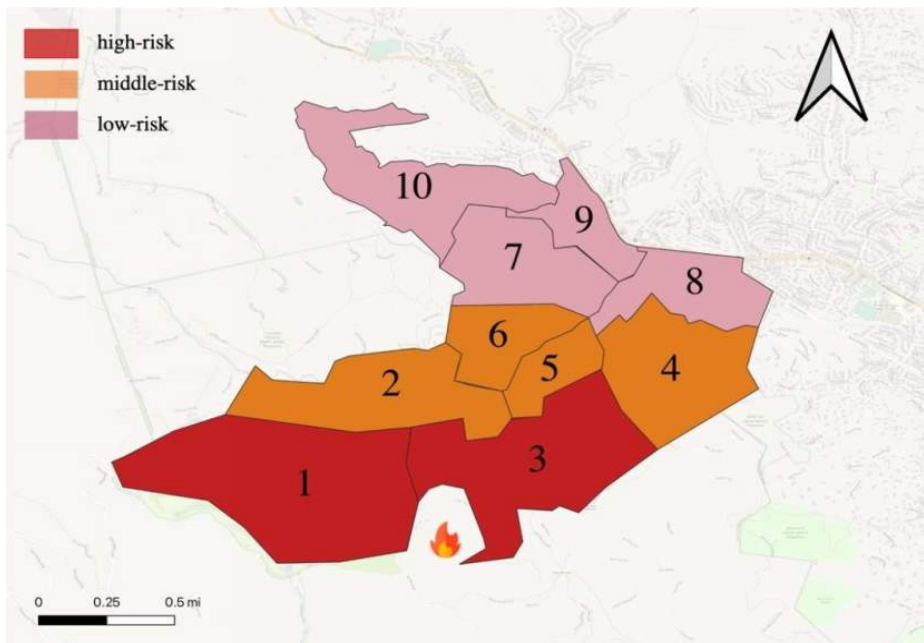


**Figure 31. Average Exposure Times For Vehicle Reduction Strategy, All Case Studies**

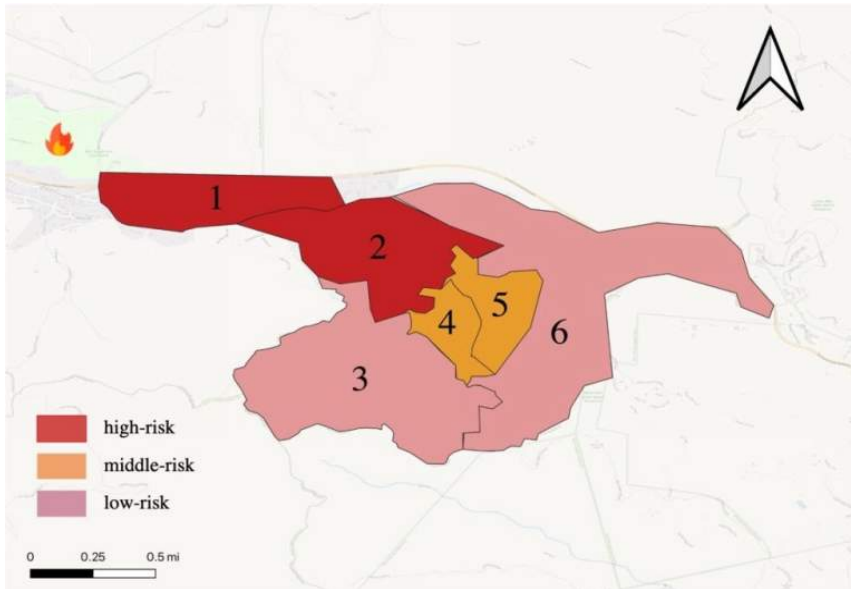
### Phased Evacuation

This section analyzes the effects of a phased evacuation strategy. First, the four study areas were divided into smaller traffic analysis zones as designated by the Metropolitan Transportation Commission. These are seen in **Error! Reference source not found.-Error! Reference source not found..** The zones in red (high-risk) are the closest zones to the modeled fire ignition point; therefore, residents in these zones would be the first to leave (Phase 1). Those in orange (middle-risk) and pink (low-risk) zones would be the second and third groups to leave (Phase 2 and Phase 3). Three scenarios with different phased intervals, described above in the “Scenario Development” section, were tested and the designated departure times for each Phase are shown in Table 9. In the daytime scenario evacuees from the designated zones depart at either 15, 30, or 45-minute intervals, while in the nighttime scenario, the intervals are 20, 40, or 60 minutes apart.

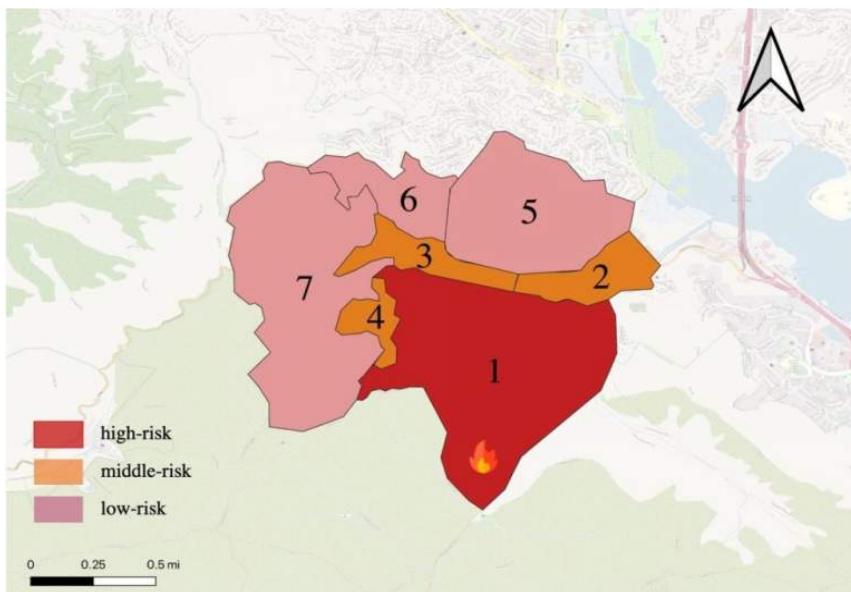
The results for each of the four locations are presented in Figures 36-39 which show the number of evacuees that reach a point at least two miles away from the fire area over time, number of evacuees within a half mile of the fire area over time, and cumulative fire exposure over time under each phased evacuation strategies for the four case studies. Table 10 and Figures 40-41 present the average travel time and average exposure time or each of the different alternatives.



**Figure 32. Evacuation Zones for Ross Valley**

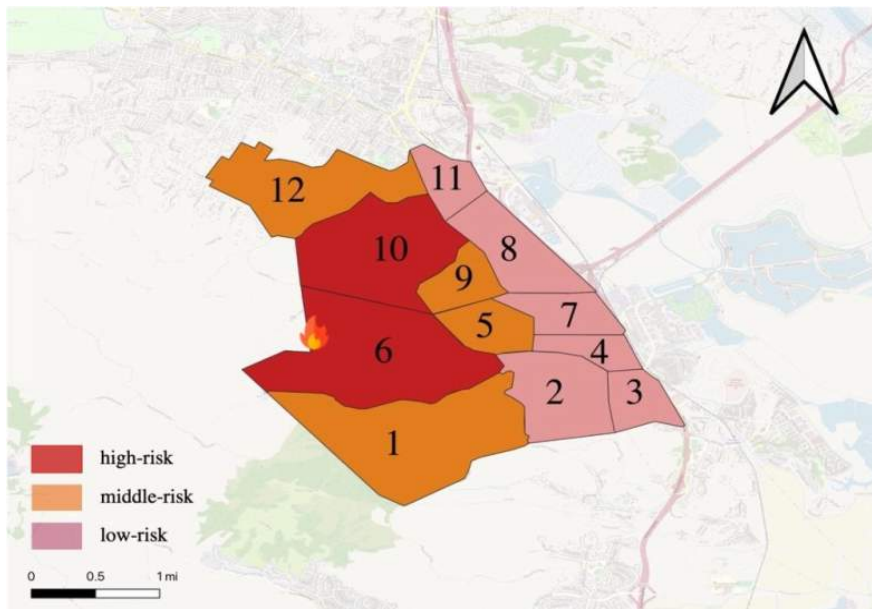


**Figure 33. Evacuation Zones for Woodacre Bowl**



**Figure 34. Evacuation Zones for Tamalpais Valley**





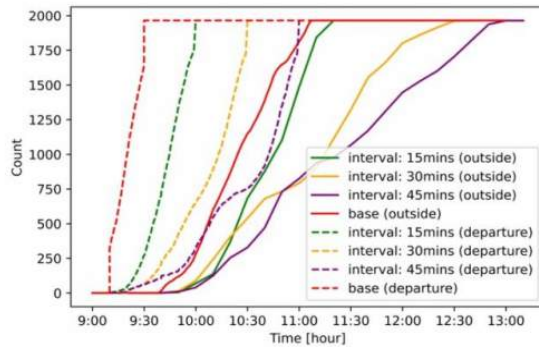
**Figure 35. Evacuation Zones of Novato Neighborhood**

**Table 9. Departure Times for Phased Evacuation Strategy, All Case Studies**

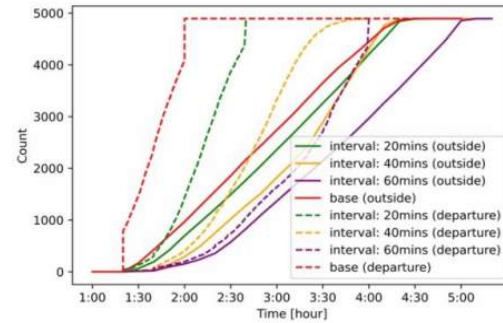
	Interval	Phase 1 (zones)	Phase 1 (departure time)	Phase 2 (zones)	Phase 2 (departure time)	Phase 3 (zones)	Phase 3 (departure time)
Day time	15 mins		9:20±10 mins		9:35±10 mins		9:50±10 mins
	30 mins	Fairfax (1,3)	9:20±10 mins	Fairfax (2,4,5,6)	9:50±10 mins	Fairfax (7,8,9,10)	10:20±10 mins
	45 mins	Woodacre (1,2)	9:20±10 mins	Woodacre (4,5)	10:05±10 mins	Woodacre (3,6)	10:50±10 mins
Night time	20 mins	Tamalpais (1)	1:40±20 mins	Tamalpais (2,3,4)	2:00±20 mins	Tamalpais (5,6,7)	2:20±20 mins
	40 mins	Novato (6,10)	1:40±20 mins	Novato (1,5,9,12)	2:20±20 mins	Novato (2,3,4,7,8,1 1)	3:00±20 mins
	60 mins		1:40±20 mins		2:40±20 mins		3:40±20 mins

For the Ross Valley case, Figure 36 shows that in the daytime scenario when the interval between phases is 15 minutes it takes two hours to complete the evacuation. When the interval is increased to 30 minutes the evacuation takes three and a half hours and when it is increased to 45 minutes the evacuation is completed in four hours. In the nighttime scenario, if the phased intervals are 20, 40 and 60 minutes, the evacuation times last 3, 3, and 4 hours, respectively. Notably, longer lasting evacuation times do not necessarily represent high evacuation efficiency. From the perspective of people within 0.5 mile of the fire area and cumulative exposure time, the baseline leads to the lowest exposure (around 85 hours) and quick evacuation, and longer interval time leads to worse evacuation performance at the daytime scenario. In the nighttime scenario, the best option is the 20-minute interval (corresponding cumulative exposure time is 600 hours) and the worst is the interval of 60 minutes, of which the exposure time reaches over 700 hours.

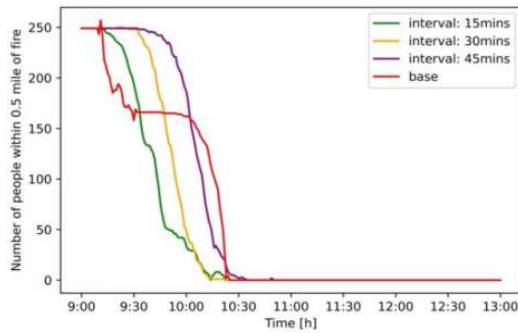
Table 10 and Figures 40-41 show that the average evacuation time decreases as the phasing interval increases from one and a quarter hour when there is no phased interval to one hour when the interval is 45 minutes, a reduction of 23 percent. However, the longer interval time forces some people to stay longer in the fire danger area. When the interval time is 45 minutes, the average exposure time increases by 17 percent, compared to the baseline. However, when the interval time is 15 minutes, both average travel time and exposure time are reduced. Hence, the optimal interval for Ross Valley is 15 minutes. For the nighttime evacuation, a longer interval time leads to lower evacuation time, but higher exposure time. When the interval time is 20 minutes, the average evacuation time is 40 percent of the baseline and 60 percent of the time with a 40-minute interval. In addition, the average exposure time with a 40-minute interval is 27 percent less, compared with a reduction of 38 percent with a 20-minute interval and 6 percent with a 60-minute interval. Therefore, a 20-minute interval is the best option for the Ross Valley nighttime scenario.



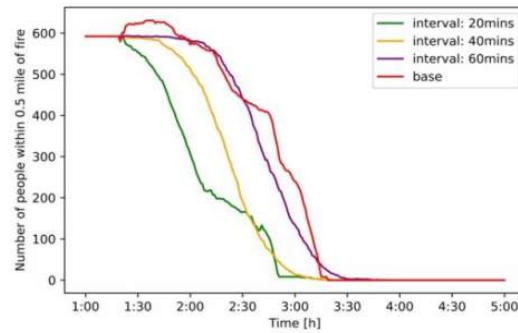
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



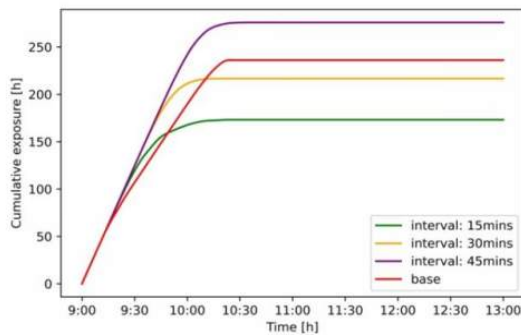
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



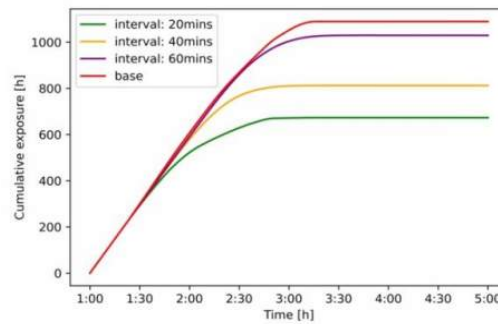
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



(f) Cumulative exposure (hours) (nighttime scenario)

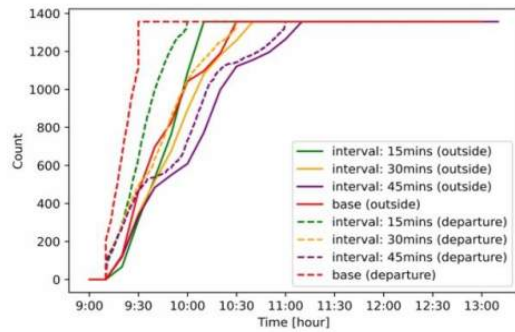
**Figure 36. Phased Evacuation Performance Measures for Ross Valley**



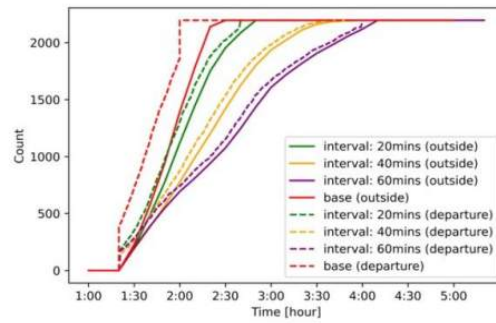
For the Woodacre Bowl case, Figure 37 shows that in the daytime scenario if the phased intervals are 15, 30, and 45 minutes, respectively, the evacuation takes one, one and a half, and two hours to complete. In the nighttime scenario if the phased intervals are 20, 40, and 60 minutes, respectively the evacuations last one and a half, two and a half, and three hours. Notably, longer evacuation time does not necessarily represent low evacuation efficiency.

An interval of 30 minutes leads to the lowest exposure time (around 58 hours) and quick evacuation, while the baseline performs the worst in the daytime scenario (up to 100 hours of cumulative exposure time). In the nighttime scenario, all evacuation intervals perform similarly, with exposure time of around 80 hours, while for the baseline, the exposure time reaches 120 hours.

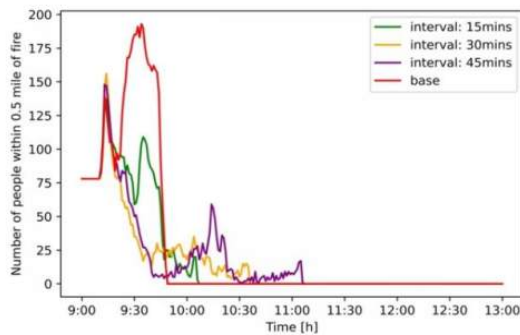
Table 10 and Figures 40-41 show that, similar to the Ross Valley case, the average daytime and nighttime evacuation times decrease as the phased evacuation interval time increases. However, the average exposure times of both scenarios first decrease and reach their lowest value with a 30/40-minute interval. However, as the interval time continues to increase, the average exposure times increase, and the speed of the evacuation becomes slower than the speed of the fire spread. Hence, the ideal interval time for the daytime evacuation is 30 minutes and 40 minutes for the nighttime evacuation.



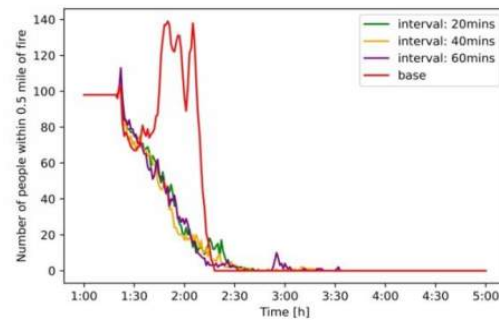
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



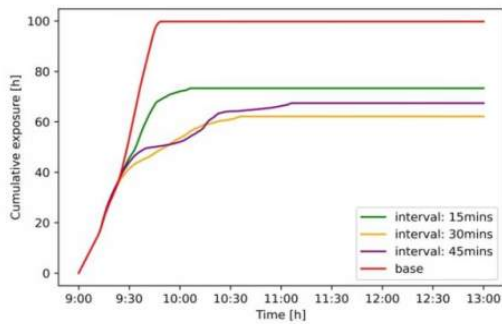
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



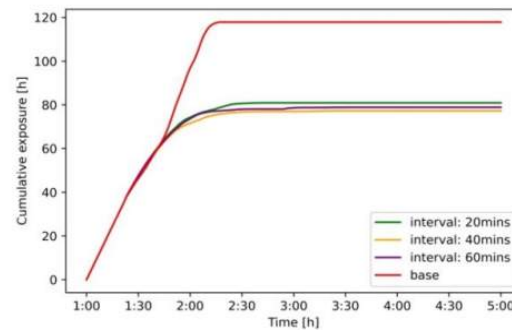
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



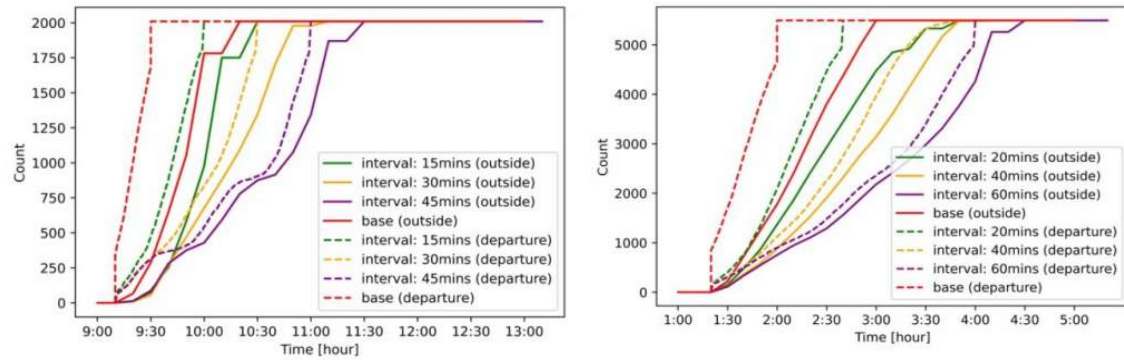
(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 37. Phased Evacuation Performance Measures for Woodacre Bowl**

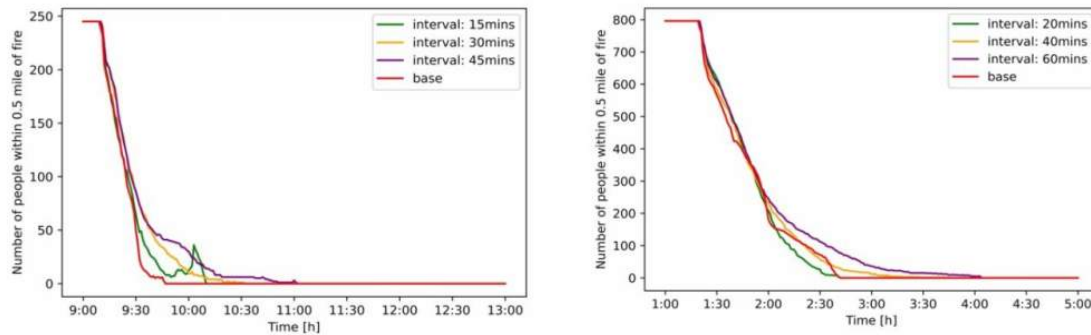
For the Tamalpais Valley case, Figure 38 shows that in the daytime scenario when the interval between phases is 15 minutes it takes one and a half hours to complete the evacuation. When the interval is increased to 30 minutes the evacuation takes two hours and when it is increased to 45 minutes the evacuation is completed in two and a half hours. In the nighttime scenario, if the phased intervals are 20, 40 and 60 minutes, respectively, the evacuations last two and three-quarter hours two and three-quarter hours and three and a half. Notably, longer evacuation times does not necessarily represent low evacuation efficiency. For the daytime scenario, the baseline has the lowest fire exposure time (around 85 hours) and quick evacuation, and longer interval times reduce evacuation performance. For the nighttime scenario, the all-phasing intervals perform similarly, with exposure times around 600 hours, though the 60-minute interval exposure time reaches over 700 hours.

Table 10 and Figures 40-41 show that a larger interval time results in higher evacuation efficiency in terms of the average evacuation time for both the daytime evacuation and nighttime scenarios. However, average fire exposure time, even for the 15/20-minute interval is no better than the no-phase scenario. In the daytime evacuation, a 15-minute interval reduces the average evacuation time by 34 percent, while increasing the average exposure time by 16 percent. If the focus is on reducing fire exposure time as much as possible, then for the daytime evacuation, the best strategy is to let all evacuees leave at the same time. For the nighttime evacuation, applying a 20-minute interval reduces the average evacuation time markedly and reduces the exposure time somewhat. Therefore, this is the optimal strategy for the nighttime case.

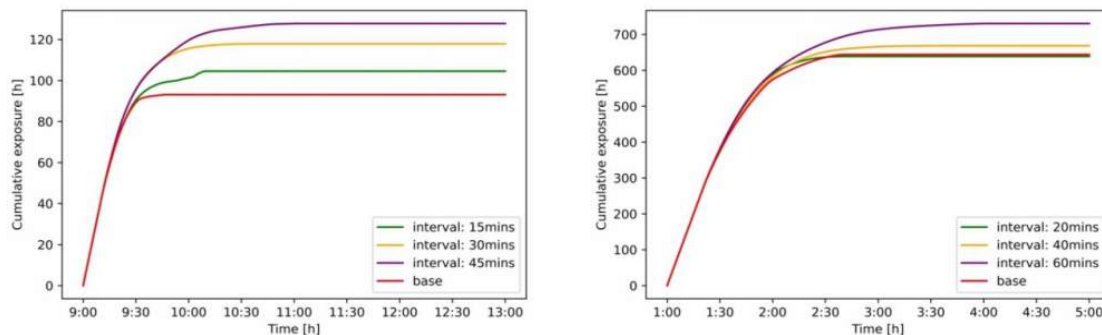




(a) #vehicles that reach 2 miles away from the fire area (daytime scenario) (b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



(c) #persons within 0.5 mile of fire (daytime scenario) (d) #persons within 0.5 mile of fire (nighttime scenario)



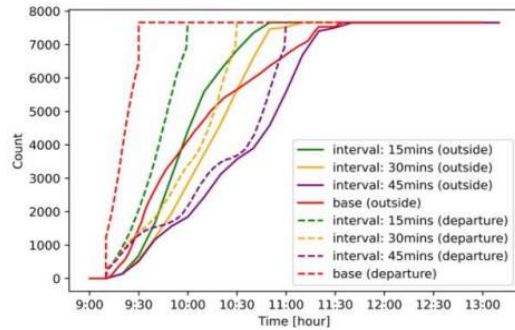
(e) Cumulative exposure (hours) (daytime scenario) (f) Cumulative exposure (hours) (nighttime scenario)

**Figure 38. Phased Evacuation Performance Measures for Tamalpais Valley**

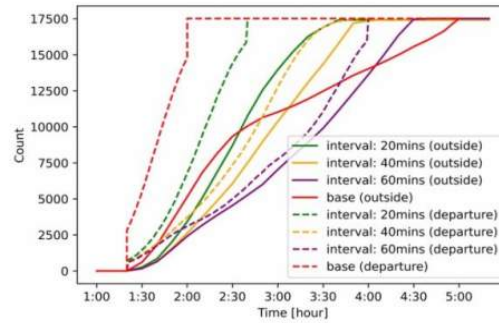
For the Novato Neighborhood case, Figure 39 shows that in the daytime scenario when the interval between phases is 15, 30 and 45 minutes, respectively the evacuation is completed in 1.75, two, and 2.5 hours. For the nighttime scenario if the phased intervals are 20, 40, and 60 minutes, respectively, the evacuations last two and a half, two and a half and four hours.

Longer evacuation times do not necessarily represent low evacuation efficiency. An interval of 30 minutes for the daytime scenario leads to the lowest cumulative fire exposure time (around 45 hours) and quick evacuation, while the baseline leads to the worst evacuation. For the nighttime scenario, intervals of 20, 40, and 60 minutes perform similarly, with exposure times around 250 hours while the baseline exposure time reaches around 500 hours. Table 10 and Figures 40-41 show that, as for the other three cases, average evacuation times decrease as the phasing interval is increased. Average exposure times are mostly unchanged across these three different intervals. Additionally, the performance of the 30/40-minute interval is close to that of a 45/60-minute interval. Therefore, 30/45-minute intervals for daytime evacuation and 40/60-minute intervals for nighttime evacuation are the best options according to the model.

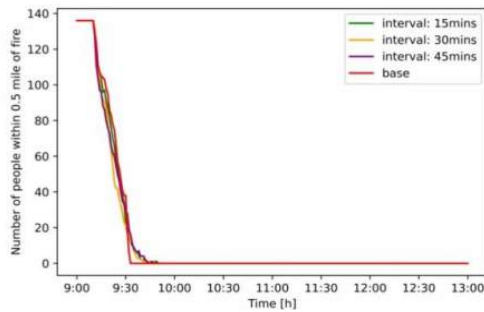
In summary, as the phasing interval is increased, the evacuation takes longer, at least up to a point, because the traffic congestion almost disappears. When implementing a phased evacuation strategy, it is important not only to focus on travel time but also the duration of fire exposure; longer waiting times in high-risk areas can pose a significant threat to residents.



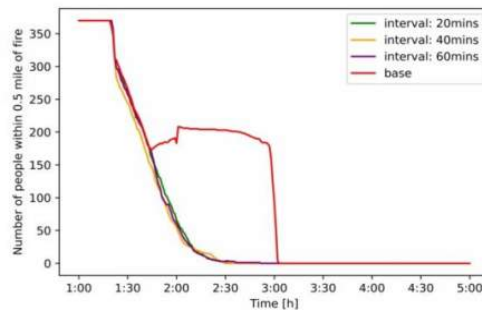
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



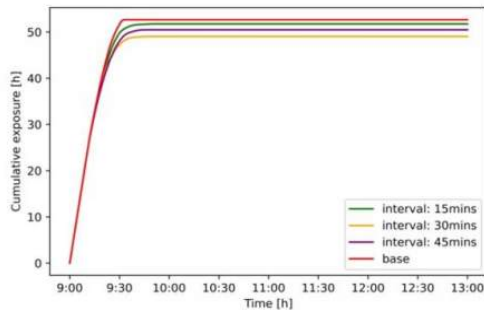
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



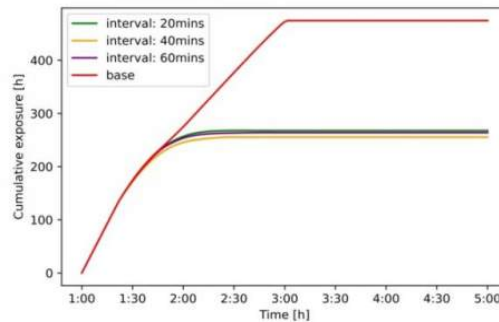
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



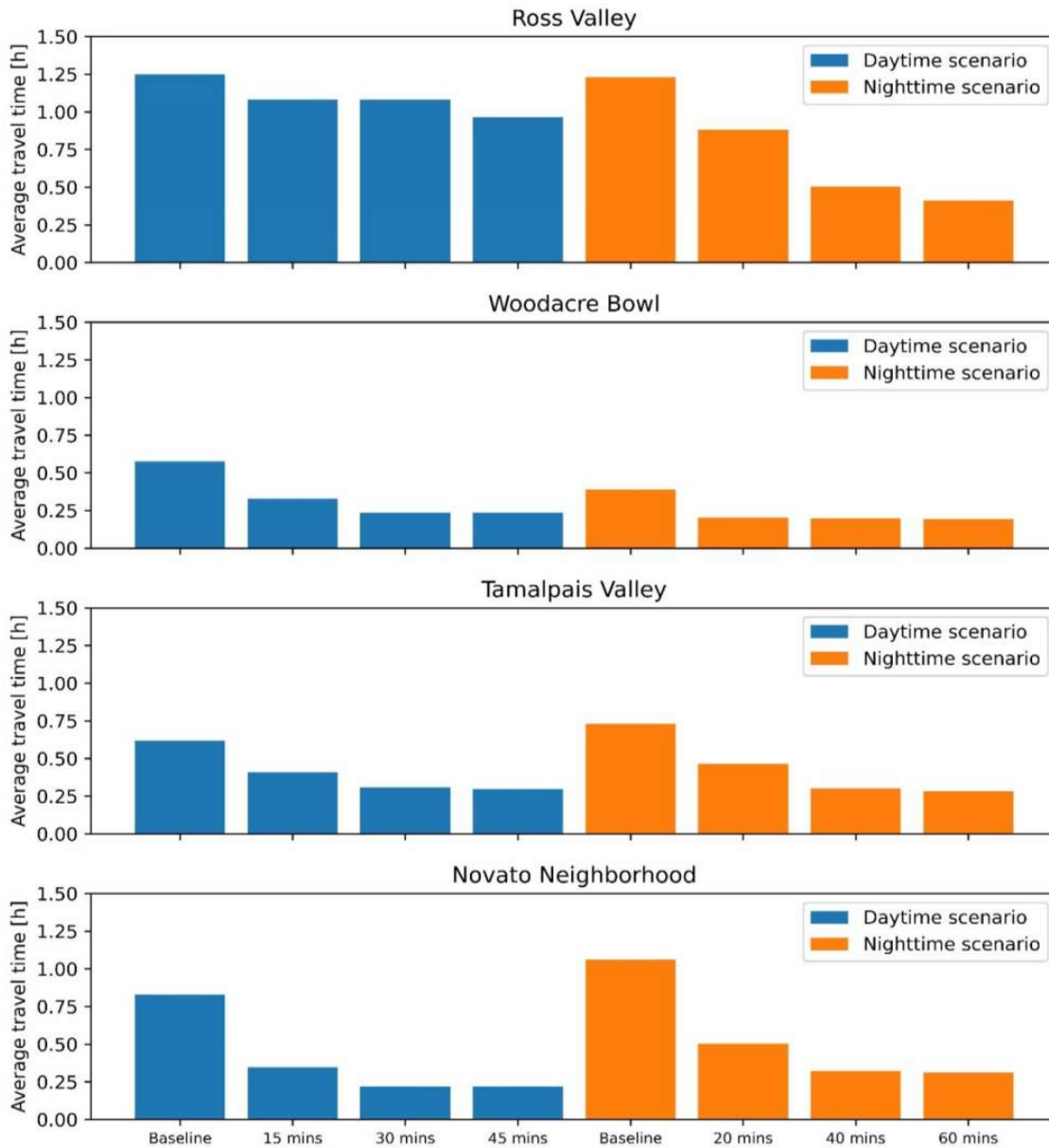
(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 39. Phased Evacuation Strategy Performance Measures for Novato Neighborhood**

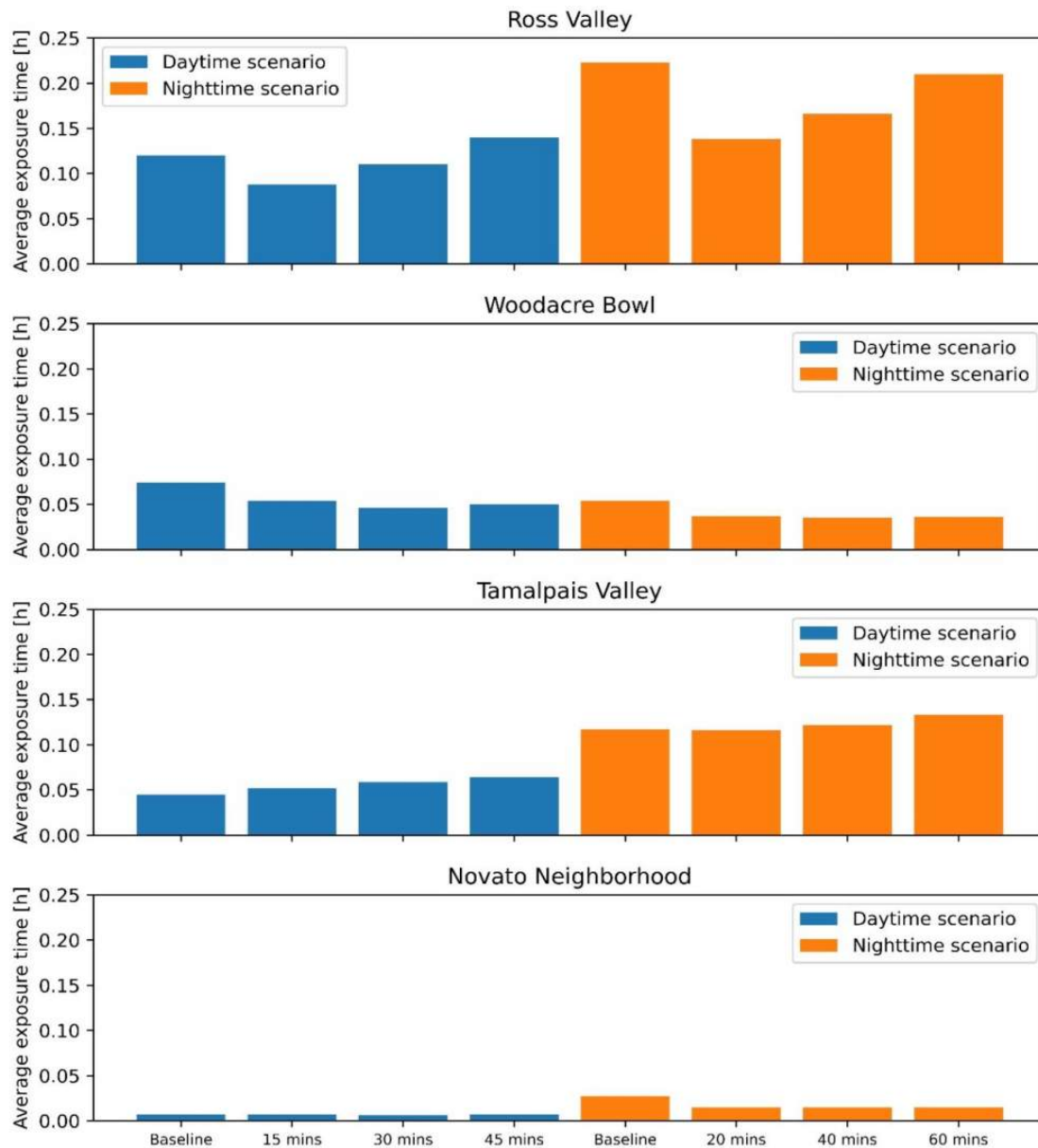


**Table 10. Average Evacuation Time and Exposure Time for Phased Evacuation Strategy, All Case Studies**

Indicators	Average travel time [h]	%change from baseline	Average exposure time [h]	%change from baseline	Average travel time [h]	%change from baseline	Average exposure time [h]	%change from baseline
Ross Valley	Daytime case				Nighttime case			
Baseline	1.250	-	0.120	-	1.230	0	0.223	-
15/20 mins	1.081	-13.5%	0.088	-26.7%	0.883	-28.2%	0.138	-38.1%
30/40 mins	1.079	-13.7%	0.110	-8.3%	0.505	-58.9%	0.166	-25.6%
45/60 mins	0.963	-23.0%	0.140	+16.7%	0.412	-66.5%	0.210	-5.8%
Woodacre Bowl	Daytime case				Nighttime case			
Baseline	0.577	-	0.074	-	0.389	-	0.054	-
15/20 mins	0.328	-43.2%	0.054	-27.0%	0.203	-47.8%	0.037	-31.5%
30/40 mins	0.236	-59.1%	0.046	-37.8%	0.197	-49.4%	0.035	-35.2%
45/60 mins	0.236	-59.1%	0.050	-32.4%	0.194	-50.1%	0.036	-33.3%
Tamalpais Valley	Daytime case				Nighttime case			
Baseline	0.618	-	0.045	-	0.731	-	0.117	-
15/20 mins	0.408	-34.0%	0.052	+15.6%	0.463	-36.7%	0.116	-0.9%
30/40 mins	0.308	-50.2%	0.059	+31.1%	0.301	-58.9%	0.122	+4.3%
45/60 mins	0.296	-52.1%	0.064	+42.2%	0.282	-61.4%	0.133	+13.7%
Novato Neighborhood	Daytime case				Nighttime case			
Baseline	0.830	-	0.007	-	1.061	-	0.027	-
15/20 mins	0.346	-58.3%	0.007	0.0%	0.502	-52.7%	0.015	-44.4%
30/40 mins	0.220	-73.5%	0.006	-14.3%	0.322	-69.7%	0.015	-44.4%
45/60 mins	0.220	-73.5%	0.007	0.0%	0.311	-70.7%	0.015	-44.4%



**Figure 40. Average Travel Times for Various Departure Intervals for Phased Evacuation Strategy, All Case Studies**



**Figure 41. Average Exposure Times for Different Departure Intervals for Phased Evacuation Strategy, All Case Studies**



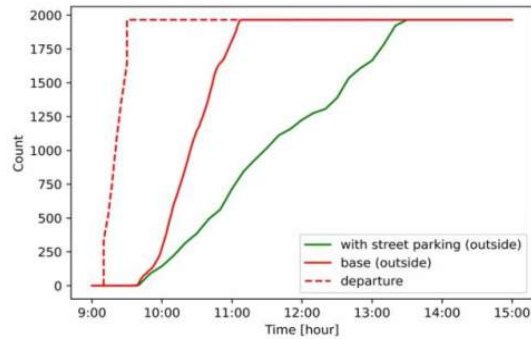
### On-street Parking Prohibition

This section analyzes the impact of street-parking on evacuation efficiency. Figures 42-45 show the number of evacuees that reach a point two miles away from the fire area over time, number of evacuees within a half mile of the fire area over time, and cumulative exposure over time with and without street parking for all four cases. Table 11 and Figures 46-47 present the average evacuation time and average exposure time for each alternative parking prohibition strategy.

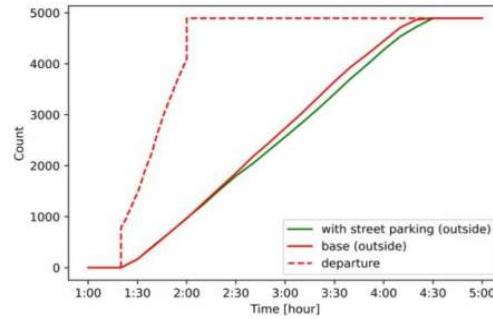
For the Ross Valley case, Figure 42 shows that if street parking is allowed, the evacuation lasts over four hours for the daytime scenario, compared with two hours if street parking is prohibited. However, for the nighttime scenario, there is no significant difference with evacuation time lasting around 3.5 hours.

Street parking leads to slower evacuations and increases the total cumulative exposure time in the daytime scenario to over 400 hours, which is double compared to the situation without street parking. For the nighttime scenario, the total exposure time when street parking is permitted is only 100 hours more than when it is prohibited.

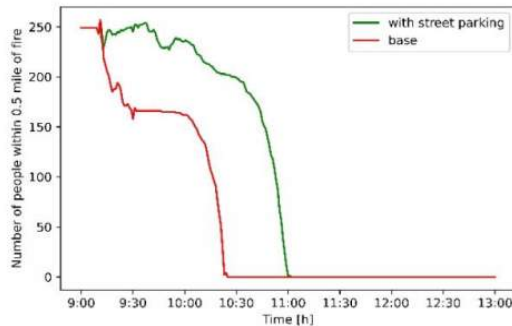
Table 11 and Figures 46-47 show that, if street parking is permitted during the daytime, the average evacuation time increase significantly by up to 88 percent and fire exposure time to over 78 percent. However, street parking does not affect nighttime evacuations as much, as there is little of background traffic in the way so even though permitting street parking reduces road capacity, vehicles can still evacuate smoothly.



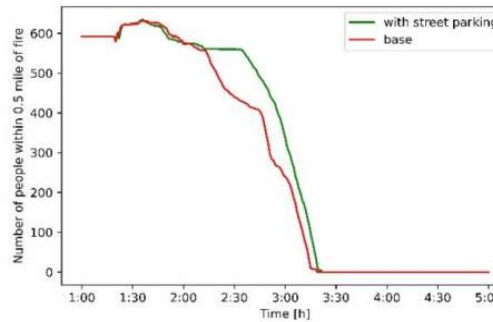
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



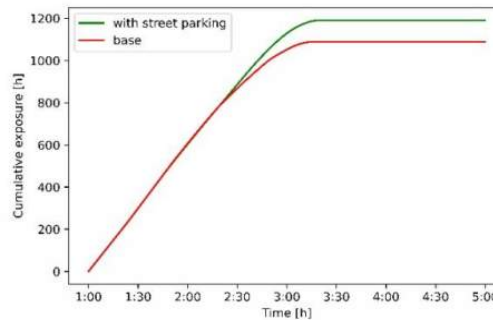
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)

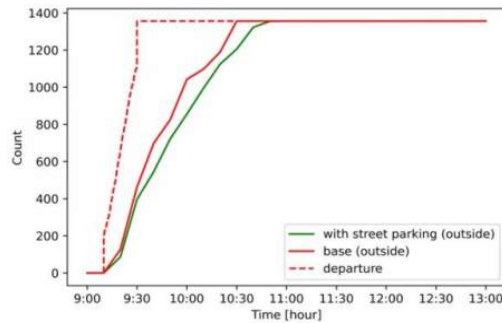


(f) Cumulative exposure (hours) (nighttime scenario)

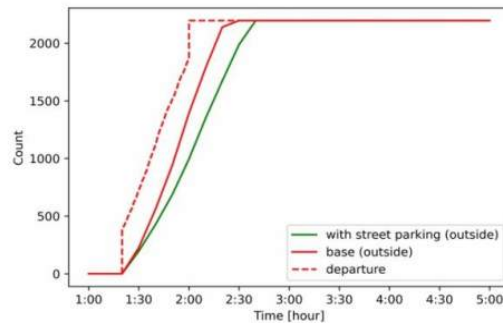
**Figure 42. Street Parking Prohibition Strategy Performance Measures for Ross Valley**

For the Woodacre Bowl case, Figure 43 shows that if street parking is allowed, the evacuation lasts for over one and a half hours for the daytime scenario, which is very close to the evacuation time when street parking is prohibited. For the nighttime scenario, street parking extends the evacuation time from one and a quarter hour to one and a half hours. In the daytime scenario, the cumulative exposure times are similar at around 100 hours; however, for the nighttime scenario, street parking increases the total exposure time by 20 hours to 140 hours and strands persons in the vicinity of the fire area for a longer duration. Table 11 and Figures 46-47 show the opposite result compared to the Ross Valley case. Street parking has a very small effect on the daytime evacuation, but a huge impact on the nighttime evacuation. During the daytime, there is little background traffic around that area and the number of evacuees is relatively small, so the evacuees can evacuate quickly. However, during the nighttime, the number of evacuees is nearly double the number of evacuees during the daytime. There are only two exits to leave this area and if evacuees want to leave, they need first to enter the fire danger area and then drive through these two exits. With the reduced road capacity caused by street parking, the fire danger area becomes congested which leads to longer exposure and evacuation times. Therefore, officials should consider notifying residents to move their vehicles off the streets in these situations.

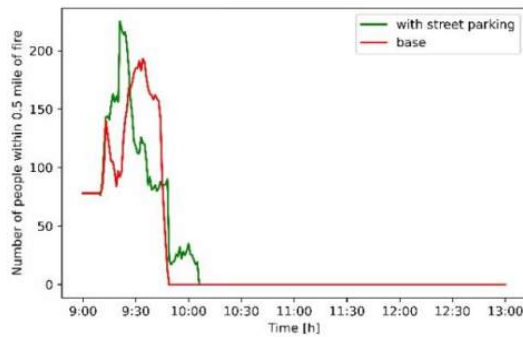




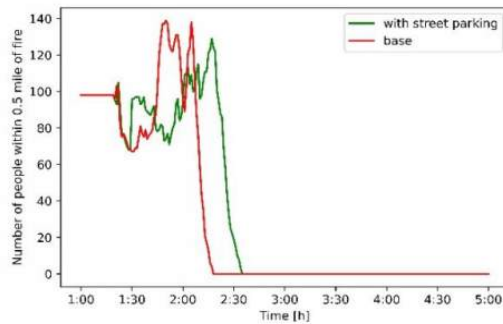
(a) #vehicles that leave 2 miles away from the fire area (daytime scenario)



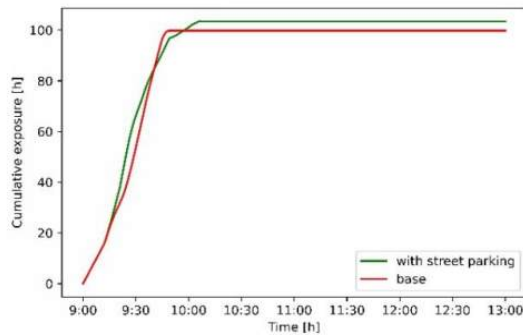
(b) #vehicles that leave 2 miles away from the fire area (nighttime scenario)



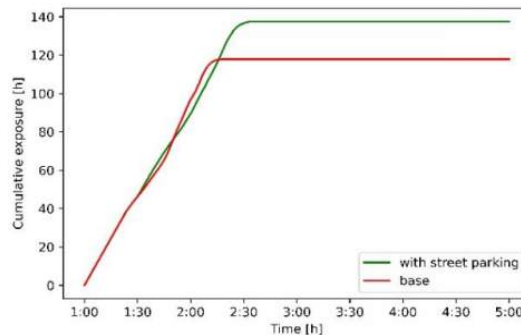
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



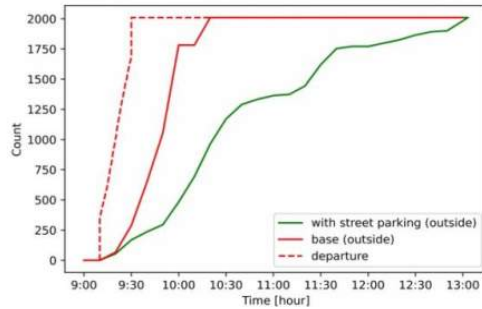
(e) Cumulative exposure (hour) (daytime scenario)



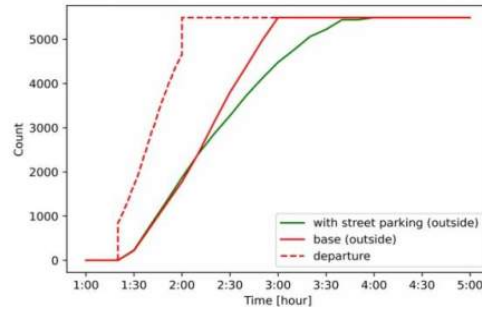
(f) Cumulative exposure (hour) (nighttime scenario)

**Figure 43. Street Parking Prohibition Strategy Performance Measures for Woodacre Bowl**

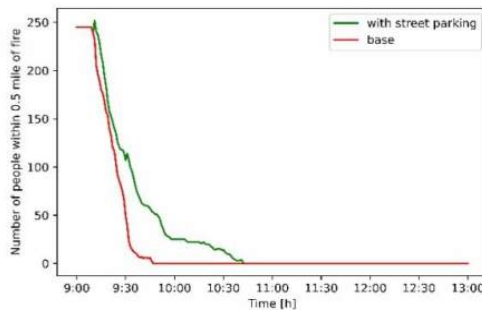
For the Tamalpais Valley case, Figure 44 shows that if street parking is allowed, the evacuation lasts over five hours in the daytime scenario, four hours longer than without street parking. For the nighttime scenario, street parking only extends the evacuation time by one hour to around two and a half hours. Street parking extends fire exposure times in both scenarios by 40 hours and 400 hours, respectively. Table 11 and Figures 46-47 show that street parking has a significant influence on evacuation efficiency in both the daytime scenario and nighttime scenario, where the average evacuation times increase by 19 and 12 percent, respectively, and the average exposure times increase by 52 and 58 percent respectively. Based on the simulation results, officials should consider prohibiting on-street parking whenever fire danger in Tamalpais Valley is high.



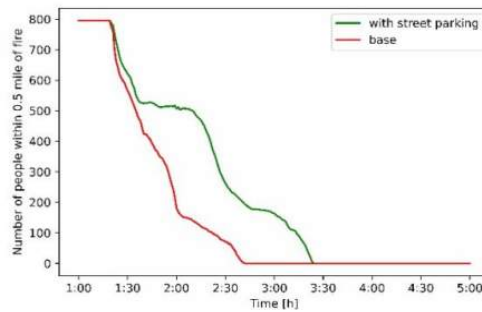
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



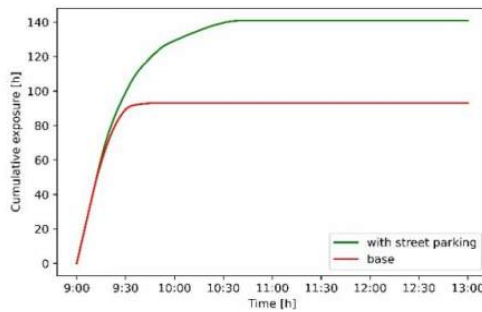
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



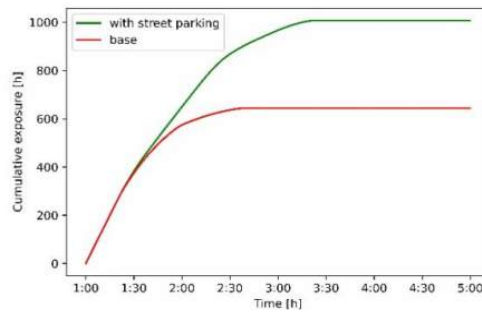
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



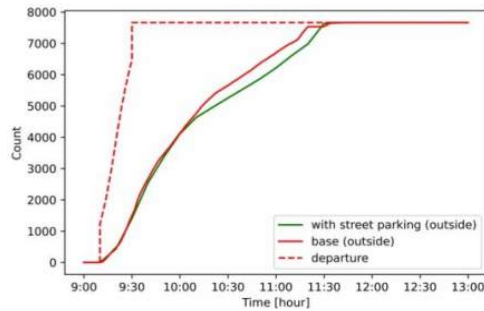
(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 44. Street Parking Prohibition Performance Measures for Tamalpais Valley**

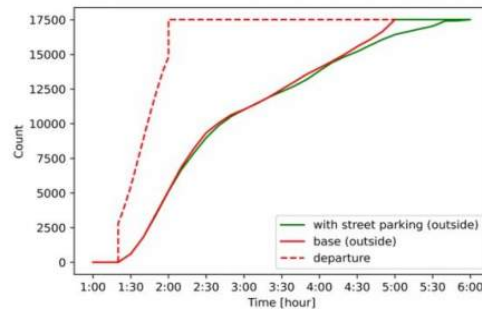


For the Novato Neighborhood case, Figure 45 shows that if street parking is allowed, the evacuation lasts over two and a half hours for the daytime scenario, which is very close to the evacuation time when street parking is prohibited. For the nighttime scenario, street parking extends the evacuation time from four hours to four and a half hours. Street parking almost has no impact on the cumulative fire exposure time and number of persons within a half mile of the fire area in the daytime scenario. In the nighttime scenario, street parking hinders the evacuation process, causing the exposure time to increase to 700 hours, which is 250 hours more compared to the situation without street parking. Table 11 and Figures 46-47 show that street parking has a tiny effect on daytime evacuation, but a significant influence on nighttime evacuation. During the day, the number of evacuees is small, and there are many exits. Therefore, the reduced road capacity for residential roads does not influence the evacuation much. However, there are 17,519 evacuees during the night. Even though there is almost no background traffic, the dual effect of having so many evacuees and the fewer number of accessible lanes creates delays. These findings show how banning on-street parking at night when fires occur in the Novato Neighborhood could greatly increase evacuation efficiency.

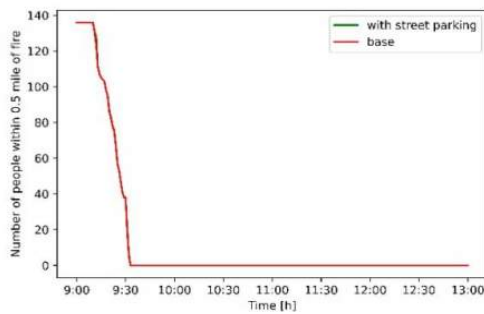
In evaluating banning on-street parking, we assumed that, if the road capacity is reduced by 25 percent, the average evacuation time would increase by around 25 percent. Yet, the results of many scenarios did not reflect this pattern. Instead, the evacuation times only increased about 10 percent in some scenarios (e.g., Ross Valley nighttime scenario and Woodacre Bowl daytime scenario), but rose by 50 percent in others (e.g., Ross Valley daytime scenario, Novato Neighborhood nighttime scenario). The impact depended on the different number of background vehicles and evacuee vehicles. Thus, the merits of this strategy depend on the characteristics of the local areas, including the ratio of number of evacuees to volume of background traffic, the spatial distribution of evacuees, and the number of exits.



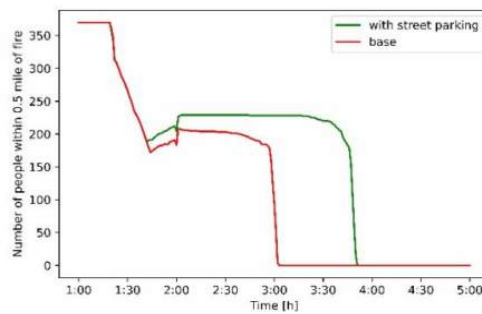
(a) #vehicles that reach 2 miles away from the fire area (daytime scenario)



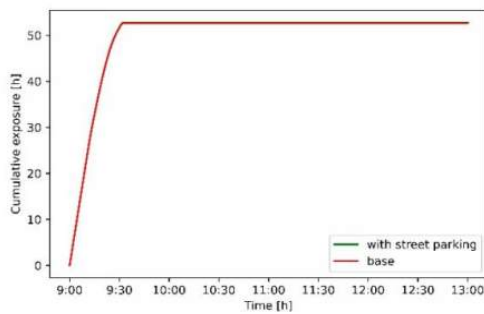
(b) #vehicles that reach 2 miles away from the fire area (nighttime scenario)



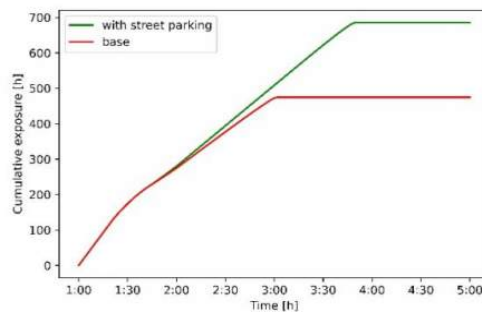
(c) #persons within 0.5 mile of fire (daytime scenario)



(d) #persons within 0.5 mile of fire (nighttime scenario)



(e) Cumulative exposure (hours) (daytime scenario)



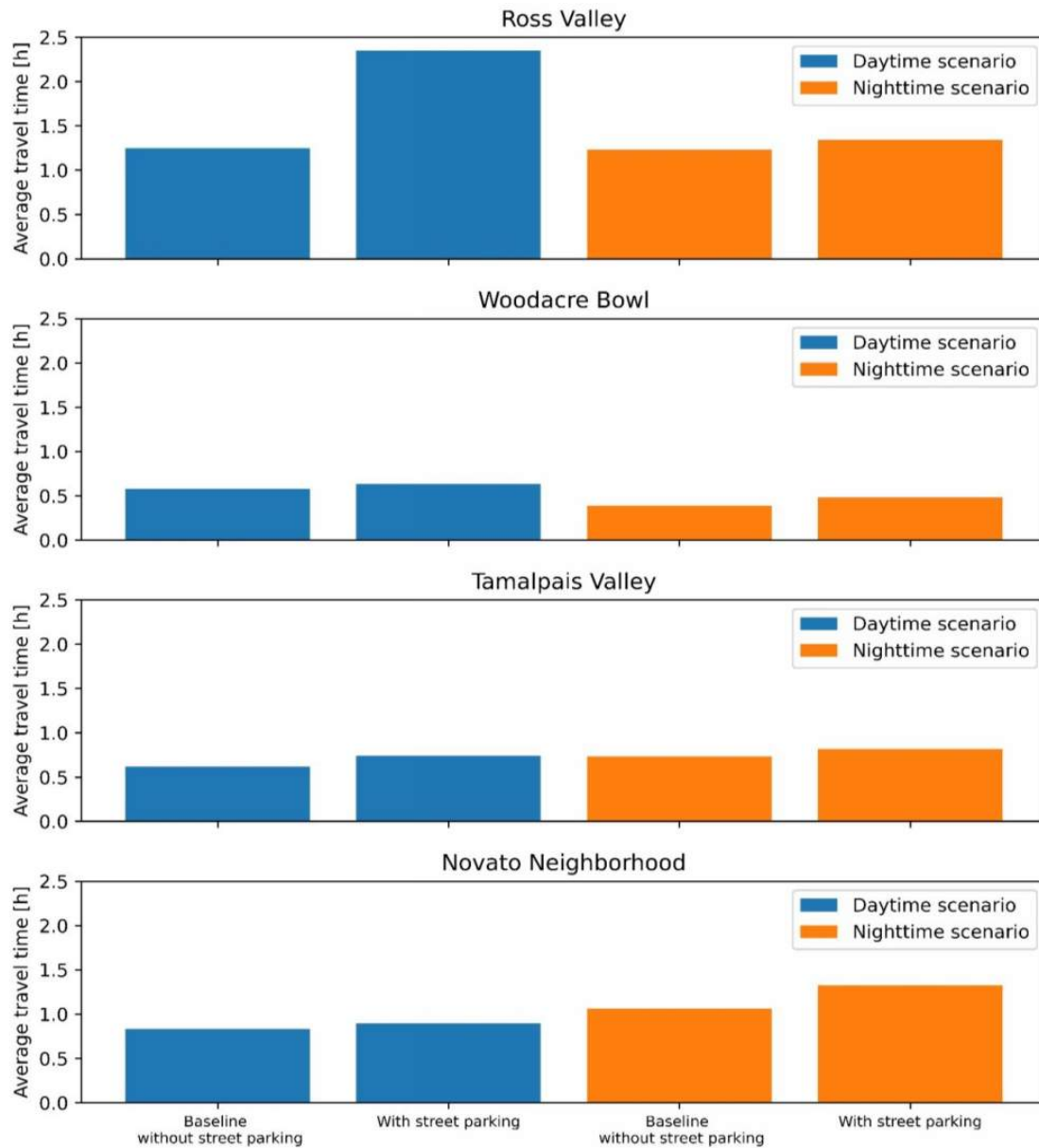
(f) Cumulative exposure (hours) (nighttime scenario)

**Figure 45. Street Parking Prohibition Strategy Performance Measures for Novato Neighborhood ()**

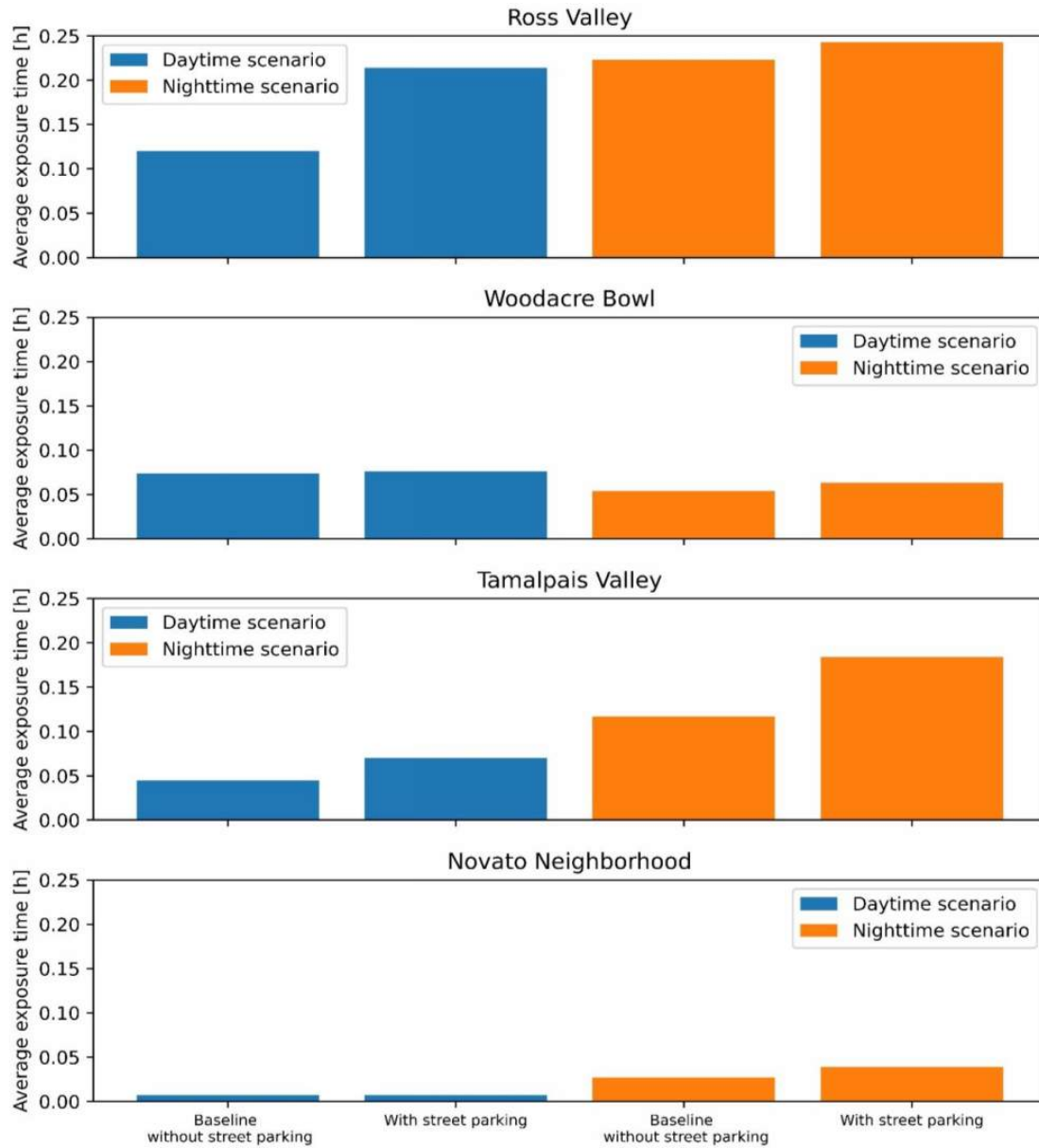
**Table 11. Average Evacuation and Exposure Times for Street Parking Prohibition Strategy for All Case Studies**

Indicators	Average travel time from [h]	%change from baseline	Average exposure time [h]	%change from baseline	Average travel time [h]	%change from baseline	Average exposure time [h]	%change from baseline
Ross Valley	Daytime case				Nighttime case			
Without street parking (baseline)	1.250	-	0.120	-	1.230	-	0.223	-
With street parking	2.353	+88.2%	0.214	+78.3%	1.341	+9.0%	0.243	+9.0%
Woodacre Bowl	Daytime case				Nighttime case			
Without street parking (baseline)	0.577	-	0.074	-	0.389	-	0.054	-
With street parking	0.632	+9.5%	0.076	+2.7%	0.480	+23.4%	0.063	+16.7%
Tamalpais Valley	Daytime case				Nighttime case			
Without street parking (baseline)	0.618	-	0.045	-	0.731	-	0.117	-
With street parking	0.738	+19.4%	0.070	+52.2%	0.817	+11.8%	0.184	+57.3%
Novato Neighborhood	Daytime case				Nighttime case			
Without street parking (baseline)	0.830	-	0.007	-	1.061	-	0.027	-
With street parking	0.896	+8.0%	0.007	0.0%	1.327	+25.1%	0.039	44.4%





**Figure 46. Average Evacuation Times With and Without Street Parking**



**Figure 47. Average Fire Exposure Times With and Without Street Parking**

## Recommended Strategies

The previous section analyzed different evacuation strategies in terms of two summary statistics: (i) average time for evacuees to reach two miles away from the fire area; and (ii) average exposure time within a half miles of fire area. From the results shown in Tables 8, 10-11 and Figures 30-31, 40-41, and 46-47, different strategies exhibit varying performance in different areas and times. This is due to differences in road networks, fire ignition points and progression, the number of evacuees, and the normal traffic around the areas. Table 12 lists recommended strategies for each case.

Sharing a vehicle among multiple persons is a good strategy among these different cases, as sharing vehicles can greatly reduce traffic congestion and speed up the evacuation. However, it is difficult and time-consuming to coordinate having persons from different households share one vehicle in emergency situations. On the contrary, it is quite easy to encourage persons not to use all their cars, but to share one or two vehicles among family members. We recommend that at least two persons should share a car during fire evacuations.

We recommend cities consider adopting a phased evacuation strategy. However, longer departure intervals do not necessarily result in a more efficient evacuation. This is because over time fires can spread and approach zones that were initially far from the point of origin. Therefore, it is not advisable to make persons in these zones wait too long time before issuing an evacuation order.

The effect of street parking on evacuation varies with the circumstances. In some cases, such as the nighttime scenario for Ross Valley and the daytime scenario for Woodacre Bowl, street parking had little impact on the evacuation, while in the other cases, prohibiting street parking can result in a significant increase in evacuation efficiency. The difference results from varying numbers of evacuees and exit routes. When the number of evacuees is relatively small compared with the number of background vehicles and the number of exits is large, the effect of street parking is small. Yet, with are more evacuees and fewer exits, the impact of street parking is high. Overall, prohibiting street parking on fire days can effectively reduce evacuation times. This strategy would be advantageous in all cases, particularly Tamalpais Valley, and during the daytime for Ross Valley, and at night for Woodacre Bowl, and the Novato Neighborhood. Prohibiting street parking in these cases could significantly improve evacuation performance.



**Table 12. Recommended Strategies**

<b>Case</b>	<b>Daytime Scenario</b>	<b>Nighttime Scenario</b>
Ross Valley	i. $\geq 3$ persons sharing one vehicle ii. 15-min departure interval iii. No street parking	i. $\geq 2$ persons sharing one vehicle ii. 40-min departure interval
Woodacre Bowl	i. $\geq 3$ persons sharing one vehicle ii. 30-min departure interval	i. $\geq 2$ persons sharing one vehicle ii. 40-min departure interval iii. No-street parking
Tamalpais Valley	i. $\geq 2$ persons sharing one vehicle ii. No phased evacuation iii. No-street parking	i. $\geq 2$ persons sharing one vehicle ii. 20-min departure interval iii. No-street parking
Novato Neighborhood	i. $\geq 3$ persons sharing one vehicle ii. 30/45-min departure interval	i. $\geq 3$ persons sharing one vehicle ii. 40/60-min departure interval iii. No-street parking

## Policy Recommendations

The following policy recommendations are based on our analysis of the three evacuation strategies.¹

### Vehicle Reduction

Based on the analysis presented in the previous sections, reducing the number of evacuating vehicles is a highly recommended strategy for Marin County. In Marin County, the average household size in 2019 was 2.45 and the number of vehicles per household was 1.9 (US Census Bureau, 2021). Due to the high level of vehicle ownership, there may be less incentive to carpool in emergency situations. The relevant benefits of carpooling have already been advocated on official websites (Firesafe Marin, 2019, 2020).

This strategy was also analyzed in Zhao and Wong (2021), and the relevant policy recommendations discussed there remain valid based on results from this study:

- Recommend residents take as few vehicles as possible (just enough to transport people and key belongings) through an educational and informational campaign.
- Suggest residents pre-pack their vehicle(s) during high fire danger periods so that vehicle space is used efficiently.
- Develop an equitable insurance framework for protecting residents' vehicles in high-risk fire areas.
- Develop plans for parking areas outside of potential evacuation zones for residents to take additional vehicles during high fire danger weather conditions as part of their emergency preparedness planning).

Zhao and Wong (2021)

In addition, the following policies are also recommended:

- Establish a communication system to provide real-time updates on car-pooling opportunities, match drivers with potential passengers, and disseminate information about carpooling resources and schedules.
- Continuously monitor and evaluate the effectiveness of vehicle reduction/car-pooling policies after a wildfire. Collect feedback from users, measure the impact on transportation patterns, and make necessary adjustments to improve the effectiveness and operational feasibility of this strategy.

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¹ The analysis framework and some content of this section can be referred to Table 4 in Zhao and Wong (2021). Direct quotes are used for readability. References to the original content are given whenever applicable.

## Phased Evacuation

The effectiveness of a phased evacuation strategy depends on the timing phases and size of the designated zones. However, this requires heavy communication and coordination tasks. Overall, when implementing a phased evacuation, it is essential to have an accurate assessment of the fire progression to prevent a situation where some people are exposed to the fire threat while waiting for the issuance of an evacuation order.

This strategy was also assessed in Zhao and Wong (2021), and their policy recommendations are still applicable based on results from this study:

- Research, develop, and distribute widely phased evacuation plans that create reasonable time bands.
- Use known boundaries and easy to identify landmarks and roads to set evacuation zones for phasing.
- Maintain relatively few potential zones to reduce confusion in the evacuation process and reduce the number of messages sent to evacuees.
- Convey emergency evacuation orders and warnings by zones.
- Prepare for contingencies (e.g., changes in time bands) if the fire spreads faster or slower than expected.

In addition, the following policy recommendations should be considered:

- Conduct public education campaigns to raise awareness about the phased evacuation strategy, the importance of preparedness, and the actions residents should take during each phase.
- Provide guidance on emergency kits, communication plans, and evacuation procedures to help individuals and communities prepare for evacuation in advance.

## Street Parking Prohibition

The effectiveness of prohibiting street parking in wildfire situations is highly context specific. In some areas, prohibiting street parking can effectively increase the road capacity and speed up the evacuation. However, this strategy requires active communication with residents before and during the evacuation, making it difficult to implement. To minimize trouble for residents, careful research should be conducted on where street parking has a significant impact on evacuation efficiency. Overall, this strategy is moderately recommended, but context-specific analysis is highly recommended.

Street parking has been demonstrated to have a great effect on the road capacity. It reduces road capacity by 16-30 percent (Wijayarathna, 2015; Cao et al., 2017). During evacuations, prohibiting street parking can greatly mitigate traffic congestion. Before wildfires occur, residents need to be notified to move their vehicles off the street. However, there may not be enough space off the street for vehicles to park. When formulating a street



parking prohibition plan, it is essential to identify alternative parking spaces to ensure that vehicles have a place to park.

The following recommendations should be considered in developing a street parking prohibition policy:

- Judge the impact of street parking on the evacuation traffic.
- Develop street parking prohibition plans that focus on highly congested roads and neighborhoods with few exits to maximize effectiveness and minimize disruptions to residents along the roads.
- Notify residents along roads where street parking is prohibited on fire days ahead of time.

## Summary and Conclusions

This study applied a spatial-queue-based dynamic traffic simulation model to analyze the impact of strategies for vehicle reduction, phased evacuation, and prohibiting street parking on the evacuation process. Background traffic was considered in conducting the simulations due to its effect on evacuation efficiency. These three strategies were tested on representative areas in Marin County, including Ross Valley, Woodacre Bowl, Tamalpais Valley, and a Novato neighborhood.

Simulation results show that **vehicle reduction** is a good strategy for evacuations based on the modeled average evacuation times and average wildfire exposure times. **Road congestion is mitigated, and evacuation can be completed more quickly.** Achieving an average of just two or three persons per vehicle can significantly reduce both average evacuation and exposure times, though beyond that improvements are only marginal. **Carpooling should be recommended during evacuation in these four areas.**

The phased evacuation simulation results show that this strategy **reduces peak demand on the roadway by spreading out evacuees temporally and reduces traffic congestion.** The optimal time interval between phases depends on the speed the fire spreads and the number of evacuees. Time intervals that are too short or too long will be less efficient, suggesting a need for thoughtful planning.

The effect of prohibiting street parking varies. In some cases, prohibiting street parking can make a greatly improve evacuation efficiency, while in the other cases, it makes little difference. This result suggests that a thorough analysis should be conducted before a wildfire occurs to determine whether this strategy is appropriate for implementation during fires.

The simulations presented in this study involve many assumptions regarding road networks and vehicle behavior due to the level of detail that the model can support. Nevertheless, the results show that the proposed wildfire-traffic simulation framework can offer broader application for preparedness analysis especially for resource-strapped communities in WUI areas to undertake the most cost-effective precautionary measures and implement corresponding policies.

However, there are some limitations to this research. This study only involved two fire scenarios for each case study, one in the morning and one in the evening. Additional fire scenarios could be explored in future research, as traffic patterns differ at different times of the day. It may also be possible to develop distinct evacuation strategies tailored to specific periods of the day when fires may occur. **Additional evacuation strategies could also be analyzed, such as making narrow roads one-way during Red Flag Days to increase road capacity.**

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## WHITE PAPER

# Bay Area Wildland Urban Interface Review of Risks, Plans, and Strategies

WE ARE IN A FIRE PRONE REGION. HIGH FIRE SEVERITY.

WE NEED A CUMULATIVE EXIT EVACUATION ANALYSIS WITH CURRENT POPULATION AND  
PROJECTED POPULATION  
SEE PAGE 28, WE NEED A SAFETY ELEMENT

CURRENTLY WE HAVE ABOUT 4000 HOUSING UNITS IN ST HELENA.

20% OF X = 256  
X = 1280

WE DON'T KNOW HOW MANY UNITS WE WILL ACTUALLY NEED TO BUILD IN ORDER TO ACHIEVE  
RHNA. SINCE THE FOR SALE ZONING CODE DOESN'T INCLUDE REQUIREMENTS FOR 50% AND  
OR 80% AMI UNITS, WE MAY NEED SIGNIFICANTLY MORE UNITS TO FULFILL THE RHNA  
REQUIREMENTS.

WE NEED TO TAKE INTO ACCOUNT GROWTH MANAGEMENT AS A PUBLIC HEALTH AND SAFETY  
MATTER. INCREASED POPULATION ANALYSIS WITH EVACUATION EXITING ON LIMITED ROADS.

Association of Bay Area Governments & Metropolitan Transportation Commission, 2018

#### **Disclaimer**

*This report does not include assessment nor recommendations regarding response activities related to wildfires. The report touches on notification, evacuation, and shelters, but recommendations on these topics are out of the scope of this work. For more information on these topics we recommend connecting with the Bay Area Urban Areas Security Initiative (UASI), who builds regional capabilities in these areas. The work is supported by two working groups:*

- 1) Emergency Management Work Group [sheltering resources]  
<http://www.bayareauasi.org/programs/community-resiliency-recovery>*
- 2) Public Information and Warning Work Group [notification resources]  
<http://www.bayareauasi.org/programs/public-information>*

*For information on the 2017 North Bay Fires please refer to the County and State after action efforts.*

***If you have questions about the white paper please contact Michael Germeraad (Resilience Planner, ABAG/MTC) [mgermeraad@bayareametro.gov](mailto:mgermeraad@bayareametro.gov) (415) 820.7945.***

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## Preface

The Bay Area is a hazard-rich region. Flooding, earthquakes, landslides, drought, and wildfire all contribute to the region's risk. In 2017 the Association of Bay Area Government's Resilience Program published Risk Landscape, a document that characterized the range of hazards facing the Bay Area. To date the Program had focused many resources on earthquake risks, and partnered with the Bay Conservation Development Commission to study current and future flooding risks. Staff recognized a need to study the region's wildfire risk in greater detail, and in the spring of 2017 began research to document the San Francisco Bay Area's wildfire risks.

On October 8, 2017 the Bay Area experienced the most deadly wildfires in state history, and lost 10,000 homes. The risks being explored in the white paper were realized, and the region's wildfire risk was front and center.

The scope of this White Paper does not focus on the 2017 fires directly, but instead explores the strategies communities currently use to mitigate wildfire risk. The report is a resource for the Metropolitan Transportation Commission, Association of Bay Area Governments and its member jurisdictions to better understand wildland fire risk in the region. The white paper characterizes wildfire hazard in the region, assesses existing wildfire hazard maps, and includes a literature review of Bay Area fire planning documents. A suite of appendices provide links to resources to support communities engaged in wildfire mitigation efforts in their communities. In addition to the paper, a searchable database of wildfire mitigation strategies is also available showcasing the 350+ strategies discussed in the 15 reviewed Bay Area fire planning documents.

Funding for this paper was provided through a FEMA Cooperative Technical Partnership [Grant No. EMF-2016-CA-00010]. Any opinions, findings, or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the Federal Emergency Management Agency.

### A. The Document Layout

**I: Characterization of Fire Risk** – A range of mapping and assessment tools enable the characterization and modeling of wildfire risk. Each year new tools with improved accuracy and coverage are being developed to provide planners and decision makers with more information to understand the severity and extent of fire risk. The section describes the hazard mapping resources, general fire impacts, and concludes with a mapping analysis of the intersection of Bay Area wildfire hazard and Bay Area land use and vulnerable populations.

**II: Wildland Urban Interface (WUI) Plans and Strategies** – In California, the state, local jurisdictions and community groups produce a range of wildfire planning documents. The chapter introduces the plan landscape, the coverage of the plans in the region, and their legislative links. Agency staff reviewed fifteen plans in the region, and aggregated a full list of strategies from each plan. The section summarizes and analyzes the range of wildfire strategies described in the plans, and common funding mechanisms.

**III: Summary & Next Steps** – The section outlines areas for the regional agencies and local jurisdictions to pursue to reduce wildfire risk with local partners. The next steps are built on areas of convergence between the fifteen studied plans.

## I. Characterization of WUI Fire Risk

Risk is often characterized as the intersection of hazards and assets. This section characterizes the Bay Area wildland urban interface (WUI) fire hazard and general asset classes. The section ends with an assessment of hazard maps success in forecasting past wildfire perimeters, and a high-level exposure assessment of land uses and vulnerable populations in the region.

### A. Bay Area WUI Fire Hazard

To narrow the paper scope, staff focused research on wildland urban interface fires. Other fire types, including: structural fires, infrastructure explosions, wildland fires, and fire following earthquake all are probable risks for the region, but are not included in this document. ABAG has chosen to focus on WUI wildfire risk because of the potential for regional or sub-regional impacts. However, for some communities other fire hazards like structural fires may be a greater risk. Therefore, as part of this research, staff compiled resources that touched on non-WUI fire impacts. Information on structural fires and fire following earthquake are described in *Appendix H. Other Fire Types and Impacts*.

Fires in the urban environment and in the wildland-urban interface result in direct damage to the built environment and can injure or kill residents. Wildland fires can cause significant impacts to critical structures such as housing; damage linear infrastructure systems that serve the Bay Area, causing subsequent outages; impact air quality in the entire region during the duration of the fire; and impact water quality in watersheds affected by a wildland fire. Wildland and wildland-urban interface fires can also damage natural and open space environments and cause lasting impacts to slopes and soils.

This document focuses research within the nine-county Bay Area. Fires elsewhere in the state can impact Bay Area air quality, and can damage infrastructure and natural systems that the Bay Area is dependent upon. While this research explores the fire risks within the nine-county region, Bay Area communities and agencies should recognize that their risks extend beyond the region. *Appendix H. Other Fire Types and Impacts* describes impacts within the San Francisco Bay Area from the 2013 Rim Fire, which was located several hundred miles away from the Bay Area.

A vivid example of wildland urban interface fire is the 1991 Tunnel Fire in the Oakland and Berkeley Hills. The firestorm occurred within a larger high fire hazard zone that is part of an approximately 60 mile stretch of hills running from the Carquinez Strait to San Jose in the eastern San Francisco Bay Area. The fire happened in an economically well-off, largely built-out residential area that has a long standing fire history linked to hot, dry fall winds and the presence of dense, flammable vegetation. WUI fires continue to be a risk for many Bay Area communities. The October 8, 2017 North Bay fires have many characteristics that closely resembled the Tunnel Fire conditions, and occurred just ten days earlier in the fire season than the October 19, 1991 fire.

There are a number of resources available to help communities characterize their fire risk. The next sections highlight the different entities responsible for fire services, perimeters of past fires, data on climate change's influence on Bay Area fire, a variety of methods for mapping fire hazard, and information on wildfire smoke.



### **Fire Management Responsibility Areas**

In the Bay Area fire management is shared by local, state, or federal entities. For each location in the region, a single agency has direct responsibility. In local areas (incorporated areas), local fire departments or fire protection special districts are responsible. In state areas (unincorporated areas), CAL FIRE is responsible. In Federal areas, the Department of the Interior is responsible. Localities and the State cover most of the region with the exception of West Marin County, and portions of Northern Napa which have large Federal lands. Figure 1 maps Bay Area fire responsibilities.

Many jurisdictions have partnerships and contracts with CAL FIRE for fire services both for managing wildland areas and for fire suppression. During a large wildfire, assets from local, state, and federal resources are tapped regardless of where a fire is burning.

### **Historic Bay Area Fire Occurrences**

Wildfires are common events in the Bay Area. Prior to the 2017 fires in the North Bay, the 1991 fire in the Oakland-Berkeley Hills was the largest urban-wildland fire in the Bay Area, and resulted in \$1.7 billion in losses. In that fire, 3,354 single-family dwellings and 456 apartments were destroyed, while 25 people were killed and 150 people were injured. Figure 2 maps the perimeter of fires since 1955. Marin County also includes approximate fire perimeters dating back 100 years. This map includes fires up to December 31, 2016. Figure 3 includes preliminary perimeters from the large 2017 North Bay wildfires. *Appendix B. 2017 North Bay Wildfires – An Early Perspective* includes further discussion on the 2017 fires.

Where fires have occurred in the past can be a determinant of where fires are likely to occur in the future. These maps also provide an opportunity for communities to use a past fire as a scenario to characterize their risk. Sonoma County's 2016 Community Wildfire Protection Plan highlights the impacts of a repeat of a 1964 fire, a fire that shared the name of the 2017 fire. Using scenarios is a helpful tool to articulate risks to decision makers. The Sonoma County example is described further in *Appendix B. 2017 North Bay Wildfires – An Early Perspective*.

### **Probability of Future Fire – Climate Influenced**

Increases in wildfire risk as a result of climate change are primarily due to higher temperatures and longer dry periods over lengthier fire seasons. Potential changes in vegetation, wind patterns, or wind severity could also increase risks. Research out of UC Merced has projected the future fire risk impacted by climate change compared to existing fire risk. In the Bay Area the results are mixed. The research projects a decreased fire risk in some East Bay and South Bay locations (due to the already dry and small vegetation conditions), and a 50% increase in fire risk in portions of the Peninsula and North Bay (due to the more dense levels of vegetation that will be dryer than in the past) by 2085. Generally, across the Bay Area there is fairly limited change in fire risk in the year 2050, with the greatest change occurring between 2050 and 2085, especially in the high emission climate change scenario. The data, pulled from Cal Adapt – a state tool to support Climate Adaptation work – suggests that some jurisdictions might have to adapt more aggressively compared to others. Figure 4 shows the projected fire risk increase for the Bay Area with the greatest increase and decrease areas highlighted. Jurisdictions can use the State's Cal Adapt tool ([cal-adapt.org](http://cal-adapt.org)) to explore the best available state level data on climate influence on fire risk.

The future fire risk model analyzes two primary variables: fuel availability and flammability of fuel. In California the change in fire risk is a result of either a densely forested ecosystem becoming drier, or a

dry climate experiencing large vegetation growth after a year of above average precipitation. In the first scenario the suite of climate impacts (higher temperatures, less snow pack, earlier springs) result in previously wet dense fuel ecosystems becoming dry – increasing the fire risk dramatically. In the second ecosystem, dominated by grass and low density shrubs, the risk is often unchanged or decreased because the availability of fuel is the governing variable for fire risk, and the fuel remains unchanged or decreases as a result of projected precipitation (Westerling, 2008). These modeling characteristics are reflected in the Bay Area’s future fire risk map, and are why eastern Alameda County with already dry grasses remains unchanged, but western Sonoma County with wetter, dense vegetation will become dryer and more prone to wildfire.

The Bay Area, compared with other portions of California, especially those near the Oregon border and the headwater forests of the Sierra Nevada Mountains, have a much lower projected increase in fire risk due to climate change. Near the Oregon border, many areas are expecting a 500 percent increase in fire risk by 2085, with some areas projected to see their fire risk increase more than 10 times over the remainder of the century.

#### **Existing Fire Hazard Maps for the Bay Area**

The State produces a range of wildfire mapping products to support their wildfire management efforts, local efforts, and to meet regulatory requirements. A full set of resources are available through CAL FIRE’s Fire and Resource Assessment Program (FRAP) ([frap.fire.ca.gov](http://frap.fire.ca.gov)). In addition to these state initiatives, some local governments, or local divisions of CAL FIRE have produced their own fire hazard maps. As part of the 2016 update, the Marin County Community Wildfire Protection Plan used granular mapping to characterize fire risk in the county. At the writing of this paper, Marin County is the Bay Area jurisdiction that has done the most to characterize and map wildfire hazard at the local level. As will be discussed in Section II of the white paper, many jurisdictions have an interest in updates of state fire hazard maps, granular maps of local areas, or granular mapping of high risk areas.

#### *Fire Hazard Severity Zones (FHSZ)*

CAL FIRE has developed maps depicting wildfire hazard areas. Figure 5 is a map of fire hazard severity in State Responsibility Areas. Fire hazard severity takes into account vegetation amount, topography, and weather (temperature, humidity, and wind), and represents the likelihood of an area burning over a 30-50 year time period. In Figure 5, shadowed portions of the map depict very high fire hazard severity in Local Responsibility Areas. CAL FIRE only maps very high fire hazard severity in their final local responsibility areas. Local fire departments and protection districts may have other locally available hazard severity information for these areas, but often do not.

In addition to characterizing risk, FHSZ maps are also a regulatory tool. In all state areas, and in local areas within a very high zone, property owners are subject to mandatory code requirements for their structures and adjoining vegetation. The building code requirements, like most code requirements, are not retroactive and are only mandatory for new construction and large renovations. When CAL FIRE produces a Very High Hazard Severity map for a local jurisdiction, the local agency has an opportunity to comment on the map before adoption. In Section II the fire code is discussed in greater detail, with *Appendix I. Fire Code Details* providing an even greater description.

Additional legislation has been tied to the FHSZ designations. If local communities have a Very High designation, they are subject to Senate Bill 1241 (discussed in Section II). In addition to these hooks, the zones were previously used to designate additional parcel fees. Until the 2017 legislative update of Cap

and Trade, property owners paid a special parcel fee to help pay for state fire expenses. As part of the 2017 Cap and Trade legislation, this fee was waived.

#### *Fire Threat*

CAL FIRE also has produced a threat map which produces a fire threat rating for all geographies regardless of responsibility. Fire Threat is a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). Potential fire behavior is a function of the vegetation (fuel) and slope conditions that would support high or very high fire behavior when burned under typical severe weather conditions. Fires that burn in these areas under hot, dry, and windy conditions are difficult to control even by the world's most comprehensive wildland fire protection system. These two factors are combined to create 5 threat classes: Extreme, Very High, High, Moderate, or Not Mapped (Cal Fire, 2003). The Extreme category is concentrated in Southern California, with the only Bay Area occurrence in Marin County with under 2,000 total acres in the category. Figure 6 maps the fire threat layer in the Bay Area counties.

Fire threat can be used to estimate the potential for impacts on various assets and values susceptible to fire. Impacts are more likely to occur and/or be of increased severity for the higher threat classes. The data set was published in 2004 as part of the 2003 California Forest and Range Assessment.

Section 1.C. Bay Area Fire Risk analyzes how well Fire Hazard Severity and Fire Threat have intersected with the region's fire history. The main difference in the layers is not that one is better or worse than the other, but rather that Fire Threat maps fire risk across the entire Bay Area, while Fire Hazard Severity leaves many portions of local/urbanized areas unmapped.

#### *Wildland Urban Interface*

CAL Fire also produced WUI maps that highlight areas with burnable vegetation and residential density greater than one unit per 20 acres. These zones represent areas of potential fire and high exposure of people and property. Figure 7 is a map of CAL FIRE-designated WUI zones. Some local fire departments and districts have chosen to identify their own WUI zones based on their local knowledge of the landscape. Santa Rosa is one city example with a self-defined WUI Area. The state level WUI maps are made using state level data and alone, without local vetting, can be a less than polished product. Areas like Foster City captured by the map may be areas that would not be classified as WUI when exploring the model output locally.

#### **Wildfire Ignition Sources**

In many of the Bay Area plans there is data on the cause of fire ignitions. After the high number of undetermined ignition sources, power lines, vehicles, campfires, debris burning, and equipment were the highest sources of wildfire ignitions in the region. Across many plans there was recognition that non-natural fire ignitions were the majority of wildfire ignitions. Figure 8 shows the frequency of each ignition type for wildfire plans that included data. In Marin County, data was available for multiple years, while all other plans only reported ignition history for a single year. In addition to the plans included in Figure 8, the Alameda County and Contra Costa County plans provided a narrative of ignition sources, citing that human related ignitions (arson, camp/picnic activities, powerlines, fireworks, fuel reduction activities, smoking, playing with fire, and vehicles) were the most common, with only 1% of fires caused by lightning.



Many of the plans included that the ignition source is important as it relates to fire weather conditions, primarily when there are high winds. When concerned about ignition and severe fire spread conditions, electric line ignitions are especially problematic because they typically occur during periods of high wind activity (Santa Clara County [Community Wildfire Protection Plan, 2016]). The co-occurrence of high winds causing downed power lines with arcing and rapid rates of spread from the ignition site can cause electric fires to have faster spread than other ignition types that are less correlated to wind.

#### **Smoke & Air Quality Mapping**

Wildfires are primarily responsible for the worst air quality days in the San Francisco Bay Area. The particulate matter observed in the recent North Bay Fires were at times a full order of magnitude greater than a typical poor day. Figure 9 shows the ten worst air quality days in the region since 2003, six of which were due to wildfire smoke.

Smoke from wildland urban interface fires is complex. In fully wildland fires the smoke is more predictable, and is mostly caused by the burning of organic material. Smoke from these fires is unhealthy by itself. When structures, equipment, and other inorganic components become a source of the smoke, it can be toxic. To help understand the complexities of smoke, the Bay Area Air Quality Management District (BAAQMD) monitors the air and shares information with stakeholders. In addition to what is in the smoke, the Air District forecasts smoke plume directions to inform sub-regions that will have worsened air quality. For local, in-region wildfires, the forecast can be trickier because the plumes are narrow and impact a smaller band of the region. For out-of-region wildfires it is easier to predict impacts because the plumes are broad and will impact large portions of the region similarly.

After the fires are out, air quality impacts remain at a hyper local level. Localized air quality can be diminished adjacent to burn areas with large quantities of ash. Special precautions should be taken to protect those cleaning debris, rebuilding, and living/working adjacent to the burn areas.

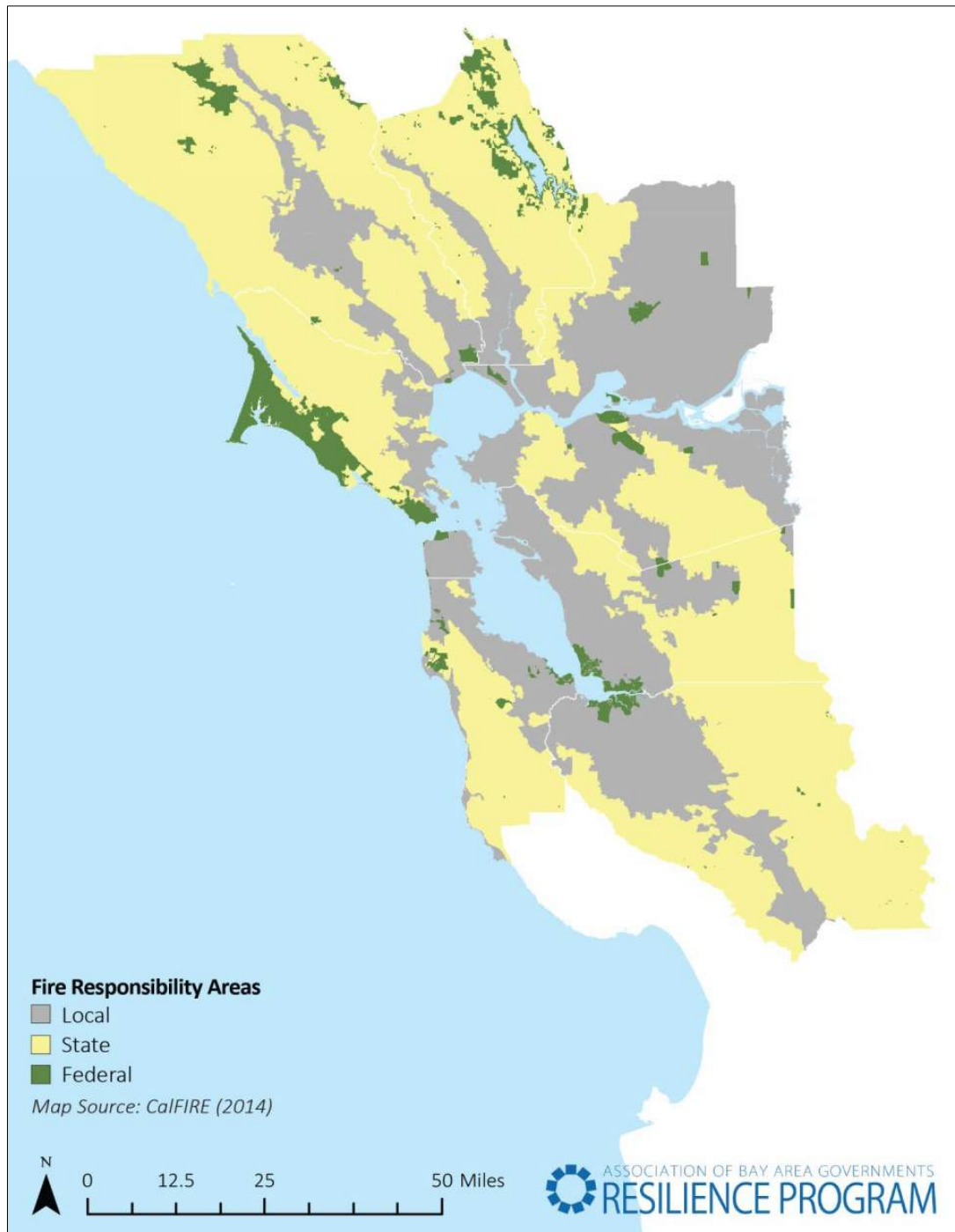


Figure 1 Fire Management Responsibilities in the San Francisco Bay Area

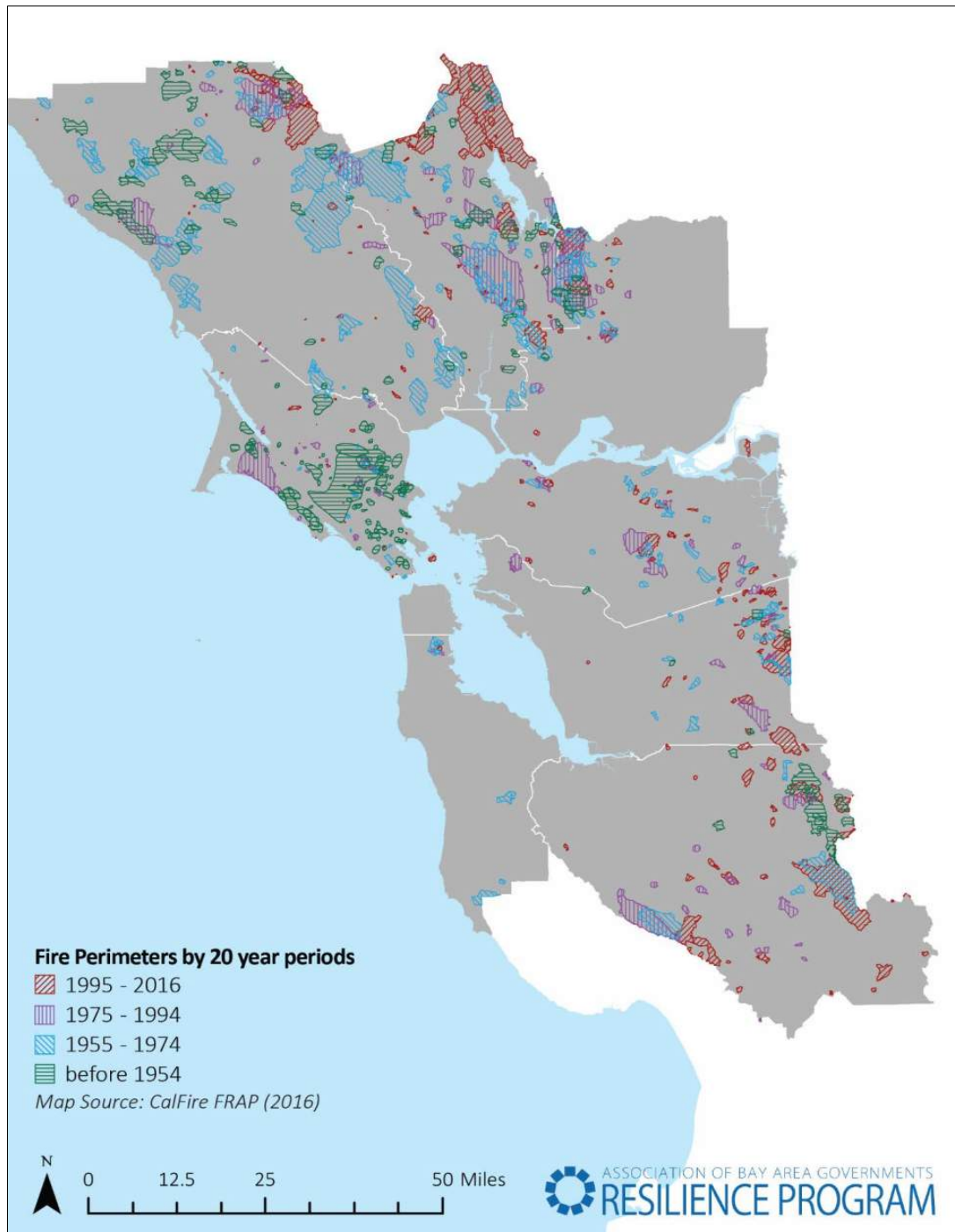


Figure 2 Historic Bay Area Fire Perimeters 1955 – 2016



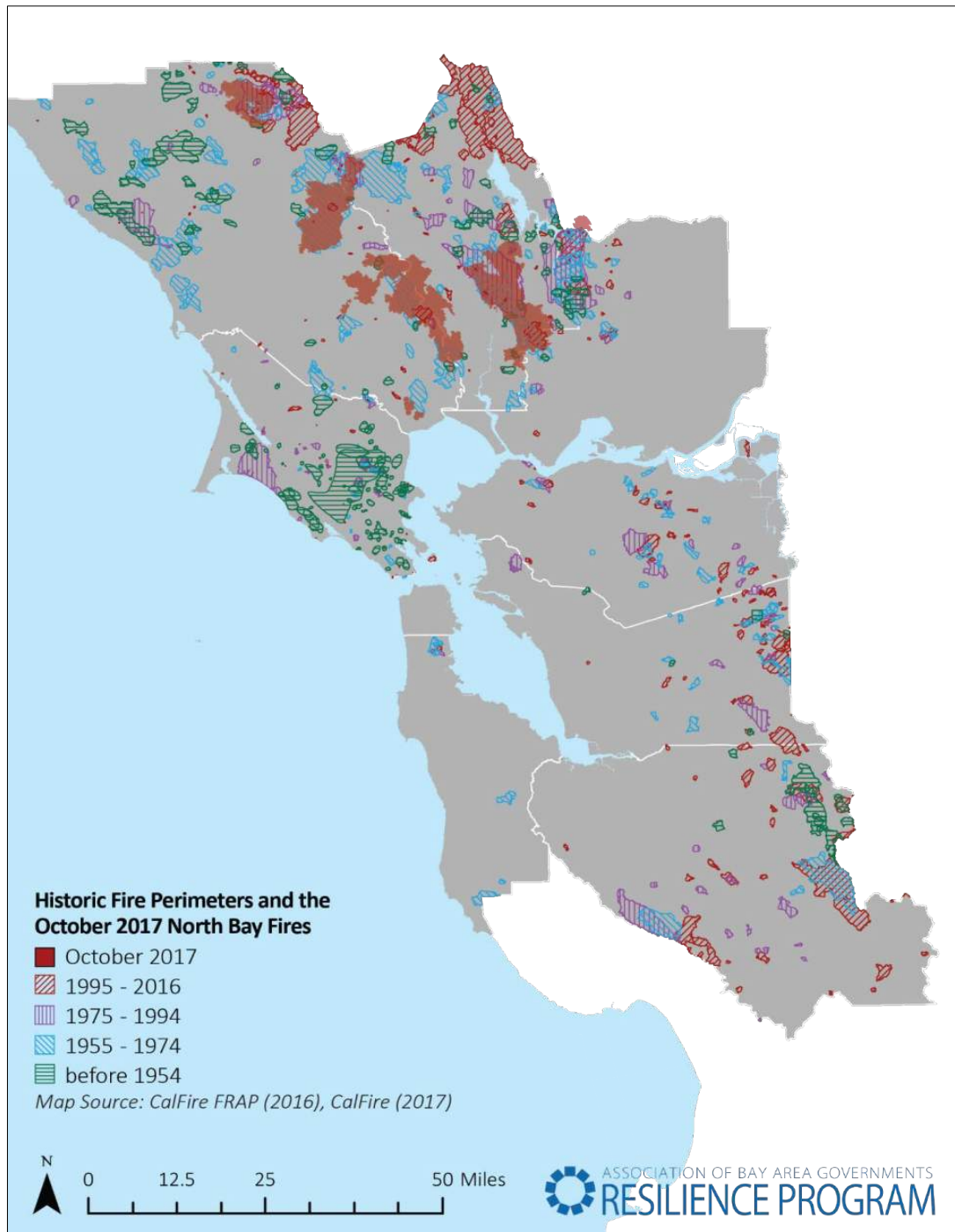


Figure 3 Historic Bay Area Fire Perimeters 1955 – 2016 and Unofficial 2017 North Bay Fire Perimeters

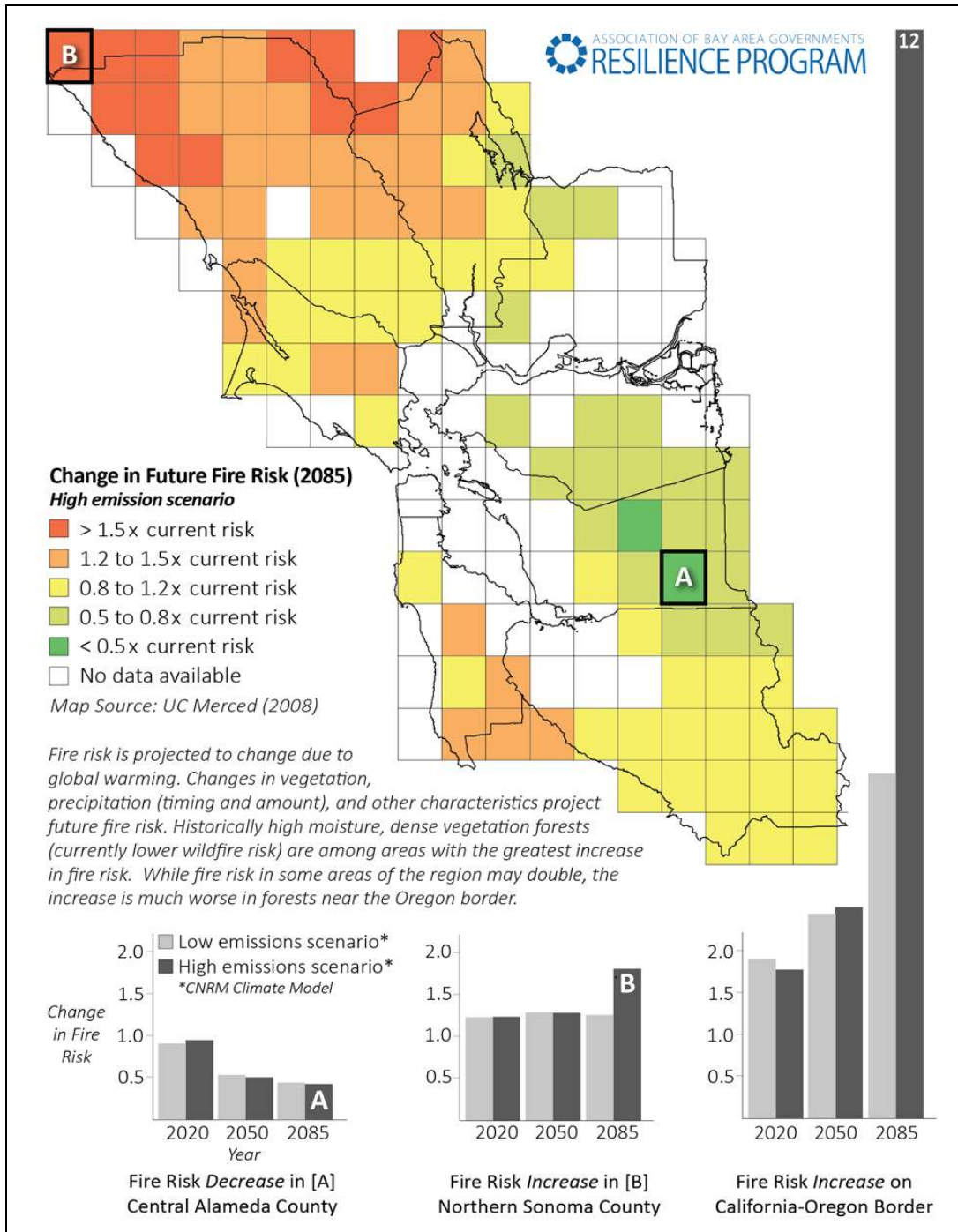


Figure 4 Climate Change Influence of Future Fire Risk

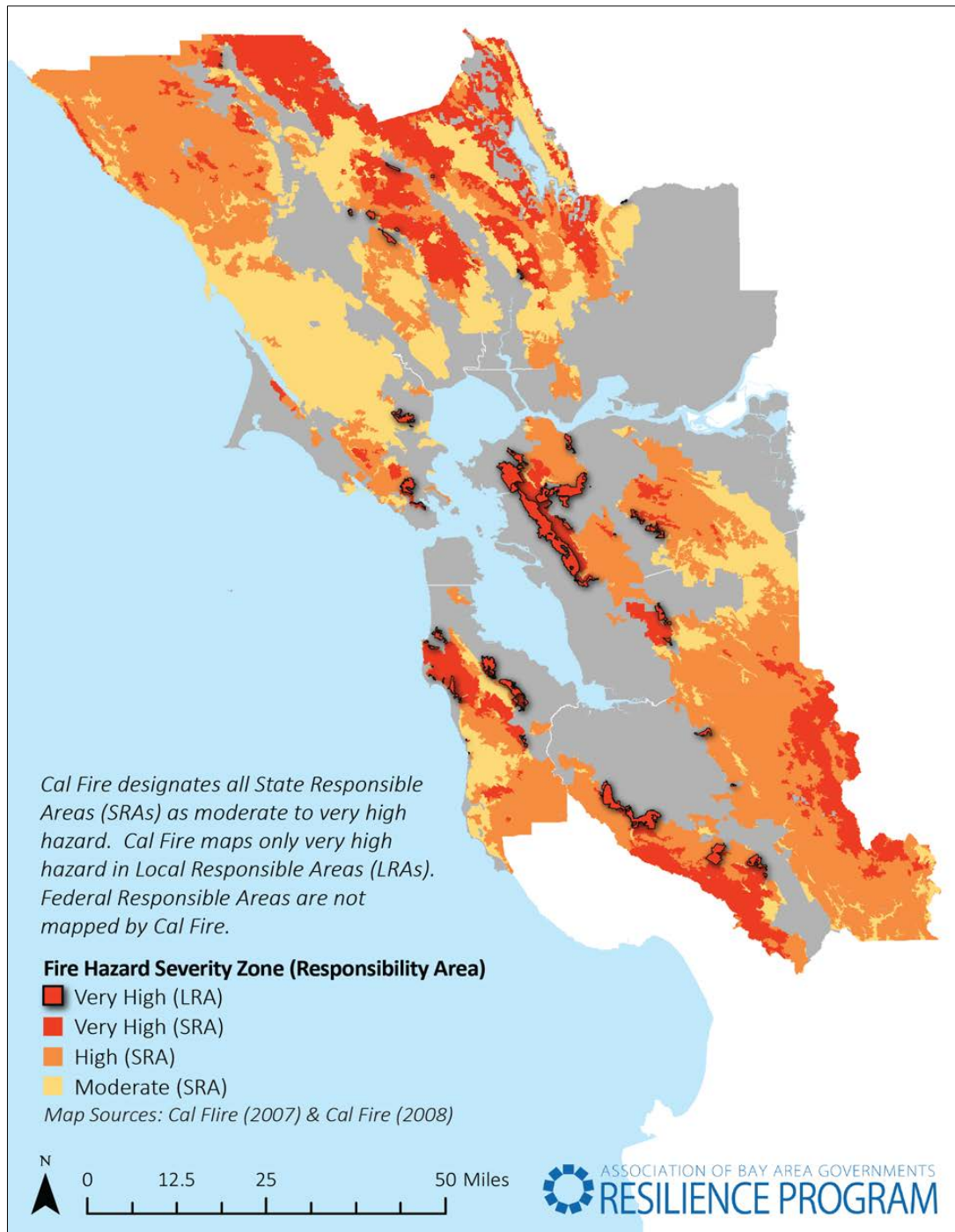


Figure 5 Fire Hazard Severity Zones with Local Responsibility Areas Outlined



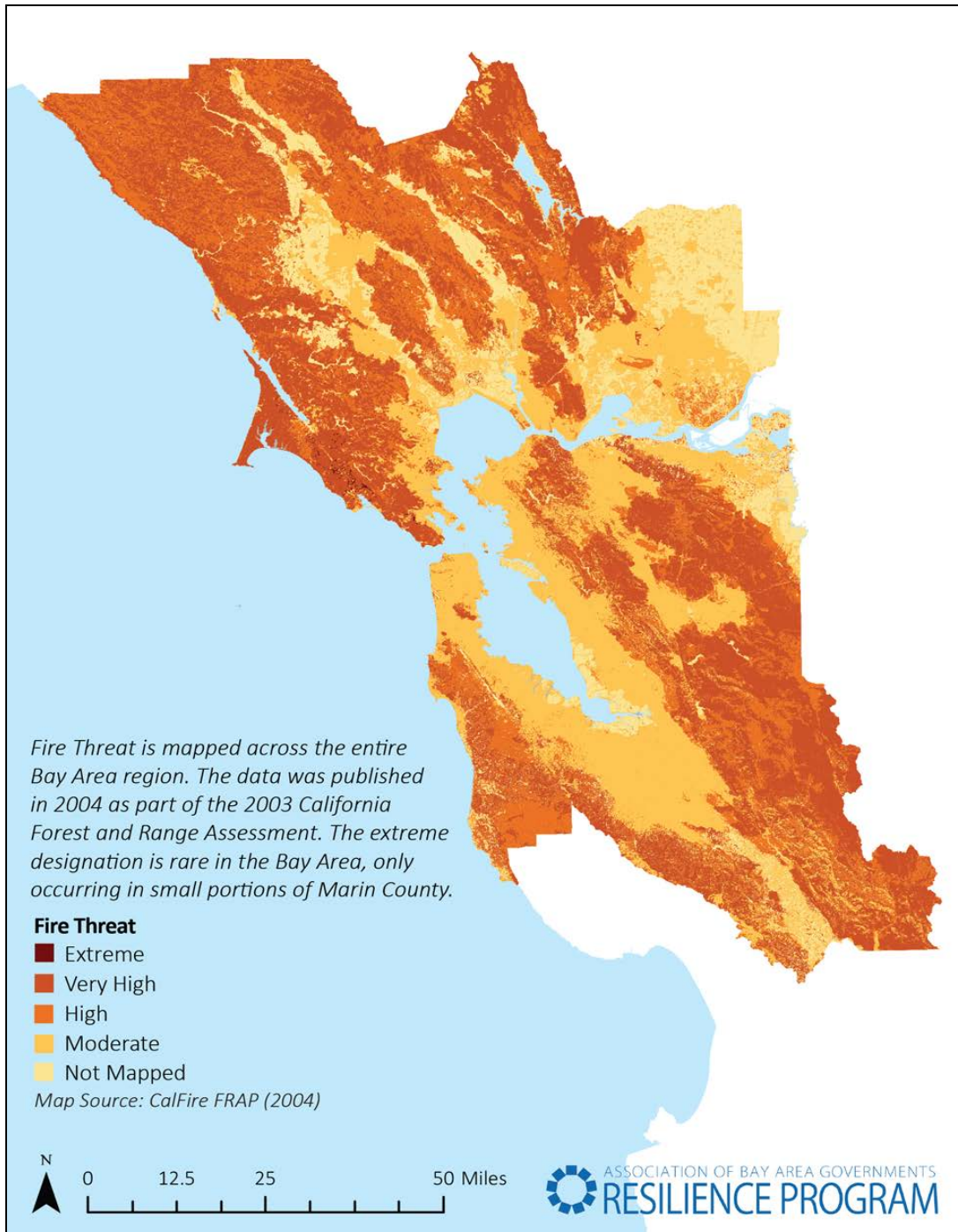


Figure 6 Fire Threat in the San Francisco Bay Area

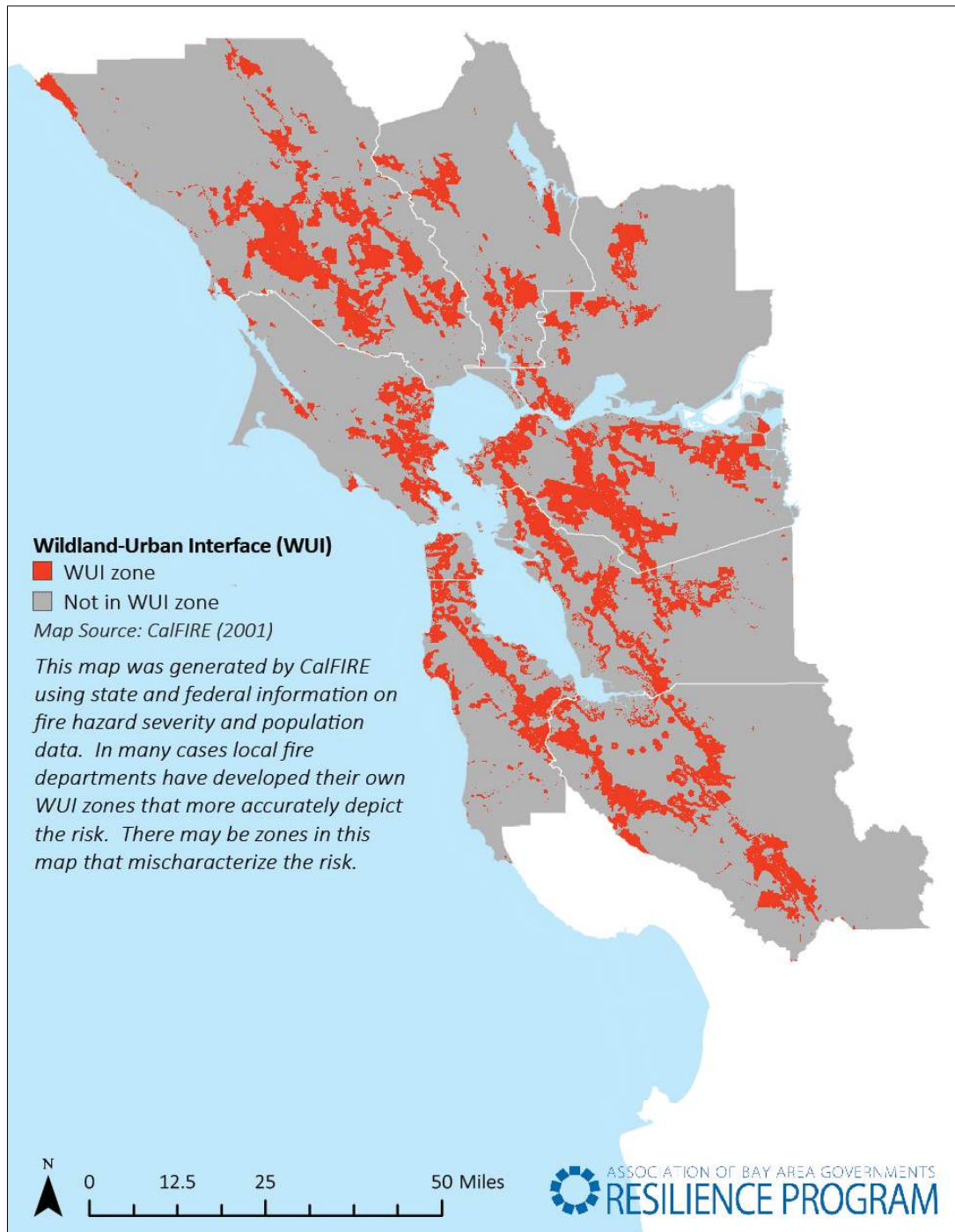


Figure 7 State Defined Wildland Urban Interface

	Plan (Ignition Data Year(s))						
	Summation of All Plans	Marin CWPP (1974-2014)	Marin Unit Plan (2005-2014)	Santa Clara, Alameda, Contra Costa Unit Plan (2015)	San Mateo Unit Plan (2015)	Santa Clara CWPP (2014)	Sonoma, Napa, Solano Unit Plan (2013)
Unkown, Undetermined	1	1	1	1	1	1	1
Powerlines	2	5	2	2	6	3	2
Vehicles	3	5	3	2	6	2	4
Campfire	4	2	5	7	9	not included	not included
Debris Burning	5	10	4	6	4	4	2
Equipment	6	5	6	4	3	not included	not included
Arson	7	4	not included	5	2	not included	not included
Accidental, Playing with Fire	8	3	not included	not included	9	6	not included
Smoking	9	8	not included	9	5	5	not included
Lightning	10	9	not included	7	6	7	not included
Railroad	11	11	not included	9	9	not included	not included

Figure 8: Ignition Source Ranked by Frequency for Bay Area Plans with Ignition Data.



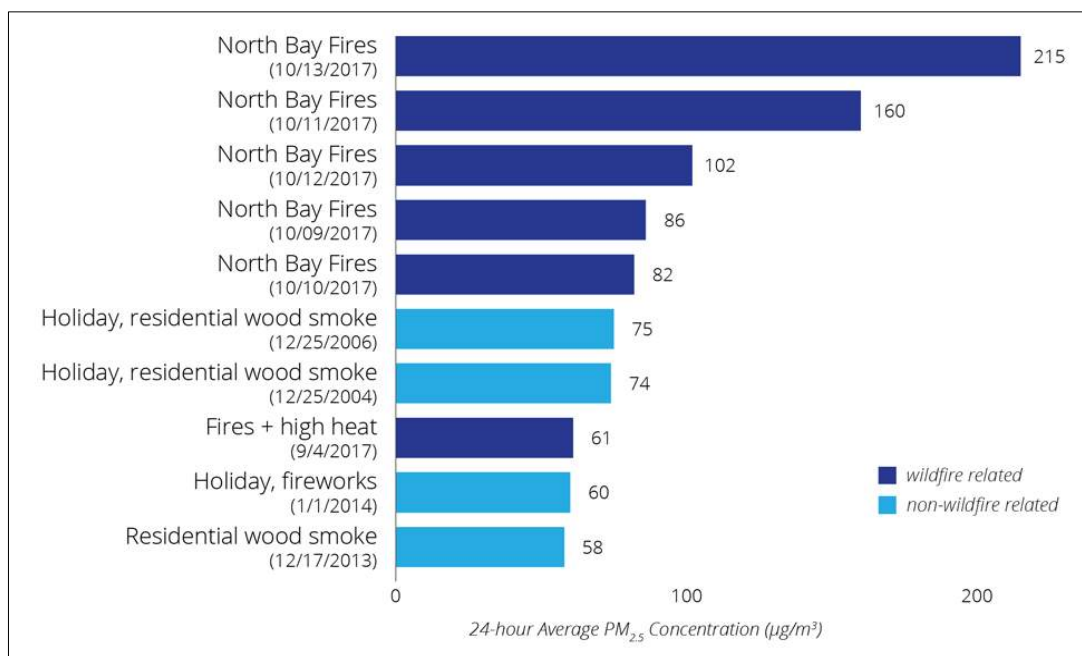


Figure 9 Top Ten PM_{2.5} Days in the Bay Area Since 2003 (BAAQMD, 2018)

## B. Fire Impacts on Assets

Fires have significant impacts. Their most devastating and focused impact is burning assets. The result of burned landscape can create cascading hazard impacts, resulting in impaired water quality, increased mudslide risk, increased landslide risk, and possible change to flooding dynamics. In addition to the impacts of burning, fires also produce smoke that has direct impacts on people and the built environment. A general characterization of fire impacts on people, buildings, infrastructure, and the environment is provided. For more information on assets and including asset impacts in a risk assessment, Risk Profile 2017 provides additional discussion (ABAG, 2017a).

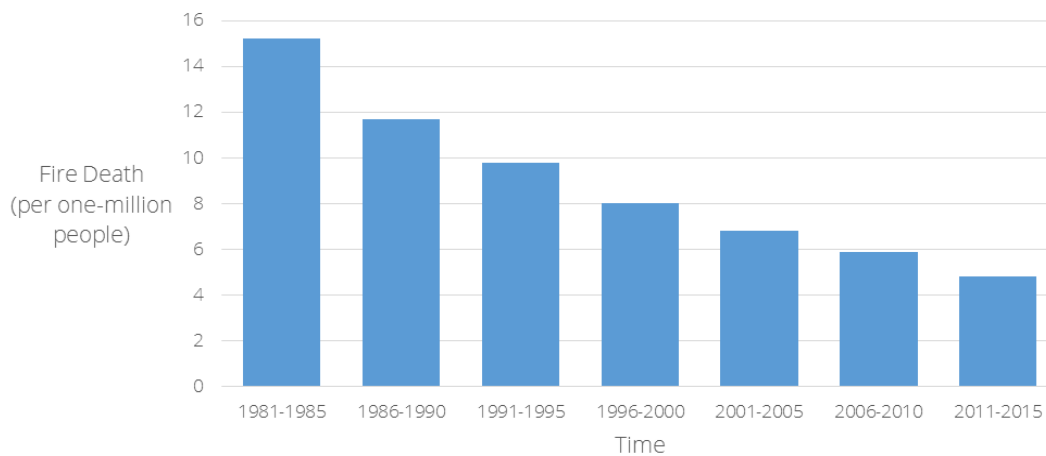
### People

Fires threaten safety and public health. Without warning and sufficient evacuation strategies, fires can kill and injury people. In addition to the fire directly, smoke causes severe public health impacts. Smoke impacts are much more widespread than the fire itself, and strategies are needed to address this risk. This research focused efforts on studying in-region wildfire risks, but smoke impacts from fires burning out of the region can have smoke impacts on Bay Area residents. Conversely, wildfires within the region can worsen air quality for Central Valley residents, who bear the brunt of poor air quality.

For healthy people, smoke from wildfire will cause temporary health impacts. Chest tightness, congestion, watery eyes, and a dampened immune system are common symptoms that can take time to recover from once the poor quality air has cleared. For individuals who have trouble breathing to begin with, smoke becomes an added challenge. Children are at greater risk because they breathe at a higher

rate than adults, so they'll take in greater quantities of smoke relative to their body weight. The elderly and populations with cardiovascular, lung disease, emphysema, and bronchitis are at a higher risk as well.

Fire deaths in the state of California have been steadily declining over the past three decades (see Figure 10). This data set does not distinguish which deaths were from wildfires versus other fire types. Much of the decline has been credited to updated building codes which have targeted structural fire risks with strategies like fire sprinklers. The data set also does not include any deaths that were associated with indirect smoke impacts.



*Figure 10 Fire Death Rates per Million Population in California*

#### *Vulnerable Populations*

Certain members in the community are more at risk of being harmed by disasters and specifically fires than others, including the very young, the very old, the disabled and the chronically ill, and residents without access to vehicle. These individuals are more susceptible to the extreme conditions created by a disaster and have less mobility to evacuate out of harm's way.

In 2013 ABAG and BCDC worked with stakeholders to define vulnerable population characteristics that make individuals less able to prepare for, respond to, and recover from disasters. Ten census-collected attributes were determined to be indicators for high social vulnerability and were mapped to uncover block groups in the region with high percentages of socially vulnerable populations. The ten indicators are: population over 75, population under 5, housing cost burdened, transportation cost burdened, no high school diplomas, very low income, limited English households, people of color, no vehicle households, and rental households. For each indicator, a specific level of significance was determined that indicates that the particular block group has a higher than average concentration of that indicator. Block groups with more than one indicator were aggregated to create a vulnerability "score" for that block group. While these indicators were developed for earthquake and flooding risk, they are also applicable for other hazards such as fire. For more information on vulnerable population see Stronger Housing Safer Communities, 2015, [http://resilience.abag.ca.gov/projects/stronger_housing_safer_communities_2015/](http://resilience.abag.ca.gov/projects/stronger_housing_safer_communities_2015/).

### Buildings

Buildings and their contents are at risk of being destroyed by fire. Not all structures are equal in their ignitability. Some construction materials are more resistant to fire and while other construction materials or design methods are at a higher risk for igniting.

For a long time, the California building code has incrementally adjusted portions of the fire code to address structural fire concerns. This has resulted in standards such as fire sprinklers, building materials, and fireproofing elements. Most fire code improvements were focused on reducing structural fires rather than WUI fire risks. In 1991, the State adopted the first WUI code in Chapter 49 of the California Fire Code. The code required defensible space standards and required the California Board of Forestry to map WUI areas. It wasn't until 2005 and 2008 that the California Building Code Chapter 7A and the California Residential Code Section R327 were improved to include increased building standards for new construction. The code has standards for roofing, attic ventilation, exterior walls, underfloors (decking, floors), and ancillary structures. It applies to buildings built in State Responsibility Areas and Local Responsibility Areas with a Fire Hazard Severity Zone rating of Very High (see Figure 5 for these areas). Buildings constructed prior to 2005 and buildings outside of the above described areas do not have to meet these WUI fire code standards. For more on the building codes see *Appendix I. Fire Code Details*. Individual jurisdictions are able to pass more stringent standards that require a broader area of homes to comply with the WUI code, or require property owners within the regulated area to bring their structures up to code, often in the form of a triggering action, like the owner requesting a permit for a large renovation.

In order to accurately characterize WUI fire risk, the attributes of buildings are needed. It is important to know if a structure is located within a high fire hazard zone, but the risk is much greater if it has a wood roof and exposed eaves, which are vulnerable characteristics of fire-prone buildings. To best understand a community's WUI fire risk it is important to understand the attributes of buildings in the community.

### Infrastructure

In fires, above ground infrastructure is at risk to damage. Telecommunication and electric poles and lines can be damaged in fires, and mechanical infrastructure components like transformers and electrical equipment can also be damaged not only by fire, but by smoke leading to power outages. In the 2013 Rim Fire, infrastructure equipment for power generation was damaged by dense smoke. Linear transportation infrastructure such as roads and rail lines are not a significant fire risk compared with other utilities, but debris clearance following a fire can limit access, and structures such as transit stations can be impacted. Fire can also impact transit by burning buses or trains, impacting transit service after a fire. In areas with old local roads there can be infrastructure such as bridges that are built with wood, which are at risk of damage.

Aside from components that can burn above ground, watershed basins can be impacted by fires. The reduction of vegetation in a watershed can result in greater erosion leading to greater turbidity in streams and lakes. The nutrient mix after a fire can also result in different conditions making algae blooms a greater possibility in the years following the fire. Lastly, for fires that burn into urbanized areas, the range of plastics and chemicals that burn in the fire can result in toxic byproducts that wash into waterways or down into groundwater aquifers.

Underground infrastructure can experience damage in high intensity fires depending on its proximity to the surface and the intensity of the fire. In the recent 2017 North Bay fires, there was significant damage



to storm water infrastructure. Underground plastic pipes and metal culverts melted in the fire, causing cascading impacts during the rainy season, which for late summer fires, is often only weeks or months away.

### **Environment**

Fire is a natural process, but with increases in ignitions caused by humans (electrical lines, equipment, campfires, fireworks, etc.), decades of robust fire suppression, and anthropogenic climate change, the dynamics have become less natural. Fires impact different environments differently. In forests, the intensity of the fire is a key characteristic that influences the impact of the fire. Historically, more frequent low intensity fires burned underbrush and small trees, leaving larger trees. In recent decades, fires in the region have been higher intensity which has resulted in complete vegetation loss.

Because fires can cause so much damage, and when uncontained are unpredictable, fire management typically translates into suppression of many fires. The result, recognized across the Western United States, has been an increase in forest density, especially in the number of smaller trees. This has led to high intensity fires that burn all vegetation. Following a fire, vegetation that was endemic to a location may be less likely to come back, with new species taking over.

The loss of vegetation and changes to surface soils caused by the fire alters the environment. When all supporting vegetation is burned away, hillsides become destabilized and prone to erosion. In high heat fires, the burned surface soils are harder and absorb less water. When winter rains come, this leads to increased runoff, erosion, and can cause landslides in hilly areas. For more information on Bay Area landslide hazard, see Risk Profile (ABAG, 2017a).

As mentioned in the Infrastructure section above, the erosion and debris flow potential can cause cascading impacts in the waterway systems. Water species reliant on specific conditions, both physical, and nutrient-based are impacted by drastic changes.

## **C. Bay Area Fire Risk**

The first two portions of this section described the Bay Area fire hazard and a subset of Bay Area assets. Their intersection offers a glimpse into the risk posed by wildfires in the region. At the regional scale there are limited comprehensive data sets for the region, which limits the ability to effectively characterize and quantify regional WUI risk. Some communities in the region that have more granular information about their hazard or their assets are capable of producing much more robust and meaningful WUI risk assessments that can help to communicate needs and prioritize risk reduction strategies.

### **Analysis of Bay Area Wildfire Mapping**

The multiple mapping data sets discussed in the hazard section provide multiple ways for jurisdictions to characterize their wildfire risks. ABAG performed GIS analyses to understand how successful current maps are in predicting past wildfire extents. The white paper provides summary results. For detail on the analysis performed please refer to *Appendix E. Further Discussion on Wildfire Mapping Data Analysis* which has details on the analysis, and data sources used.

#### *Success of Fire Hazard Severity Zones and Fire Threat in Mapping Historic Fire Perimeters (1955-2016)*

In a literature review of local wildfire planning efforts, Wildfire Hazard Severity Zones were the most commonly stated resource to characterize hazard. A GIS mapping intersection was done to determine

two key features: Table 1, of areas that have burned in the last 65 years, how much of the burned area was in different Severity Zones; and Table 2, what percent of different Severity Zones have burned.

*Table 1 Percentage of Burned Area in Each Fire Severity Zone*

Very High	38%
High	28%
Moderate	23%
Not Mapped	11%
Total	100%

*Table 2 Percentage of Fire Severity Zone that has Burned*

Very High	45%
High	18%
Moderate	24%
Not Mapped	5%
All Areas	18%

The analysis should give users confidence that the Fire Hazard Severity Zones have been decent predictors of fire risk. In 65 years, 45% of Very High areas have burned. It also begs the question of whether more mapping is needed for areas that are characterized as unmapped. Eleven percent of the area that has burned in the Bay Area has occurred in the unmapped areas.

CAL FIRE also uses the Fire Threat layer to characterize fire risk. Unlike Fire Hazard Severity Zones, Fire Threat maps fire hazard at all locations in the region. Table 3 and Table 4 share the results to the same assessment, completed for Fire Threat.

*Table 3 Percentage of Burned Area in Fire Threat Classifications*

Extreme ¹	0.1%
Very High	56%
High	34%
Moderate	8%
Little or No Threat	3%
Total	100%

¹ In the Bay Area there are only 681 acres classified as Extreme Threat. Because of this, it makes up just a small portion of the overall area (850,000 acres) that has burned in the region from 1950 – 2016.

*Table 4 Percentage of Fire Threat Classifications that has Burned*

Extreme	34%
Very High	32%
High	23%
Moderate	5%
Little or No Threat	4%
All Areas	18%

An important distinction to recognize is the difference in past burned areas for “moderate” values in Fire Threat and Fire Hazard Severity maps. Moderate for Fire Hazard Severity Maps has burned 3x more frequently than the moderate value for Fire Threat. When using either mapping layer the above tables are helpful tools to characterize Very High, High, Moderate attributes.

In the Local Responsibility Area (LRA) specifically, 33,230 acres have burned. As mentioned previously for the Fire Hazard Severity Zones, only the Very High risk is mapped in the LRA, while Fire Threat is mapped across all responsibility areas. Of the 33,230 total acres burned, 5,110 acres were in the Very High Fire Hazard Severity Zones, while 28,120 acres were in unmapped areas. As a percentage of total area, 10% of very high LRA land has burned, while only 2% of unmapped LRA land has burned, but of the burned LRA, 85% was out of the mapped areas. Comparatively, because the Fire Threat map characterizes all areas, there is data for each threat category. The categories appear to be poor determinants of risk in LRA when looking at the percent of total burned area, but this is largely because a much greater percent of LRA by area is in lower threat zones. When reclassified as percent of severity zone burned we see that 12% of Very High LRA fire threat has burned while only 5% of high, 2% of moderate, and 1% of little/no threat have burned.

*Table 5 In the LRA, the Percent of Area Burned in Different Hazard Zones 1955-2016*

Fire Hazard Severity Zone	% of Total Burned Area	% of Severity Zone Burned
Very High	15%	10%
High	-	-
Moderate	-	-
Not Mapped	85%	2%

Fire Threat Zone	% of Total Burned Area	% of Severity Zone Burned
Extreme	0%	0%
Very High	10%	12%
High	16%	5%
Moderate	61%	2%
Little or No Threat	13%	1%

#### *Exposure of Land Use to Fire Hazard Severity Zones*

Using the Fire Hazard Severity Map, an exposure assessment was conducted on the region’s land use, based on ABAG’s five regional land use categories (2005). This analysis looks at the distribution of land use within each Severity Zone as well as the percentage of land in each Severity Zone for each land use category.



**Table 6 Percent of Severity Zone in Each Land Use by Area**

Land Use Value	Fire Hazard Severity			
	Unmapped	Moderate	High	Very High
Open Space, Agriculture	50%	82%	71%	70%
Commercial & Industrial	8%	0%	0%	0%
Education/Public/Semi-Public	5%	2%	1%	1%
Residential	25%	14%	27%	26%
Other ¹	12%	2%	1%	2%
TOTAL	100%	100%	100%	100%

¹ Other is a combination of Land Use Values "Water, Other/Unknown, Mixed Use, Mixed Use: Other"

**Table 7 Percent of Land Use Area in Each Severity Zone**

Land Use Value (acres)	Fire Hazard Severity				Total
	Unmapped	Moderate	High	Very High	
Open Space, Agriculture (2,917,000)	32%	22%	31%	15%	100%
Commercial & Industrial (158,000)	98%	2%	1%	0%	100%
Public and Education (138,000)	72%	9%	12%	7%	100%
Residential (1,087,000)	43%	10%	32%	15%	100%
Other ¹ (258,000)	83%	6%	6%	4%	100%
Total (4,559,000)					

¹ Other is a combination of Land Use Values "Water, Other/Unknown, Mixed Use, Mixed Use: Other"

Table 6 highlights a few trends that someone familiar with the region might expect. Nearly all of the Very High zone is open space and residential land, with 70% in open space. Almost all commercial and industrial land uses are completely out of mapped fire risk zones, and nearly three-quarters of public and education land uses are out of mapped fire risk zones.

Table 7 shows that by area nearly half of residential land is in high or very high fire hazard zones. Using a more detailed land use attribute set with 15 different land use categories, the residential category can be dissected further to discover that a big portion of the land area under residential is defined as "mixed use: residential and open space/agriculture". Table 8 shows how the different sub categories of residential uses break out.

**Table 8 Acres of Residential Land Use in Each Severity Zone**

Land Use Value	Fire Hazard Severity				Total
	Unmapped	Moderate	High	Very High	
Residential	454,687	54,406	37,005	44,546	590,644
Mixed Use: Res. & Com./Ind.	3,890	32	9	-	3,932
Mixed Use: Res. & O.S./Ag.	11,302	56,129	305,861	119,323	492,616
Total	469,880	110,567	342,876	163,870	1,087,192

Nearly half of the area falls into the “Residential and Open Space/Agriculture” sub section. The Open Space/Agriculture category also represents over 73% of the Very High residential share. The land use layer is helpful in understanding the amount of different areas in different severity zones, but fails to express how many homes are in the zones. Unfortunately a regional parcel level assessment was not conducted for this study due to constraints of the project scope and limited parcel data available at a regional level. However, at the local level where more granular information may be known at the parcel level, an assessment can be done categorizing by number of homes rather than number of acres.

#### *Exposure of Vulnerable Communities to Fire Hazard Severity Zones*

As discussed in the section on Vulnerable Populations on page 20, of key importance is recognizing where vulnerable communities are located relative to hazards. At a regional scale, demographic data is used to highlight general trends in population (for example: income, education, age, language) to flag areas where communities are less able to prepare for, respond to, and recover from a disaster. Across the region at a local level there may be more detailed efforts underway that are focused on understanding where there are individuals within the community that need special support for evacuation. Table 9 highlights the exposure of vulnerable residents (as defined by section on Vulnerable Populations on page 20), in Fire Hazard Severity zones.

*Table 9 Vulnerable Community Populations (in number of residents) in each Fire Hazard Severity Zone.*

		Fire Hazard Severity				Total
		Unmapped	Moderate	High	Very High	
Community Vulnerability (0 lowest, 10 highest)	3	1,138,447	46,515	41,452	42,296	1,268,710
	4	838,361	12,370	6,630	11,317	868,677
	5	570,102	2,913	2,981	2,956	578,952
	6	411,869	396	198	1,742	414,205
	7	351,600	575	-	-	352,174
	8	147,587	554	-	-	148,141
	9	10,533	-	-	-	10,533
Total		3,468,498	63,322	51,261	58,311	3,641,392

In the region of 7.5 million residents (in 2015), census block groups totaling 3.64 million residents were classified as having a community vulnerability rating of 3 or greater. This does not mean that everyone within the census block is vulnerable, but rather they live in a block group with a proportionally higher concentration of vulnerable populations as compared with other block groups. Of the 3.64 million residents living in communities with a vulnerability score greater than 3, 3.46 million are in the unmapped fire hazard severity zones. The good news is that the vast majority of the remaining census tracts that are in areas of marked fire hazard severity are communities with lower community vulnerability score. In fact there is not a single census tract with a community vulnerability indicator score above 7 located in high and very high severity zones (see Table 9).

This analysis portion only highlights key takeaways of the analysis and does not include details of the data sets and assumptions and approximations used to complete analysis. *Appendix E. Further Discussion on Wildfire Mapping Data Analysis* has more tables, and breakdowns that provide additional information on differences between Local, State, and Federal lands as well as values in acres.

## II. WUI Plans and Strategies

### A. Local Fire Plans – Lay of the Land

Jurisdictions and agencies use a range of plans to characterize wildfire risks and develop responsive strategies. Some plans are led by grassroots engagement with threatened communities, while others are organized by fire agencies or jurisdictions to meet state or federal requirements or guidelines.

#### Common Stakeholders & Networks

Most planning processes recognize the need for collaborative input, and are developed with the support of other key stakeholders. The most common authors and key stakeholders included in wildfire planning documents are:

**Fire Safe Councils** – Most communities in the region have citizen-organized councils focused narrowly on wildfire issues. In some counties, a countywide council provides input on fire planning efforts, and acts as an engagement and network to encourage individual action by property owners. Other Fire Safe Councils represent individual neighborhoods, with a particular focus on fire safety within a single subdivision. In other cases the county has a Fire Safe Council, with more localized councils providing an opportunity to engage on local issues. Some councils are the lead or co-lead on planning processes, while others are primarily an engagement and dissemination platform to educate residents of risks and to promote preparedness, mitigation programs, and training. Some councils apply for grants and are the implementation leads for projects.

**Local Government (Fire Department) and/or Fire Special District** – In incorporated portions of the Bay Area, cities develop fire-related plans, or incorporate fire hazards into elements of comprehensive planning. Cities also carry responsibilities for land use zoning, building permitting and inspection, and maintenance of infrastructure. Many communities have a fire department with key functions to reduce fire risk and to respond to fires. Other communities are set up differently, and instead rely on a fire special district to provide their service. Often times the special district provides services to multiple jurisdictions. *Appendix D. List of Fire Districts in the San Francisco Bay Area* lists and maps all the fire districts in the nine-county region. In total there are over 166 fire agencies in the nine-county Bay Area.

**CAL FIRE** – The state is responsible for providing fire services to unincorporated land that is not federally owned. In some cases CAL FIRE has contracts to provide fire services to other areas. The state agency leads annual operational planning efforts, and works on long range wildfire planning. Statewide, CAL FIRE has 21 units; the Bay Area Counties are divided into four units. Within each unit there are battalions that provide service to a smaller area. CAL FIRE also has staff that develop fire hazard maps for the state, and other staff focused on supporting local governments with fire planning and implementation.

Outside of these three stakeholders there are other entities that play important roles in wildfire planning and in response to fires. Large land owners (open space preserves, water districts, etc.), community/neighborhood based organizations, residents, and a myriad of state and federal agencies can all be major players in planning.



### Common Plans

**Unit Fire Management Plans (Unit Plans)** are completed on an annual basis by the CAL FIRE Pre-Fire Engineer in each Unit area. The Unit Plans document assessments of the fire situation within each of CAL FIRE's 21 Units and six contract counties. The plans include stakeholder contributions and priorities, and identify strategic areas for pre-fire planning and fuel treatment as defined by the people who live and work with the local fire problem (CAL FIRE, 2012). CAL FIRE Unit staff are the leads on these plans.

**Community Wildfire Protection Plans (CWPP)** emanate from the 2003 Federal Healthy Forest Restoration Act (HFRA) in response to destructive wildfires in 2002. The HFRA was intended to direct funding and guidance for better forest management practices throughout wildland and WUI areas. In the Act, CWPPs were incentivized to prioritize future fuel reduction projects. CWPPs needed to meet three overarching criteria (Firewise, 2016):

1. Formed through **collaborative** efforts among different agency/government stakeholders and impacted parties;
2. Identify and prioritize areas for **fuel reduction treatments**; and
3. Recommend measures that communities can take to reduce the **ignitability of structures**.

Communities that are covered under a CWPP are prioritized for federal grant funds through the Bureau of Land Management, U.S. Department of the Interior, and the California Fire Safe Council. CWPP's are commonly led by a community organized fire safe council, local jurisdictions, or fire district.

**Local Hazard Mitigation Plans (LHMP)** emanate from the 2000 Disaster Mitigation Act (DMA), which amended the Stafford Disaster Relief and Emergency Assistance Act to include a new approach to hazard mitigation planning and implementation efforts. The DMA established requirements for states, tribal, and local entities to create FEMA approved plans that would open up funding opportunities through the Hazard Mitigation Grant Program (FEMA, 2004). Plans are required to document and assess local hazard, including fire, and develop mitigation strategies to reduce risk. LHMP's are led by local governments, or by a County, with local governments annexing onto the County plan.

**Safety Elements** are a required component of every city and county's general plan. The goal of the safety element is to reduce the potential short and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, droughts, earthquakes, landslides, climate change, and other hazards. The safety element must identify hazards and hazard abatement provisions to guide local decisions related to zoning, subdivisions, and entitlement permits.

The recent introduction of climate risk to the discussion of the safety element, mandated by SF 379, adds a focus on longer term preparation of a community for a changing climate. Policies in a safety element should identify hazards and emergency response priorities, as well as mitigation through avoidance of hazards by new projects and reduction of risk in developed areas. As California confronts mounting climate change impacts, local governments are now required to include a climate change vulnerability assessment, measures to address vulnerabilities, and comprehensive hazard mitigation and emergency response strategy as explained further in the SB 379 section below. (OPR, 2017). Safety Elements are completed by local governments.

**Other Plans** are used for narrower strategy focus. Examples of other plans include: Fuel Management, Vegetation Management, Open Space Management, Timber Harvest, Wildfire Management, and Pre-

Attack plans. Many CWPP's and Unit Plans reference these plans and the plan implementation as a key priority.

### Integration of Plans

Over the past decade there have been numerous efforts to coordinate and align hazard mitigation and climate adaptation planning with other planning efforts. Many plans by themselves do not have any exacting requirements to ensure implementation. A suite of state legislation is increasingly requiring jurisdictions to use mitigation and adaptation planning efforts to inform their safety element – the plan with the strongest connection to local decision making. Figure 11 shows the relationship between three state laws that incentivize (carrot) or require (stick) greater integration of fire planning in day-to-day local government actions. While Unit Plans and Community Wildfire Protection Plans do not have any laws requiring their incorporation into the Safety Element or LHMP, many call out strategies to incorporate specific strategies into those documents.

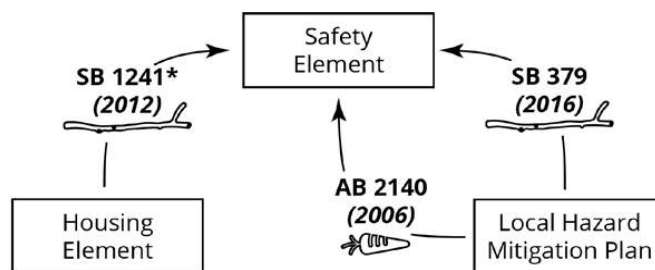


Figure 11 Key Local Fire Planning Documents and Carrot and Stick Plan Consistency Laws

*SB1241 does not impact all communities. 34 Bay Area cities are subject to SB1241 and are listed in Appendix D.

**AB 2140** authorizes local governments to adopt their LHMPs with the safety elements of their general plans (Gov. Code § 65302.6). Integration or incorporation by reference or annexation is encouraged through a post-disaster financial incentive that authorizes the state to use available California Disaster Assistance Act funds to cover local shares of the 25% non-federal portion of grant-funded post-disaster projects when approved by the legislature (Gov. Code § 8685.9) (OPR, 2017). The incorporation of LHMPs with the safety element was further strengthened by SB 379.

**SB 379**, codified at Government Code section 65302(g)(4), requires cities to address climate change adaptation and resilience in the safety element of all general plans. Specifically, “upon the next revision of a local hazard mitigation plan, adopted in accordance with the federal Disaster Mitigation Act of 2000 (Public Law 106-390), on or after January 1, 2017, or, if a local jurisdiction has not adopted an LHMP, beginning on or before January 1, 2022, the safety element shall be reviewed and updated as necessary to address climate adaptation and resilience strategies applicable to the city or county (OPR, 2017).

**SB 1241** (Kehoe, Statutes of 2012) revised the safety element requirements for state responsibility areas and very high fire hazard severity zones (Government Code Sections 65302 and 65302.5). Specifically, during the next revision of the housing element on or after January 1,

2014, the safety element shall be reviewed and updated as necessary to address the risk of fire in state responsibility areas and very high fire hazard severity zones. SB 1241 requires that the draft element of or draft amendment to the safety element of a county or a city's general plan be submitted to the State Board of Forestry and Fire Protection and to every local agency that provides fire protection to territory in the city or county (OPR, 2014). *Appendix C. List of Bay Area Cities with a Very High Fire Hazard Severity Zone & Subject to SB 1241* has a list of jurisdictions that are subject to this law.

## B. Bay Area Fire Plans

Each of the described plans in Section II, A have unique geographic boundaries. Figure 12 illustrates (as of Summer 2016) where jurisdictions have each plan type. The majority of jurisdictions in the region have a Local Hazard Mitigation Plan, Community Wildfire Protection Plan, and a Unit Plan. All cities are required to have a General Plan with a Safety Element. Figure 13 illustrates the boundaries for Unit Plans, and Figure 14 shows the boundaries for CCWPs.

The maps are not intended to highlight jurisdictions who do not have a certain plan, but instead for jurisdictions to recognize that if they'd like to understand what their strategies for wildfire mitigation are, they may need to look at a number of documents to understand the complete set of actions. Because there are many types of planning documents that all have unique requirements and motivations, a complete approach to wildfire mitigation may be represented in multiple documents. Similarly, a community that invests in a robust process for one planning process may have sufficient information to craft strategies and follow through.



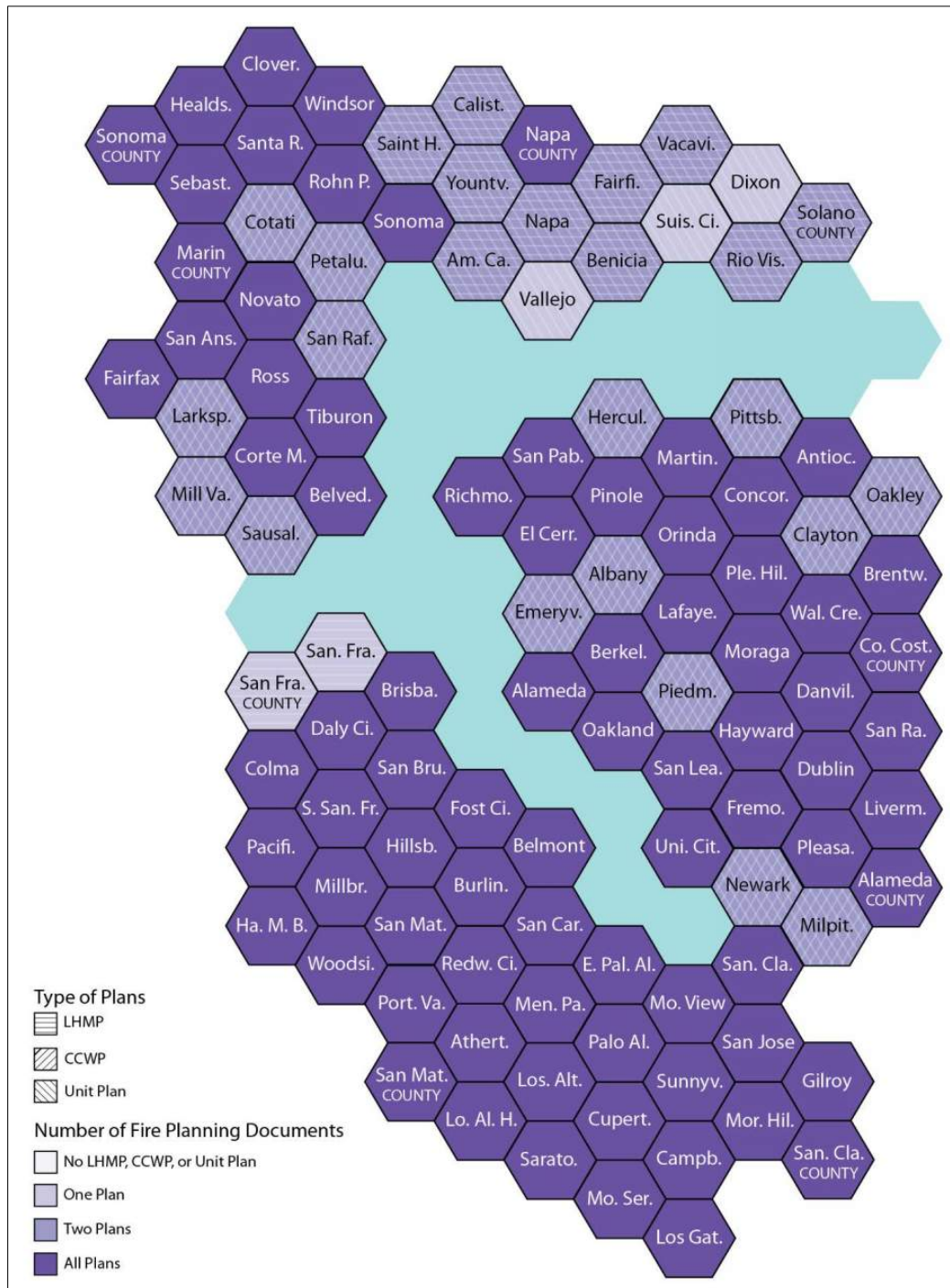


Figure 12 Wildfire Fire Plan Coverage in San Francisco Bay Area Local Jurisdictions (as of Summer '17)

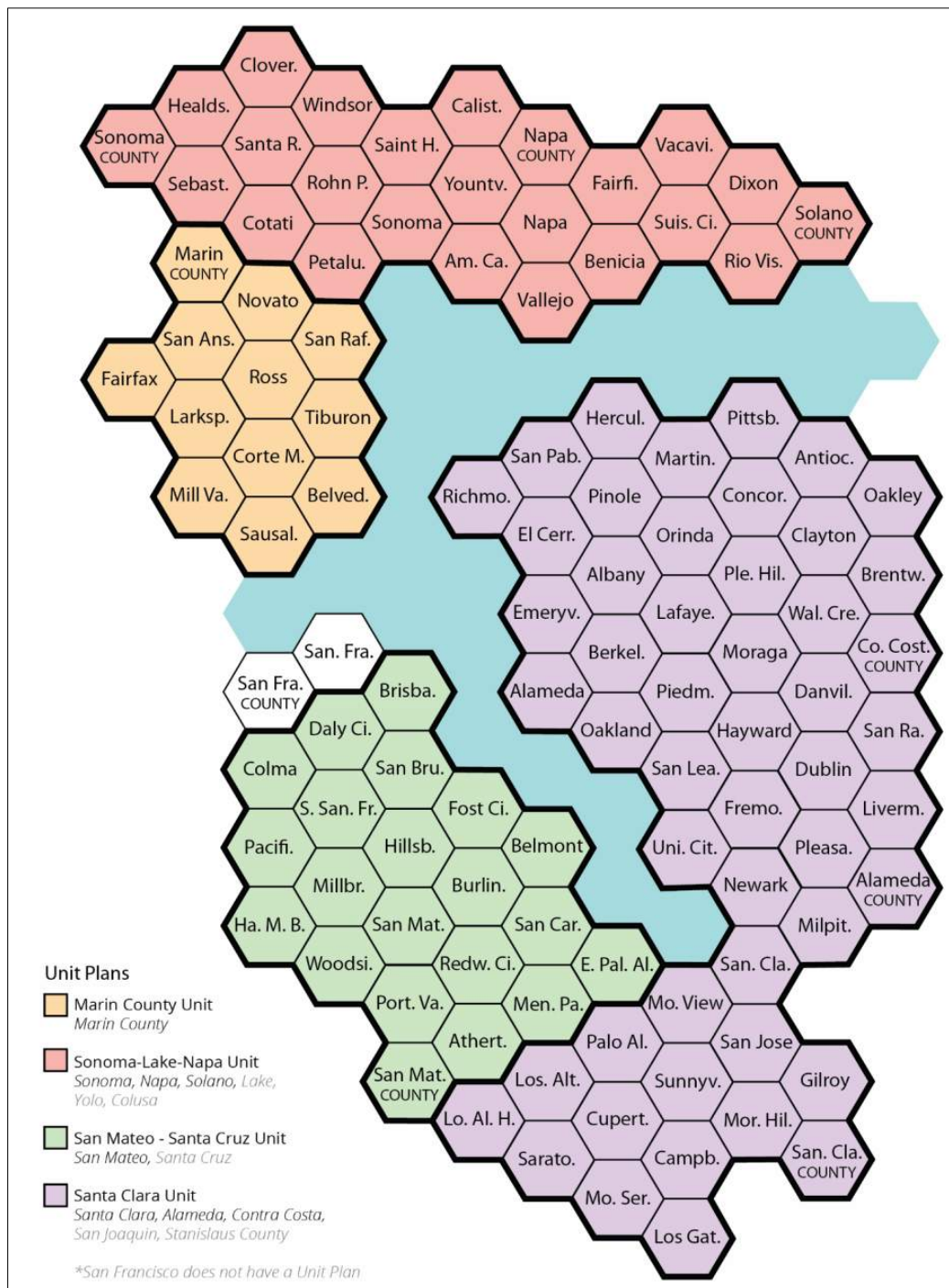


Figure 13 CAL FIRE Unit Management Plan Boundaries in the San Francisco Bay Area



Figure 14 Community Wildfire Protection Plans in the San Francisco Bay Area



### **Analysis of Bay Area Fire Plans**

Each Fire Plan in the region is unique, with different resources available to complete the work, and with different goals/scopes. This section summarizes some of the tools in use in the Bay Area to manage fire risk.

Napa County's CWPP's were focused on single neighborhoods, and were produced primarily by local Fire Wise Councils made up of local residents. None of the Napa CWPP plans were longer than 21 pages. In comparison, the Santa Clara County CWPP was supported by consultants and was much more expansive, with hundreds of pages and twelve appendices. While reviewing plans in the region, a number of qualities were noted to understand what elements/resources different communities were incorporating into their plans.

### *Risk Assessments, and Climate Change*

Risk assessments are a key element recommended as part of each plan type's (CWPP, Unit Plan, and LHMP) guidance document. For LHMPs, a risk assessment is required. As staff reviewed plans, key elements of wildfire risk assessments were noted. Figure 15 below shows how different planning processes used different assessment elements. This matrix reflects only what was in the plan document and does not reflect risk assessments that may have informed the planning process but that were not included in the plan itself.

Does the Plan...	Contra Costa, Alameda, Santa Clara	Contra Costa	Alameda	Santa Clara	San Mateo	San Mateo	Marin	Marin	Sonoma, Napa, Solano	Sonoma	Napa
	Unit Plan	CWPP	CWPP	CWPP	Unit Plan	CWPP	Unit Plan	CWPP	Unit Plan	CWPP	CWPP's (6)
designate WUI areas?	No	No	No	Yes	Trace	Trace	Yes	Yes	No	Yes	N/A
include ignition history?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	N/A
have historic fires listed?	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	N/A
have fuel/vegetation layer?	No	No	No	Yes	No	No	Yes	Yes	No	Yes	N/A
include a hazard Layer	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	N/A
include an asset layer?	No	Trace	No	Yes	No	Trace	No	Trace	No	Trace	N/A
include asset attributes?	No	No	No	Yes	No	No	No	No	No	No	N/A
intersect hazard & asset?	No	Yes	Yes	Yes	No	No	No	Yes	No	Yes	N/A
discuss climate change	No	Yes	Trace	Yes	No	No	Trace	Yes	No	Yes	N/A
express climate change in hazard?	No	No	No	No	No	No	No	Trace	No	No	N/A

Figure 15 Elements of Risk Assessments and their Inclusion in Bay Area Fire Plans.

Two risk assessments in the region stood out as leaders in using modeling to assess their risk. Marin County's CWPP and Santa Clara County's CWPP each included a robust risk assessment. Both plans characterized the hazard using granular local data, and included discussion of how assets were at risk to the fire.

To date, climate change has not been well referenced within the documents; only Marin County included the influence of climate change in fire hazard characterization.

### C. Bay Area Fire Plan Strategies

ABAG staff used the 15 Fire Plans to explore strategies Bay Area stakeholders were recommending to reduce wildfire risk. The strategies were organized into a database and used to develop three sections:

- High Level Bay Area Strategy Insight and General Wildfire Strategies
- Description of General Strategies & List of Most Commonly Cited Strategies
- Funding Options

For more background, *Appendix F. Further Discussion on Bay Area Wildfire Plan Strategies* has a longer description of the strategies, and a link to the strategy database.

#### High-Level Bay Area Strategy Insight and General Wildfire Strategies

Risk is the product of vulnerability and consequence. In Bay Area Fire Plans, a suite of strategies are recommended to reduce either value. Figure 16 is a visual representation of the common categories most strategies fall within and whether they reduce the likelihood of damage (vulnerability), or if they reduce the impact of a fire (consequence). In addition to the topical strategy areas represented in the visualization, there are a number of different mediums to implement each of the strategies. For example, many plans have multiple strategies focused on defensible space; some focus on research, others focus on educational resources, while others suggest policies, programs, or inspections.

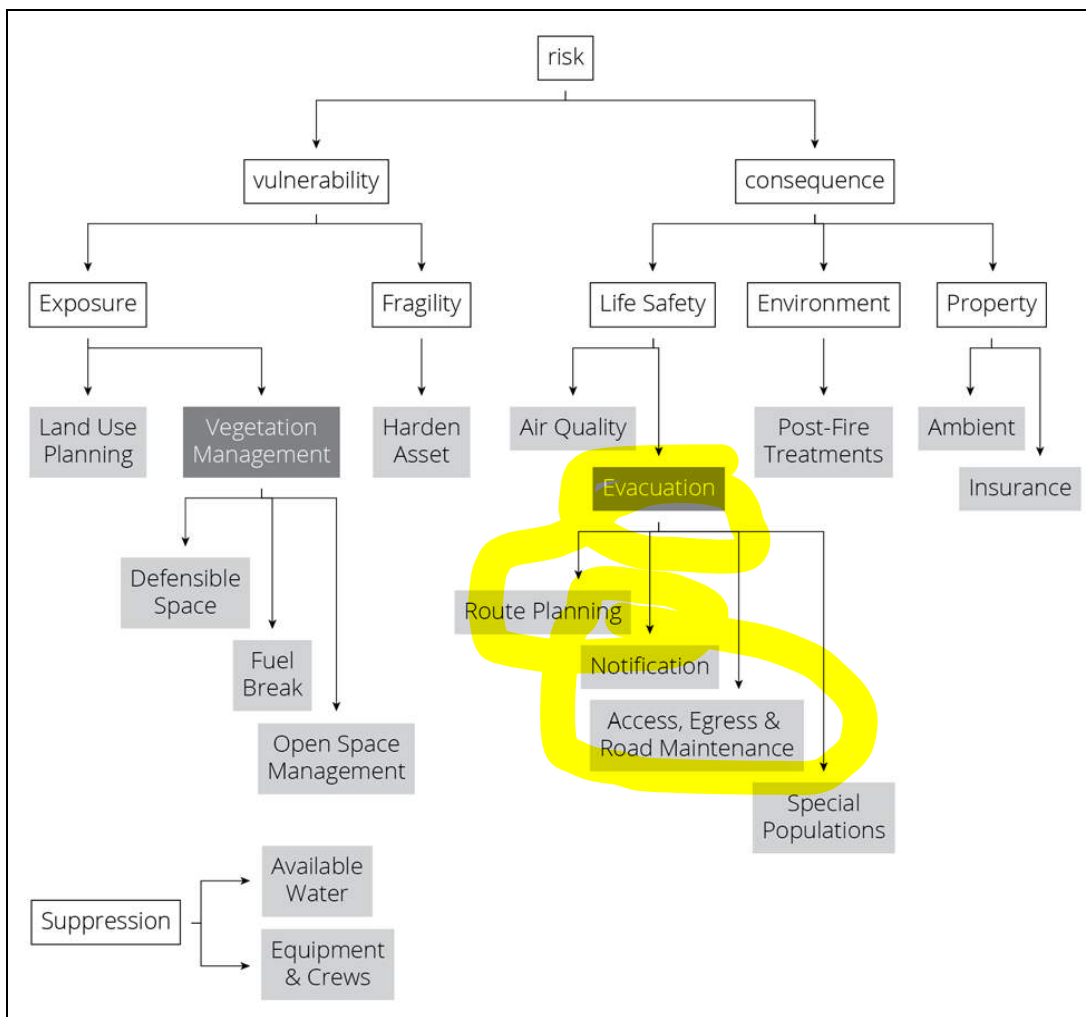


Figure 16 Visualization of Wildfire Risk Reduction Measures



Within each of the strategy categories described in Figure 16 above, there are a wide range of elements that specific strategies may target. Below is a general description of what each category attempts to address.

#### **Strategy Types to Reduce Vulnerability**

**Reduce Exposure through Land Use Planning** – Where homes, businesses, and infrastructure are located can be a powerful way to reduce wildfire risk. Different locations within a city can present drastically different wildfire risk. Locating important assets in areas of low fire risk is a straightforward method to reduce risk. When using land use as a fire management tool it is critical that other considerations like flood risk, transit access, and economic feasibility are considered as well.

**Reduce Exposure through Vegetation Management** – Vegetation is a key variable in determining the fire risk for a specific area. In the Wildland Urban Interface, vegetation (grass, shrubs, trees) is the primary fuel source that powers fires. Most strategies to address vegetation occur in three sub-areas:

**Defensible Space** – The amount of vegetation and its proximity to a home has a large influence on the likelihood the structure will be damaged by a wildland fire. Depending on the local conditions, many strategies recommend anywhere between 30 and 100 feet of vegetation clearance around structures, with the distance largely dependent on the slope of the property as well as the vegetation height.

**Fuel Breaks** – Areas can be greatly protected when there is a break in vegetation. Across the region fire crews use paved roads, dirt roads, and fire break specific lines to provide a barrier where a fire may have a reduced chance of spreading. Any fuel break by itself will not stop a wildfire, but they provide an increased probability of success for fire suppression activities.

**Open Space Management** – The makeup of vegetation in the wildland and open space areas can drastically change the likelihood and intensity of fires. Types of vegetation and densities of vegetation can change fire characteristics. If fires are less intense in wildland areas, they're less likely to spread in an uncontrollable manner.

**Reducing Fragility by Hardening Assets** – Certain construction methods and materials are less likely to ignite when they are exposed to fire, or when embers from a nearby fire are present. By making structures or infrastructure less likely to catch fire, there is a greater likelihood assets will survive nearby fires. This is also sometimes referred to as structure ignitability.

#### **Strategy Types to Reduce Consequence**

**Air Quality** – Given that a fire has occurred, developing strategies to reduce exposure to smoke can improve the health of impacted populations. When appropriate, moving people away from the smokiest areas, having shelter facilities with filters to improve building air quality, or providing the appropriate masks can reduce public health impacts.

**Minimizing Consequences through Evacuation** – Nothing is risk proof. When fires and other hazards are too great, having a strategy to move people to safety is imperative. Improving evacuation outcomes requires a variety of approaches:

**Route Planning** – Having a plan in place to rapidly move everyone out of an area is critical. Evacuation plans, like many of these strategies requires research, plans, education, and training.

**Notification** – When there is a fire risk, or when there is a fire that poses a risk, a robust communication channel is needed. Red flag warnings and a variety of emergency management messaging platforms are used to warn of heightened risk and issue evacuation orders.

**Access, Egress & Road Maintenance** – In many cases alterations may be needed to ensure safe evacuation. Narrow roads, single routes, or roads with overhanging vegetation are dangerous. When safe routes are designated they should be maintained to provide safe evacuation.

**Special Populations** – Many community members require assistance to evacuate. The car-less, disabled, elderly, and youth are populations that need special attention.

**Post Fire Treatments** – Following a fire, there are a suite of actions that can improve ecosystem health. Some strategies include rehabbing any fire breaks created during the fire, or shoring up waterways to handle rainfall in a post-fire landscape.

**Insurance** – Coverage for homeowners, renters, and businesses can reduce the financial hardship. Having coverage is a good start, but having sufficient coverage is also important.

**Ambient** – Following a disaster that displaces households and businesses, having a community that can meet the needs of the displaced individuals is key. When vacancy rates are low, or when people don't have a local network on which to rely, they are less able to stay in the community.

#### **Managing Fires by Suppression**

Having firefighting assets in place to suppress wildland fires near development can prevent fires from expanding, or allow for greater resources to protect the urban environment. Having available equipment (trucks, tenders, aircraft), crews (firefighters, first responders), and accessible water all improve the ability to contain fires. The plans described in this white paper do not focus on listing equipment or crew needs; however there are many strategies that focus on ensuring water availability for fire-fighting in the wildland urban interface.

#### **Strategy Mediums and Methods**

Within each strategy category, there are often specific strategies to achieve the desired goal. While reviewing the plans a number of common mediums and methods were continually referenced. To help characterize the plan strategies a set of common mediums/methods were used:

- Research (data collection, analysis, exploratory)
- Education (resource, activity)
- Networking (professional-to-professional, professional-to-public, public-to-public)
- Plans (long range, operational)
- Policies (code, ordinance)
- Programs
- Projects
- Training
- Funding
- Inspection

To get a high-level picture of where fire plans in the region focus strategies, a matrix of strategy category and strategy medium was produced, see Figure 17. In total 368 strategies across the Unit Plans

and CWPP were sorted. “General” was added to categories to represent strategies that embodied comprehensive approaches. Vegetation management was the overwhelming focus of the plans in the region, followed by evacuation and structure ignitability strategies. As for strategy medium, the strategies were well distributed with education and research at the top.

	General	Vegetation Mgmt	Structure Igniteability	Water Supplies	Evacuation	Notification	Total
Research	20	27	1	1	10	1	60
Education	41	33	9	0	6	5	94
Network	24	14	0	3	2	1	44
Plan	15	3	0	0	15	0	33
Policy	1	12	9	1	2	0	25
Program	1	16	0	0	4	0	21
Project	2	37	0	7	6	1	53
Training	1	0	0	0	3	1	5
Funding	5	4	2	0	0	0	11
Inspection	3	16	2	0	1	0	22
Total	113	162	23	12	49	9	368

Figure 17 Matrix of Strategy Category and Medium



### Funding Sources

Many strategies discussed in the plans require funds to implement. Grants are a common funding source, while other plans have strategies focused on long-term funding for mitigation. The Santa Clara County Community Wildfire Protection Plan goes into great detail on grant funding sources. An excerpt of this portion of the plan is included in *Appendix G. Wildfire Funding Opportunities – From Santa Clara County CCWP*. In addition to grant opportunities, two Bay Area communities have been able to fund WUI mitigation programs and projects with local funding approaches.

#### Grant Opportunities

*Appendix G. Wildfire Funding Opportunities – From Santa Clara County CCWP* has a broader set of potential grant sources and opportunities. Three of the larger grant opportunities are described here:

**CAL FIRE** has a range of grants. The Fire Prevention Fund provides over \$15 million annually for areas within the SRA for both mitigation projects as well as planning efforts. Government entities as well as organizations like Fire Safe Councils can be awarded grants.

*In 2017 CAL FIRE awarded 11 grants to Bay Area communities ranging from \$22,500 to \$200,000, all for fuel management (CAL FIRE, 2017).*

**Federal Emergency Management Agency** has a Pre Disaster Mitigation Grant Program and Hazard Mitigation Grant Program that can be used to support WUI mitigation projects. Between 2005 and 2010 the nine-county region secured \$14.9 million in grants to support a range of vegetation management projects and programs. The largest awarded grant was for \$3 million.

*The East Bay Regional Park District was successful in retrieving five HMGP and PDMC grants between 2007 and 2009. The average grant award was over \$2 million (ABAG, 2017b). In total for all-hazards projects the region has received over \$330 million since 1994, but no wildfire projects within the region have been funded since 2009.*

*Outside of the region El Dorado County and San Bernardino Counties have each received HMGP funds to administer a wood shake roof replacement program for existing homes. The program offers homeowners up to 70% of the cost of replacement with a maximum of \$6,500 and \$4,500 respectively. In San Bernardino County the program is accompanied by an ordinance requiring roof replacement for many triggers (County of San Bernardino County, 2016).*

**California Fire Safe Council** works annually to bundle a suite of funding opportunities into a single process. The grants focus on reducing the risk of WUI fires and often have a focus on vegetation management projects. In the past the grants have a maximum of \$200,000.

*Fire Safe Councils in San Mateo (\$133,000) and Santa Clara (\$186,000) Counties were each awarded 2017 grants for vegetation management projects and a public wildfire education program respectively.*

#### Local Funding – Assessment Districts

Assessment districts are an effective funding tool to pay for collective WUI mitigation projects. They can be used for annual maintenance, as well as projects with long-term reduction in WUI risk. One of the best examples of local funding is the Oakland Wildfire Prevention Assessment District. The District has had a complex history. First instituted by City Council in 1993, the district operated for four years before

California Proposition 218 required the assessment to be voted on by the residents of the district. After a stint of special funding from the local budget, in 2003 the assessment was approved by voters in the district with 74% of the property owners voting in favor. The following ten years, the district generated \$1.7 million in annual revenue with a \$65 assessment on Oakland Hills properties. The funding paid for vegetation management along 300 miles of roads, provided contractor training, replaced fire danger signs, paid for remote automated weather stations, defensible space inspectors, and staff to support projects and explore grant opportunities. Unfortunately, when the District required a re-approval vote in 2014, it fell 66 votes short of the 2/3 threshold. A 2017 report to Oakland City Council highlights the accountability failures that led to less support for the district (City of Oakland, 2017).

*Local Funding – Municipal Service Tax*

The Marin County CWPP recommended placing a Municipal Service Tax on a future ballot to support a robust vegetation management program. The City of Mill Valley Community Facilities District (within Marin County) already has a \$266 annual tax (with a 2% annual increase to keep up with inflation) on single family residences to pay for a suite of services, including “reduce fire hazards.” Over \$300,000 of the annual funds go to vegetation removal, chipper programs, and educational mailings. The city has a process for fixed and low-income residents to be exempt from the tax. In 2016 the tax was supported by 77% of the voters (City of Mill Valley, 2017).

### III. Next Steps

Aggregating the strategies from 15 Bay Area wildfire plans allowed for common themes to rise to the surface. Based on the analysis of fire planning documents and a regional level GIS analysis the following six recommendations are made:

1. Coordination of planning processes and documents.
2. Collect, analyze, and communicate parcel/building-specific information.
3. Thoughtful expansion of the WUI code.
4. Develop high quality, locally relevant educational collateral.
5. Explore and pilot cost-effective methods of vegetation management.
6. Invite air quality experts to comment on wildfire plans and offer strategies to address smoke impacts.

A commonality across all strategies was a need to connect the wildfire mitigation work with non-fire focused entities. Most of the strategies listed benefit from others' support, or alignment with like efforts rather than in parallel.

#### **Coordination of planning processes and documents.**

There is a suite of planning documents which communities can use to characterize their wildfire risks and prioritize mitigation strategies. At the state and federal level, there should be some consideration of opportunities for plans to be coordinated and streamlined, enabling communities using one robust plan to access funding sources currently tied to a single plan. For the time being, separate planning processes should build upon one another, taking advantage of a single vulnerability assessment and existing public engagement platforms built in past efforts, as well as link important strategy actions to implementation-oriented documents, like the general plan, specific plan, and capital improvement budget. These plans are often produced in planning departments, finance departments, or city manager and administrator offices.

Many of the plans call for the need to connect more closely with the broader hazard mitigation, climate adaptation and resilience planning efforts. Having fire-focused research, strategies, and plans is a great way to dig deep into the issues, but they must be successfully integrated into larger strategies that can support their implementation.

Local and regional growth strategies should focus future growth outside of highest WUI risk areas. As part of the next Regional Transportation Plan and Sustainable Communities Strategy, ABAG and MTC will consider natural hazards and climate impacts in areas of focused growth. The current plan designates Priority Development Areas, that are projected to absorb the majority of the region's forecasted growth. By area, only .5% of PDAs are in fire hazard severity zones and half of the acreage exposed to fire hazard severity zones is in a single PDA. Continued focus on driving future growth into PDAs will support a goal of limiting residential exposure to wildfire. Local governments who have areas of growth outside of PDAs should work to reduce the amount of new construction occurring in the highest fire risk areas.

*Appendix A. Annotated Bibliography of Fire Planning Resources* has a suite of documents that can support the integration of wildfire planning into the General Plan and other elements of local government. The resources provide detailed recommendations and processes to be aware of for stakeholders who want to integrate WUI strategies into land use plans.



**Collect, analyze, and communicate parcel/building-specific information.**

Some communities have used Hazus or wildfire-specific modeling to understand their WUI risk by number of physical assets, acreage, or financial assets exposed. In most cases these models are developed with assumed building data. Knowing which buildings have fire-resistant roofs and which do not has a large impact on the risk assessment. Granular information about individual buildings would allow jurisdictions to develop more accurate and detailed risk assessments, leading to targeted outreach and education in specific locations. In addition to informing agency decisions about risk, the data can be shared with individual homeowners to educate them about their specific risks. In Santa Clara County's CWPP they specifically call out a need for more granular data for two products: (1) improve their risk assessment model at a finer scale, (2) produce an interactive tool for citizens to use online that shows them the degree of fire hazard, as well as their unique risk because of their building and parcel attributes.

Building-specific information is not a unique need to wildfire mitigation strategies. It can also support many other mitigation programs focused on upgrading existing buildings. Greenhouse gas mitigation strategies focused on energy efficiency as well as water efficiency efforts have strategies focused on building-level data collection. Many communities are also interested in building inventories for seismic and flood mitigation policies. While the specific data may be different for different risks, the process for collecting the data could be coordinated. Similar to Santa Clara County's desire to have a public-facing building inventory to educate homeowners on their specific wildfire risks, other efforts are attempting to build similar platforms that use building-specific data to showcase opportunities to mitigate risk or reduce greenhouse gasses or water consumption. The foundation for all of these strategies is good building-level information. Communities interested in many policies might consider a comprehensive approach to building-level data collection.

**Thoughtful expansion of the WUI code.**

The WUI code could be expanded in three ways: (1) expand the areas that are subject to the WUI code; (2) increase the triggers for structural hardening by adjustments to the state standard, or by local amendment; and (3) improve enforcement of the code. Expansion of the code needs to be done in a measured manner to ensure the benefits outweigh the costs and that there are appropriate resources to support an increased enforcement need. These three elements are interdependent. If you change the boundary of areas subject to the WUI code, or increase the frequency of retrofit projects, more resources will be needed for inspection. Changes to the first two without enforcement can diminish the quality of the efforts.

*Expand the areas that are subject to the WUI code.*

Currently, all SRA lands and Very High Severity Zones in the LRA are subject to the WUI codes. There are areas within local jurisdictions that have high and moderate severity zones, but they're not included in the State's final maps. The state produced draft maps in 2007 with high and moderate zones marked at the local level. The analysis performed in this white paper, and the recent North Bay Fire illustrates that unmapped areas still do burn. Jurisdictions can choose to expand the areas of their cities subject to the WUI code to decrease risk.

*Increase triggers for structural hardening by adjustments to the state standard or by local amendment.*

The structural hardening components of the WUI code apply only to new construction. Other jurisdictions across the state have adopted amendments to the California Fire Code to require building

owners to meet the updated building code standards at a variety of trigger levels (10% remodel, point of sale, etc.). Increasing the frequency of triggers will accelerate building retrofits to meet the fire code. Jurisdictions with very high risk and resources could consider a mandatory compliance, similar to actions taken by jurisdictions for seismically-deficient buildings.

*Increase the enforcement of the code.*

Many plans in the region called for greater resources to expand the number of inspections completed each year. Other plans described strategies to increase efficiency, tracking, or partnerships to increase inspections. With improved enforcement, the existing areas subject to the code will have higher compliance, reducing their risk.

**Develop high quality, locally relevant education collateral.**

Every plan reviewed listed the need for better resources to support private property owners with decision support information to mitigate their risk and prepare for possible evacuation. Federal and state agencies produce generic model resources to support jurisdictions. Elements of documents are helpful, but other elements can be counter-productive to local goals (i.e. keeping vegetation moist at all times may work for communities with robust water supplies, but is counter-productive per drought considerations in much of California). Each property owner has a unique set of variables that make generic resources less helpful. Supporting residents with targeted information will help ensure the quality of the work they take on, and increase action.

In addition to having locally relevant educational materials, many jurisdictions specifically call out the need for comprehensive materials that talk about all fire related considerations (vegetation management, structural ignitability, street standards, evacuation preparations, etc.), rather than separate resources for each component. In addition to the breadth of the material, having information that describes the problem, and provides specific resources (i.e. standards, funding/financing, process, contact information) will help prevent people from getting stuck, not knowing how to proceed with a project that may require a permit, coordination with a large land owner, or finding a contractor.

Bay Area focused model resources that are adaptable may provide a base to allow individual jurisdictions or neighborhoods to make high-quality, locally relevant decision support resources for their community. Similar educational documents targeted at homeowners to inform them of ways their home can be made more safe, healthy or green are being developed by other stakeholders. Any efforts to coordinate and align homeowner engagement may make limited resources go further.

**Explore and pilot cost effective methods of vegetation management.**

Plans across the region call for studying the cost effectiveness of different vegetation management methods, as well as efforts needed to streamline the regulatory process. For individual homeowners, large open space managers, and government, vegetation management is expensive and sometimes a permit-fraught process. This is a challenge across the state of California, with state and federal agencies key stakeholders for any efforts to streamline the regulatory element of vegetation management.

In a handful of documents, agencies and departments were curious about the costs and benefits of goat grazing, as well as mechanical treatments with revenue generating potential. In some areas in the state mechanical treatments to reduce forest density generate revenues, some of which can have a net revenue to help pay for further management elsewhere. These strategies are being discussed for Sierra Nevada Mountain forests (PPIC, 2017).

Many plans call out a need for developing a database of vegetation management costs associated with different management techniques to help communities choose the best approach, with better understandings of costs. It should be recognized that many of the permit issues and delays can be a result of other communities being in opposition to projects that have negative impacts on the area (habitat, erosion, aesthetics). A process that bring the stakeholders in at the beginning may make for more streamlined processes during implementation.

**Invite air quality experts to comment on wildfire plans and offer strategies to address smoke impacts.**

Smoke from wildfires is an impact that threatens community health well beyond the burn area. The recent North Bay fires registered the top five ever recorded bad air quality days in the Bay Area. The consideration of wildfire smoke impacts should be considered in communities response plans for evacuation and shelters, with special accommodations made for those most vulnerable to smoke impacts (see *Section 1.B. Fire Impacts on Assets* for more discussion on this).

The plans reviewed do not discuss the air quality challenge, nor were any solutions recommended. Bringing in air district partners for discussion may result in new strategies that will reduce the impacts of smoke on the community.



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## **V: APPENDICES**

Appendix A: Annotated Bibliography of Wildfire Planning Resources

Appendix B: 2017 North Bay Wildfires – An Early Perspective

Appendix C: List of Communities with a Very High Fire Hazard Severity Zone & Subject to SB 1241

Appendix D: List of Fire Districts in the SF Bay Area

Appendix E: Further Discussion on Data Analysis

Appendix F: Further Discussion on Bay Area Wildfire Plan Strategies

Appendix G: Outtake of the Santa Clara County CCWP Appendix on Funding Opportunities

Appendix H: Other Fire Types & Impacts

Appendix I: Fire Code Details



## A. Annotated Bibliography of Fire Planning Resources

### Documents Focused on Supporting Local Governments



***Managing Fire in the Urban Wildland Interface* (396 Pages)**

Blonski, B., Miller, C., Rice, C. 2010.  
Print. Solano Press Books. 978-0-923956-96-7.



***Fire Hazard Planning: General Plan Technical Advice Series* (55 Pages)**

Office of Planning & Research. May 2014.

[http://opr.ca.gov/docs/Final_6.26.15.pdf](http://opr.ca.gov/docs/Final_6.26.15.pdf)



***A Handbook for Fire Planning in the General Plan* (41 Pages)**

California Board of Forestry and Fire Protection. May 2014.

[http://www.bof.fire.ca.gov/resources/fire_planning_and_the_general_plan_handbook_final_may2014_newtitlepage.pdf](http://www.bof.fire.ca.gov/resources/fire_planning_and_the_general_plan_handbook_final_may2014_newtitlepage.pdf)

### Documents Focused on Issues Greater than Local Governments



***California's Forest and Rangelands: 2010 Assessment* (353 Pages)**

California Department of Forestry and Fire Protection; Fire and Resource Assessment Program. 2010.

<http://frap.fire.ca.gov/assessment/2010/document>



***California Forest Carbon Plan* (201 Pages)**

CAL FIRE, California Natural Resources Agency, CalEPA. 2017

[http://www.fire.ca.gov/fcat/downloads/California%20Forest%20Carbon%20Plan%20Draft%20for%20Public%20Review_Jan17.pdf](http://www.fire.ca.gov/fcat/downloads/California%20Forest%20Carbon%20Plan%20Draft%20for%20Public%20Review_Jan17.pdf)



***Improving the Health of California's Headwater Forests* (36 Pages)**

Public Policy Institute of California. September 2017.

<http://www.ppic.org/publication/improving-the-health-of-californias-headwater-forests/>

## B. 2017 North Bay Wildfires – An Early Perspective

This White Paper does not provide findings and lessons learned from the devastating 2017 fires in California. Other after action reports and studies have been commissioned, and will be better resources for stakeholders to use as they develop strategies to address WUI risks.

Following the North Bay Fires, MTC offered support to the impacted local governments to help facilitate the rebuilding and recovery process. This support was documented in a report out to the ABAG Executive Board on May 17, 2018. A recording of the report is available here:

[http://baha.granicus.com/MediaPlayer.php?publish_id=878755fa-5ac9-11e8-8074-00505691de41](http://baha.granicus.com/MediaPlayer.php?publish_id=878755fa-5ac9-11e8-8074-00505691de41)

The fires in Sonoma, Napa, and Solano Counties destroyed over 8,000 structures (Figure 18). The dollar value for the fire's damage has exceeded \$10 billion, and the reconstruction is expected to take many years.

Before the fires occurred, the research of local fire planning documents had highlighted Sonoma County's use of a fire scenario to describe WUI risk. In 2016 the County approved the Community Wildfire Protection Plan. In the report, under the risk assessment section, the plan used two 1964 fires to showcase that those same fires would cause significantly more damage in 2016 than occurred in 1964 due to subsequent development.

"In September of 1964, the Hanley fire, fueled by dry weather and 70 mile per hour winds, swept across the Napa-Sonoma County border. It burned out of control through Knights Valley, Franz Valley, and Mark West Canyon and was finally stopped when it reached the northern parts of Santa Rosa. Simultaneously, a fire burned through Nunn's Canyon to the edge of Route 12. Together, these fires burned 65,800 acres, over 100 homes and destroyed millions of dollars in property.

If we superimpose the areas burned by these two fires on today's built environment, we find that 3,500 buildings are currently located in these areas. These buildings include many private homes, one public middle school, ten sites with hazardous materials, a PG&E substation, and high-tech commercial space. An estimated 9,600 people live in this area.

The cost of damage to buildings, their contents and agriculture could easily exceed one billion dollars. Developments including Franz Valley, Mark West Estates, Foothills Ranch, Porter Creek, and Heights Subdivision would be devastated by a repeat of these fires. Firefighting costs could reach multiple millions.

Stringent fire safety standards in Sonoma County coupled with improved mutual aid systems may prevent a repeat of the 1964 fires; however, it is not inconceivable that a large uncontrolled wildland fire burning on a severe weather day could overwhelm resources and cause significant damage." – Sonoma County CWPP (2016)

The 2017 fires were eerily similar to the 1964 fires that Sonoma County had used to explore their present day fire risk. Figure 19 shows the high overlap between the two fire years. In the end, the 2017 fires were even worse than a direct repeat of the 1964 fires. The excerpt from the 2016 Sonoma County CWPP highlights the value of scenario planning as a method to explore risks.

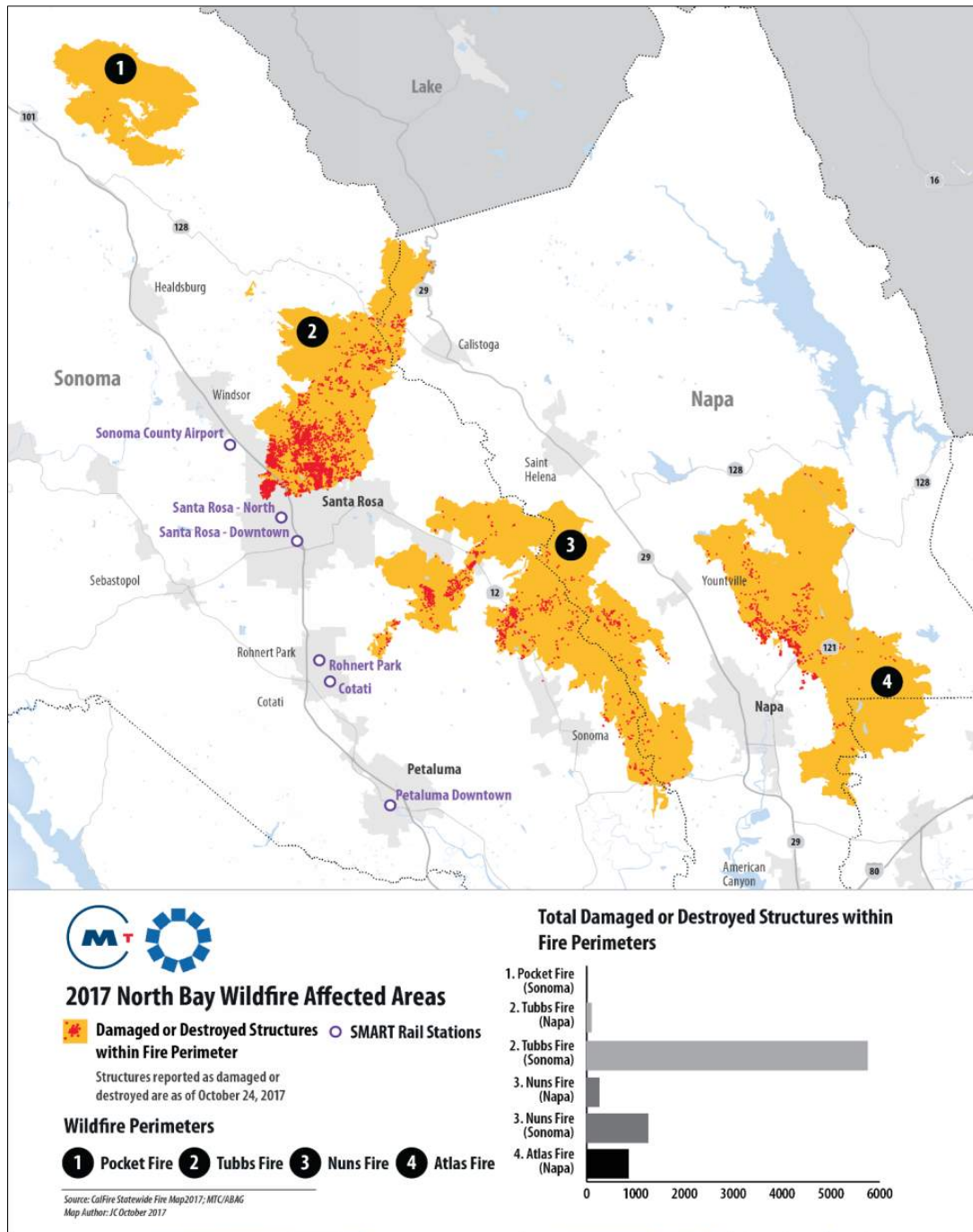


Figure 18: 2017 North Bay Wildfire Affected Areas and Damaged or Destroyed Structures within Fire Perimeters



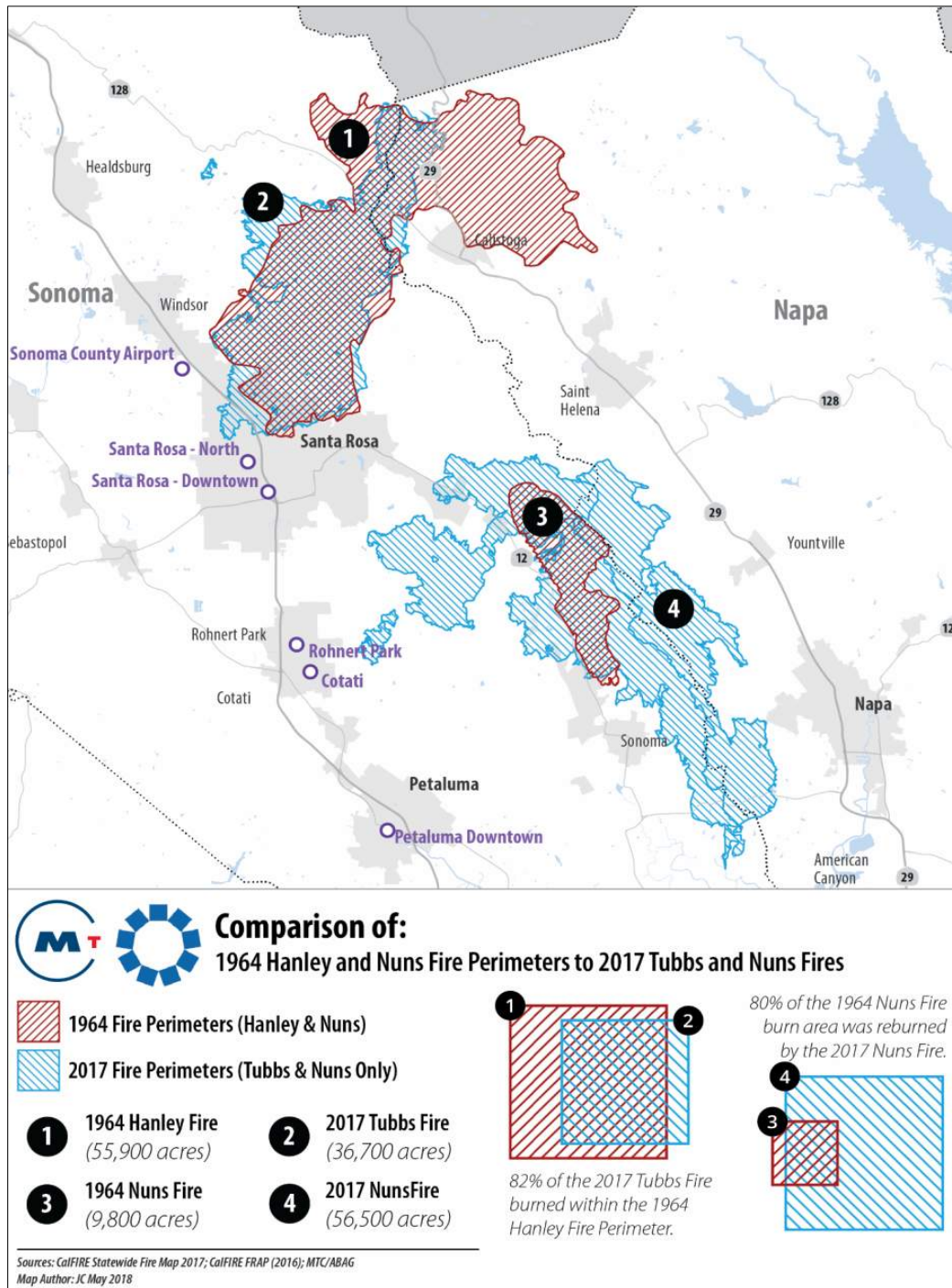


Figure 19: Comparison of 1964 Hanley and Nuns Fire Perimeters to 2017 Tubbs and Nuns Fires

### C. List of Bay Area Cities with a Very High Fire Hazard Severity Zone & Subject to SB 1241

Jurisdictions with a Very High Fire Hazard Severity Zone are required by SB 1241 to update their safety element/housing element when they update their housing element or local hazard mitigation plan. 34 jurisdictions have a VHFHSZ and are subject to the law:

#### **Alameda County (5)**

- Berkeley
- Oakland
- Piedmont
- Pleasanton
- San Leandro

#### **Contra Costa County (7)**

- Danville
- El Cerrito
- Lafayette
- Moraga
- Orinda
- Pinole
- Richmond

#### **Marin County (3)**

- Larkspur
- Mill Valley
- Novato

#### **Napa County (2)**

- Calistoga
- Yountville

#### **San Francisco (0)**

#### **San Mateo County (8)**

- Belmont
- Half Moon Bay
- Hillsborough
- Portola Valley
- Redwood City
- San Carlos
- San Mateo
- Woodside

#### **Santa Clara County (6)**

- Cupertino
- Los Gatos
- Monte Sereno
- Morgan Hill
- San Jose
- Saratoga

#### **Solano County (0)**

#### **Sonoma County (2)**

- Cloverdale
- Santa Rosa

### D. List of Fire Districts in the San Francisco Bay Area

Below is the best available knowledge of Fire Districts and Departments in the nine-county Bay Area.

County	Department/District Name	Jurisdiction Served
Contra Costa	1 Concord Naval Weapons Station - South	Concord
	2 El Cerrito Fire Department	El Cerrito
		Unincorporated Contra Costa County
	3 Rodeo-Hercules Fire Protection District	Hercules
		Unincorporated Contra Costa County
	4 John Muir Historic Site	Martinez (partial)
	5 Shell Oil Refinery	Martinez (partial)
		Moraga
	6 Moraga-Orinda Fire Protection District	Orinda
		Unincorporated Contra Costa County
		Oakley
	7 East Contra Costa Fire Protection District	Brentwood
		Unincorporated Contra Costa County
	8 Pinole Fire Department	Pinole
	9 Dow Chemical	Pittsburg
	10 Chevron	Richmond
	11 Richmond Fire Department	Richmond
		San Ramon
	12 San Ramon Valley Fire Protection District	Danville
		Unincorporated Contra Costa County
		Dublin (portion)
Alameda	13 Byron Airport	Unincorporated Contra Costa County
	14 Crockett-Carquinez Fire Protection District	Unincorporated Contra Costa County
	15 Concord Naval Weapons Station - North	Unincorporated Contra Costa County
	16 Tesoro	Unincorporated Contra Costa County
	17 Contra Costa Water District - Los Vaqueros Reservoir	Unincorporated Contra Costa County
	18 Buchanan Field Airport	Unincorporated Contra Costa County
	19 C & H Sugar Company Fire Department	Unincorporated Contra Costa County
		Unincorporated Contra Costa County
		San Pablo
		Lafayette
		Walnut Creek
	20 Contra Costa Fire Protection District	Pleasant Hill
		Martinez
		Concord
		Pittsburg
		Antioch
	21 Alameda Fire Department	Alameda
	22 Albany Fire Department	Albany
	23 Berkeley Fire Department	Berkeley
	24 Dublin Fire Department	Dublin
Alameda	25 Emeryville Fire Department	Emeryville
	26 Fremont Fire Department	Fremont
	27 Hayward Fire Department	Hayward
		Livermore
	28 Livermore-Pleasanton Fire Department	Pleasanton
		Unincorporated Alameda County
	29 Newark Fire Department	Newark
	30 Oakland Fire Department	Oakland
	31 Piedmont Fire Department	Piedmont
	32 San Leandro Fire Department	San Leandro
	33 Alameda County Fire Department	Unincorporated Alameda County
	34 Fairview Fire Protection District	Unincorporated Alameda County
	35 Union City Fire Department	Union City
Santa Clara	36 Campbell Fire Department	Campbell
	37 Los Altos Fire Department	Los Altos
	38 Los Altos Hills County Fire District	Los Altos Hills
	39 Milpitas Fire Department	Milpitas



Santa Clara (continued)	40	South Santa Clara County Fire Protection District	Morgan Hill Gilroy Unincorporated Santa Clara County
	41	Mountain View Fire Department	Mountain View
	42	Palo Alto Fire Department	Palo Alto
	43	San Jose Fire Department	San Jose
	44	Santa Clara Fire Department	Santa Clara
	45	Saratoga Fire Protection District	Saratoga (Portion)
	46	Sunnyvale Fire Department	Sunnyvale
	47	Santa Clara County Central Fire Protection District	Unincorporated Santa Clara County
			Cupertino
			Saratoga (portion)
			Monte Sereno Los Gatos
San Mateo	48	Belmont Fire Protection District	Belmont
	49	Brisbane Fire Department	Brisbane
	50	Burlingame Fire Department	Burlingame
	51	Colma Fire Protection District	Colma Unincorporated San Mateo County
	52	Daly City Fire Department	Daly City
	53	Foster City Fire Department	Foster City
	54	Half Moon Bay Fire Protection District	Half Moon Bay Unincorporated San Mateo County
	55	Hillsborough Fire Department	Hillsborough
	56	Menlo Park Fire Protection District	Menlo Park
			Atherton
			East Palo Alto
	57	Millbrae Fire Department	Millbrae
	58	Pacifica Fire Department	Pacifica
	59	Redwood City Fire Department	Redwood City
	60	San Bruno Fire Department	San Bruno
	61	South County Fire Protection District	San Carlos
	62	San Mateo Fire Department	San Mateo
	63	South San Francisco Fire Department	South San Francisco
	64	CAL FIRE - Unincorporated San Mateo County	Unincorporated San Mateo County
	65	Montara Point Fire Protection District	Unincorporated San Mateo County
	66	Woodside Fire Protection District	Woodside; Portola Valley
San Francisco	67	San Francisco Fire Department	San Francisco County/City
Marin	68	Belvedere Fire Department	Belvedere
	69	Corte Madera Fire Department	Corte Madera
	70	Ross Valley Fire Service - Fairfax	Fairfax
	71	Larkspur Fire Department	Larkspur (partial)
	72	County Service Area 17 - Kentfield-Larkspur	Larkspur (partial)
			Unincorporated Marin County
	73	Mill Valley Fire Department	Mill Valley
	74	Novato Contracted	Novato (Partial)
	75	County Service Area 1 - Loma Verde	Novato (partial)
			Unincorporated Marin County
	76	County Service Area 20 - Indian Valley, Country Club and Domingo Canyon	Novato (partial)
			Unincorporated Marin County
	77	Novato Fire Protection District	Novato (Partial) Unincorporated Marin County
	78	Ross Fire Department	Ross
	79	Ross Valley Fire Service - San Anselmo	San Anselmo
	80	San Rafael Fire Department	San Rafael
	81	County Service Area 23 - Terra Linda	San Rafael (partial)
	82	Sausalito Fire Department	Sausalito
	83	Tiburon Fire Protection District	Tiburon Unincorporated Marin County
	84	County Service Area 28 - West Marin	Unincorporated Marin County
	85	County Service Area 29 - Paradise Cay	Unincorporated Marin County

Marin (continued)	86	County Service Area 33 - Stinson Beach	Unincorporated Marin County
	87	Stinson Beach Fire Protection District	Unincorporated Marin County
	88	Inverness Public Utility District Volunteer Fire Department	Unincorporated Marin County
	89	Kentfield Fire Protection District	Unincorporated Marin County
	90	Bolinas Fire Protection District	Unincorporated Marin County
	91	County Service Area 14 - Homestead Valley	Unincorporated Marin County
	92	County Service Area 19 - San Rafael	Unincorporated Marin County
	93	Sleepy Hollow Fire Protection District	Unincorporated Marin County
	94	County Service Area 9 - Northridge	Unincorporated Marin County
	95	County Service Area 13 - Upper Lucas Valley	Unincorporated Marin County
	96	County Service Area 27 - Ross Valley	Unincorporated Marin County
	97	County Service Area 16 - Greenbrae	Unincorporated Marin County Larkspur (partial)
	98	County Service Area 18 - Las Gallinas	Unincorporated Marin County San Rafael
Sonoma	99	County Service Area 6 - Gallinas Creek	Unincorporated Marin County San Rafael (partial)
	100	County Service Area 31 - Fire Service in Unincorporated Marin	Unincorporated Marin County Tiburon (partial)
	101	Southern Marin Fire Protection District	Unincorporated Marin County Tiburon (partial) Corte Madera (partial)
	102	Lakeville Volunteer Fire Company	Unincorporated Sonoma County
	103	Cloverdale Fire Protection District	Cloverdale Unincorporated Sonoma County
	104	Rancho Adobe Fire Protection District	Cotati
	105	Healdsburg Fire Protection District	Healdsburg
	106	Petaluma Fire Protection District	Petaluma
	107	Rohnert Park Fire Protection District	Rohnert Park
	108	Santa Rosa Fire Protection District	Santa Rosa Unincorporated Sonoma County
	109	Sebastopol Fire Protection District	Sebastopol
	110	Sonoma Fire Protection District	Sonoma
	111	Cazadero Community Services District	Unincorporated Sonoma County
	112	Occidental Community Services District	Unincorporated Sonoma County
	113	Bodega Bay Fire Protection District	Unincorporated Sonoma County
	114	Timber Cove Fire Protection District	Unincorporated Sonoma County
	115	Two Rock Coast Gaurd Fire Protection District	Unincorporated Sonoma County
	116	Two Rock Volunteer Fire Company	Unincorporated Sonoma County
	117	Kenwood Fire Protection District	Unincorporated Sonoma County
	118	Knights Valley Volunteer Fire Company	Unincorporated Sonoma County
	119	Mayacamas Volunteer Fire Company	Unincorporated Sonoma County
	120	Bennett Valley Fire Protection District	Unincorporated Sonoma County
	121	Bloomfield Volunteer Fire Company	Unincorporated Sonoma County
	122	Bodega Volunteer Fire Company	Unincorporated Sonoma County
	123	Valley Ford Volunteer Fire Company	Unincorporated Sonoma County
	124	Valley Of The Moon Fire Protection District	Unincorporated Sonoma County
	125	Wilmar Volunteer Fire Company	Unincorporated Sonoma County
	126	Monte Rio Fire Protection District	Unincorporated Sonoma County
	127	Russian River Fire Protection District	Unincorporated Sonoma County
	128	San Antonio Volunteer Fire Company	Unincorporated Sonoma County
	129	Annapolis Volunteer Fire Company	Unincorporated Sonoma County
	130	Camp Meeker Volunteer Fire Company	Unincorporated Sonoma County
	131	Forestville Fire Protection District	Unincorporated Sonoma County
	132	Schell-Vista Fire Protection District	Unincorporated Sonoma County
	133	Community Services Area 40	Unincorporated Sonoma County
	134	Sea Ranch Volunteer Fire Company	Unincorporated Sonoma County
	135	Sotoyome Volunteer Fire Company	Unincorporated Sonoma County
	136	Eldridge Fire Department	Unincorporated Sonoma County
	137	Fort Ross Volunteer Fire Company	Unincorporated Sonoma County
	138	Geyserville Fire Protection District	Unincorporated Sonoma County

Sonoma (continued)	139	Glen Ellen Fire Protection District	Unincorporated Sonoma County
	140	Gold Ridge Fire Protection District	Unincorporated Sonoma County
	141	Graton Fire Protection District	Unincorporated Sonoma County
	142	Mountain Volunteer Fire Company	Unincorporated Sonoma County
	143	Windsor Fire Protection District	Windsor (partial) Unincorporated Sonoma County
Napa	144	Rincon Valley Fire Protection District	Windsor (partial) Unincorporated Sonoma County
	145	American Canyon Fire Protection District	American Canyon Unincorporated Napa County
	146	Calistoga Fire Department	Calistoga
	147	Napa Fire Department	Napa
	148	Saint Helena Fire Department	St. Helena
Solano	149	CAL FIRE - Sonoma-Lake-Napa Unit	Unincorporated Napa County
	150	Yountville Fire Department (CAL FIRE Contract)	Yountville
	151	Cordelia Fire District	Unincorporated Solano County
	152	Benicia Fire Department	Benicia
	153	Dixon Fire Department	Dixon
	154	Fairfield Fire Department	Fairfield (partial)
	155	Travis Air Force Base	Fairfield (partial)
	156	Rio Vista Fire Department	Rio Vista (partial)
	157	Suisun City Fire Department	Suisun City
	158	California Department of Forestry & Fire Protection	Unincorporated Solano County
	159	Dixon Fire District	Unincorporated Solano County
	160	Suisun Fire District	Unincorporated Solano County
	161	Vacaville Fire District	Unincorporated Solano County
	162	Ryer Island Fire District	Unincorporated Solano County
	163	East Vallejo Fire District	Unincorporated Solano County
	164	Montezuma Fire District	Unincorporated Solano County
	165	Vacaville Fire Department	Rio Vista (partial) Vacaville
	166	Vallejo Fire Department	Vallejo Unincorporated Solano County



#### E. Further Discussion on Wildfire Mapping Data Analysis

The tables in *Section I.C. Bay Area Fire Risk* are available in excel format on the report website: <http://resilience.abag.ca.gov/wildfires/>. The first sheet of each file has meta data on both the GIS data and geoprocessing operations, as well as the attribute tables and excel analysis. The GIS data is available for download on the Resilience Program's Open Data Page: <http://resilience.abag.ca.gov/open-data/>.

The files included online are:

***Fire Perimeter Severity Tables*** – Summarizes the intersection of Fire Hazard Severity with past fire burn perimeters.

***Fire Perimeter Threat Tables*** – Summarizes the intersection of Fire Threat with past fire burn perimeters.

***Fire Perimeter Comparison Severity Threat*** – Compares results of the above two tables.

***Fire Land Use Severity Tables*** – Summarizes the intersection of Fire Hazard Severity with different a regional land use layer.

***Fire Community Indicators Tables*** – Summarizes the intersection of Fire Hazard Severity with community vulnerability.

#### F. Further Discussion on Bay Area Wildfire Plan Strategies

Staff extracted strategies from all of the CCWP and Unit Plans in the region to understand the universe of existing strategies. The strategies are available in an accompanying spreadsheet and can be searched by their plan origin, and the tags used in Figure 17. In the spreadsheet, the first sheet has meta data on the tags used in the strategy “database” and includes descriptions of how to use the pivot table to study different intersections among strategy keywords.

When staff looked at the aggregate of strategies there were thirteen strategies that were common among the fifteen studied plans. Many strategies were listed multiple times within a plan, or were common across all plans. Below is a list of the 13 most cited strategies within the Bay Area region. These do not necessarily reflect the most effective strategies, or the overall priorities of the region, but they are the strategies that appeared most frequently.

##### ***General – Collaborative Planning Process***

Most plans recognized a need to jointly plan, exercise, and support the other stakeholders within their planning area. Strategies often cited national, state, and local agencies as well as the need to partner directly with neighborhoods to support planning. In six of the eight counties plans recognized a need to partner with other agency partners as well as with neighborhood groups.

##### ***General – Comprehensive Public Awareness Campaign***

Each plan recognized the need to have a robust and comprehensive public awareness strategy. Many plans suggested blending separate campaigns focused on individual actions into a comprehensive campaign focused on preparedness, mitigation, and response. Departments across the region

mentioned efforts to message at local events and local schools, and an interest in using social media in a more significant way. For a more comprehensive approach to fire risk, the plans mention the need to have a single resource (pamphlet, website, app) that has all the information in a single location, that has locally relevant material.

***Land Use – Conduct, Integrate, and Maintain wildfire planning documents.***

All the plans recognized the needs to consistently maintain the documents and improve their quality as new information and resources are available. Many plans recognized the suite of planning documents and the need to align their strategies, and attach strategies to Local Hazard Mitigation Plans, the Safety Element, or a special ordinance. To achieve this goal, many plans called out the need to work directly with local government staff to integrate fire approaches into the more comprehensive documents.

***Vegetation Management – Special Resources for Species and Site Conditions***

The most frequently cited strategy was the development and dissemination of resources on specific species management as it relates to vegetation management. In the Bay Area, vegetation management is complex because of the varied species, site conditions, and techniques necessary to perform vegetation management for each unique case. The plans discussed needs for materials to support stakeholders (individual residents, forest management crews, and large land owners) in performing vegetation management appropriately to limit other environmental consequences, and in a cost effective manner. Across multiple planning documents, goat grazing was discussed as an exciting technique that should be studied further and expanded.

***Vegetation Management – Defensible Space Inspections***

Property owners living in State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones in the LRA are required by the code to maintain clearance of flammable vegetation around their property. A property owner's clearance responsibility is limited to 100 feet from his or her structure(s) or to the property line, whichever is closer, and is limited to their lands. Responsible fire departments/agencies have the authorization to inspect and levy fines for violations of the defensible space code. The LE 100 inspection is a standard form used in many communities. For more on the specific code language see Appendix I. Fire Code Details.

***Vegetation Management – Defensible Space Programs***

Beyond education resources to help residents maintain defensible space around their property, many communities have supported programs to make the process easier for residents. Programs to provide access to a wood chipper and/or easy green waste disposal are common strategies. Some plans recognized two important additions to defensible space program offerings: (1) support for residents who are physically unable to perform the necessary work and/or don't have the financial resources to complete the work, and (2) address defensible space on absentee and vacant properties which don't only increase the risk for the vacant property, but also the surrounding neighbors.

***Vegetation Management - Fuel Breaks & Large Land Owners***

A suite of fuel break strategies are common in most planning documents. The strategies range from efforts to map the location and quality of the fuel breaks, strategies to leverage existing roads as fuel breaks, and the expanded use of shaded fuel breaks. Shaded fuel breaks are a technique to not remove

all vegetation, but instead remove underlying brush and thinning tree cover. In some areas the shaded fuel break provides a better balance between wildfire protection and ecosystem and aesthetic goals. Many plans call for shaded fuel breaks in transition zones between open space areas and developed residential zones.

***Hardening Assets – Provide resources for retrofit.***

Many plans recognize that the state mandated code only requires new building construction to meet the WUI code for structures. Plans recognized a need to educate both homeowners and contractors on structure ignitability retrofits. Specific strategies suggested partnerships with local home improvement stores to promote educational materials on structure ignitability retrofits.

***Hardening Assets – Inspect and enforce the code.***

The building code requires new construction to meet stricter standards. An inspection process is outlined in the code to ensure that standards for roofs, vents, windows, doors, decking, underfloors and auxiliary structures are met. For more information on the code requirements, and the inspection process for new construction see Appendix I. Fire Code Details.

In some jurisdictions, amendments have been made to the state fire code to require buildings at point of remodel to require WUI code upgrades to the building be made. Different thresholds (i.e. projects greater than 50% the cost of structure) are used in different regions, and some jurisdictions do not have this local amendment. When these amendments are in place, it's important that inspection be used to enforce the regulation.

***Suppression – Study and expand water storage.***

Only a few plans called out the need to expand the amount of water for firefighting in the WUI. Some plans were interested in exploring mutual use of water supply for recreation areas, irrigation, or other water storage uses. The plans also explored an interest in studying opportunities to expand water storage for multi-use projects (i.e. drinking water at trailhead and for firefighting purposes). A few plans specifically called out increasing existing storage standards for private properties – increasing the minimum above 5,000 gallons.

***Suppression – Use new technologies to detect fires.***

A number of new exciting technologies are being developed that have the potential to monitor forest health in real time and detect fires quickly. A combination of flying drones, stationed cameras, and satellites have the potential to improve the awareness of real time risk, and be alerted more quickly to ignitions. Some strategies call for the expansion of these systems while others are focused on studying their potential use for their district/agency.

***Evacuation – Develop and train evacuation plans for all WUI communities and ensure special population needs are met.***

Ensuring neighborhoods have an evacuation plan in place is an important first step. Many plans call for the review of current plans, and require secondary access routes where none exist. Some plans mentioned engagement activities to train/exercise the plan with residents, as well as engagement



activities to train residents on the evacuation plan and educate them on other preparedness measures they should have in place before an evacuation order is issued.

Many plans mentioned an overall need to know where special needs populations are, so plans can be made to assist those who are unable to evacuate by themselves. This includes disabled, elderly, and children.

***Evacuation – Maintain evacuation routes free of vegetation and vehicular congestion***

In after-action reports from past fires across the globe, responders have noted that evacuation was less successful because evacuation routes had fire-caused debris on the roadways. This is a dangerous condition, that many plans call out. Some plans call for prioritized vegetation management along evacuation routes, or specific programs for vegetation management along evacuation routes.

In addition to vegetative debris blocking evacuation, traffic congestion and parked vehicles can hinder evacuations. In the 1991 Oakland Hills Fire the narrow roadways combined with parked cars resulted in a poor evacuation. Some plans call for strict parking standards in areas that are a high fire risk and where roads are narrow. The fire code for new construction also requires sufficient access and egress to allow for evacuation as well as emergency vehicles to effectively access properties with space to turn around their large vehicles.

**G. Wildfire Funding Opportunities – From Santa Clara County CCWP**

In Appendix D of the 2016 Santa Clara County Community Wildfire Protection Plan there is a summary of funding opportunities. The appendix provides summaries of the funding programs and when available details about past funding amounts and processes. You can access Appendix through Santa Clara Counties website: <http://www.sccfd.org/santa-clara-county-community-wildfire-protection-plan>

## H. Other Fire Types and Impacts

### Sidebar 1 – Structural Fires

The most frequent fires are structural fires. Mostly caused by accidents, structure fires occur during all seasons and can begin from a variety of ignition sources.

In California, over the decades, structural fires have decreased, in large part due to the successful adoption and enforcement of building codes. Increased indoor water sprinkler requirements, reduced material flammability, improved alarm systems, and better fire escape egress have all reduced the frequency of structural fires, their spread, and their impact on life safety. These code improvements have resulted in safer new buildings, but as is common with many building code upgrades, improvements are rarely retroactive. Older buildings built before current code standards may not be required to update. It is often up to local building code amendments and ordinances to require existing buildings of certain types to upgrade their systems.

These deficiencies in older buildings was realized on December 2, 2016 w Oakland warehouse fire during an event caused 36 fatalities. The single structure fire was more deadly than the 1991 Tunnel fire which destroyed over 3,000 homes and killed 25. Across California, there were 107 deadly residential structure fires reported to the U.S. Fire Administration in 2016 (U.S. Fire Administration, 2017). This count only captures reported fires and only captures residential fires – which omit fires like the December 2 warehouse fire.

### Sidebar 2 – Fire Following Earthquakes

Fire following an earthquake can lead to large scale urban conflagrations. The urban fire conflagration that followed the 1906 San Francisco Earthquake did more damage than the earthquake itself. In the 1906 earthquake, liquefaction-related ground deformation damaged water pipelines and this disruption to the water supply contributed significantly to the extent of the fire spread (USGS, 2017).

The scale of the fire following earthquake risk is a combination of two earthquake impacts: (1) simultaneous ignitions across a wide area, (2) extensive damage to water pipeline infrastructure. In an earthquake electrical, natural gas appliances and infrastructure cause ignitions across a wide scale. The greater the shaking the greater chance of ignitions (Scawthorn, 2008). In a significant earthquake along the San Andreas or Hayward faults hundreds (if not a thousand) ignitions could begin simultaneously. At the same time that ignitions occur, the water pipelines are also expected to have significant breaks which can drain the system rapidly. The combination of many ignitions and limited water supplies to suppress the fires creates the large fire following earthquake risk.

As a result of the 1906 earthquake the City and County of San Francisco invested in an auxiliary water supply system, a redundant water supply system specifically designed for firefighting. The system includes cisterns throughout the city and pipes and additional pumping stations. The City of Berkeley took a novel approach to the problem, investing in an the Berkeley Above Ground Water Supply System (BAWSS). The system is mobile and consists of trucks, pumps, and large diameter flexible hose. The system can be deployed quickly and pump water five miles inland from the San Francisco Bay. No other Bay Area cities have a redundant firefighting system to the likes of San Francisco and Berkeley. But many cities share their same risk.

**Sidebar 3 – Rim Fire & Headwater Study & Climate Change Impact**

On August 17, 2013 a fire began in the Stanislaus National Forest, 150 miles east of San Francisco. The fire grew rapidly from 16,204 acres on August 21st to 201,795 acres on August 30th. In total, the fire burned 257,314 acres surrounding San Francisco's water and power facilities. The fire was not considered contained until October 24th.

There were initial fears that the fire and future runoff would contaminate the Hetch Hetchy watershed. Because the fire was largely outside of the Hetch Hetchy watershed there were no serious water quality issues; however, the power system was impacted. Two of the three hydroelectric powerhouses were taken offline on August 19th, because the facilities as well as the transmission lines were threatened by the fire. The rooftop of the Holm powerhouse caught fire and sensitive equipment inside the building suffered smoke damage. During the disruption in generation, San Francisco purchased energy on the open energy market, amounting to \$860,000 (2013 dollars). During the event, there was enough capacity on the open market to meet the demand (ABAG, 2014).

The event highlighted the Bay Area's reliance on infrastructure systems that are hundreds of miles away. In this instance the fire did not disrupt water supply, nor did the fire interrupt energy sources enough to disrupt the grid. The fire does highlight the potential for other fires to disrupt key Bay Area infrastructure systems. Strategies that reduce fire risk in the Sierra Nevada mountains will make the Bay Area's water and energy supplies more reliable.

For a statewide assessment of wildfire risk in the Sierra Nevada, and its potential impacts to the Sierra watersheds, the Public Policy Institute of California published Improving the Health of California's Headwater Forests (PPIC, 2017).



## I. Fire Code Details

There are two key elements to the WUI fire code: (1) defensible space clearance that must be upkept continuously, and (2) building standards for new construction. In both cases the minimum standards outlined in the state code only require these codes to be enforced in SRA and Very High Fire Hazard Severity Zones in the LRA. Local jurisdictions can increase the extent of the standards if they choose. The suite of codes are well outlined in the California Fire Code Chapter 49. The chapter outlines refers readers to other codes. A summary of Chapter 49 and it's referenced codes is described in this appendix, and includes links to the full code language.

### California Fire Code Chapter 49 Requirements for Wildland-Urban Interface Fire Areas.

*Adopted frequently. Current code last adopted in 2016.*

The code defines state responsibilities, maps, and plans, and calls out sections of different codes that must be met. The code calls out two key sections:

1. Section 4905 Wildfire Protection Building Construction
  - a. Refers readers to comply with three specific elements of the California Building Standards Code. The Code applies to State Responsibility Areas, and in Local Responsibility Areas where “substantial evidence in the record [shows] that the requirements of this section are necessary for effective fire protection.”
    - i. **California Building Code, Chapter 7A.**
    - ii. **California Residential Code, Section R327.**
    - iii. **California Referenced Standards Code, Chapter 12-7A.**
2. Section 4906 Hazardous Vegetation and Fuel Management
  - a. Mandates that all Fire Hazard Severity Zones (Moderate, High, and Very High) in the SRA, and Very High Severity Zones in the LRA are required to comply with the following code requirements.
    - i. **Public Resources Code, Section 4291**
    - ii. **California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299.**
    - iii. **California Government Code, Section 51182**
    - iv. **California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.**
    - v. *For SRA only*
      1. **Public Resources Code 4290**
      2. **California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270**
    - vi. *For LRA only*
      1. **Government Code 51175 - 51189**

### California Building Code 7A

*Applies to properties permitted after December 1, 2005.*

Applies to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a Wildland-Urban Interface Fire Area – defined as all SRA lands, and Very

High Fire Hazard Severity Zones in the LRA (which is supported by Government Code Sections 51177(c), 51178, and 5118). The code has requirements for the following building elements. Within each section there are further references to specific standards.

1. Roofing
2. Attic ventilation
3. Exterior walls
4. Underfloors (decking, floors)
5. Ancillary buildings and structures

#### **California Residential Code Section R327**

*Adopted regularly*

*All requirements apply to buildings built after July 1, 2008. Some (roof and attic ventilations sections) apply to buildings built after December 1, 2005.*

The code reads similar to California Building Code 7A and focuses on materials and construction methods for exterior wildfire exposure. This code includes Section R372.3 which describes the specific building and material standards for testing. This code includes the same sections described in California Building Code 7A but expands within each section and includes an additional subsection on windows and doors.

#### **California Referenced Standards Code, Chapter 12-7A**

Goes into much greater detail than both CRC Section R327 and CBC 7A. It provides greater detail into the fire resistant testing standards for materials and building components.

#### **PRC 4291**

*Adopted in 2009.*

*Requirements apply to buildings built after January 1, 2010.*

The code primarily focuses on defensible space requirements for property owners. In addition to defensible space requirements it states that new construction, including a building damaged by a fire, be built to standards outlined by Government Code Section 51189. It also makes the Department of Forestry and Fire Protection responsible for the development and maintenance of fuels management guidance.

#### **California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.**

Provides guidance for the implementation of PRC 4291 to increase the survivability of buildings that exist with the SRA. It outlines a the specific set of defensible space requirements for two zones:

1. Zone 1 – Applies to area within 30 feet of a building.
2. Zone 2 – Applies to area between 30 and 100 feet of a building.

Additional defensible space beyond 100 feet can be required, but cannot require clearance beyond the property line.

**California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.**

Focuses on required clearances. No combustible material shall be placed within 10 feet of any building, and reiterates (more succinctly) the defensible space requirements in Subchapter 3.

**PRC 4290**

Adopted June 1989

Requires properties permitted after 1990 to meet the following regulations:

1. Road standards for fire equipment access.
2. Standards for signs identifying streets, roads, and buildings.
3. Minimum private water supply reserves for emergency fire use.
4. Fuel breaks and greenbelts.
5. *these regulations do not supersede local regulations which equal or exceed minimum regulations by the state.

**California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270**

The regulations have been in effect since September 1, 1991.

Provides the minimum wildfire protection standards for buildings and development in the SRA. The code has requirements for the following sections. It also grants the responsible fire agency/department to inspect for compliance with the regulations.

1. Emergency access – regulations for road width, supportive of surface loads, grades, turnarounds and turnouts, and driveways.
2. Signing and building numbering – regulations for roads and properties.
3. Private water supply reserves for emergency fire use – regulations for quantities and locations of water supplies, with details for hydrants and valves
4. Vegetation modification – reiterates the defensible space regulations with an additional section on the use of greenbelts for subdivision plans.

**Government Code 51175 – 51189**

Outlines many of the already described regulations. The code describes the procedural process for designated local areas as Very High Fire Hazard Severity and set the original designation date as January 1, 1995 for all Bay Area counties, and by January 1, 1996 for all CA counties. The code calls for the VHFHSZ designation in LRA to be updated every five years and when possible coincide with general plan updates [Note, this has not been updated every five years]. The code also requires property owners to disclose during transfers of the property (1102.6a and 1103.2 Civil Code) that it is in the VHFHSZ.

**California Government Code, Section 51182**

Is specific to defensible space regulations. Violations of regulation are punishable by a fine between \$100-500 for the first infraction, \$250-\$500 for the second infraction, and greater than \$500 and charged with a misdemeanor for the third infraction. The local agency can also contract the necessary defensible work space and place the expenses as a lien on the property.



**Links to Full Code Text**

**CFC Chapter 49**

[https://up.codes/viewer/california/california_fire_code_2016/chapter/49/requirements-for-wildland-urban-interface-fire-areas#49](https://up.codes/viewer/california/california_fire_code_2016/chapter/49/requirements-for-wildland-urban-interface-fire-areas#49)

**CBC 7A**

[http://www.fire.ca.gov/fire_prevention/downloads/ICC_2009_Ch7A_2007_rev_1Jan09_Supplement.pdf](http://www.fire.ca.gov/fire_prevention/downloads/ICC_2009_Ch7A_2007_rev_1Jan09_Supplement.pdf)

**CRC Section R327**

<http://osfm.fire.ca.gov/codedevelopment/pdf/wildfire%20protection%20building%20construction/2010-Part-2%205-CBC-SecR327.pdf>

**CRSC Chapter 12-7a**

<https://codes.iccsafe.org/public/chapter/content/2375/>

**PRC 4290 & 4291**

[https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4290.&lawCode=PRC](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4290.&lawCode=PRC)

[https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4291.&lawCode=PRC](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=4291.&lawCode=PRC)

**California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Article 3, Section 1299.**

[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IB643BB30D48311DEBC02831C6D6C108E&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=IB643BB30D48311DEBC02831C6D6C108E&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

**California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.**

[https://govt.westlaw.com/calregs/Document/I70D8EA3025E411E089088B03F1E6C213?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/I70D8EA3025E411E089088B03F1E6C213?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

**California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270**

[https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I944CA9B2D48311DEBC02831C6D6C108E&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I944CA9B2D48311DEBC02831C6D6C108E&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default))

**Government Code 51175 – 51189**

[http://www.fire.ca.gov/fire_prevention/downloads/GovernmentCode51175.pdf](http://www.fire.ca.gov/fire_prevention/downloads/GovernmentCode51175.pdf)

U.S. Communities with Limited Evacuation Routes

What happens to all of the risks numbers when population is added?  
St Helena is 267/675 RISK RANK.  
  
IS THE ONE SIZE FITS ALL CALIFORNIA STATE MANDATE  
PUTTING CERTAIN TOWNS WITH LIMITED ACCESS EXITS AT  
MORE RISK?  
IS THIS NEGLIGENCE?



STREETLIGHT DATA  
Big Data for Mobility

List is ordered alphabetically by state... with towns within each state ordered by U.S. Risk Rank*

Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits	Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits
206	East Brewton	Alabama	2,478	66%	4	201	Meadowbrook	California	3,185	59%	4
278	Southside	Alabama	7,979	57%	7	204	Ladera Ranch	California	22,980	38%	7
332	Grayson Valley	Alabama	5,775	52%	6	219	Marin City	California	2,666	62%	4
462	Satsuma	Alabama	6,084	37%	5	220	Canyon Lake	California	10,498	39%	5
555	Monroeville	Alabama	6,336	61%	9	232	San Simeon	California	462	73%	2
649	Lester	Alabama	111	97%	2	240	Rolling Hills	California	737	85%	3
7	Six Shooter Canyon	Arizona	539	98%	1	242	Moorpark	California	34,421	33%	8
25	Nogales	Arizona	20,730	53%	5	247	Avenal	California	9,082	48%	6
52	Fortuna Foothills	Arizona	26,257	71%	9	252	Desert Edge	California	3,822	49%	4
54	Valle Vista	Arizona	1,653	93%	3	261	Stallion Springs	California	2,488	90%	6
60	Swift Trail Junc	Arizona	10,137	83%	8	267	St. Helena	California	5,764	49%	5
63	San Manuel	Arizona	2,169	88%	4	273	Pinole	California	18,520	43%	8
88	Star Valley	Arizona	2,047	59%	3	289	Foster City	California	30,463	33%	8
103	Snowflake	Arizona	39,444	35%	8	303	Knights Landing	California	1,006	66%	3
104	Gold Canyon	Arizona	5,252	70%	6	304	South Lake Tahoe	California	21,146	43%	9
115	Red Rock	Arizona	14,104	48%	7	313	Fairfax	California	7,539	55%	7
168	Golden Shores	Arizona	6,044	62%	6	323	Sleepy Hollow	California	2,363	83%	6
180	Bullhead City	Arizona	1,318	87%	4	325	Huron	California	6,680	49%	6
195	Paulden	Arizona	15,129	38%	6	329	Acton	California	7,596	38%	5
212	Sun Lakes	Arizona	1,200	65%	3	333	Banning	California	28,539	39%	10
216	Oak Creek Village   Big Park	Arizona	1,853	79%	5	345	Corte Madera	California	9,378	47%	7
228	Fredonia	Arizona	5,139	55%	6	346	London	California	1,869	60%	4
234	Payson	Arizona	2,621	64%	5	365	Boulder Creek	California	4,920	63%	7
258	Arivaca Junction	Arizona	39,569	32%	10	379	Suisun City	California	27,977	37%	10
314	Huachuca City	Arizona	18,962	41%	9	385	Rio Vista	California	7,353	43%	6
336	Rincon Valley	Arizona	3,385	53%	5	386	Bodfish	California	1,991	82%	6
337	Whetstone	Arizona	2,622	48%	4	391	Atascadero	California	27,208	44%	12
357	Prescott Valley	Arizona	21,700	37%	9	402	Magalia	California	11,541	28%	5
369	Rio Rico	Arizona	231	77%	2	409	Scotia	California	850	82%	4
382	St. Johns	Arizona	2,358	60%	5	413	Pajaro	California	2,930	55%	5
384	Kachina Village	Arizona	5,372	39%	5	422	Lake Hughes	California	649	93%	4
387	Anthem	Arizona	7,504	33%	5	423	Valle Vista	California	14,686	44%	9
449	Beaver Valley	Arizona	1,520	73%	5	431	San Lorenzo	California	23,452	27%	7
451	Sells	Arizona	1,858	79%	6	437	Cutler	California	5,000	50%	6
475	Summit	Arizona	5,945	44%	6	457	Pacifica	California	37,173	24%	8
477	Catalina	Arizona	1,981	63%	5	464	San Anselmo	California	12,615	41%	8
483	Cactus Flats	Arizona	2,592	55%	5	482	Wrightwood	California	4,557	59%	7
485	Miami	Arizona	2,837	41%	4	503	Lost Hills	California	2,412	57%	5
489	Youngtown	Arizona	1,157	80%	5	508	Joshua Tree	California	7,296	39%	6
496	Congress	Arizona	1,549	68%	5	509	Myrtletown	California	4,581	41%	5
498	Linden	Arizona	14,364	49%	11	550	Lake Wildwood	California	4,991	46%	6
535	Black Canyon City	Arizona	25,016	30%	9	554	Bear Valley Springs	California	5,172	30%	4
539	Icehouse Canyon	Arizona	9,614	36%	7	559	Saticoy	California	1,035	67%	4
564	First Mesa	Arizona	946	65%	4	576	Quincy	California	1,673	52%	4
571	Fort Mohave	Arizona	3,839	65%	7	583	Rose Hills	California	2,803	40%	4
594	San Luis	Arizona	12,322	41%	9	595	American Canyon	California	19,441	34%	9
669	Saddlebrooke	Arizona	2,049	93%	2	607	Three Rivers	California	2,177	56%	5
683	Arizona Village	Arkansas	3,251	95%	3	608	Home Gardens	California	11,470	39%	8
465	Haskell	Arkansas	3,054	93%	3	628	Mammoth Lakes	California	8,234	57%	10
666	Helena-West Helena	Arkansas	3,477	78%	3	631	Mendocino	California	894	69%	4
9	Bell Canyon	California	15,294	57%	5	636	Las Flores	California	5,971	40%	6
15	Brooktrails	California	24,582	70%	8	637	Cohasset	California	573	86%	4
19	Lake California	California	1,816	91%	3	661	Salida	California	13,722	39%	9
23	North Shore	California	26,371	46%	6	671	Hawaiian Gardens	California	14,393	42%	10
34	Coto de Caza	California	14,923	38%	4	682	Richgrove	California	2,882	56%	6
40	Coronado	California	22,542	46%	6	684	Golden Hills	California	8,656	43%	8
49	Pine Canyon	California	23,066	30%	4	85	Roxborough Park	Colorado	9,102	47%	4
55	Imperial Beach	California	4,132	88%	5	120	Alamosa East	Colorado	1,453	80%	3
72	Fillmore	California	547	96%	2	184	Acres Green	Colorado	3,007	63%	4
76	Temescal Valley	California	4,099	70%	4	227	Green Mountain Falls	Colorado	616	64%	2
80	Isla Vista	California	1,184	96%	3	262	Gunnison	Colorado	5,816	49%	5
81	Santa Venetia	California	25,947	40%	6	275	Pueblo West	Colorado	29,591	51%	12
84	Squirrel Mountain Valley	California	11,506	70%	7	319	Manitou Springs	Colorado	4,994	67%	7
86	Fetters Hot Springs-Agua Caliente	California	15,177	69%	8	321	Lyons	Colorado	2,097	59%	4
90	Forest Ranch	California	1,137	91%	3	529	Nucla	Colorado	714	82%	4
96	Paradise	California	1,135	90%	3	238	Woodmont	Connecticut	1,502	60%	3
97	California City	California	5,853	52%	4	364	Dover Base Housing	Delaware	3,450	43%	4
102	McKinleyville	California	3,024	71%	4	6	South Beach	Florida	3,501	80%	2
116	Lompico	California	10,164	58%	6	11	Hutchinson Island South	Florida	5,201	86%	3
122	Cedar Ridge	California	2,909	54%	3	12	Siesta Key	Florida	6,565	73%	3
125	Plumas Lake	California	1,426	77%	3	16	Key Biscayne	Florida	12,344	48%	3
132	Las Lomas	California	13,811	40%	5	22	Marco Island	Florida	16,413	74%	6
133	Shasta Lake	California	3,166	50%	3	32	Fort Myers Beach	Florida	6,289	72%	4
135	Montara	California	2,772	40%	6	36	Fleming Island	Florida	27,126	34%	4
137	Ladera	California	7,061	61%	6	39	Cocoa Beach	Florida	11,394	52%	4
145	Oak Park	California	15,054	55%	8	41	Sanibel	Florida	6,469	68%	4
146	Cutten	California	1,225	72%	3	43	Villano Beach	Florida	2,678	78%	3
156	Santa Paula	California				44	Redington Beach	Florida	1,427	70%	2
163	Vandenberg Village	California				45	Immokalee	Florida	24,120	51%	6
165	Norris Canyon	California				48	Harlem	Florida	2,658	76%	3
166	Los Osos	California				61	Sunny Isles Beach	Florida	20,832	34%	4
169	Linda	California				64	North Bay Village	Florida	7,089	58%	4
192	Sausalito	California				67	Highland Beach	Florida	3,631	60%	3
196	Clearlake	California				71	Ormond-by-the-Sea	Florida	7,295	68%	5
198	Redway	California				73	St. Pete Beach	Florida	9,346	36%	3

* Definitions: Risk Rank out of 685 U.S. communities with 3X the average evacuation risk of all towns with populations <40,000 analyzed  
Number of Exits defined as the number of usable vehicle exits incl. paved and dirt roads  
Main Exit Load defined as the % of daily traffic using the main exit route

For more on methodology and an interactive map, visit: [streetlightdata.com/limited-evacuation-routes-map/](https://streetlightdata.com/limited-evacuation-routes-map/)



U.S. Communities with Limited Evacuation Routes (continued)



List is ordered alphabetically by state... with towns within each state ordered by U.S. Risk Rank*

Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits
77	Tyndall AFB	Florida	2,994	84%	4
82	Butler Beach	Florida	4,951	48%	3
87	Surfside	Florida	5,744	44%	3
89	Micco	Florida	9,054	58%	5
100	Treasure Island	Florida	6,705	39%	3
101	Navarre	Florida	31,378	30%	5
107	Wedgfield	Florida	2,305	64%	5
119	Indian River Shores	Florida	2,305	64%	5
128	Big Coppitt Key	Florida	1,217	42%	4
154	North Redington Beach	Florida	2,121	60%	3
155	Redington Shores	Florida	2,121	60%	3
157	Gulf Breeze	Florida	5,763	36%	3
213	Merritt Island	Florida	24,200	25%	0
224	Osprey	Florida	2,305	64%	5
239	Lake Lorraine	Florida	2,305	64%	5
264	Longboat Key	Florida	2,305	64%	5
268	Stock Island	Florida	2,305	64%	5
270	Highland Park	Florida	2,305	64%	5
271	Indian Rocks Beach	Florida	2,305	64%	5
276	Aventura	Florida	2,305	64%	5
298	Anna Maria	Florida	2,305	64%	5
301	South Pasadena	Florida	2,305	64%	5
310	Cabana Colony	Florida	2,305	64%	5
311	Verona Walk	Florida	2,305	64%	5
368	Pahokee	Florida	2,305	64%	5
374	Buckhead Ridge	Florida	2,305	64%	5
388	Palm City	Florida	2,305	64%	5
432	Oakleaf Plantation	Florida	2,305	64%	5
452	Fruit Cove	Florida	2,305	64%	5
463	Lower Grand Lagoon	Florida	2,305	64%	5
478	Madeira Beach	Florida	2,305	64%	5
497	Fuller Heights	Florida	2,305	64%	5
507	Lauderdale-by-the-Sea	Florida	2,305	64%	5
520	Watergate	Florida	2,305	64%	5
546	Warrington	Florida	2,305	64%	5
547	Big Pine Key	Florida	2,305	64%	5
556	Fort Myers Shores	Florida	2,305	64%	5
568	Ocean City	Florida	2,305	64%	5
587	Hunters Creek	Florida	2,305	64%	5
593	Kathleen	Florida	2,305	64%	5
609	Crooked Lake Park	Florida	2,305	64%	5
638	Mulat	Florida	2,305	64%	5
657	Lakeside	Florida	2,305	64%	5
673	Palm Beach	Florida	2,305	64%	5
4	Skidaway Island	Georgia	2,305	64%	5
66	Wilmington Island	Georgia	2,305	64%	5
189	St. Simons	Georgia	2,305	64%	5

Map Key:

Pink areas pinpoint the 675 U.S. communities with limited evacuation routes. Refer to the section below the map for underlying methodology.

Hover over each area for the town's population, the number of exits, and the main exit "load," indicating the percent of daily traffic using the main exit route.

Nearly 700 communities across the U.S. with limited evacuation routes

Especially when it comes to ensuring viable exits that can support evacuating the population efficiently.

700 U.S. Towns in Need of Bolstered Evacuation Preparedness

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Get a bird's-eye view of a California community that in 2020 fell victim to the 370,000-acre LNU Lightning Complex Fire. Reporting from Pleasants Valley Road, StreetLight's Martin Morzynski shares our updated interactive map of nearly 700 U.S. communities with limited evacuation routes. With climate weather events mounting, we want your town to be prepared.

...more

581	Kincaid	Kansas	122	96%	2
586	Solomon	Kansas	1,095	64%	4
613	Argonia	Kansas	500	70%	3
563	Minatare	Nebraska	816	75%	4
8	Pahrump	Nevada	36,367	69%	6
20	Boulder City	Nevada	14,743	70%	5

STREETLIGHT DATA

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# U.S. Communities with Limited Evacuation Routes (continued)



**STREETLIGHT DATA**  
Big Data for Mobility

Page 3

List is ordered alphabetically by state... with towns within each state ordered by U.S. Risk Rank*

Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits	Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits
92	West Wendover	Nevada	4,410	66%	4	421	Glen Cove	New York	26,578	40%	11
93	Sun Valley	Nevada	19,318	47%	6	436	Saugerties South	New York	2,227	50%	4
95	Grass Valley	Nevada	1,161	95%	3	439	East Atlantic Beach	New York	2,049	39%	3
245	Stagecoach	Nevada	1,874	53%	3	458	Dannemora	New York	1,121	69%	4
251	Washoe Valley	Nevada	3,019	69%	5	499	Richmondville	New York	918	74%	4
265	Skyland	Nevada	376	77%	2	522	Baldwin Harbor	New York	8,421	30%	5
292	McGill	Nevada	1,144	84%	4	589	Catskill	New York	4,022	50%	6
296	Gardnerville Ranchos	Nevada	11,191	40%	6	623	Croton-on-Hudson	New York	7,855	41%	7
297	Owyhee	Nevada	939	92%	4	635	Lido Beach	New York	2,879	48%	5
299	Lemmon Valley	Nevada	4,939	40%	4	665	Brinckerhoff	New York	2,900	47%	5
316	Mesquite	Nevada	15,193	33%	6	27	Montreat	No. Carolina	1,004	96%	2
338	Spanish Springs	Nevada	15,063	32%	6	56	Bayshore	No. Carolina	3,393	64%	3
412	Ruhenstroth	Nevada	1,293	83%	5	75	Half Moon	No. Carolina	8,352	63%	5
429	Bunkerville	Nevada	1,303	82%	5	112	River Bend	No. Carolina	3,021	75%	4
531	Alamo	Nevada	1,080	50%	3	114	Emerald Isle	No. Carolina	3,638	68%	4
553	Jackpot	Nevada	1,195	78%	5	138	Fairfield Harbour	No. Carolina	2,952	89%	5
572	Indian Hills	Nevada	5,623	57%	8	218	Kill Devil Hills	No. Carolina	6,683	49%	5
150	Berlin	New Hampshire	9,117	68%	7	272	Stonewall	No. Carolina	281	88%	2
215	Claremont	New Hampshire	13,292	49%	7	277	Brices Creek	No. Carolina	3,065	79%	6
397	Franklin	New Hampshire	8,468	59%	9	361	Duck	No. Carolina	369	66%	2
444	Marlborough	New Hampshire	1,094	71%	4	420	Ogden	No. Carolina	6,766	36%	5
58	Ocean City	New Jersey	11,635	46%	4	500	Wanchese	No. Carolina	1,642	83%	6
83	Highland Lakes	New Jersey	4,933	64%	4	504	River Road	No. Carolina	4,391	59%	7
127	Atlantic City	New Jersey	39,372	35%	7	533	Southern Shores	No. Carolina	2,714	42%	4
136	Beach Haven	New Jersey	1,170	85%	3	543	Nags Head	No. Carolina	2,675	63%	6
172	Ocean Grove	New Jersey	3,240	62%	4	567	Harkers Island	No. Carolina	1,207	77%	5
202	Brigantine	New Jersey	9,450	77%	9	598	Pine Knoll Shores	No. Carolina	1,337	72%	5
223	Kearnsburg	New Jersey	9,960	40%	5	605	Burnsville	No. Carolina	1,558	53%	4
231	North Beach Haven	New Jersey	2,223	50%	3	121	Wilton	North Dakota	711	76%	2
235	Pine Ridge at Crestwood	New Jersey	2,369	48%	3	174	Kindred	North Dakota	692	67%	2
259	Monmouth Beach	New Jersey	3,322	39%	3	179	Karlsruhe	North Dakota	82	96%	1
342	Hopatcong	New Jersey	15,173	53%	10	440	Argusville	North Dakota	475	81%	3
366	Lakehurst	New Jersey	2,654	61%	5	677	Drayton	North Dakota	758	73%	4
372	Cape May	New Jersey	3,612	52%	5	285	Craig Beach	Ohio	1,187	84%	4
378	Collings Lakes	New Jersey	1,706	60%	4	377	Irondale	Ohio	367	97%	3
448	North Wildwood	New Jersey	4,041	46%	5	390	Fairport Harbor	Ohio	3,109	76%	7
476	Helmetta	New Jersey	2,178	49%	4	392	Martins Ferry	Ohio	6,631	52%	7
518	Leisure Village East	New Jersey	4,317	42%	5	526	Bergholz	Ohio	664	64%	3
548	Sussex	New Jersey	2,130	47%	4	551	Bailey Lakes	Ohio	371	56%	2
573	Beverly	New Jersey	2,577	42%	4	561	Green Springs	Ohio	1,203	62%	4
602	Garfield	New Jersey	30,569	36%	12	597	Utica	Ohio	2,094	69%	6
610	Lake Telemark	New Jersey	1,255	59%	4	471	Millerton	Oklahoma	320	64%	2
633	Manville	New Jersey	10,605	40%	8	519	Garber	Oklahoma	820	77%	4
653	Highlands	New Jersey	5,021	36%	5	139	Bunker Hill	Oregon	1,453	76%	3
13	Los Alamos	New Mexico	11,951	51%	3	181	Reedsport	Oregon	4,130	54%	4
31	Glen Acres	New Mexico	208	100%	1	233	Cornelius	Oregon	11,863	43%	6
193	Twin Lakes	New Mexico	1,052	79%	3	284	Crooked River Ranch	Oregon	3,554	85%	7
214	Rio Communities	New Mexico	4,659	71%	6	286	Burns	Oregon	2,729	83%	6
222	Ruidoso Downs	New Mexico	2,833	75%	5	295	Columbia City	Oregon	1,950	80%	5
249	Keeler Farm	New Mexico	1,305	84%	4	302	Annex	Oregon	235	91%	2
317	Doña Ana	New Mexico	1,211	78%	4	344	Lincoln City	Oregon	8,264	43%	6
327	Chaparral	New Mexico	14,631	33%	6	358	Astoria	Oregon	9,351	46%	7
370	Santo Domingo Pueblo	New Mexico	2,456	38%	3	396	Lincoln Beach	Oregon	2,045	40%	3
383	Placitas	New Mexico	4,977	61%	7	403	Brookings	Oregon	6,309	53%	7
406	Jemez Pueblo	New Mexico	1,788	71%	5	491	Sutherlin	Oregon	7,849	51%	8
442	Bosque Farms	New Mexico	3,908	47%	5	506	Sublimity	Oregon	2,477	56%	5
450	Rodey	New Mexico	388	89%	3	514	Deschutes River Woods	Oregon	5,036	39%	5
453	Black Rock	New Mexico	1,323	64%	4	558	Warren	Oregon	1,787	51%	4
532	El Valle de Arroyo Seco	New Mexico	1,440	72%	5	569	Milton-Freewater	Oregon	7,022	51%	8
579	Fairacres	New Mexico	824	74%	4	620	Sweet Home	Oregon	8,932	44%	8
582	Hernandez	New Mexico	971	68%	4	639	Gates	Oregon	471	71%	3
588	Yah-ta-hey	New Mexico	590	87%	4	643	Falls City	Oregon	954	83%	5
616	Canova	New Mexico	118	96%	2	662	Scappoose	Oregon	6,828	43%	7
625	Chili	New Mexico	654	81%	4	28	Pocono Ranch Lands	Pennsylvania	1,099	91%	2
632	Zuni Pueblo	New Mexico	6,302	52%	8	108	Greenfields	Pennsylvania	1,170	61%	2
10	New Square	New York	7,072	74%	3	129	Beech Mountain Lakes	Pennsylvania	2,022	66%	3
17	Long Beach	New York	32,395	49%	5	140	Glen Lyon	Pennsylvania	1,873	89%	4
46	Hillside Lake	New York	1,084	80%	2	142	Edgewood	Pennsylvania	2,364	79%	4
47	Manorhaven	New York	6,556	81%	5	175	Huntingdon	Pennsylvania	6,910	53%	5
78	Port Ewen	New York	3,546	77%	4	205	St. Marys	Pennsylvania	12,845	58%	8
173	Gang Mills	New York	4,085	69%	5	230	Shamokin	Pennsylvania	7,322	46%	5
178	Montauk	New York	3,287	61%	4	318	Riverside	Pennsylvania	1,932	77%	5
203	Atlantic Beach	New York	1,891	57%	3	320	Marysville	Pennsylvania	2,469	68%	5
210	Bayville	New York	6,669	50%	5	324	Glassport	Pennsylvania	4,483	50%	5
243	Alfred	New York	3,470	78%	6	367	Liberty	Pennsylvania	2,525	50%	4
250	Haverstraw	New York	11,730	42%	6	373	Emerald Lakes	Pennsylvania	2,704	72%	6
253	Watchtower	New York	2,381	62%	4	375	Wiconsico	Pennsylvania	921	82%	4
260	Bay Park	New York	2,187	64%	4	416	West Wyoming	Pennsylvania	2,725	57%	5
290	Nedrow	New York	2,244	60%	4	426	Greenock	Pennsylvania	2,134	64%	5
294	Merritt Park	New York	1,256	60%	3	433	McClure	Pennsylvania	941	77%	4
315	Nyack	New York	6,918	49%	6	474	Hemlock Farms	Pennsylvania	3,271	60%	6
359	Chateaugay	New York	833	66%	3	486	Lake Meade	Pennsylvania	2,430	69%	6
405	South Corning	New York	1,145	71%	4	488	Dunlevy	Pennsylvania	381	87%	3
408	Maybrook	New York	2,958	55%	5	501	South Connellsville	Pennsylvania	1,959	76%	6
415	Hyde Park	New York	1,947	54%	4	515	Plymouth	Pennsylvania	5,961	43%	6
417	Mount Ivy	New York	6,975	64%	9	516	Avonmore	Pennsylvania	1,011	87%	5

* Definitions: **Risk Rank** out of 685 U.S. communities with 3X the average evacuation risk of all towns with populations <40,000 analyzed  
**Number of Exits** defined as the number of usable vehicle exits incl. paved and dirt roads  
**Main Exit Load** defined as the % of daily traffic using the main exit route

For more on methodology and an interactive map, visit: [streetlightdata.com/limited-evacuation-routes-map/](https://streetlightdata.com/limited-evacuation-routes-map/)



# U.S. Communities with Limited Evacuation Routes (continued)



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List is ordered alphabetically by state... with towns within each state ordered by U.S. Risk Rank*

Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits	Risk Rank	Town Name	State	Population	Main Exit Load	Number of Exits
524	Dunbar	Pennsylvania	985	70%	4	148	Cherry Hill	Virginia	16,073	44%	6
525	Midland	Pennsylvania	2,652	64%	6	149	West Point	Virginia	3,236	49%	3
528	New Bethlehem	Pennsylvania	1,002	52%	3	158	Gratton	Virginia	937	89%	3
542	Montoursville	Pennsylvania	4,616	48%	6	187	Radford	Virginia	16,356	47%	7
557	Hudson	Pennsylvania	1,383	58%	4	266	Appalachia	Virginia	1,754	89%	5
565	Falls Creek	Pennsylvania	1,037	83%	5	269	Waynesboro	Virginia	20,833	41%	8
577	Milroy	Pennsylvania	1,485	69%	5	309	West Springfield	Virginia	22,460	32%	7
578	Monaca	Pennsylvania	5,774	35%	5	350	Rivanna	Virginia	1,860	75%	5
590	Pen Argyl	Pennsylvania	3,575	53%	6	395	Glasgow	Virginia	1,044	56%	3
611	Nanty-Glo	Pennsylvania	2,734	50%	5	424	Blue Ridge	Virginia	3,089	64%	6
618	Oakmont	Pennsylvania	6,108	40%	6	435	Covington	Virginia	5,858	54%	7
624	Ford City	Pennsylvania	2,981	57%	6	505	Fairview	Virginia	127	99%	2
630	Mahanoy City	Pennsylvania	4,162	40%	5	536	Lake Holiday	Virginia	1,905	50%	4
664	Saw Creek	Pennsylvania	4,016	56%	7	538	Countryside	Virginia	10,072	38%	7
670	Pine Grove Mills	Pennsylvania	1,502	52%	4	545	Bethel Manor	Virginia	4,393	41%	5
675	South Fork	Pennsylvania	928	66%	4	591	Buena Vista	Virginia	6,447	46%	7
676	South Uniontown	Pennsylvania	1,362	68%	5	592	Lake Land'Or	Virginia	4,223	73%	9
2	Hilton Head Island	So. Carolina	37,065	82%	3	642	Piney Mountain	Virginia	1,167	60%	4
59	Folly Beach	So. Carolina	2,906	92%	4	1	Camano	Washington	15,657	96%	1
340	Isle of Palms	So. Carolina	4,133	61%	6	3	Mercer Island	Washington	22,609	59%	2
99	Meadow View Addition	So. Carolina	538	92%	2	14	Fox Island	Washington	3,633	91%	3
185	Pierre	So. Carolina	12,947	53%	7	26	Cosmopolis	Washington	1,564	77%	2
248	Fort Pierre	So. Carolina	2,109	83%	5	91	Bainbridge Island	Washington	22,893	58%	8
419	White Lake	So. Carolina	337	97%	3	111	West Side Highway	Washington	5,456	70%	5
21	Eidson Road	Texas	9,068	87%	5	117	Anderson Island	Washington	1,037	95%	3
50	El Cenizo	Texas	3,273	90%	4	143	Pomeroy	Washington	1,389	77%	3
51	Pecan Plantation	Texas	4,868	55%	3	144	Selah	Washington	7,327	66%	6
53	La Grulla	Texas	1,632	94%	3	162	Hansville	Washington	3,091	65%	4
74	Shady Hollow	Texas	4,613	85%	5	170	Port Townsend	Washington	8,984	75%	8
94	Cienegas Terrace	Texas	3,424	74%	4	197	Port Angeles East	Washington	3,036	61%	4
98	Horseshoe Bend	Texas	789	76%	2	199	Bangor Base	Washington	6,054	54%	5
151	Cameron Park	Texas	7,080	44%	4	211	South Bend	Washington	1,617	81%	4
152	Lake Dunlap	Texas	2,189	79%	4	280	Concrete	Washington	705	82%	3
153	Meadowlakes	Texas	1,720	89%	4	343	Manchester	Washington	5,413	62%	7
161	Mountain City	Texas	648	71%	2	394	Coulee Dam	Washington	1,038	75%	4
167	Granite Shoals	Texas	4,893	51%	4	399	Geneva	Washington	2,267	76%	6
191	Hornsby Bend	Texas	6,845	62%	6	400	Wenatchee	Washington	32,644	40%	12
207	Sienna Plantation	Texas	13,752	70%	10	443	Asotin	Washington	1,251	83%	5
209	Roman Forest	Texas	1,560	83%	4	467	Gold Bar	Washington	2,236	73%	6
226	Bevil Oaks	Texas	1,274	89%	4	492	Darrington	Washington	1,341	77%	5
246	Hideaway	Texas	3,083	55%	4	510	Wauna	Washington	4,186	60%	7
254	Laguna Vista	Texas	3,251	53%	4	511	Kelso	Washington	11,713	41%	8
263	Portland	Texas	15,530	42%	7	517	South Prairie	Washington	429	80%	3
279	Bayou Vista	Texas	1,585	73%	4	521	Ocean Shores	Washington	5,569	59%	8
305	Burkburnett	Texas	10,569	54%	8	541	Point Roberts	Washington	1,314	90%	6
335	Sandy Oaks	Texas	3,795	64%	6	619	Steilacoom	Washington	6,016	47%	7
339	Wildwood	Texas	1,235	93%	5	654	Orting	Washington	6,571	44%	7
351	Elm Creek	Texas	2,469	65%	5	658	Fife Heights	Washington	1,723	49%	4
360	Holiday Beach	Texas	514	84%	3	24	Carpendale	West Virginia	977	98%	2
398	Falcon Lake Estates	Texas	1,036	75%	4	57	Chesapeake	West Virginia	1,554	63%	2
410	Weston Lakes	Texas	2,482	36%	3	70	McMechen	West Virginia	1,926	53%	2
455	Daisetta	Texas	966	56%	3	79	Powellton	West Virginia	619	92%	2
513	Rio Bravo	Texas	4,794	40%	5	130	Shannondale	West Virginia	3,196	52%	3
540	Laughlin AFB	Texas	1,556	69%	5	147	Mallory	West Virginia	1,654	92%	4
552	Krugerville	Texas	1,599	54%	4	164	Prichard	West Virginia	564	76%	2
560	Paloma Creek	Texas	2,501	43%	4	176	Boomer	West Virginia	615	71%	2
562	Wells	Texas	739	79%	4	186	Paden City	West Virginia	2,633	67%	4
574	Indian Springs	Texas	785	76%	4	274	New Haven	West Virginia	1,561	74%	4
596	Bacliff	Texas	8,621	34%	6	283	Gallipolis Ferry	West Virginia	817	76%	3
600	Ames	Texas	1,003	83%	5	300	Pinch	West Virginia	3,299	61%	5
622	San Leon	Texas	4,994	44%	6	331	Benwood	West Virginia	1,420	70%	4
644	Ransom Canyon	Texas	1,096	62%	4	348	Carolina	West Virginia	411	96%	3
646	Port Isabel	Texas	5,574	48%	7	371	Grant Town	West Virginia	611	76%	3
652	Holiday Lakes	Texas	1,082	62%	4	380	Hepzibah	West Virginia	566	52%	2
678	Medina	Texas	3,935	56%	7	401	Mullens	West Virginia	1,561	61%	4
29	La Verkin	Utah	4,060	71%	3	407	Stonewood	West Virginia	1,774	57%	4
126	Eagle Mountain	Utah	21,931	47%	7	441	Glen Dale	West Virginia	1,484	61%	4
244	Ephraim	Utah	6,091	49%	5	446	Fort Gay	West Virginia	709	66%	3
293	Alpine	Utah	9,730	36%	5	456	Belmont	West Virginia	811	61%	3
312	Paradise	Utah	923	90%	4	479	New Martinsville	West Virginia	5,267	55%	7
347	Emigration Canyon	Utah	1,567	82%	5	534	East Bank	West Virginia	948	71%	4
434	Tooele	Utah	31,368	30%	9	566	Star City	West Virginia	1,830	50%	4
470	Manti	Utah	3,193	71%	7	601	Holden	West Virginia	911	87%	5
603	Santa Clara	Utah	6,096	47%	7	629	Rand	West Virginia	1,631	64%	5
650	Park City	Utah	7,565	47%	8	641	Eleanor	West Virginia	1,518	66%	5
328	Winooski	Vermont	7,223	47%	6	651	Piney View	West Virginia	994	81%	5
460	Essex Junction	Vermont	9,265	42%	7	113	Superior	Wisconsin	26,854	44%	7
523	Northfield	Vermont	2,039	61%	5	221	Superior	Wisconsin	664	93%	3
527	West Brattleboro	Vermont	2,740	63%	6	307	North Hudson	Wisconsin	3,925	66%	6
679	Bellows Falls	Vermont	3,113	54%	6	414	Niagara	Wisconsin	1,620	74%	5
30	Aquia Harbour	Virginia	7,241	53%	3	512	Brice Prairie	Wisconsin	1,887	51%	4
38	Poquoson	Virginia	12,121	38%	3	110	Green River	Wyoming	12,456	65%	7
65	University Center	Virginia	3,586	61%	3	160	Sleepy Hollow	Wyoming	1,308	75%	3
69	Shawneeland	Virginia	1,873	82%	3	306	Bear River	Wyoming	612	56%	2
124	Lowes Island	Virginia	10,756	48%	5	326	Evanston	Wyoming	12,293	30%	5
131	Shenandoah Shores	Virginia	934	96%	3	356	Rafter J Ranch	Wyoming	1,041	79%	4
						411	Reliance	Wyoming	719	89%	4



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we don't have a US 101 for exiting Napa Valley. We have the trail and highway 29, both have single lanes in each direction.

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## The analysis of traffic data of wildfire evacuation: the case study of the 2020 Glass Fire

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### ABSTRACT

Evacuation is a crucial policy to mitigate wildfire impacts. Understanding traffic dynamics during a wildfire evacuation can help authorities to improve in improving emergency management plans, thus improving life safety. In this study, we developed a methodology to extract historical traffic data from vehicle detector stations and automate the analysis of traffic dynamics for actual wildfire evacuations. This has been implemented in an open-access tool called Traffic Dynamic Analyser (TDA) which generates speed-density and flow-density relationships from data using both commonly used macroscopic traffic models as well as machine learning techniques (e.g., support vector regression). The use of the methodology is demonstrated with a case study of the 2020 Glass Fire in California, USA. The results from TDA showed a slight reduction in speeds and flows on US Highway 101 during the evacuation scenario, compared with the routine scenario. Moreover, background traffic has been shown to play a key role in the 2020 Glass Fire compared with previous wildfire evacuation scenarios (e.g., the 2019 Kincadee fire). The case study showed that the methodology implemented in the TDA can be used to understand traffic evacuation dynamics in wildfire scenarios and to validate evacuation models.

### 1. Introduction

Climate change and other anthropogenic factors (such as forest management and suppression policies) have led to longer wildfire seasons worldwide and increased fire frequency and intensity during these seasons [1]. Moreover, the wildland-urban interface (WUI) has also increased [2]. Improved evacuation planning and real-time decision-making are essential to minimise the negative impacts of these trends on communities.

Wildfire evacuation models have great potential to support evacuation planning and real-time decision-making and traffic management. To provide an accurate estimation of the evacuation process, these models should consider the different aspects of a wildfire event (i.e., fire and smoke spread, decision-making, pedestrian response and movement, and traffic), as well as the interaction between these aspects [3,4]. Ronchi et al. [4] assessed the potential of existing fire models, pedestrian models and traffic models to be used in a multi-layer evacuation simulation model for wildfires. Moreover, researchers have started to develop integrated models for wildfire evacuation [5–11]. Kuligowski [12] and Ronchi and Gwynne [13] argue that due to our currently limited understanding of evacuee decision-making processes and the lack of data to validate the model layers, further research efforts should focus on data collection and analysis.

Traffic models are one of the modelling layers that need further validation datasets. Many macroscopic, mesoscopic and microscopic traffic models could be used for wildfire evacuation modelling [14]. However, these models have been calibrated using data from non-evacuation scenarios. Calibration and validation efforts of these models for emergency scenarios are limited by a lack of data on evacuee travel behaviour and traffic dynamics during wildfire evacuations [9, 12, 15–17]. The importance of these data is highlighted by Dixit and Wolshon [18], who found a 10%–16% reduction in road capacity in USA hurricane evacuation events when compared with non-emergency traffic data. Factors identified as influential of this difference include unfamiliarity with the mode chosen, increased passenger load of the vehicle, increased vehicle length or change in desired headway (related to increased risk perception). Recent studies [19] on traffic dynamics during a wildfire event show similar trends. Analysis of traffic data collected both before and after the 2019 Kincadee Fire in Sonoma County, California found that vehicle speeds during the fire event were reduced by approximately 3.5 km/h for densities between 0 and 64 veh/km/lane and the capacity was reduced by approximately 5% when compared with routine conditions. However, as this is one event, further research is needed to confirm these results for other fires.

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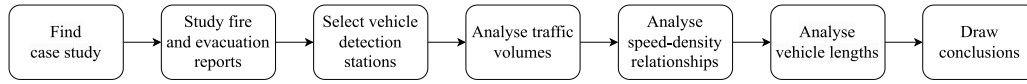


Fig. 1. Schematic presentation of the proposed methodology.

If results are consistent during other wildfire evacuations, they will need to be accounted for by traffic models to obtain realistic evacuation times. This means that the existing parameters of the speed-density and flow-density relationships (macroscopic modelling) or the car-following model (microscopic modelling) would require adjustments.

This paper presents a novel methodology for extracting and analysing data from traffic detectors for wildfire evacuation applications. While previous studies have recognised the need for data on traffic dynamics during wildfire evacuations, our work addresses this gap by providing a practical solution. The methodology has been developed and it has been implemented in a dedicated tool (including a graphical user interface) which is made freely available to all interested parties.

The aims of this work are (1) to demonstrate the functionalities of the methodology employed to obtain traffic evacuation datasets in wildfires from detector data, and (2) to provide open access to a dataset from an actual wildfire event used to show the use of the tool, the 2020 Glass Fire in California, USA.

## 2. Methodology

Our methodology is schematically summarised in Fig. 1. This section introduces some key modelling concepts needed to interpret the traffic dynamics. This is followed by an introduction to the traffic database we used and by the methodology proposed for data selection and model fitting. The paper focuses on macroscopic traffic modelling since these models can be calibrated and validated with data from traffic detector databases. Due to their lower computational requirements, they are deemed suitable for real-time wildfire evacuation applications.

### 2.1. Macroscopic traffic evacuation modelling

In macroscopic models, the traffic dynamics are generally described by three quantities: (1) the average vehicle speed  $v$  (km/h), (2) the traffic density  $k$  (veh/km/lane), (3) and the traffic flow  $q$  (veh/h/lane). These quantities are calculated for each road segment and for each time step by means of three relationships: the conservation of vehicles, the fundamental equation of traffic flow ( $q = kv$ ), and the speed-density relationship (often referred to as ‘macroscopic models’ themselves).

The first speed-density relationship was proposed by Greenshields in 1935 [20]. Since then, many have followed. Well-known models include the exponential model, developed by Underwood [21], the North-Western model by Drake et al. [22], the bi-linear (triangular) model by Daganzo [23], the model by Van Aerde and Rakha [24,25], the model by Del Castillo and Benítez [26] and the model by Cheng et al. [27].

Traffic detection systems can generally measure speed, flow, and density. Therefore, it is possible to calibrate the parameters of macroscopic models by fitting the models onto traffic data and comparing the obtained values for routine scenarios with those of evacuation scenarios. Here, only the model by Daganzo [23] (Eq. (1)), the model by Van Aerde and Rakha [24,25] (Eq. (2)) and the model by Cheng et al. [27] (Eq. (3)) are presented, as these models are most frequently used today and fit best with the data of our case study. Details on the calibration of additional models are available in [28]. The first two models rely only on physical parameters:  $v_f$  (the free-flow speed);  $v_c$  (the critical speed),  $q_c = k_c v_c$  (the critical flow, capacity),  $k_c$

(the critical density), and  $k_j$  (the jam density). The model by Cheng et al. [27] also relies on the polynomial order  $m$ .

$$v = \min \left( v_f, v_f \frac{\left( \frac{1}{k} - \frac{1}{k_j} \right)}{\left( \frac{1}{k_c} - \frac{1}{k_j} \right)} \right) \quad (1)$$

$$k = \frac{1}{a + \frac{b}{v_f - v} + cv} \quad \text{with} \quad \begin{cases} a = \frac{v_f(2v_c - v_f)}{k_j v_c^2} \\ b = \frac{v_f(2v_c - v_f)^2}{k_j v_c^2} \\ c = \frac{1}{k_c v_c} - \frac{v_f}{k_j v_c^2} \end{cases} \quad (2)$$

$$v = \frac{v_f}{(1 + (k/k_c)^m)^{2/m}} \quad (3)$$

### 2.2. Caltrans PEMS database

As an example of a traffic database that can be used as a data source for wildfire evacuation studies, we adopted the Performance Measurement System (PeMS) of the California Department of Transportation (Caltrans). This database was established introduced in 1999, in cooperation with the University of California, Berkeley [29]. Today, it collects real-time traffic data from more than 46 600 detectors spread over more than 19 000 vehicle detection stations (VDSs) along the Californian freeway system. The data is stored and made available online (<https://pems.dot.ca.gov/>) and can be used to analyse traffic dynamics and service quality along major highways across the state. Moreover, the database contains incident records from the California Highway Patrol and lane closure records from Caltrans Headquarters [29].

The most common detector in PeMS is the loop detector (64% of VDSs are equipped with inductive loops). A loop detector is essentially a wire that is installed in a sealed loop-shaped saw cut, just beneath the road surface [30]. The wire acts like a coil. When a vehicle passes over the coil, it generates a vortex current in the loop such that the loop’s inductance decreases by a few percent [30]. Consequently, one loop is able to detect the traffic flow and the detector occupancy. Some VDSs are equipped with dual loops, which consist of two loops, typically positioned three to four metres apart from each other [31]. These dual loops can also obtain the vehicle speed as the ratio of the loop distance and the detection delay ( $v = \Delta x / \Delta t$ ).

While no specific studies could be identified determining the accuracy detectors used by Caltrans, other studies have demonstrated the high level of accuracy of inductive loops in general. Studies on similar loops in Minnesota show that the flow accuracy lies between 97.0 and 99.9% when comparing it with a manual count from video footage and that the speed accuracy lies between 96.7 and 98.8% when compared to the verified speedometer of a probe vehicle [32]. Research performed in Texas [30] reveals a mean error in vehicle speed of approximately 2.4 km/h (1.5 mph), in comparison to an infrared sensor speed trap.

Based on the studies mentioned above, traffic detector data can be considered among the most accurate data available to investigate traffic dynamics and was for this reason been chosen in this study.

### 2.3. Data selection

With the database identified, the next step is to select a dataset from PeMS for a specific wildfire event to understand traffic dynamics under emergency conditions and compare it with the traffic dynamics under routine conditions. This requires the identification of a set time frame

(e.g., before, during, and after the fire event) and specific freeways of interest (e.g., one or two freeways that are either directly within or adjacent to the evacuation zones). Once the time frame and location are set, the data selection process can begin. This process considers the following five aspects:

1. Detector position.

Since the traffic dynamics on the mainline (i.e., the primary travel lanes of a highway) and ramps (junctions) are expected to differ, only the detector stations on the mainline of the highway are considered for this demonstration.

2. Speed measurement

Not all detector stations measure the speed. For those that do not, PeMS employ an algorithm to estimate the speed from data from nearby stations (via the Daily Length Profile Algorithm by Erik van Zwet, [29]). To avoid noise and bias, only detector stations that measure the speed are considered.

3. Detector health

The measurements of a detector station might be erroneous. The PeMS database automatically identifies unreliable data and calculates the health of the data (i.e., the percentage of reliable data) that is produced by the detector station. To avoid unreliable results, only detector stations with a health of 97% or more during the measurement campaigns, are considered.

4. Visual inspection

The detector stations that meet the three conditions above are then subjected to a visual inspection. First, they are located on satellite images to ensure that all lanes belong to the mainline, and not to a junction or weaving zone. Second, graphs are produced that display the evolution of speed, flow, and density over time for each lane, as well as graphs that relate the speed, flow, and density. Only stations for which the graphs show physically credible results are considered.

5. Spacing

Stations that are located close to each other will record correlated data because the same vehicles will be recorded, at almost the same moment. A selection is made to include as many stations as possible while maintaining a spacing of at least 2 km between the selected stations. This choice was a compromise between not discarding too much data and avoiding data being too correlated.

The flowchart in Fig. 4 summarises this process and the outcome related to the case study (see Section 4).

## 2.4. Data analysis

The methodology proposed here includes a dedicated procedure for model fitting which accounts for the peculiarities of the data under consideration. The macroscopic models  $v = f(k)$  can be fitted to traffic data by minimising the sum of squares ( $S$ ) of the residuals (error on the speed predictions). We used the Levenberg–Marquardt algorithm [33, 34]. The residuals are weighted as proposed by Qu et al. [35] to ensure that the model fits well over the full range of densities (see Eq. (4) [35], where all  $m$  data points are ordered so that  $k_i \leq k_j$  when  $i < j$ ). Without weighting, the models would typically fit poorly in the high-density region due to the imbalance that is often observed in traffic data.

$$S = \sum_i^m w_i (v_i - f(k_i))^2 \quad (4)$$

where

$$w_i = \begin{cases} (k_2 - k_1) & i = 1 \\ (k_{i+1} - k_{i-1})/2 & i = 2, 3, \dots, m-1 \\ (k_m - k_{m-1}) & i = m \end{cases}$$

It is also possible to compare the trends of the evacuation data and routine data without assuming an underlying speed-density relationship. To do so, two machine learning methods are applied. The first method is Gaussian Kernel Smoothing (GKS), a commonly used weighted moving average. However, the weights of the Gaussian kernel are also multiplied by the weights mentioned above (Eq. (4)) to correct for the imbalanced data. The same weights are applied to the moving quantiles, which are calculated by linear interpolation from the empirical cumulative distribution function, as proposed by Parzen [36]. This way, the asymmetry and heteroscedasticity of the variance are disclosed without assuming its distribution. In the second method, the regression is obtained from support vector regression (SVR). Here, the scikit-learn package [37] is used to establish the regressions. To obtain non-parametric regressions, Gaussian (also called radial basis function) kernels were chosen.

The optimal hyperparameters (the kernel length scale  $\sigma$  of the GKS and the kernel coefficient  $\gamma$  and regularisation parameter  $C$  of the SVR) were found by means of a grid search, during which the average weighted sum of squares (Eq. (4)) from a five-fold cross-validation was minimised.

The fitted models and regression lines of the evacuation data and the routine data can then be compared to discuss the differences in traffic dynamics. One reason that might partly explain observed differences could be a change in the average vehicle lengths. Therefore, this method proposes to analyse the vehicle lengths as well. The lengths can be calculated as given in Eq. (5) [38,39]:

$$l = \frac{v\phi}{q} \quad (5)$$

where  $l$  is the arithmetic average length (m/veh) of all vehicles passing by the detector,  $v$  is the average speed (m/s),  $\phi$  is the detectors occupancy (–), which is the fraction of the sampling period for which a vehicle is present at the detector location, and  $q$  is the flow (veh/s) passing by the detector (all during the five-minute interval).

## 3. Traffic dynamics analyser

The methodology presented in Section 2 was implemented in a tool with a graphical user interface (see Fig. 2). This tool allows the user to extract PeMS data from different vehicle detection stations at different periods (scenarios) and to automate the analysis. The tool, called Traffic Data Analyser (TDA), is released in open access on Github and Zenodo [40]. What follows is a description of the different uses of the methodology for traffic evacuation data analysis using TDA.

The user must specify their PeMS account details, the identification number of the vehicle detector stations they intend to analyse, as well as the timespans they are interested in. The TDA is then able to log into the platform and automatically extract all required data. Hereafter, it processes the data by executing the necessary conversions and calculates the traffic density and the average vehicle lengths. If the user has used TDA before, they can also use the spreadsheet that they generated before, rather than downloading and processing all data again. Next, TDA generates the graphs as requested by the user.

Since our proposed methodology advises the user to visually inspect the relationships between the fundamental variables, the tool has been developed to generate graphs for each detector station individually. Speed, flow, and densities can be plotted for each lane of these stations, both as time series and as scatterplots. These graphs are valuable to perform a visual inspection of the data.

Moreover, TDA can aggregate the speed, flow, and density data on the scenario-level (evacuation versus routine) and provide the scatterplots. It also allows fitting (predefined or user-defined) models in accordance with our proposed methodology (see Section 2.4). In addition to the graphs, a second spreadsheet is created that contains the values of the fitted parameters, as well as the confidence intervals of these values. Examples of these graphs and tables are shown in Section 4.

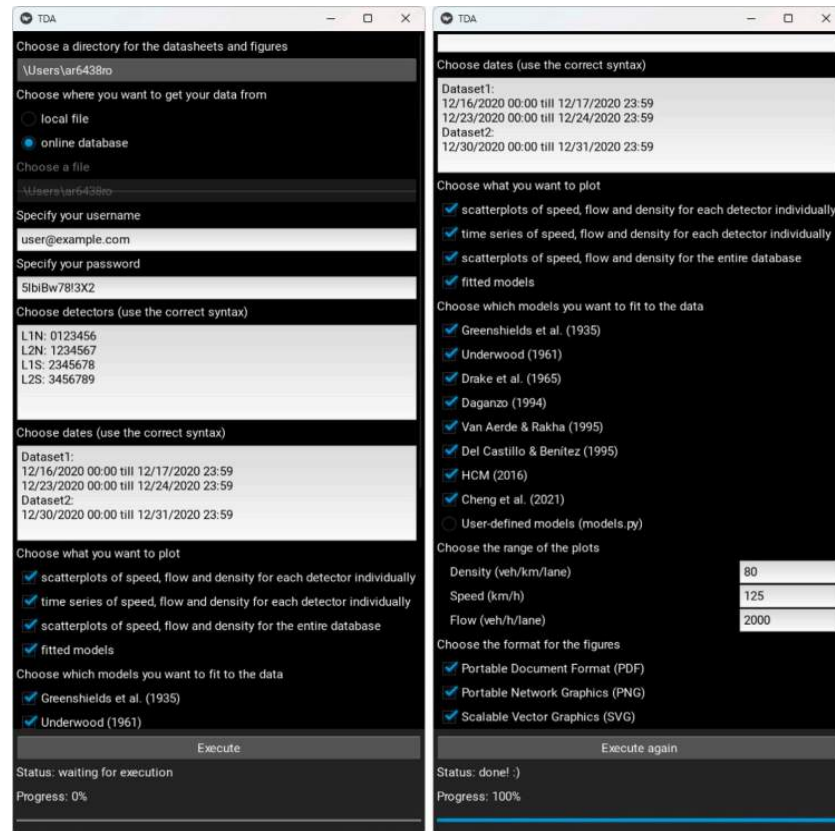


Fig. 2. Graphical user interface of the traffic data analyser.

#### 4. The 2020 Glass Fire case study

In this section, we demonstrate the methodology through a case study: the 2020 Glass Fire. The Glass Fire was chosen as it led to a large-scale evacuation. Moreover, US 101, which is adjacent to the evacuation zone, is equipped with dual loop detectors, allowing for the measurement of flow, speed, and occupancy at the time of the evacuation. This section provides a brief overview of the event, followed by a presentation of the data selection process. This section ends with an analysis of the traffic dynamics on US 101 during the routine scenario (before the fire event) and the evacuation scenario (during the fire event). The goal is to identify if similar trends are found in the 2020 Glass Fire as were found in the Kincade Fire [19] as well as previous hurricane events [18].

##### 4.1. Overview of the fire event

The 2020 Glass Fire started on 27 September 2020 just before 4 am and continued burning for 24 days until it was fully contained (on 20 October 2020) [41]. The ignition point was located in Napa County, California, United States, but the fire expanded rapidly to Sonoma County, due to the extremely high temperatures, strong winds and unprecedented drought [42]. By the second day, approximately 14 700 hectares (36 400 acres) of land has been affected, which is more than half of the eventually affected area (27 300 hectares or 67 500 acres) [41]. The ignition point and eventual perimeter of the fire are displayed in Fig. 3. On the second day, the fire reached the towns of

Santa Rosa, Calistoga, and Saint Helena. In total, 1555 structures were destroyed [41] (of which 42% were residential) and 282 structures were damaged (of which 57% were residential),¹ making this fire the tenth most destructive wildfire in California to date [43].

Both Sonoma County and Napa County are divided into zones to manage evacuations during emergencies. In Sonoma County, all evacuation orders were issued on the 27th and the 28th of September [44], while in Napa, the last order was issued on the 4th of October. All orders were lifted between the 2nd and the 19th of October.² The evacuation zones for which a warning or order were issued, are shown in Fig. 3.

##### 4.2. Data selection for the fire event

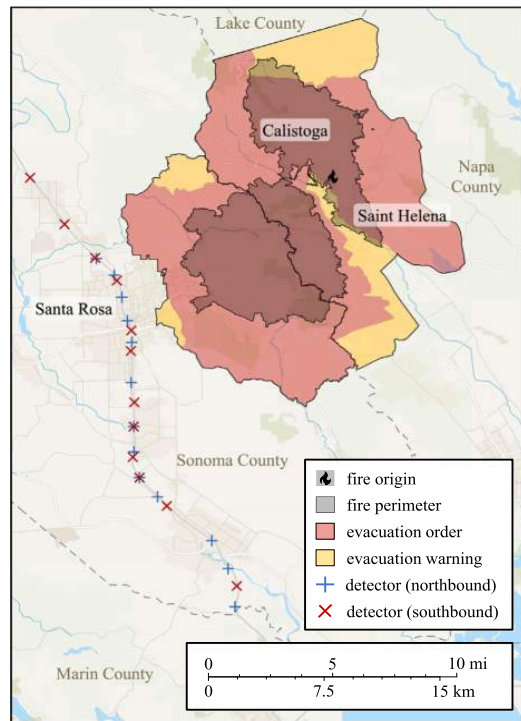
Only one route in the vicinity of the evacuation zones is equipped with vehicle detection stations (VDSs): the federal highway US 101. This highway runs straight through Sonoma County and it is the only route with multiple lanes in each direction and grade-separated junctions. It has a speed limit of 65 mi/h ( $\approx 105$  km/h).

There are 301 vehicle detection stations along which congestion occurs in Sonoma County. All were considered in the selection process presented in Section 2.3. The outcome is summarised in the flowchart in Fig. 4. Eventually, fifteen stations were discarded after the visual inspection. For seven of these stations, detectors were present on an

¹ Glass Fire Incident Update, posted on Twitter by CAL FIRE.

² News updates, posted online by ABC7 News.





**Fig. 3.** Map (ESRI) of the wildfire incident. The evacuation warnings and orders for both Sonoma [44] and Napa (News updates, posted online by Bay City News) are coloured yellow and red respectively. The ignition point is marked with a flame symbol and the final perimeter of the fire is drawn in black [41]. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

**Table 1**  
Time periods of data extraction (day/month) and the corresponding flow.

Scenario	Start	End	Week	Traffic flow (veh/day)
Routine	08/31	09/02	36	22 399
	09/14	09/16	38	22 140
	09/21	09/23	39	22 690
Evacuation	09/28	09/30	40	22 295

on-ramp, an off-ramp, or a weaving zone, despite them being labelled as “mainline” in the PeMS database. The other eight discarded stations had one or more detectors that produced unreliable data. The final selection of VDSs is presented in Fig. 3.

The first evacuation orders were issued on Sunday the 27th of September. After analysing the traffic flow, it was decided to consider an evacuation scenario that starts on Monday the 28th and ends on Wednesday the 30th of September (Week 40). The reason for this decision is explained in more detail in Section 4.3. To compare the data with normal traffic, routine data is extracted one week earlier (Week 39), two weeks earlier (Week 38), and four weeks earlier (Week 36), from Monday to Wednesday as well. The reason why Week 37 is not included is because of Labor Day, on Monday the 7th of September. This day, traffic flow is significantly different and traffic dynamics are also considered to differ (as “weekend”-dynamics are expected). Table 1 summarises the time periods of data extraction. The average flow during these periods is also shown.

PeMS also provides incident reports. In this case, most of the incidents are vehicles or objects that briefly obstruct the road. None

of the incidents led to lane closures or influenced the traffic dynamics considerably. A complete list of incidents is provided in [28].

#### 4.3. Analysis of the traffic dynamics

We have extracted, processed and published the data in open access [45]. This section analyses the data.

Fig. 5 shows the hourly flow and speed of the traffic on US 101 before and during the evacuation. The flows and speeds are obtained by averaging the values of all twenty-five selected detectors. Curves of the different weeks are overlaid to demonstrate the recurring trends. The earliest week is Week 34, on which the new school year started. It can be easily noticed that the routine traffic flows are regular, as all blue curves overlap well. The one exception is Monday the 7th of September 2020 (Week 37), as it is a national holiday (*Labor Day*).

The fire started early on Sunday the 27th of September (Week 40). Apart from relatively small evacuation orders at a distance equal to 25 km from US 101, no orders are issued until late in the evening [41]. The effect of the wildfire on the traffic flow is clearly visible during the last two hours. However, during these two hours, the traffic flow is rather low (i.e., no densities beyond 25 veh/km/lane are recorded). It was therefore decided to consider the start of the evacuation scenario on Monday (see Table 1) and end on Wednesday. This also eliminates the effect of the weekend on the traffic dynamics.

Fig. 6 shows the scatterplot of the extracted data. Clearly, congestion occurs during the evacuation (as well as during routine conditions). However, most of the data points have a low traffic density (98.6% of all points have a density below 20 veh/km/lane). This confirms the need for weighting when fitting the speed-density relationship to the data (see Section 2.4).

To apply our suggested methodology, the models by Daganzo, Van Aerde and Rakha, and Cheng et al. are fitted to the data using the TDA. The results are presented graphically in Fig. 6 and numerically in Table 2. The table shows the optimal model parameters, the confidence margins and the ratios  $\phi$ , which represent the value of the parameter during the evacuation scenario, relative to the value during the routine scenario.

The trends of the data can also be presented without assuming a relationship between speed and density. Fig. 7 presents the weighted moving average achieved by Gaussian kernel smoothing (GKS). A kernel length scale  $\sigma$  of 2.750 veh/km/lane was used. The coloured lines represent the average values and the coloured surfaces are bounded by the 5 to 95 percentiles. Fig. 7 also shows the lines obtained with support vector regression (SVR). The kernel coefficient  $\gamma$  and the regularisation parameter  $C$  are 60 and 0.028 respectively for the evacuation scenario and 94 and 0.024 for the routine scenario.

Fig. 7 shows slight differences between the two scenarios. Comparing evacuation and routine scenarios, the average speed reduction for densities between 0 and 60 veh/km/lane equals 1.07 km/h for GKS and 1.23 km/h for SVR. The capacity reduces by 1.9% (GKS) or 3.1% (SVR). The parametric model fits show small differences between the scenarios as well (see Fig. 6 and Table 2).

Fig. 8 visualises the sample distribution of average vehicle lengths for the evacuation scenario and the routine scenario. Both the histogram and the cumulative probability curve are constructed by weighting the average vehicle lengths with the flow of the interval and lane in question to obtain car-based distributions. The histograms of both scenarios show a substantial overlap of 96.0%, suggesting a minimal disparity in the distributions of vehicle lengths.

#### 5. Discussion

Overall, the methodology and accompanying TDA tool were used to collect and analyse traffic data before and after the 2020 Glass Fire in Sonoma County, California. The process allows the user to input the detector stations as well as the dates of the different scenarios and

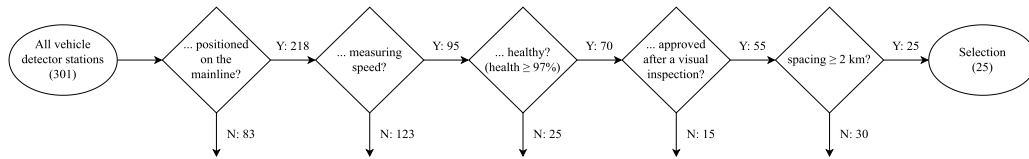


Fig. 4. Flowchart of the selection process for the vehicle detection stations for our case study.

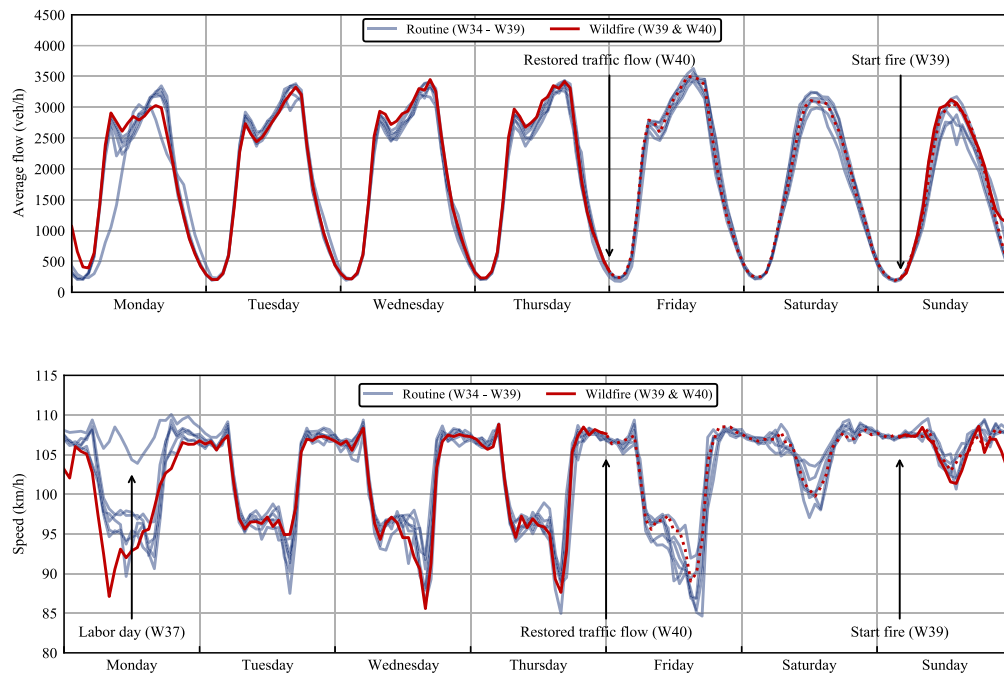


Fig. 5. Hourly flow and speed, averaged over all detectors, before and during the wildfire. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

Table 2

Best fit values and confidence margin of the model parameters.

Model	Parameters	Best fit $\pm$ 95% confidence margin				$\varphi$ (%)
		Routine		Evacuation		
Daganzo [23]	$v_f$ (km/h)	102.1	$\pm 0.12$	101.7	$\pm 0.21$	99.6
	$k_c$ (veh/km/lane)	14.1	$\pm 0.03$	13.6	$\pm 0.05$	96.3
	$k_j$ (veh/km/lane)	192.2	$\pm 2.14$	230.8	$\pm 7.58$	120.1
	WRMSE (km/h)	6.19		6.98		
Van Aerde & Rakha [24]	$v_f$ (km/h)	105.8	$\pm 0.17$	105.0	$\pm 0.29$	99.2
	$a$ (km lane/veh)	4.58E-03	$\pm 6.9E-05$	4.16E-03	$\pm 1.5E-04$	90.7
	$b$ (km ² lane/veh/h)	1.59E-01	$\pm 7.7E-03$	1.29E-01	$\pm 1.3E-02$	81.0
	$c$ (h lane/veh)	5.83E-04	$\pm 3.0E-06$	6.25E-04	$\pm 6.3E-06$	107.3
	WRMSE (km/h)	5.96		6.77		
Cheng et al. [27]	$v_f$ (km/h)	109.2	$\pm 0.19$	109.0	$\pm 0.34$	99.8
	$k_c$ (veh/km/lane)	24.5	$\pm 0.06$	24.0	$\pm 0.12$	97.6
	$m$ (-)	2.27	$\pm 0.01$	2.25	$\pm 0.03$	99.2
	WRMSE (km/h)	6.36		7.32		

obtain the spreadsheet and the graphs for each station (individually and collectively) to better understand traffic dynamics of evacuation scenarios and routine scenarios on highways in the state of California. As the TDA is released in open access, the tool and its accompanying methodology are presented here to promote its use. With TDA, past and future fires in California can be analysed in a similar way to better

understand traffic dynamics in different types of fires, communities, highways, and evacuation scenarios. It is hoped that the methodology presented can be applied to other traffic databases around the world. The use of the TDA allows for a comprehensive understanding of the potential change in speed, flow, and occupancy on highways during emergency events, such that existing traffic models can be updated

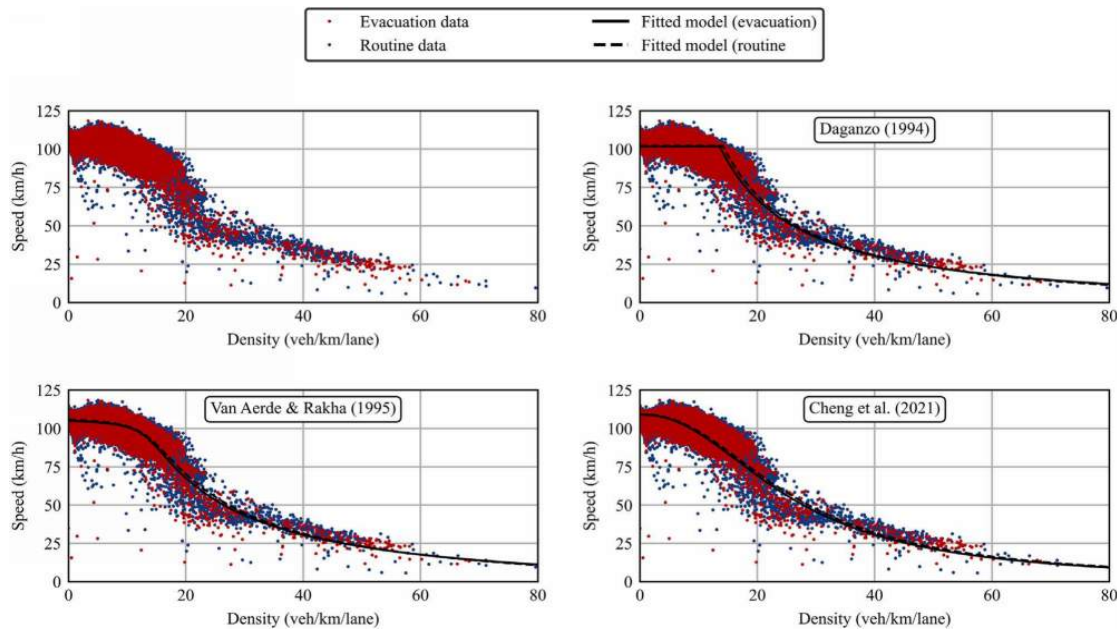


Fig. 6. Speed-density data and the fitted models for the evacuation data and the routine data. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

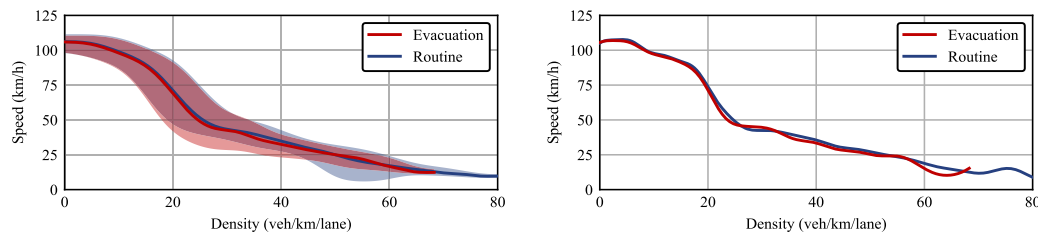


Fig. 7. Non-parametric regression, obtained by GKS (left) and SVR (right). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

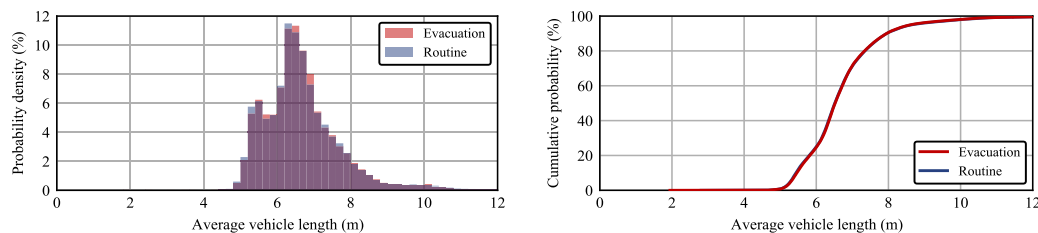


Fig. 8. Probability density and cumulative probability of the average vehicle length. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

to account for evacuation scenarios. In turn, these and future findings can be used to improve the way in which communities plan for wildfires before an event and emergency authorities make decisions about evacuation, including instituting traffic management solutions, in real-time.

The proposed methodology and TDA were then implemented in a case study focused on the 2020 Glass fire. Results from the TDA demonstrate an average reduction in speed of 1.25 km/h (GKS) to 1.72 km/h (SVR) when comparing evacuation scenarios with routine

scenarios. The road capacity drops by 2.1% (GKS) to 4.7% (SVR). However, this difference was smaller than that identified by Rohaert et al. [19] in their study of the 2019 Kincade Fire (i.e., a study that also analysed movement along US 101). The difference between the Kincade Fire and the Glass Fire is likely related to the position of the fire and evacuation zones in relation to US 101. During the Kincade Fire, the affected evacuation zones surrounded both sides (i.e., east and west) of US 101; whereas in the Glass Fire, the highway was only in close



vicinity to the affected areas (on the east). Consequently, the proportion of background traffic is expected to be higher for the 2020 fire.

Also, previous studies of wildfire and hurricane events suggest that evacuees often choose to leave with larger-sized vehicles (e.g., boat trailers, caravans, campers, or vans) during evacuation [46,47]. This might (partially) explain the reduced road capacity when the flow is expressed in vehicles rather than passenger car equivalents. During the 2019 Kincade Fire, the distribution of vehicle lengths changed significantly, while this is not the case for the 2020 Glass Fire (see Fig. 8). Therefore, Fig. 8 substantiates the assumption that ‘background traffic’ was more dominant on US 101 during the Glass Fire evacuation, likely diluting the effect of evacuee movement on the traffic dynamics. This explains why the difference in speed between the two scenarios is small.

The results of this work indicate the need for dedicated calibration and validation efforts of traffic models used to predict the evacuation time during wildfires. The distance of the fire location and evacuation zones from the impacted roads and highways is one of the factors influencing the results of traffic models. This finding also aligns with the results from the recent study by Hou et al. [48], which found that the impact on traffic performance reduces when the fire distance increases. The PeMS database collects traffic data from specific highways and freeways equipped with vehicle detection stations. It does not collect data from the other roads located closer to the fire region (e.g., collector or arterial roads). To compensate for this limitation with the PeMS database, other complementary datasets, such as GPS trajectory data [49], can help to measure traffic performance. Using complementary data sources can also improve the performance of the wildfire evacuation models.

As with any study, it is important to acknowledge the limitations associated with this work. One of them, in particular, is the fact that US 101 is further away from the affected area in the 2019 Glass Fire. Also, the PeMS database only collects traffic data from freeways, whereas in many cases the important traffic dynamics also occur on smaller roads. In this case, we only have traffic movement data on the main roads, rather than data from all the roads used for evacuation.

## 6. Conclusion

This paper presents a novel methodology for the analysis of traffic data in wildfire evacuation scenarios, based on both fitting parametric macroscopic traffic models and non-parametric machine learning regressions. The methodology has been implemented in a tool called Traffic Dynamics Analyser (TDA), which is made available for free for all interested parties [40] and has been demonstrated through a case study of the 2020 Glass Fire. The data from this case study has also been made available openly [45]. Results show the need for understanding traffic evacuation dynamics during wildfires and how this can be reflected in wildfire evacuation model development, calibration, and validation efforts.

## Declaration of competing interest

The authors declare no conflict of interest associated with the manuscript.

## Data availability

Data are publicly available

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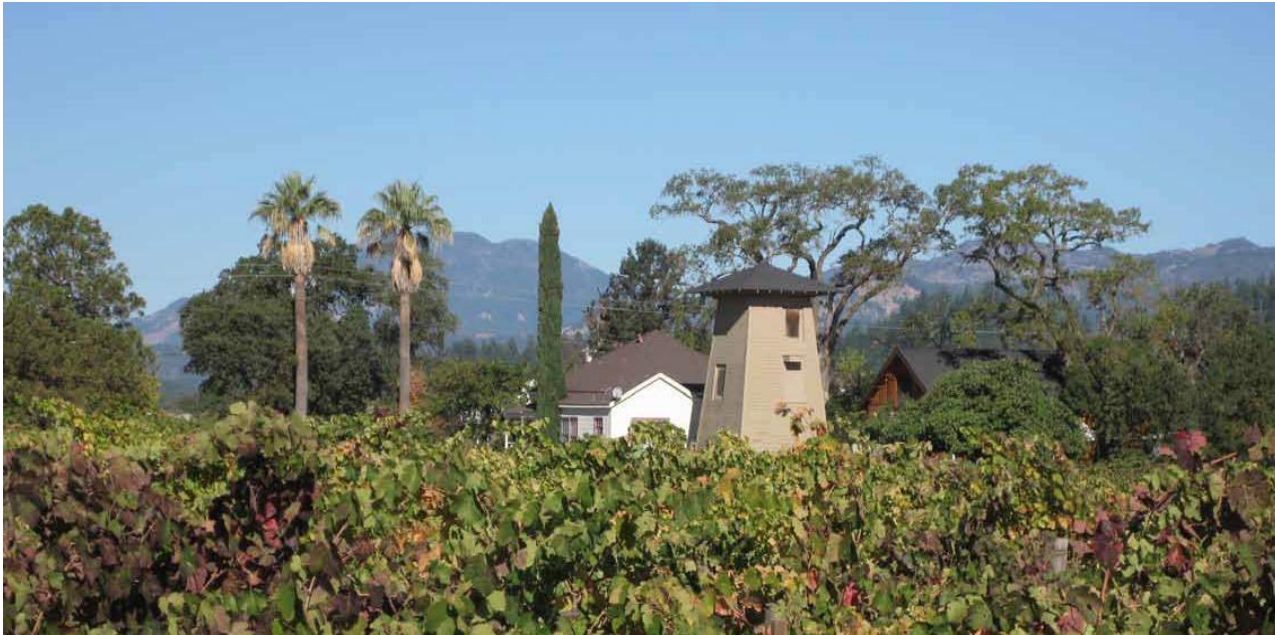
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chapter two  
land use and  
growth management



## 2 land use and growth management



*The Land Use and Growth Management Element provides an outline for governing future land use decisions and development patterns.*

- 1 introduction
- 2 land use and growth management**
- 3 economic sustainability
- 4 public facilities and services
- 5 circulation
- 6 historic resources
- 7 community design
- 8 open space and conservation
- 9 public health, safety and noise
- 10 climate change
- 11 housing
- 12 parks and recreation
- 13 arts, culture and entertainment

### 2.1 Purpose of the Element

The Land Use and Growth Management Element presents a framework for governing future decisions about allowable, context-appropriate land use and desirable development patterns to maintain the small-town character of St. Helena. This framework aims to effectively manage growth by drawing from and building upon the community's distinct history, walkable and strong neighborhoods, and active downtown. The Land Use and Growth Management Element sets the stage for maintaining an economically, socially, and environmentally sustainable St. Helena.

The Land Use and Growth Management Element includes the following sections.

- **2.2 Community Development Framework.** Describes the framework for community development, including the growth management system and land use designations (p. 2-3).
- **2.3 Key Findings.** Identifies key findings based on an existing conditions analysis and extensive community outreach (p. 2-26).
- **2.4 Goals.** Defines overarching goals to guide policies and implementing actions (p. 2-28).

## 2 land use and growth management

- **2.5 Policies and Implementing Actions.** Identifies policies and implementing actions to manage growth and maintain community character (p. 2-29).

### 2.2 Community Development Framework

Famous for its scenic Napa Valley location, fine wineries, and historic Main Street, St. Helena seeks to protect its small-town, agricultural character through a coordinated approach to growth management and land use planning. The City has developed an Urban Limit Line to control and limit development in order to ensure that prized agricultural and open space lands remain for future generations. In addition, it has crafted a land use designation system that works in tandem with its growth management goals, while allowing for targeted development in key areas and maintaining the character of its existing neighborhoods and central commercial areas. Following are detailed descriptions of the City's land use designations, growth management system, and development capacity.

The increasing pressures to grow caused serious concern in the community during the 1970s and resulted in the creation of a Growth Management System in the late 1970s. Public workshops and a phone survey conducted for the 1993 General Plan Update indicated that the principal land use concern was the rate of growth in the city. The community was generally concerned that there would be a loss of charm and beauty, increased traffic conditions, and an inadequate water supply. For the 2040 General Plan Update, a phone survey, Town Hall meetings, and mail-in survey were conducted and found that the same issues still resonate in the community and addressing concerns regarding traffic congestion, inadequate water supply, and preservation of small-town character remain priorities in St. Helena. Therefore, the City should follow the long-standing philosophy that growth in St. Helena needs to be carefully managed to ensure that each of these decades-long public concerns are adequately addressed in future land use determinations.

## 2 land use and growth management



*St. Helena seeks to protect its small-town, agricultural character through a coordinated approach to growth management and land use planning.*

### LAND USE DESIGNATIONS

Land in St. Helena is classified according to four broad land use categories:

- Residential Areas;
- Commercial and Mixed-use Areas;
- Business and Industrial Areas; and
- Community and Natural Resource Areas.

Within each of these categories, specific land use designations identify uses and the density and intensity of development allowed in each designation. Table 2.1 and Figure 2.1 outline the City's land use designations. For quick comparison and reference, Figure 2.2 includes a menu of St. Helena's land use designations, permitted building intensities and densities, and examples of potential building types for each land use designation.

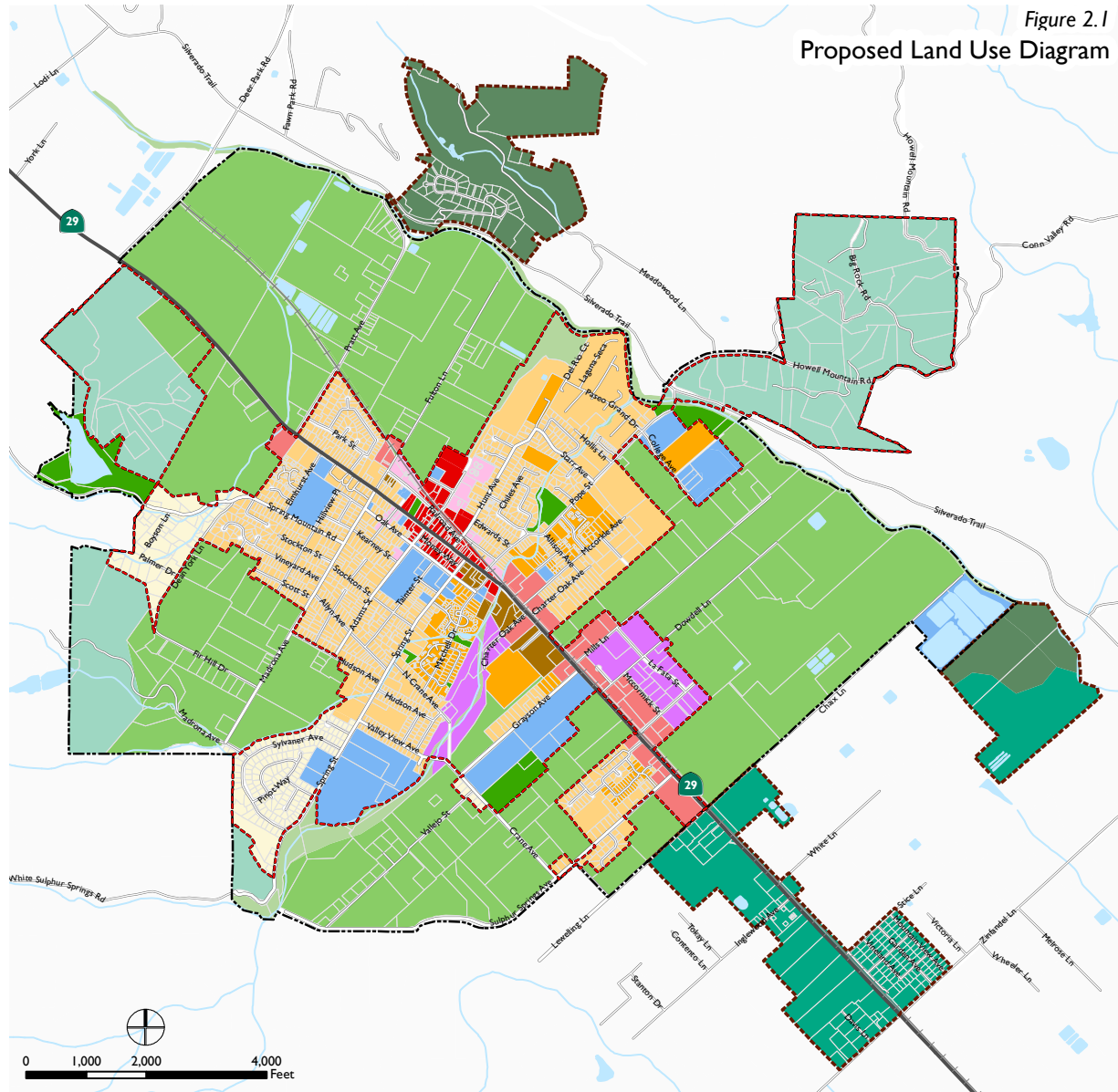


## 2 land use and growth management

TABLE 2.1: General Plan Land Use Acreage

Land Use Designation	Acres	Percent of Total
<b>Residential</b>		
Low Density Residential	97	3%
Medium Density Residential	409	13%
High Density Residential	83	3%
Subtotal	<b>589</b>	<b>19%</b>
<b>Commercial and Mixed-Use</b>		
Mixed-Use	19	1%
Central Business	28	1%
Service Commercial	61	2%
Subtotal	<b>108</b>	<b>4%</b>
<b>Business and Industrial</b>		
Office	15	0.5%
Industrial	60	2%
Subtotal	<b>75</b>	<b>2.5%</b>
<b>Community and Natural Resource</b>		
Open Space	72	2%
Park	57	2%
Public and Quasi-Public	156	5%
Woodlands and Watershed	451	14%
Agriculture	1,451	46%
Subtotal	<b>2,187</b>	<b>69%</b>
<b>Total</b>	<b>3,148</b>	<b>100%</b>
<i>Note: Acreage totals do not include public roadways.</i>		

## 2 land use and growth management



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018

### St. Helena General Plan

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Central Business
- Service Commercial
- Mixed-Use
- Office
- Industrial
- Public and Quasi-Public
- Parks and Recreation
- Agriculture
- Open Space
- Woodlands and Watershed

### Napa County General Plan

- Agricultural Resource
- Agriculture, Watershed and Open

- Railroad
- Water Features
- Urban Limit Line
- Study Areas
- City of St. Helena

### GENERAL PLAN UPDATE City of St. Helena

## 2 land use and growth management

**FIGURE 2.2: General Plan Land Use Menu**

Land Use Category	Density/ Intensity	Examples		
<b>Low Density Residential (LDR):</b> Single-family detached homes, secondary residential units and limited agricultural uses.	1.0 to 5.0 dwelling units per acre			
<b>Medium Density Residential (MDR):</b> Single-family detached and attached homes, and secondary residential units.	5.1 to 16.0 dwelling units per acre			
<b>Higher Density Residential (HDR):</b> Single-family and multi-family housing, including apartments, town-houses and group homes.	16.1 to 28.0 dwelling units per acre			
<b>Mixed-Use (MU):</b> Medium density residential mixed with retail, office, restaurant or other local-serving uses.	Up to 20 dwelling units per acre			
<b>Central Business (CB):</b> Retail and commercial businesses that serve residents and visitors, including restaurants, lodging, retail, office, etc.	Maximum FAR 2.0			
<b>Service Commercial (SC):</b> Retail and service uses that are local-serving and may be auto-oriented, including offices, restaurants, service stations, etc.	Maximum FAR 0.50			
<i>Notes: Dwelling units per acre (du/ac) describes residential building density. Floor area ratio (FAR) denotes building intensity for non-residential uses.</i>				



## 2 land use and growth management

Land Use Category	Density/ Intensity	Examples		
<b>Business and Professional Office (BPO):</b> Administration and professional office uses, including medical, financial, etc.	Maximum FAR 0.50			
<b>Industrial (I):</b> Industrial parks, warehouses, light manufacturing, auto and farm-related uses.	Maximum FAR 0.50			
<b>Woodland and Watershed (WW):</b> Very low density residential that ensures protection of wildlife, vegetation, open space and watershed resources.	Minimum parcel size 5 acres			
<b>Agriculture (AG):</b> Agricultural and winery uses with restricted single-family residential.	Minimum parcel size 5 to 40 acres			
<b>Public/Quasi-Public (PQP):</b> Government-owned facilities, schools, churches, cemeteries, etc.	Maximum FAR 0.50			
<b>Parks and Recreation (PR):</b> Parks with public recreation uses.	N/A			
<b>Open Space (OS):</b> Natural open spaces devoted to natural resource preservation and management, outdoor recreation, public health and safety.	N/A			

## 2 land use and growth management



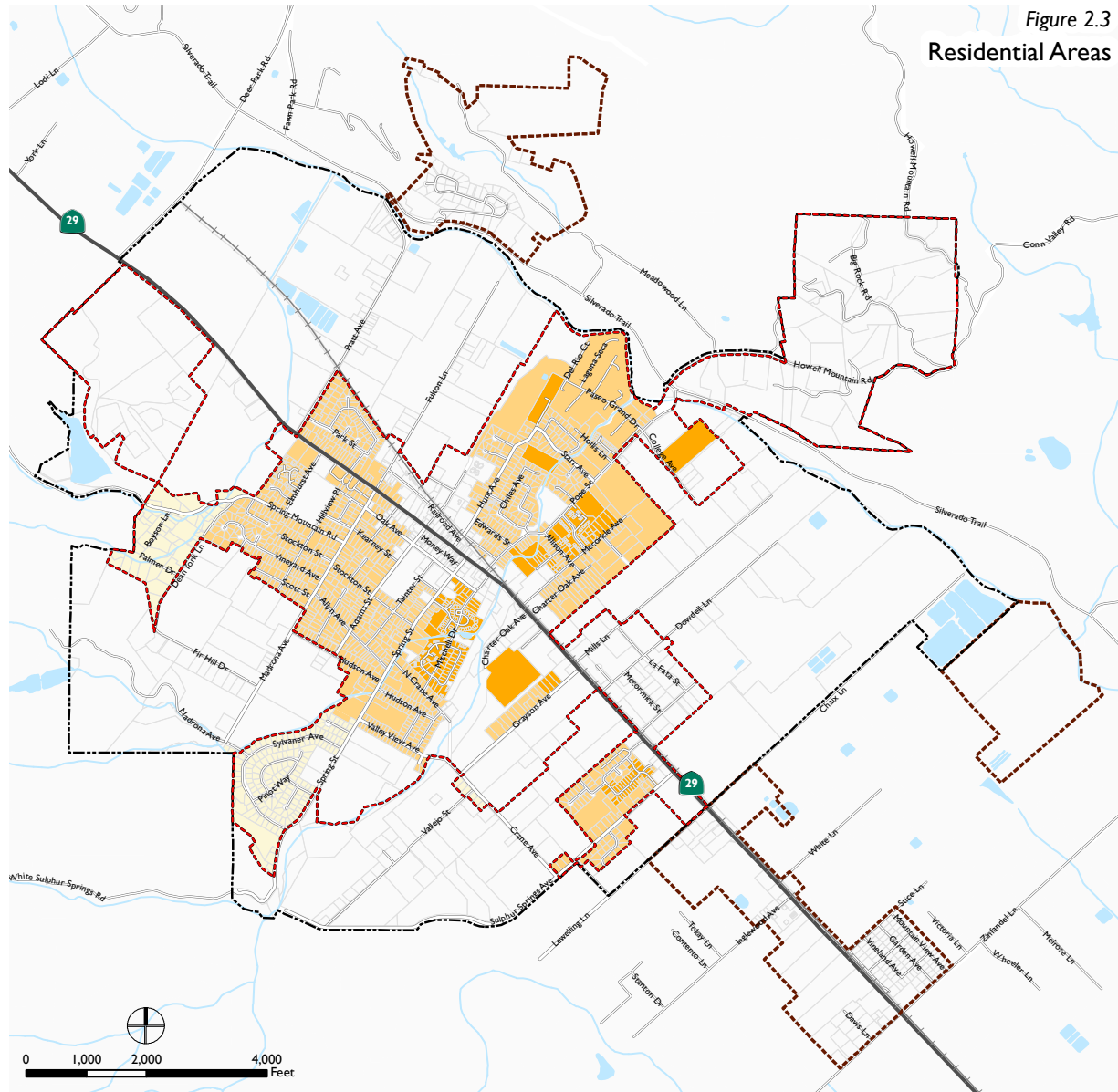
*There are a variety of residential densities including single family, multi-family and secondary dwelling units.*

### Residential Areas

St. Helena has a variety of residential areas that include single family, multifamily, and secondary residential housing options. These neighborhoods support a range of lifestyles at a broad spectrum of household income levels. Higher density infill development can expand housing options citywide, but the impact to neighborhoods with regard to traffic, parking, and public safety - where difficult fire access, roads with parking on both sides, and sidewalks without street separation can result in accidents - should be carefully considered. The creation of mixed-use areas with retail in the heart of the city can also increase housing options. Residential land use designations should encourage the development of accessible and diverse neighborhoods, where appropriate. Figure 2.3 highlights residential areas.

- **Low Density Residential (LDR).** The LDR land use designation includes single-family detached homes, accessory dwelling units (sometimes referred to as “second units”), limited agricultural uses, and similar and compatible uses. This designation permits residential densities between 1.0 and 5.0 dwelling units per acre. The LDR designation applies to limited areas of the city with large, residentially-subdivided parcels, particularly those near the city’s perimeter.
- **Medium Density Residential (MDR).** The MDR land use designation includes single-family attached and detached homes, and compatible uses. This designation permits residential densities between 5.1 and 16.0 dwelling units per acre. Retained from the 1993 General Plan, the MDR designation is the City’s predominant residential designation and it is intended to maintain a development pattern in St. Helena’s higher density areas that is consistent with historic development patterns.
- **Higher Density Residential (HDR).** The HDR land use designation can accommodate single-family and multi-family residential housing, apartments, and group quarters. This designation permits residential densities between 16.1 and 28.0 dwelling units per acre.

## 2 land use and growth management



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018



## 2 land use and growth management



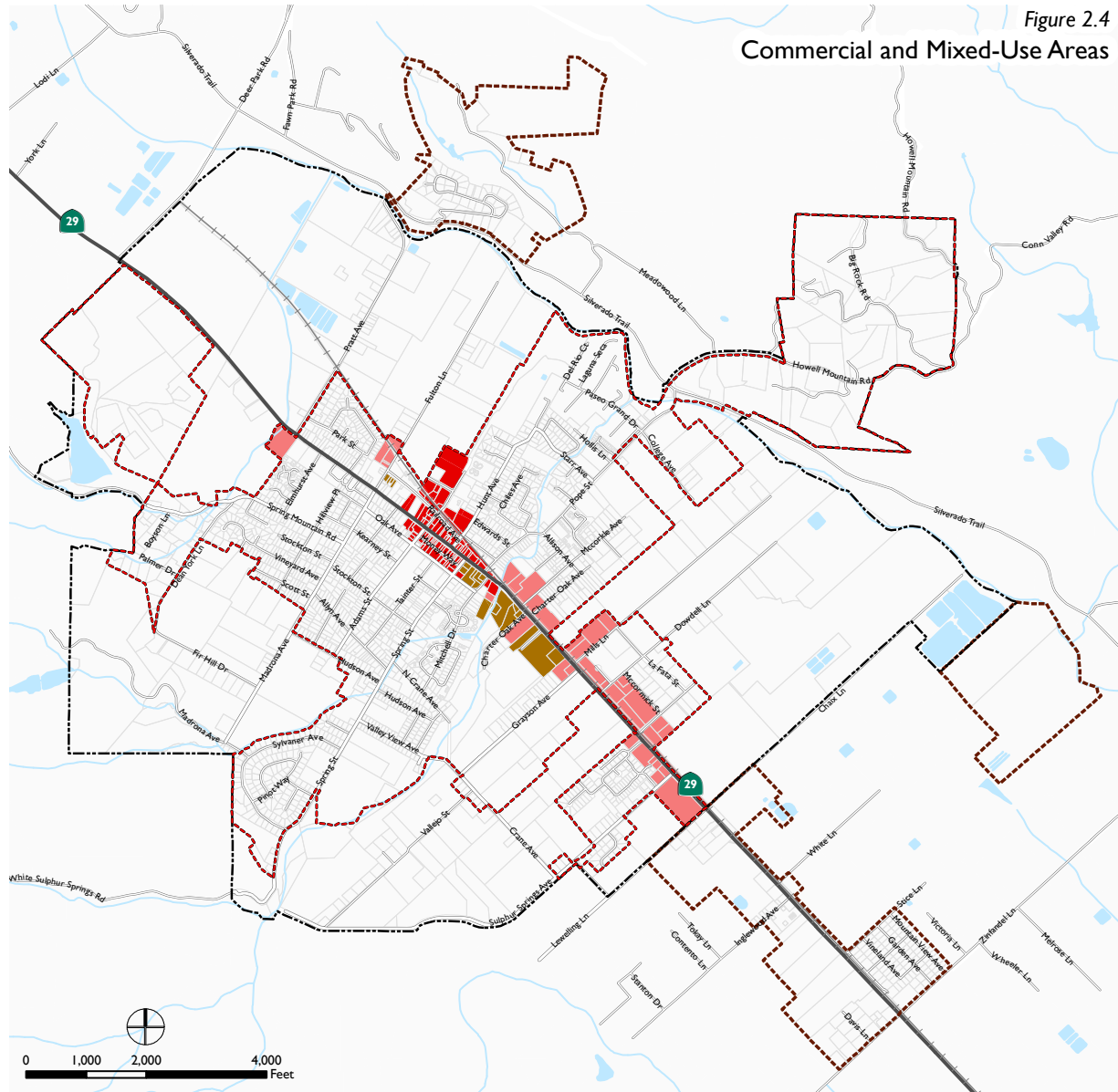
*Commercial uses include restaurants, cafes, retail and offices.*

### Commercial and Mixed-Use Areas

St. Helena has a number of commercial areas that provide retail and commercial services. Businesses serve tourists, city residents, and residents of the unincorporated agricultural areas who have traditionally traveled to St. Helena to shop for goods and services. In the city's historic Central Business District, a small amount of higher-density, mixed-use development that is context appropriate can expand housing options while also supporting additional retail and commercial services. Figure 2.4 highlights commercial and mixed-use areas.

- **Mixed-Use (MU).** The MU land use designation allows medium- to high-density residential mixed with retail, office, restaurant, or other commercial uses. The maximum allowable residential density in MU areas is 20 dwelling units per acre. The intent of this land use designation is to protect the Urban Limit Line by encouraging a mix of uses at infill locations and reduce greenhouse gas emissions by locating housing opportunities within close proximity to commercial and retail.
- **Central Business (CB).** The CB land use designation includes retail and commercial uses that serve local residents and the surrounding area. Typical CB uses include offices, restaurants, specialty retail and lodging, with particular emphasis on pedestrian-oriented retail and service uses on the ground floor level and offices located on upper floors. Residential uses can be considered for upper floor areas but are subject to discretionary use permit review and approval. The maximum allowable FAR in CB-designated areas is 2.0. The CB district extends from Sulphur Creek along Main Street to midway between Adams Street and Pine Street, west to Oak Avenue and along the north side of Adams Street east of Main Street.
- **Service Commercial (SC).** The SC land use designation includes service and retail uses that have larger space needs than are available in the Central Business District. Potential SC uses include offices, restaurants, service stations, and lodging, with a maximum allowable FAR of 0.50. The SC designation includes areas fronting State Route 29/Main Street south of Sulphur Creek.

## 2 land use and growth management



## 2 land use and growth management

### Business and Industrial Areas

St. Helena has limited areas designated for business and industrial uses. These uses are important to the community's economic health, serving St. Helena residents as well as residents and businesses in the surrounding unincorporated areas. Figure 2.5 highlights business and industrial areas.

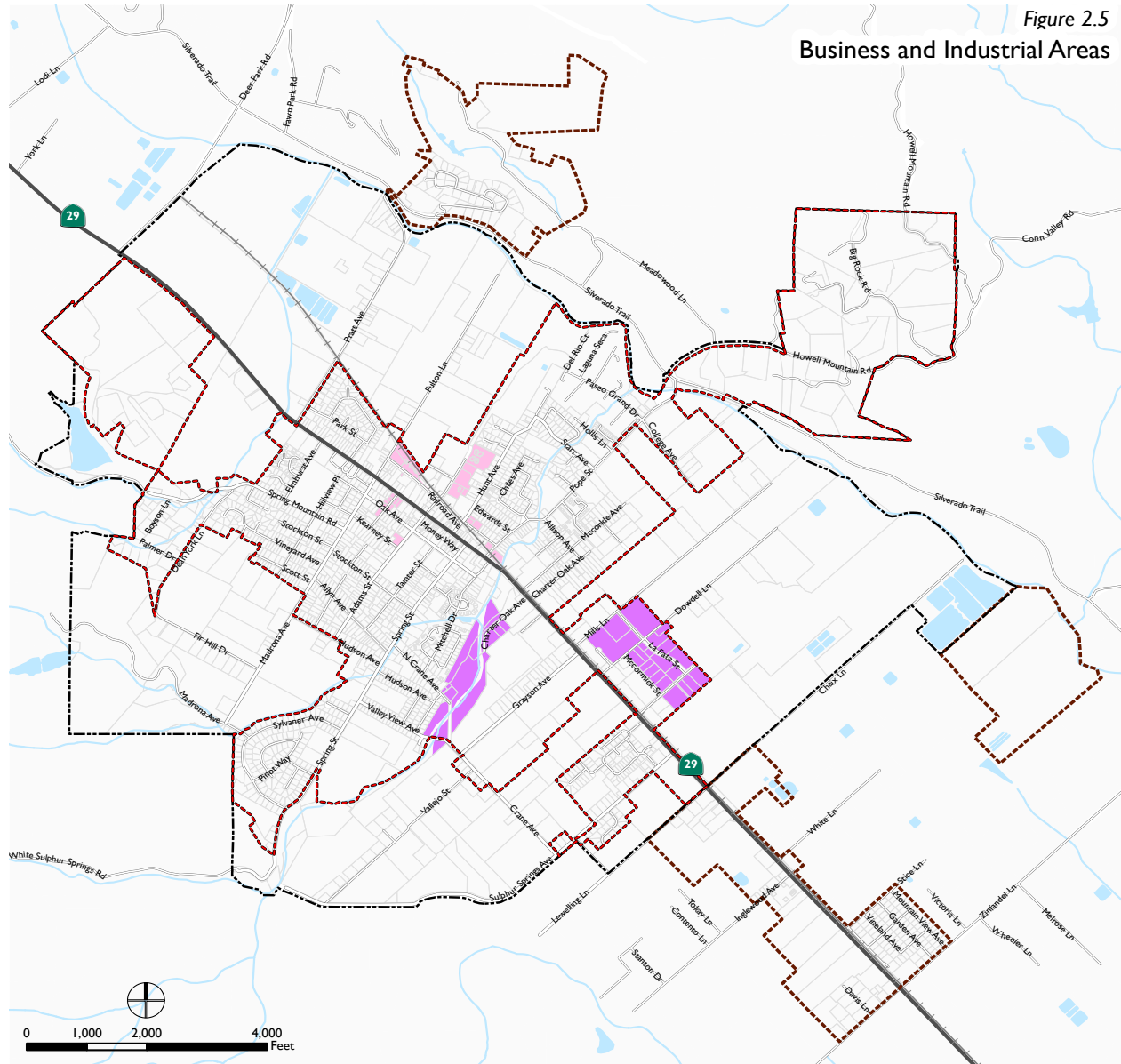


*Industrial areas provide important locations for light manufacturing and agriculture-related uses.*

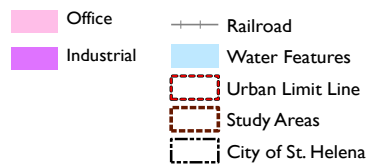
- **Business and Professional Office (BPO).** The BPO designation allows for professional and administrative office uses, including medical, financial, and similar uses. Residential uses in this designation can be considered for upper floor areas, subject to discretionary use permit review and approval. The maximum allowable FAR is 0.50. BPO areas are located throughout the city and provide a compatible, transitional use between commercial and residential areas.
- **Industrial (I).** The Industrial land use designation includes industrial parks, warehouses, light manufacturing, and auto and farm-related uses. The maximum allowable FAR is 0.50. Industrial areas are located south of Mills Lane and east of State Route 29; along Sulphur Creek between State Route 29 and Valleyview Street; and east of State Route 29, south of Mills Lane. An Urban Reserve Area is designated to the east of the existing industrial area south of Dowdell Lane for future expansion of this area.



## 2 land use and growth management



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018



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City of St. Helena

## 2 land use and growth management



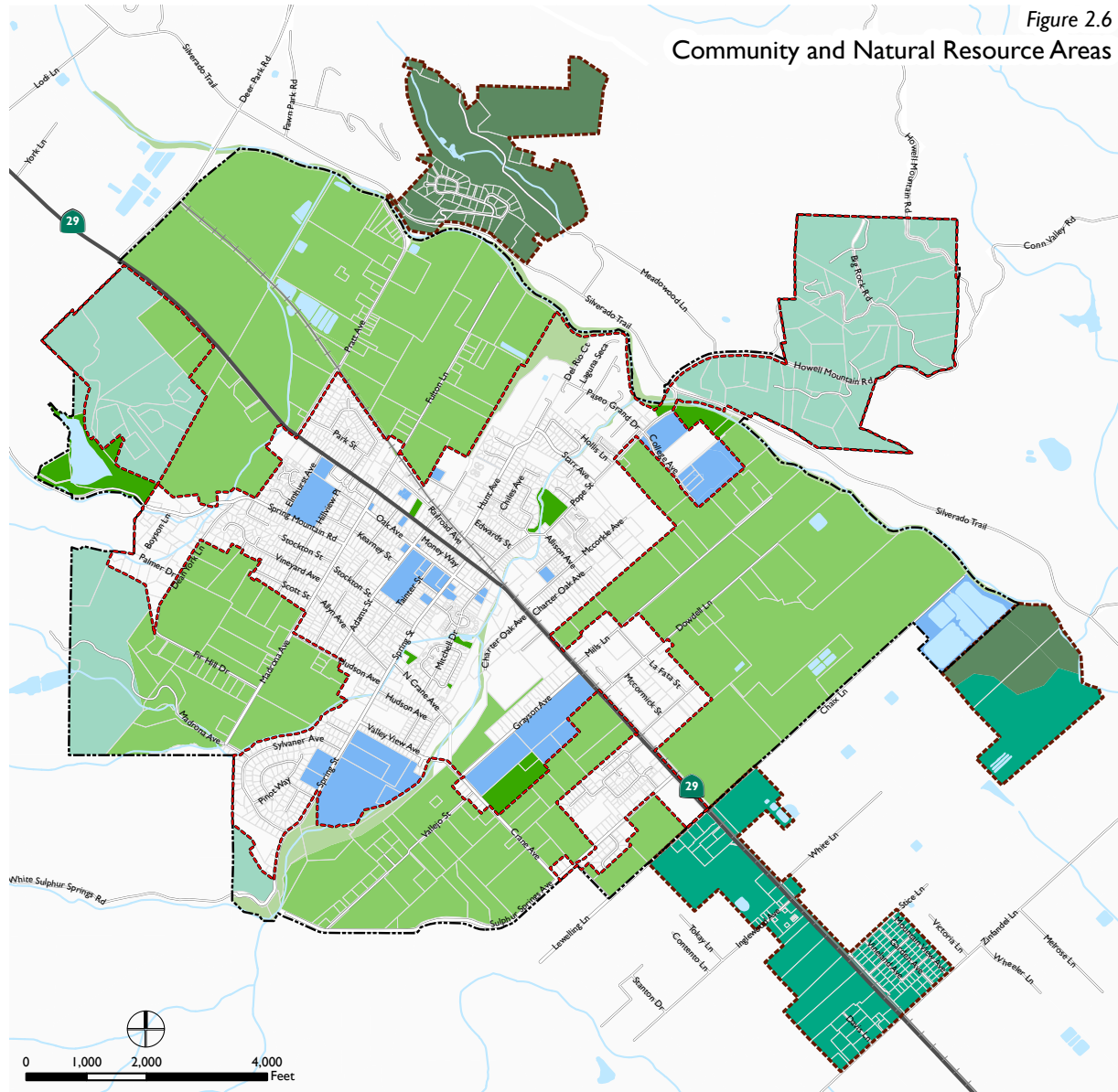
*Agriculture designations make up more than 48% of the land within the City.*

### Community and Natural Resource Areas

St. Helena has a wide range of agriculture, parks, open spaces, and civic uses that serve a diverse range of community needs. Natural areas, such as the creeks and hills, offer opportunities for preservation and conservation. Public facilities provide opportunities for social and community development. Land use planning should aim to improve these amenities and enhance accessibility for all city residents. Figure 2.6 highlights community and natural resource areas.

- **Woodland and Watershed (WW).** The WW designation includes very low density residential that ensures the protection of wildlife, vegetation, open space, and watershed resources. This designation applies to steep hillsides at the city's westernmost and easternmost boundaries, with the intent to accommodate low-density, estate type development in locations that are less suitable for agricultural use. The minimum allowable parcel size is five acres.
- **Agriculture (AG).** The AG land use designation includes agricultural and winery uses with restricted single family residential and public/quasi-public uses. This designation applies to large areas of the valley floor that surround the city's urban core. With the exception of hillside areas designated WW, all lands outside the Urban Limit Line are designated AG regardless of their size or actual use. Minimum parcel sizes for new parcels in AG areas range from 20 to 40 acres. However, wineries in AG land may utilize a small portion of onsite land for provision of affordable employee housing thus alleviating some of the low and moderate housing needs in the city, while simultaneously reducing commute traffic.
- **Public/Quasi-Public (PQP).** The PQP land use designation provides for government-owned facilities, public and private schools, and quasi-public uses such as churches, community/public serving endeavors, and cemeteries. The maximum FAR for the PQP designation is 0.50. The PQP designation occurs throughout the city, and includes the City library, all of the public schools, some of the private schools, all churches, cemeteries, and the City-owned wastewater treatment plant.

## 2 land use and growth management



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018

### St. Helena General Plan

- Public and Quasi-Public
- Parks and Recreation
- Agriculture
- Open Space
- Woodlands and Watershed

### Napa County General Plan

- Agricultural Resource
- Agriculture, Watershed and Open Space

- Railroad
- Water Features
- - - Urban Limit Line
- - - Study Areas
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- **Parks and Recreation (PR).** The PR land use designation includes public parks with recreation uses. It applies to all existing public parks and proposed park sites.
- **Open Space (OS).** The OS designation includes open spaces that are devoted to natural resource preservation and management, passive outdoor recreation, multi-use trails, public health, and safety. All OS areas are associated with stream corridors that pass through or are adjacent to the city, including the Napa River, Sulphur Creek, and York Creek. Roads are part of Open Space, but are not contributors to natural resource, public health, recreation, etc. as stated above.

### GROWTH MANAGEMENT

St. Helena aims to contain development and preserve agricultural lands in and adjacent to the city. Tools for accomplishing this include the Urban Limit Line, designated Urban Reserve Areas, and the Residential Growth Management System. Figure 2.7 illustrates St. Helena's Urban Limit Line and Urban Reserve Areas.

#### Urban Limit Line

The Urban Limit Line is a parcel-specific boundary that marks the limit of where urban development is permitted within the incorporated area of St. Helena. The intent of the Urban Limit Line is to discourage urban sprawl by containing urban development within designated areas during the planning period (see Figure 2.7).

Land outside the Urban Limit Line, but inside the incorporated area, is designated for agricultural uses. Given the long-term nature of the General Plan and the potential for unforeseen circumstances, the Plan anticipates the potential need to expand the urban area by identifying Urban Reserve Areas.

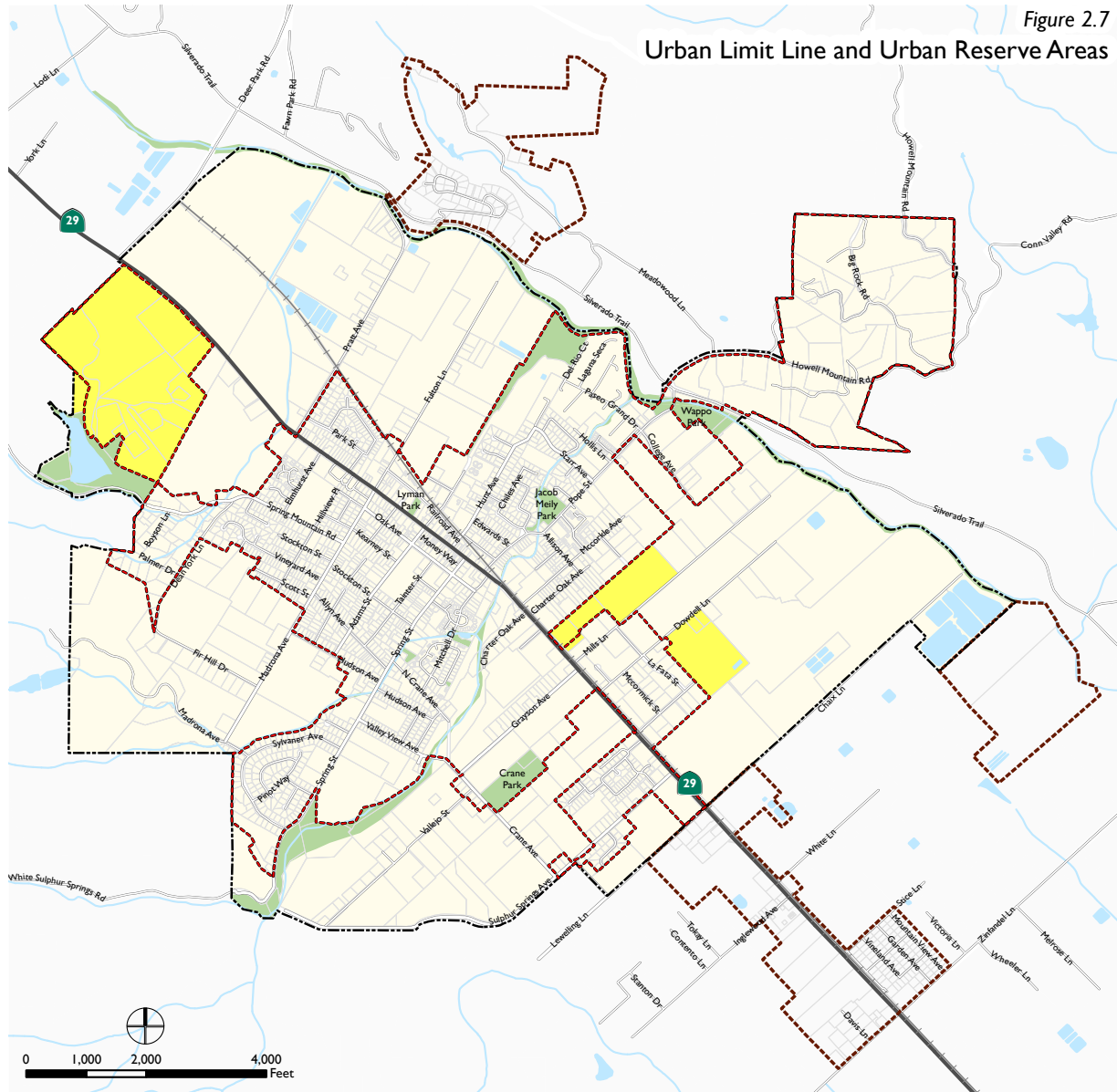
#### Urban Reserve Areas

Urban Reserve Areas can be considered for urban development after urban sections within the Urban Limit Line are developed and if additional land is needed



*The Urban Limit Line marks the limit of where development is permitted.*

## 2 land use and growth management



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018

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for urban uses. The Urban Reserve Areas, which are contiguous with the existing urban area, have been carefully located to encourage thoughtful, measured growth and to ensure that further urban development will maintain the compact development pattern desired by the community.

Urban Reserve Areas are all designated Agricultural (AG) and are expected to remain in agricultural use or undeveloped for the foreseeable future. Zoning in the Urban Reserve Areas will be the same as in other areas designated for agriculture. Zoning changes of any specific Urban Reserve Areas will be determined by the City Council at the time of incorporation within the Urban Limit Line. Such changes will depend upon many factors, including: compatibility with existing or proposed surrounding uses; availability of services; demand for the proposed uses; the availability of other suitable areas; and the agricultural resource value of the land.

Locational suitability and timing will be considered when considering changes to the Urban Limit Line and incorporation of Urban Reserve Areas. Requests for expansion of the Urban Limit Line will be considered in logical groupings that reflect the best long-term interests of the City, and will not be considered on a parcel-by-parcel basis, or in a manner that would permit non-contiguous development.

### Residential Growth Management System (GMS)

The Residential Growth Management System limits (GMS) the number of building permits available for residential growth each year. That limit, as of the time of the General Plan update in 2018 is nine (9) residential units/year, with exceptions given for affordable housing, accessory dwelling units, and in other circumstances as spelled out in the City's implementing Growth Management Ordinance. The City, as part of its periodic review of the GMS, should consider the assigned Regional Housing Need Allocation (RHNA) number for a given Housing Element cycle when establishing limits. This will help to ensure consistency with the larger Bay Area's growth direction which encourages development in Priority Development Areas (PDAs) near transit and job centers. The regional growth strategy indicates that development outside the PDAs encourages sprawl, and contributes to traffic congestion and environmental impacts such as reduced air quality and loss of open space and Agricultural lands. No PDAs have been established in St. Helena.



## 2 land use and growth management



*A growth strategy principle is to maintain high-quality design and community character.*

### GENERAL PLAN STRATEGY

The General Plan strategy presents an outline for the evolution of the city. This strategy is grounded in a set of planning principles and identifies key General Plan Change Areas and land use capacity in those areas. Each of these topics is described in more detail below.

### Growth Strategy Principles

The principles for guiding future growth in St. Helena are based upon the city's unique development pattern, vision for a sustainable future and its growth management. The following planning principles apply to the land use development strategy:

- Protect agricultural lands located outside the Urban Limit Line.
- Preserve agriculture, green, and open space within the Urban Limit Line to ensure the city maintains a rural and small-town character with sufficient "fingers of green", particularly in light of St. Helena's longstanding significant inadequacy of park land. (See Parks and Recreation Element).
- Focus new residential and commercial growth inward on appropriate infill sites.
- Maintain community character by requiring high-quality design and by avoiding "big box" development patterns and styles for commercial, industrial, and residential growth.
- Ensure that growth is sustainable for the long term and does not strain natural resources, services, or quality of life.

## 2 land use and growth management

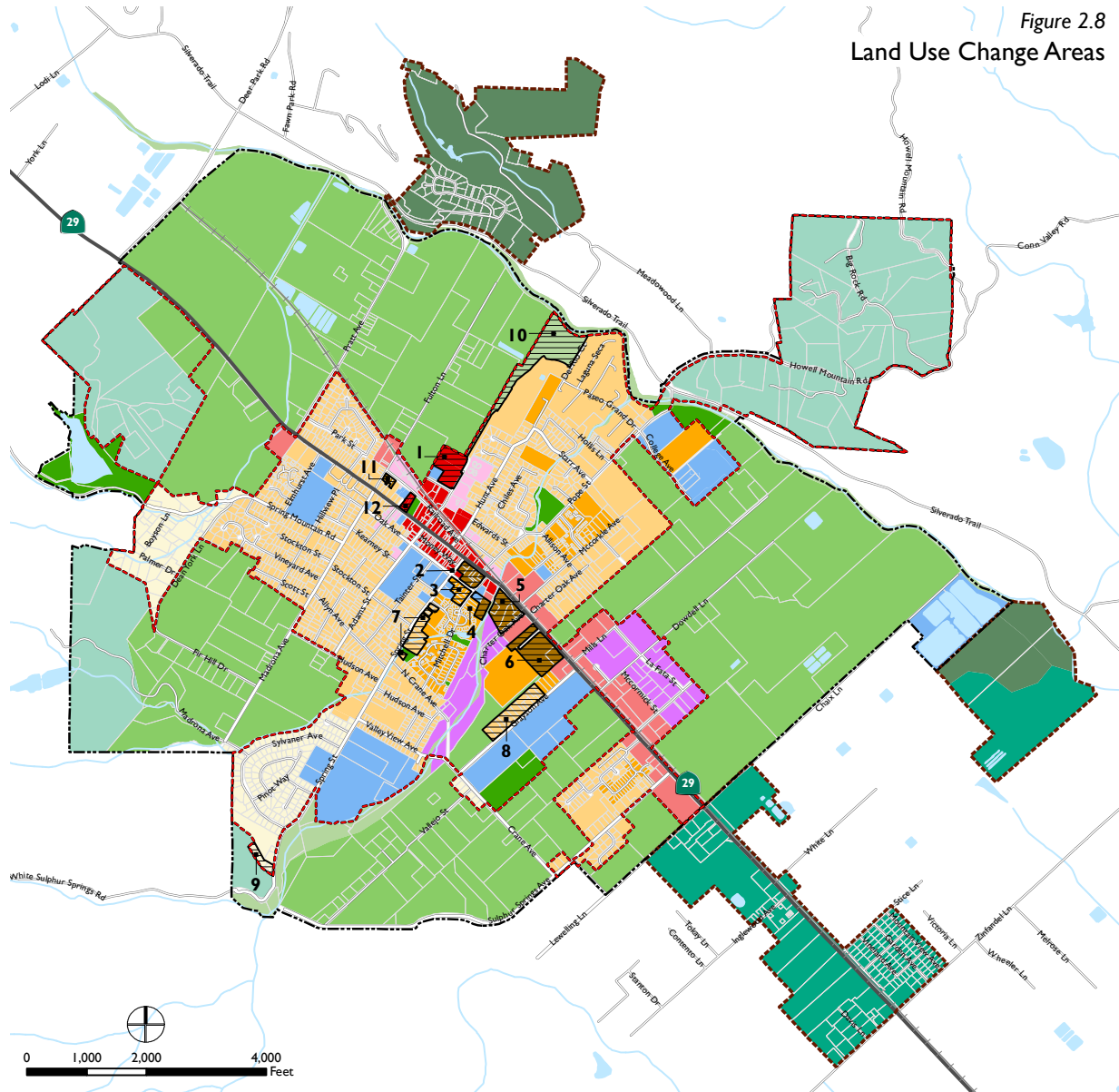
### General Plan Change Areas

During the General Plan Update process 13 sites were identified for land use change, including sites for Mixed-Use, which is a new land use designation. These sites are located within the Urban Limit Line (with some minor shifts) and include parcels with commercial, mixed-use, and residential designations. Figure 2.8 shows the land use change areas that correspond to the list below.

1. **Adams Street and Library Lane (5.66 acres):** The proposed development program for the Adams Street property involves designating the entire site, with the exception of the library, as Central Business District. The library site will remain Public/Quasi Public. A modification of the Urban Limit Line is also proposed, which will increase the developable area by 2.83 acres and orient development along Adams Street.
2. **Main Street, Spring Street and Oak Avenue (2.61 acres):** M=Mixed-Use is proposed for this area to allow a mix of commercial, office, and residential development.
3. **Mitchell Drive and Oak Avenue-Northwest (2.04 acres):** High Density Residential is proposed for this area to allow for higher density development within walking distance to downtown.
4. **Mitchell Drive and Oak Avenue-Southeast Side (1.58 acres):** Mixed-Use is proposed for this area to allow a mix of commercial, office, and residential development.
5. **Main Street and Charter Oak Avenue (12.12 acres):** Mixed-Use is proposed for the eastern portion of the parcel and Industrial for the western portion of the property.
6. **Main Street and Vidovich Avenue (14.44 acres):** This parcel has a Mixed-Use General Plan land use designation, and the Vineland Station Hotel Project, a mixed-use project, has been approved for the location.

## 2 land use and growth management

Figure 2.8  
Land Use Change Areas



Data Source: City of St. Helena, 2018; Napa County, 2018; Dyett & Bhatia, 2018



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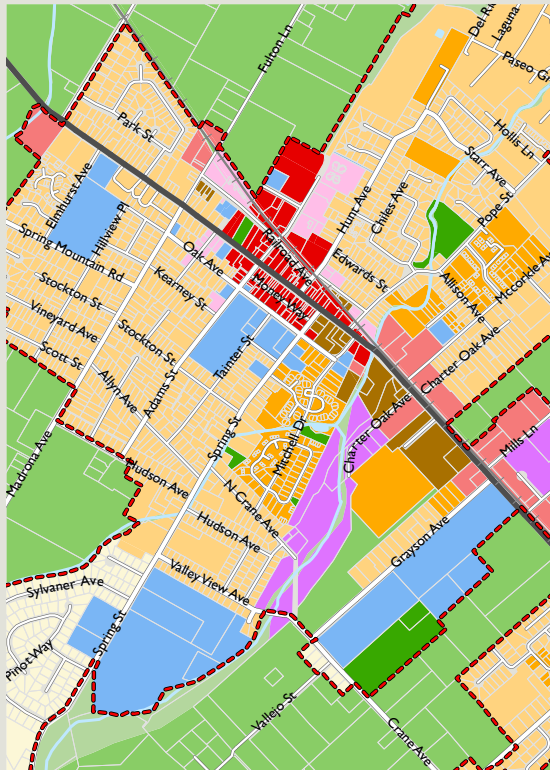
## 2 land use and growth management

7. **Spring Street and St. James Drive (4.65 acres):** Medium Density Residential is proposed for this area to accurately reflect existing densities.
8. **Grayson Avenue (7.01 Acres):** Medium Density Residential is proposed on these parcels to allow more flexibility in density for this area.
9. **West end of Spring Street (14.31 acres):** This area includes a modification to the Urban Limit Line and an identical shift expanding the Low Density Residential area by 1.49 acres. This change is made to better reflect the flat portion of this parcel.
10. **Flood Control Project Site (15.7 acres):** Redesignate this parcel (the flood control project site) from Medium Density Residential to Open Space.
11. **Railroad Avenue (4 parcels):** Adjust the General Plan designation for parcels 1547 to 1569 on Railroad Avenue from Medium Density Residential to Mixed-Use.
12. **City Hall Site:** The Central Business District (CBD) designation is proposed for the property where City Hall is currently located.

## 2 land use and growth management

### CONCEPTS, TRENDS AND IDEAS

## The Relationship between Land Use and Zoning



The General Plan Land Use and Growth Management Element establishes a broad vision and framework for land use in St. Helena. It sets forth policies and implementing actions that are intended to guide local decision-makers over the life of the Plan. In contrast, the Zoning Ordinance details specific standards and design guidelines to regulate development. The functions of these two planning tools are described in further detail below.

### St. Helena's Land Use and Growth Management Element

- Defines and locates land uses throughout the City.
- Specifies acceptable building heights and densities per land use type.
- Describes the intent and direction of St. Helena's growth.
- Includes overarching, citywide development principles, goals and policies to achieve a high quality built environment.

### St. Helena's Zoning Ordinance

- Regulates density (number of residential dwelling units per acre) and intensity (floor area ratio) of development.
- Specifies standards for site design, including open space, building orientation, massing, setbacks and relationship to the street and adjacent properties, parking requirements, and elevation.
- Provides incentives for affordable housing.
- Establishes allowed and prohibited uses.

## 2 land use and growth management

### Land Use Capacity

Several factors contribute to managing and guiding new growth in St. Helena. The General Plan Land Use and Zoning maps describe where different land uses are permitted and the intensity of development that may be allowed. The Land Use Change Areas map (Figure 2.8) and Housing Opportunity Site map (see Housing Element Figure 1.0) present locations where new development is likely to occur in the next 20 years. The Growth Management System limits the allowed number of new residential permits to a maximum of nine (9) new residential units per year. That represents a total of 72 units over the eight-year term of the Housing Element, which exceeds the City's 2015 to 2023 RHNA allotment of 31 total residential units. Established by the State of California in 1969, RHNA requirements directly influence how St. Helena considers population growth. The State Housing and Community Development Department (HCD) works with the various regional Councils of Governments (COGs) throughout the state to identify and allocate the supply of housing necessary to meet the existing and projected growth in population and households in California (also see the Housing Element).



*St. Helena functions as a service center for surrounding towns and unincorporated areas.*



## 2 land use and growth management

### 2.3 Key Findings

There are several challenges and opportunities facing St. Helena related to land use and growth management. The following key findings are based upon comprehensive existing conditions analysis and community input.

- Regional growth forecasts prepared by the Association of Bay Area Governments (ABAG) in 2013 anticipate that St. Helena will add 400 new residents between 2015 and 2040. The City should be aware of long-term population projections when developing General Plan land use policies.
- The City's Residential Growth Management System limits residential growth in order to protect agricultural land and ensure that the City can provide adequate public services, natural resources, and infrastructure necessary to meet increased need.
- St. Helena experiences high commercial rents and, except for the 2008 and 2009 recession, relatively high demand for additional commercial and office space in the city. The demand for office space is again increasing, and commercial rents are increasing as a result.
- There are a number of light industrial and commercial areas with a potential for development or redevelopment, particularly in the vicinity of State Route 29 south of Sulphur Creek.
- In February 2005, the City adopted the Highway 29 Specific Plan, which outlines circulation changes, roadways extensions, traffic signal installations, and streetscape improvements along the State Route 29 corridor west of the Sulphur Creek Bridge.

## 2 land use and growth management

- Despite its relatively small population, St. Helena functions as a service center, and provides public services for surrounding towns and unincorporated areas, including Meadowood, Madrone Knoll, Calistoga, Angwin, Deer Park, Rutherford, and the unincorporated area south of St. Helena. Through efficient land use planning, the City can ensure that St. Helena continues to serve this function while meeting the needs of its residents.
- Land use changes and development in the unincorporated areas adjacent to the city limits can have a significant impact on St. Helena. Close coordination with Napa County is essential for managing adverse impacts on St. Helena and coordinating City planning efforts accordingly.
- St. Helena has been successful in preserving agricultural lands within the city limits. The California Department of Conservation and Farmland Mapping and Monitoring Program identifies only one significant incidence of land converted from farmland to an urbanized use, which was the conversion of eight acres of farmland into an expansion of Crane Park. County-wide, most agricultural land conversions have been from rangeland or lower-value uses, such as orchards, to vineyards for wine production.

## 2 land use and growth management



### 2.4 Goals

The goals of the Land Use and Growth Management Element are:

#### **Manage Growth and Maintain Community Character.**

St. Helena is committed to preserving its existing community character, maintaining agricultural lands, managing growth and the impacts of tourism, and

ensuring that adequate infrastructure and facilities are provided.

#### **Promote High-Quality and Sustainable Development.**

St. Helena is dedicated to a high standard of quality, economic viability and ecological sustainability with respect to the design, planning, and construction of new and renovated public and private facilities.



## 2 land use and growth management



### 2.5 Policies and Implementing Actions

A range of policies and implementing actions are outlined below and organized into the following topic areas:

1. Growth Management;
2. Residential Neighborhoods;
3. Commercial Districts;
4. Industrial Districts;
5. Agricultural Uses; and
6. Public Facilities.

The following policies and actions mandate, encourage, or allow certain initiatives to be pursued throughout the duration of the General Plan. Together, they serve as strategic directions for City staff and partners, highlighting where time and resources should be focused.

## 2 land use and growth management

### topic area

## 1 GROWTH MANAGEMENT

### Policies

**LU1.1** Require new development to occur within well-defined boundaries and be consistent with the ability to provide urban services. New development should mitigate infrastructure impacts by using sustainable, best management practices in green building and stormwater management and paying its share of development impact fees, while minimizing impacts on sewer, water, energy, and natural resources.

**LU1.2** Allow urban development to occur only within the Urban Limit Line. Consider an exception for on-site employee housing on Agricultural lands. Urban services, such as sewer, water, and storm drainage, will only be extended to development within the Urban Limit Line.

The Urban Limit Line may only expand when the amount of developable land within the Urban Limit Line is insufficient to implement the General Plan policies or when logical to include developed lands receiving urban services from the City. Expansion outside the Urban Limit Line should first be considered in Urban Reserve Areas. Expansion into other areas outside the Urban Limit Line should be considered only when the proposed land use is found to further the goals and long-term objectives of the City and does not result in adverse impacts to adjacent uses in either the urban or rural areas.

## 2 land use and growth management

## topic area

## 1 GROWTH MANAGEMENT

**LU1.3** Support agricultural and low-intensity uses beyond the Urban Limit Line.

**LU1.4** In order to minimize and postpone the need for expansion of the Urban Limit Line, encourage infill development within currently developed areas.

**LU1.5** Require new development to provide adequate infrastructure and urban services, including compliance with the policies and implementing actions affecting new development as set forth in the Public Facilities and Services Element.

**LU1.6** Support the redevelopment of vacant and underutilized sites within the downtown area with mixed-use development opportunities. Encouraging infill development with a mix of uses will support a pedestrian-oriented, vibrant retail and commercial district that is centrally located and easily accessible to residents and neighborhoods.

**LU1.7** Continue to limit the approval of market rate residential development to the maximum allowed under the Growth Management System. Regulated affordable units and second units are exempt from this limitation.



*Infill development is encouraged in order to postpone the need for expansion of the Urban Limit Line.*



## 2 land use and growth management

### topic area

## 1 GROWTH MANAGEMENT

### Implementing Actions

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**LU1.A** In order to increase residential density and housing availability without requiring an extension of the Urban Limit Line, allow the conversion of single-family homes in central locations to duplexes or triplexes under appropriate circumstances and where the homes are in medium and high density zoning districts. Update the Zoning Code to implement this policy.

**LU1.B** Rezone appropriate sites with land use designations such as Central Business, Service Commercial, and Mixed-Use, in accordance with the General Plan Land Use Map. Include provisions to allow for compatible uses on the same site, either in one structure or adjacent structures. The mix of uses can be vertical or horizontal and can include attached residential development in keeping with the integrity of historic structures and historic districts.

**LU1.C** Continue to update the City's housing inventory to track the status of residential growth by unit type and affordability level.

## 2 land use and growth management

## topic area

**1 GROWTH MANAGEMENT**

**LU1.D** Review the City's housing needs every five to eight years in conjunction with updates to the Housing Element to reassess housing priorities for the future years.

**LU1.E** Restrict the use of housing units as short-term rentals, except for those allowed by the Short-Term Rental Ordinance.

**LU1.F** Evaluate the effectiveness of the Growth Management System and consider the need for revisions in light of the City's Housing Strategy. As part of this effort, study options for incorporating a mechanism to assess the relative benefits a proposed residential project brings to the community, such as through a community benefits program.

**LU1.G** Work with property owners and the Napa County Local Agency Formation Commission to study the benefits of annexing lands adjacent to the City of St. Helena, where the City owns and operates critical municipal infrastructure, including utility infrastructure, and/or provides municipal services, or where the provision of municipal services to replace wells and aging septic systems would improve public health.

**LU1.H** In the event that unincorporated areas are annexed to the City, advocate for favorable tax-sharing agreements that ensure that the City receives the revenues necessary to support the municipal services and infrastructure required in those areas.



*The City's housing inventory should be regularly updated.*

## 2 land use and growth management

### topic area

## 2 RESIDENTIAL NEIGHBORHOODS

### Policies

**LU2.1** Promote a mix of housing types and price ranges that are consistent with the Housing Element RHNA categories of housing affordability.

**LU2.2** Encourage new residential development that is consistent in design, size, color, and floor area ratio (FAR) with the older residences in the neighborhood.

**LU2.3** Protect residential neighborhood views of surrounding vineyards and mountains.

**LU2.4** Encourage the subdivision and/or development of larger parcels as Planned Unit Developments to ensure a more comprehensive and creative approach to planning the development as a single unit. This does not prohibit use of Planned Unit Developments on parcels less than three acres.

**LU2.5** Encourage the development of higher density housing in areas near the center of the city and close to recreation and services, such as transit, retail, and public facilities.

**LU2.6** Allow residential density at the higher end of the permitted range for single family development within Medium and High Density Residential Land Use designations as long as the development character of the single family area is maintained, including lot widths, orientation to street, building heights, onsite parking, traffic, and noise, among other considerations.

**LU2.7** Ensure safe, walkable, and bikeable residential neighborhoods and vibrant, livable streets.

**LU2.8** Ensure walkable and accessible neighborhoods through mixed-use development.



*A mix of housing types and price ranges allows choice for residents.*



## 2 land use and growth management

## topic area

**2 RESIDENTIAL NEIGHBORHOODS**Implementing Actions

**LU2.A** Update the zoning ordinance and map to be compatible with the General Plan land use map and designations.

**LU2.B** Develop and implement residential design guidelines and/or form-based codes, for single family and multiple family uses, to provide oversight and guidance for new buildings and renovations. Guidelines should ensure that new residential development is consistent with the design, size, and footprint of older residences in the neighborhood. Consider the impact of new development on surrounding residences.

*(Also see the following elements: Community Design, Topic Area 3; and Economic Sustainability, Topic Area 3).*

**LU2.C** Implement view shed protection review for residential development as part of an updated design review process.

**LU2.D** Continue to require residential developers to contribute to the provision of community facilities and services (e.g. parks, recreation facilities and programs, education facilities, traffic and transportation facilities, and services), consistent with State law requiring a nexus between project impacts and required mitigation.

**LU2.E** Update zoning standards to encourage the following criteria:

- A variety of lot widths and sizes, such as that found in the older areas of town;
- Garages at the rear of lots rather than on the street; or creative garage designs that incorporate the “garage door” frontage appearance to blend into the home;
- Lot coverage and floor area ratio (FAR) that is consistent with the scale of historic and older areas;
- Planting of street trees and planting strips along sidewalks; and
- Setbacks, building massing, and configuration consistent with older parts of neighborhoods.

## 2 land use and growth management

### topic area

## 3 COMMERCIAL DISTRICTS

### Policies

**LU3.1** Strengthen the downtown as the City's social and cultural core, and as the primary center of retail services. Facilitate a healthy mix of retail and commercial uses, residential development, entertainment, and lodging.

**LU3.2** Enhance the pedestrian-oriented character of commercial areas and provide for convenient pedestrian and bicycle connections to encourage walking and reduce vehicle trips within the commercial area.

**LU3.3** Support the redevelopment of auto-oriented commercial areas into pedestrian-friendly commercial uses.

**LU3.4** Protect historic resources in the commercial areas and encourage appropriate rehabilitation and adaptive reuse.

**LU3.5** Ensure that new retail and commercial development is compatible with and complementary to St. Helena's small-town image. In addition, within the City's Central Business District, new retail and commercial development should be of a scale and type that complements the historic character.



*Downtown is the City's social and cultural core.*



## The Planning Commissioner Handbook

### Chapter 8

# Infrastructure Planning



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# Infrastructure

Infrastructure refers to the physical support services necessary for development. At the simplest level, a road, driveway or easement of some type is essential to gaining property access and allowing development on a property. Other infrastructure can include water or sewer lines in developed areas, or wells and irrigation channels in rural areas. Electrical power, telephone lines, television cable and fiber optic are also considered infrastructure. Generally, the more people expected at a site, the more infrastructure that is needed to provide services.

Infrastructure for individual projects is handled at the staff level and is usually the first question asked concerning the development potential for a property. Most agencies have development standards that establish a basic minimum amount of infrastructure for certain types of development, and in many instances have adopted ordinances that require an extension of lines to connect to existing infrastructure. As a result, by the time the planning commission is considering a project these issues have largely been addressed.

Occasionally infrastructure must be brought from an area outside of the project boundaries and occasionally for some distance. When this occurs, there are direct impacts such as trenching, road closure, etc. associated with construction and indirect impacts such as growth inducement that the commission must consider. As this need would be part of the project itself, both the direct and indirect impacts should also be addressed in the staff report for the project and provided to the commission.

The commission will have a considerable say in where infrastructure is provided in long range planning associated with a general or a specific plan, or master planning of a large project. As a part of this process, the commission will need to consider existing and future land use. Staff will provide information regarding utilities in that area that may be available to support additional development. An example might be considering adding new housing to a downtown where water and sewer lines already exist. In some instances, there will be adequate capacity because the system may have been designed for housing in the past, in others expansion of the system may be required as part of any improvements. Without a technical engineering study, it is not possible to know what improvements will be needed.

# Infrastructure Planning

## Good Infrastructure Planning

Good infrastructure planning starts with the general plan and the anticipated density and intensity of development. Because we can estimate utility demand based on population and building size, dwelling units, persons per acre, type and size of commercial development are important components of long-range planning. Ideally infrastructure should be phased, meaning that you only build enough to meet your short-term needs and allow for expansion to meet long term needs. However, the individual phases may need to be larger than the project at hand to take advantage of engineering efficiencies, or practicality. For example, it is not possible to build half an overpass.

Infrastructure can also be used to help guide development into areas of the community that meet the goals of the general plan. If major infrastructure is extended into an area that currently lacks infrastructure it becomes easier for development to occur, which can attract developer interest. While in one context this could be considered growth inducing, in another it can be seen as furthering the expectations expressed in the general plan.

Infrastructure planning does not just look at new (greenfield) development potential, it is also important to evaluate the potential to intensify development that has already occurred. For example, if you are expanding housing opportunities in your downtown it is likely that the new homes will have a greater demand on sewer and water systems than the existing commercial land use. While expanding existing infrastructure can be disruptive to daily activities, encouraging infill may have greater long-term benefits.

## Capital Improvement Plans

A capital improvements plan ("CIP") is a plan for the orderly expansion and financing of infrastructure— like roads, drainage, sewers, water lines, parks, libraries and other civic amenities—to meet the needs of new and existing development. These costs are critical expenditures that can seldom be covered through a local agency's annual operating budget. Once a CIP is created, it can be used to establish a fee schedule for new development. The planning agency is required to review capital improvements for consistency with the general plan.¹ One method of ensuring consistency is to have the planning commission review and make a general plan consistency finding for the CIP prior to its adoption by the agency.

To provide a simple example, if a city's capital improvements plan calls for each neighborhood to have its own park and the estimated cost for a park in a new 2000-unit development is \$100,000, the per-unit fee would be \$500. Most calculations are more complex, but the idea is the same: new development should pick up its fair share of the cost of infrastructure. Remember, however, that new development cannot be asked to make up for shortcomings in existing infrastructure. For example, if an existing wastewater treatment plant needs to be replaced, the agency cannot place the entire replacement cost on new development.

Master plans are often prepared for important infrastructure. These plans are based on the general plan and reflect the anticipated development potential within the service area covered by the plan. Often the staff report or analysis for the project will reference whether the project is consistent with the water, wastewater or storm drainage master plan. In some cases, payment of fees is all that is needed for the project to be considered consistent, and in others the project will actually construct some of the improvements called for in the master plan. As the improvements and fees are based on development potential, projects that are less than the expected potential can have an impact on the overall plan because the agency may receive less in the way of fees which can affect funding of other plan components.

¹ Government Code Section 65103(c)



## Wet Utilities

### Water

Developers refer to infrastructure as utilities and divide them into wet and dry utilities. Wet utilities include water, sewer and storm drainage. Water service can be provided by a public agency or by a private water company or in some instances by the landowner themselves through either a private well or collection of wells. The placement of water lines is regulated by an agency's design standards and by the physical constraints of the site. Because water lines operate under pressure, steep slopes and valleys are not as critical an issue to new water lines.

It is important to note that most water services are sized (meaning the diameter of the pipes and the design of the system) not for the actual use of the building but to meet fire flow which is a much higher demand. Water providers prepare an Urban Water Management Plan (UWMP) that assumes development consistent with a general plan, shows the service area and source of all water.² Usually, a project that is consistent with the general plan and the UWMP is sufficient to determine there is adequate water for that project. Note that the update periods of the UWMP and different than those of the general plan therefore as part of the development review process the agency confers with the water provider early in the development review process to ensure adequate water resources. For large projects, Water Code Section 10910 requires preparation of a Water Supply Assessment (WSA) as part of the environmental documentation for the project. The WSA must demonstrate that water is available to meet the needs of the project during multiple drought years.

For rural projects, or projects that are on some form of groundwater well, providing service can be more complicated. The reason for this is the Sustainable Groundwater Management Act³ that establishes regional planning to prevent overdraft of groundwater. Overdraft is when more water is extracted from the ground than can be replenished. Other planning considerations for groundwater wells include water quality, gallons per minute, emergency generator(s) as backup and possible interaction with other groundwater wells. Well placement, abandonment and construction are usually overseen by the local health department who maintain standards for groundwater wells.

In California, water is a valuable and scarce resource. The wise and efficient use, and ultimately reuse of water, is an essential part of the long range and current planning process. After years of multiple droughts, our fragile water collection and distribution system is mandating that decisions on development include a discussion of water usage. Depending on location and water resources, efficient use of water may require the elimination of lawns in some areas, and the extension of reclaimed water into others.

### Sewer

Sewer or sanitary sewer is arguably one of the most important aspects of development as careful consideration is needed to avoid contamination and health impacts. Agencies that provide sewer service create master plans that rely on development potential established by the general plan. These master plans often form the basis of impact fees charged for development to connect to the system. The sewer master plans typically have a collection and a treatment system component.

² Water Code Section 10631

³ Water Code Section 10720

## Collection System

Sewer lines are placed underground, and ideally designed to use gravity to move liquid and solids toward a wastewater treatment plant. Because of the mix of liquid and solids, the slope of the sewer line is important. If the slope of the line is too steep the liquid will flow faster than the solids which can lead to the solids blocking the pipe. If the slope of the line is too shallow the flow will collect and can stagnate causing odor and blockage problems. If topography does not allow the use of gravity, the agency may require a form of pump known as a lift station to lift the sewer up and into a gravity system. In some instances, the pump can force sewage into a pressurized sewer line which is known as a forced main. While lift stations and forced mains are essential in some communities, engineers try to avoid them because they require power and have moving parts which require regular maintenance. Because of the potential for blockage, and to relieve hydraulic pressure, lines are connected using a series of manholes. A manhole (or maintenance hole) is usually a concrete column that leads to the sewer line. The sewer line is open at the bottom of a manhole to allow inspection and to remove blockage.

## Treatment System

Once the sewage reaches the wastewater treatment plant it is treated in accordance with state and federal requirements. Some wastewater treatment plants treat sewage at a level that allows reuse of the water. Reused water can be pressurized like potable water but is delivered in a purple pipe. The pipes are purple to avoid cross connection with potable water lines that are white. Purple pipe water is often used for irrigation of landscaping and can also be used for some industrial purposes.

If a wastewater treatment plant does not create reusable water it must discharge the water either onto land or into a receiving water body. The quality of water discharged from the wastewater treatment plant is regulated by the state Regional Water Quality Control Board and is in a published permit that can be reviewed by the public.

## Onsite Systems

In areas where there is no sanitary sewer system, on-site systems may be used. Because of the potential public health hazard, the design of on-site systems is usually monitored by the health department. The most commonly known on-site system is called a septic tank. A septic tank consists of a concrete box that has multiple chambers that capture liquids and solids from the structure(s). Bacteria forms in the tank that breaks down the solids and the excess liquid drains into a leach field. A leach field is a collection of perforated pipes that are underground and allow the liquids to drain into the soil where more bacteria in the soil further treat the water. Septic tanks are dependent upon soil types, depth to ground water, and the types of use, all of which are regulated by the health department. Septic tanks also require regular maintenance and rely upon the owner to have knowledge of the system limitations.

There are several different ways of treating wastewater on-site and each has benefits and constraints. Engineers will select the system best suited for the project, soil conditions and regulatory environment. These decisions seldom rise to the level of the planning commission as they are highly technical in nature and heavily regulated for public health and safety.

## Drainage

Land can create impervious surfaces which are surfaces that repel stormwater and keep it from soaking into the ground. Stormwater runoff can be channelized by topography into creeks and rivers, and by development through buildings, roads, curbs and channels. Flowing water is powerful and erosive and unless kept in check it can create damage and hazards far in excess to the size of a given storm. The process of planning for storms is called stormwater planning and often occurs at a regional and local level.

All land can be placed in a defined watershed. A watershed is an area with a 'top' and a 'slope' toward a receiving water

body or drainage. Development within the watershed changes the natural drainage by placing buildings, roads and other improvements in the path of stormwater. While collecting stormwater in pipes and channels concentrates its potentially damaging effects, a collection system can protect communities from flooding, aid in groundwater recharge and in some cases allow reuse of the water. Toward the top of the watershed the storm drainage system may consist of curbs along paths or roadways that direct drainage away from improvements. As the amount of impervious area increases, the stormwater is directed to drop inlets (DI) which is usually a form of grate in the curb line of a roadway that leads to a pipe. A series of pipes and channels direct the stormwater flow to the receiving waterbody. Generally, stormwater system pipelines and channels are larger at the bottom of the watershed the closer they are to the receiving water body.

As with sewer, the discharge of stormwater into a receiving water body is regulated by the Regional Water Quality Control Board (RWQC). The RWQC requires development to prepare a Stormwater Pollution Prevention Plan (SWPPP) as part of the National Pollutant Discharge Elimination System Permit (NPDES) that every agency has, or operates under (some agencies operate under a larger agency permit). The quality of the stormwater runoff is monitored and if it exceeds standards active measures are required to improve the quality. A component of the stormwater system can include onsite detention or retention basins, along with pervious landscaping or recharge areas to keep as much of the stormwater on the project site as possible.





## Public Service Ethics

As a planning commissioner, you wield considerable power over how your community grows and develops. With this power comes the expectation that you will hold yourself to the highest ethical standards. Part of being ethical means exercising your power in the public's interests, as opposed to personal self-interest or other narrow, private interests.

All parties appearing before the planning commission are entitled to a fair, ethical and accountable government process, which includes appointed committees and commissions. This requires that public officials and appointed committee and commission members adhere to the following:

1. Comply with both the letter and spirit of the laws and policies affecting government operations and processes;
2. Be independent, impartial and fair in their judgment and actions;
3. Prioritize the public good when fulfilling duties as a public servant and avoid any appearance that title or position is used for personal gain; and
4. Conduct public deliberations and processes openly, unless legally confidential, in an atmosphere of respect and civility.

There are a number of resources on the ethical obligations of planning commissioners. One is the law. California has a robust array of laws relating to ethics that are summarized in this section. The law, however, merely sets a minimum standard for ethical conduct. Just because an action is legal doesn't mean that it is ethical. For example, it may be legal for you to vote on your best friend's project application, but if everyone in the community knows how close the two of you are, will the community truly feel that you were able to put the community's interests ahead of your personal loyalties?

## Making Ethical Decisions

Another source of guidance may be your agency's own code of ethics, if it has one. Many cities and counties have adopted ethics codes to provide guidance in local decision-making processes. At some point in your service as a planning commissioner, you will likely face two common types of ethical dilemmas. The first involves situations in which doing the right thing will come at a significant personal cost to you or your public agency. In these situations, the answer is relatively simple. The bottom line is that being ethical means doing the right thing for the community regardless of personal or organizational costs.

The second type of ethical dilemma involves those situations in which there are two conflicting sets of "right" values. In these instances, drawing the ethical bottom line is more difficult. If you find yourself faced with a "right versus right" decision, the following questions may help you come to an answer:

- Which ethical values are in conflict (for example, trustworthiness, compassion, loyalty, responsibility, fairness or respect)?
- What are the facts? What are the benefits, of or the harm avoided by, a particular decision? Is there a decision that does more good than harm?
- What are your options? Is there a course of action that would be consistent with both sets of values?
- Is one course of action more consistent with a value that is particularly important to you (for example, promise-keeping or trustworthiness)?
- What decision best reflects your responsibility as an officeholder to serve the interests of the community as a whole?

- What decision will best promote public confidence in the planning commission and your leadership?

For example, in your role as a planning commissioner, you will frequently be asked to make exceptions to your jurisdiction's planning laws. A developer may, for instance, ask for a general plan amendment to enable a project to be approved. The developer is likely to point to numerous benefits that will flow to the community as the result of the amendment.

In coming to a decision in such a situation, the first step is to consider what ethical values are at stake. One might be fairness to those property owners who developed their properties in accordance with the policies expressed in the general plan and the public who participated in developing the plan. Another might be compassion for the developer seeking the amendment: if it is not economically feasible to develop the property as envisioned by the general plan, perhaps an amendment is in order. The next step is to weigh the competing costs and benefits. Although the developer has identified the benefits to the community associated with approving the amendment, what are the benefits of adhering to the general plan? What are the costs of amending the plan? Will an amendment in this situation open the door for other amendment requests? How might the planning commission fairly evaluate those requests while still maintaining the overall integrity of the general plan? Are there options that might enable the community to reap some of the benefits described by the developer while still being consistent with the general plan as written?

Finally, consider which approach will best promote the public's confidence in the planning process. Will the public's confidence be undermined if the commission doesn't enforce the plan? Or will denying the amendment look so rigid and unfair to the applicant that it will undermine the public's faith in the planning commission as a decision-making body? What decision will best support the commission's stewardship of the community's economic and environmental health?

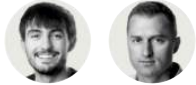
The answers to the questions listed above will vary with each situation and likely will not be clear-cut or obvious. However, asking difficult questions and thoroughly evaluating the answers can go a long way in helping you make consistently ethical decisions that further the public's interests. Often we have biases that we are not aware we have. Make sure you consider any bias you may have that might impact your decision.



Some Pacific Palisades residents said the community had long asked for more detailed fire preparation plans. When a fire raged through the community this week, gridlock ensued.



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**By Nicholas Bogel-Burroughs and Mike Baker**

Jan. 8, 2025

Flames were roaring near the Pacific Palisades neighborhood of Los Angeles when Marcia Horowitz and her husband rushed to their car, hoping for a quick escape eastward out of the fire zone.

But a police officer along the route directed them to head west along Sunset Boulevard, where the couple found themselves stuck in gridlock. The road was so clogged with panicked residents that traffic was barely moving, Ms. Horowitz said, and an emergency responder told everyone to abandon their vehicles and flee toward the beach on foot.

“Nobody would’ve gotten out of their car if they hadn’t been told, ‘You’ve got to get out, now,’” said Ms. Horowitz, 79, who fled without even her purse when the official warned people not to spend time gathering their belongings.

The abandoned cars near Pacific Palisades — many dented and broken when a bulldozer had to plow through them to make way for emergency crews — became a symbol of Los Angeles’s desperate attempt to mobilize against what is shaping up to be the most destructive fire in its history.

The chaotic scene was one years in the making. As in other areas of the towering, fire-prone hillside neighborhoods that ring the Los Angeles basin, Pacific Palisades residents had long pleaded for more attention to preparing for the fires that are



striking the region with ever-greater frequency and ferocity. As recently as 2019, two fires that burned near parts of Pacific Palisades had shown the challenges of moving thousands of people through the area's few escape routes.

Those fires, in October 2019, threatened homes in the area and led to traffic jams as people moved to evacuate.

The Palisades, rising on bluffs and foothills over the Pacific Ocean near the elite communities of Malibu and Santa Monica, has long been an enclave for those looking to escape the urban bustle of Los Angeles. Roads that snake up winding canyons provide residents with privacy, panoramic sunset views and access to hiking trails through the Santa Monica Mountains.

But the steep topography and the rugged landscape carry a risk: Wildfires are a constant threat.

Over the past decade, residents have held meetings and sent emails urging local officials to recognize the potential for problems with evacuation and do more to avoid the risk of future disaster. In a 2020 message to Los Angeles City Council members, Palisades community leaders said that there remained "substantial risks to public safety due to crowded conditions causing back-ups on both substandard and standard streets during required evacuations."



Flames engulfed an area along the Pacific Coast Highway near the ocean. Mark Abramson for The New York Times

Theater Palisades burned in the fire. Mark Abramson for The New York Times

With the tinder-dry conditions this year and forecasts for powerful Santa Ana winds, the Pacific Palisades community council had already been scheduled to meet on Thursday, with plans to discuss fire safety and a citywide effort for Los Angeles to develop its first Community Wildfire Protection Plan — something many U.S. communities facing wildfire risks have already done to help identify risks, explain mitigation strategies and plan for disasters.

Haldis Toppel, a Palisades resident who was involved in past community meetings about wildfires, said Fire Department representatives had seemed complacent when asked about the need to make more detailed fire response plans. At one meeting, she said, residents pressed the Fire Department to outline evacuation plans for various scenarios, only to be told that specific evacuation routes would have to be determined at the time of a fire, depending on the conditions.



(Minutes from a 2016 meeting between Fire Department managers and the community council show that a department official described just such a plan — establishing evacuation routes based on fire conditions.)

“To me, that always sounded more of a wishful scenario than reality,” Ms. Toppel said.

Capt. Erik Scott, a spokesman for the Los Angeles Fire Department, said he was not immediately able to review the history of evacuation planning in the area. He said the department encourages people who live in smaller neighborhoods with fewer exit paths to be prepared to flee by foot, if necessary.

“People need to think about acting outside the box and evacuating on foot, especially if you’re in a hillside community with narrow streets that tend to get clogged and turned into a choke point,” he said.

Referring to the gridlock that stymied evacuation efforts on Tuesday, he said that emergency officials do not advise people to abandon their cars on the road unless they are in imminent danger because it can lead to precisely what happened — blocked evacuation routes.

He said he did not know what person or agency had instructed people to flee their cars on Sunset Boulevard.

Traci Park, who has represented Pacific Palisades on the Los Angeles City Council since 2022, said that residents were right to want a standard, defined evacuation route but that she also understood it was important for fire officials to have discretion about how to evacuate people during a blaze.



Firefighters continued to fend off flames near businesses on Sunset Boulevard in Pacific Palisades on Wednesday. Mark Abramson for The New York Times



Evacuees gathered at the Westwood Recreation Center, a shelter operated by the Red Cross in Los Angeles. Isadora Kosofsky for The New York Times

She said there were unique factors that had caused the current fire to be so devastating, including high winds that spread the flames and kept emergency responders from using aerial equipment to beat back the fire.

Still, she said, there had been a “chronic underinvestment” in essential infrastructure, including water systems, the electrical grid and resources for firefighting and other emergency response.

“What happened in the last 24 hours was not unforeseeable,” she said. “It was just a matter of time.”

Ms. Toppel was one of those who had to evacuate their houses on Tuesday, taking her dog and a few belongings, and she headed for Sunset Boulevard, hoping to head inland to areas farther from the smoke and fire. But like Ms. Horowitz, she

encountered law enforcement officers who were directing traffic west, toward the beach.

Ms. Toppel said it had taken her about 90 minutes to travel about a mile down the hill, with smoke billowing through the packed traffic.

She was lucky, though, and was eventually able to drive her car past the abandoned vehicles that had been cleared by a bulldozer.

Several people who remained in Pacific Palisades were hospitalized with serious injuries, officials said, and at least eight firefighters battling the Palisades fire have also been injured, including one who suffered a serious head injury on Tuesday night.

The Palisades fire, one of several major blazes burning around Los Angeles, was first reported around 10:30 a.m. on Tuesday.

About 45 minutes after the first report, officials issued a warning for much of the Pacific Palisades area, encouraging people to prepare for possible evacuations. A little before noon, officials ordered an evacuation for a small area to the west, and they then expanded it at 12:07 p.m. to include much of the Palisades.

By then, the fire was churning out of control.

Kathy Trisolini, a law professor who lives in Pacific Palisades, said that she had left shortly before the mandatory evacuation was issued, in part because she recalled traffic jams during one of the 2019 fires.





A charred neighborhood above Sunset Boulevard in the hills of Pacific Palisades. Mark Abramson for The New York Times



Nancy Chiamulon and Irma Alvarado embraced after returning to Ms. Chiamulon's property in Pacific Palisades. Mark Abramson for The New York Times

During that fire, she said, one neighbor sat for hours in traffic. The community was spared that time, and everyone returned to intact homes.

This week was different. Flames scorched Ms. Trisolini's neighborhood near Palisades Village, and she texted her neighbors after she had evacuated, badgering them to leave, too. One man resisted but finally agreed to leave, she said. Less than an hour later, she saw a video of her neighbor's home burning down. Then, on the news, she saw her own home at least partially on fire.

Ms. Horowitz said she had first learned that the fire was approaching her neighborhood when her son called her on Tuesday as she was returning home from a medical appointment. Driving up Sunset Boulevard, she looked out the window and saw flames in the distance.

When she arrived on her street, so many cars were coming and going that she had to pull over and jog up to the house. She got inside and told her husband that they had to flee. Her husband, Edward Horowitz, had not realized the extent of the danger, she said. When a neighbor had come to check on him, he had responded that he was fine, took a shower and told his wife he needed to shave.

It was clear to her that there was not time.

“I just said, ‘We’ve got to go, and we’ve got to go now,’” Ms. Horowitz recalled. “When you see the flames, you know it’s close.”

She said she was still not sure what had become of her home. She saw a picture online that showed a neighbor watering down one side of the house with a tree on fire nearby.

“I maybe have half a house,” she said.

Now, in the safety of a hotel, she cannot forget the long minutes spent trying to escape.

“It’s terrifying,” she said. “Don’t let anyone tell you it’s not. It’s the most terrifying thing I have ever experienced.”

Tim Arango contributed reporting from Los Angeles and Isabelle Taft from New York. Alain Delaqu  rie and Kirsten Noyes contributed research.

**Nicholas Bogel-Burroughs** reports on national stories across the United States with a focus on criminal justice. He is from upstate New York.

**Mike Baker** is a national reporter for The Times, based in Seattle.

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A version of this article appears in print on , Section A, Page 10 of the New York edition with the headline: An Evacuation Disaster Years in the Making

### On housing and zoning code, my observations

Dear Mayor Dohring, Vice Mayor Deasey, Councilmembers, and Staff, (My views as a resident, not in any other role)

I have several zoning code items I intend to raise for discussion; however, I would like to begin with what I believe is the most pressing issue, as it directly affects our ability to meet our RHNA obligations and the stated goals of our General Plan.

This concern arose from a meeting I was asked to attend by Kelso, developer's representative for the Spring Grove project, prior to the Planning Commission hearing. I attended only to ask clarifying questions. One response, in particular, raised significant concern.

#### Inclusionary Housing and AMI Targeting

Spring Grove proposes 41 units, of which 8 are designated as affordable. These 8 units are split evenly:

- 4 units at **100% AMI**
- 4 units at **120% AMI**

I asked why none of the affordable units were targeted at **80% AMI or below**. Kelso stated that the zoning code does not require it. This interpretation was later confirmed by consulting staff, who directed me to the Inclusionary Housing Requirements section of the zoning code and noted that the code is more lenient for **owner-occupied (for-sale)** projects than for rentals. See code sections at the end referenced.

As currently written, the code:

- Requires **half** of the inclusionary units to be at **100% AMI**
- Allows the *other half* to be:
  - **80% AMI only if the developer elects to do so** (with an incentive), *or*
  - **120% AMI**, with no requirement to provide lower-income units

In other words, for owner-occupied projects, there is **no requirement** to provide units at **80% AMI or below**.

#### Conflict with RHNA and Housing Element Goals

According to our Housing Element, **163 of the 256 RHNA units** required by 2031 fall within the **Very Low and Low Income** categories—approximately **64% of our total obligation**.

Yet only **20%** of units in most housing developments are required to be affordable, and for owner-occupied projects, those affordable units may entirely avoid the 50–80% AMI categories.

The Spring Grove project is a clear example:

- 41 total units
- Zero units at 50–80% AMI

Given limited sites and a five-year timeline, I do not see a realistic path to achieving 163 lower-income units without:

- Significant philanthropic intervention, **or**
- Meaningful amendments to the zoning code to better target these income levels

#### ADUs and Missed Opportunities

State law allows ADUs to be counted across income categories, which can help distribute RHNA obligations more equitably. ABAG's summary of this approach is linked here for reference.

However, St. Helena's zoning code appears to:

- Exclude ADUs from affordable housing counts altogether, SEE CODE Section 17.30.030A.
- Count them only toward **moderate income**, where we already have minimal RHNA obligations (only 26 units) (*I don't see this in writing in the zoning code, this was a verbal confirmation from staff*)

This is particularly concerning because ADUs are one of the few housing types that:

- Can be built incrementally
- Do not require large redevelopment sites
- Can naturally serve lower-income households

#### Local ADU Regulations as a Deterrent

The argument has been made that ADUs in St. Helena are "not typically rented." I would suggest that this may be the result of our own regulatory framework, including:

1. Requiring a **separate water hookup**, which is financially prohibitive. Also not a state mandate.



2. Limiting ADU size below what state law allows, reducing sizes of families that might need more space.
3. Imposing architectural requirements that reduce livability, including: SEE ADU ordinance no 2025-002
  - o Mandatory stylistic matching to the primary residence
  - o Window and door restrictions within 30 feet of property lines that require clerestory or obscured glazing, effectively eliminating views and daylight

These requirements make ADUs more expensive, less livable, and less appealing—particularly for seniors, caregivers, or local workers.

Additionally, family-occupied ADUs (e.g., for parents or adult children) may not generate documented rent, yet still provide essential housing. Discounting these uses ignores real housing outcomes.

#### **Broader Implications**

What concerns me most is that our current approach appears to:

- Enable development on valuable sites “by right” that won’t achieve the intended desire for affordable housing, Spring Grove as example.
- Maximize market-rate production while meeting only the minimum affordable requirements (conflicts with general plan)
- Fall short of achieving our lower-income housing goals
- Require future upzoning or site identification, leading to overbuilding and infrastructure strain

There are also fiscal implications. In communities across California, nearby property values have declined following similar development patterns, resulting in reassessments and reduced property tax revenue, lower tax base.

#### **General Plan Consistency**

This approach appears inconsistent with our General Plan, particularly the Growth Management Policies (GP p.64), which states to limit approval of market rate residential development. See image below.

#### **Closing**

I believe we are undermining our own housing goals through the way our zoning code is written and applied. I respectfully request that Council and staff closely examine:

- AMI targeting requirements for owner-occupied projects
- The treatment of ADUs in RHNA accounting
- Local ADU regulations that exceed or conflict with state intent

I appreciate the opportunity to raise these concerns and look forward to continued discussion.

Sincerely,

Michelle Covell

SEE below

From Staff Presentation Aug 19th, special joint meeting

## Background on St. Helena Housing Growth: Adopted Regional Housing Needs Assessment (RHNA)

Income/ Affordability Category	RHNA Allocation	Units Issued Building Permits or Certificate of Occupancy (as of 1/1/2025)	Remaining RHNA
Lower <b>50-80% AMI</b>	<b>163</b>	2	161
Moderate <b>100 AMI</b>	26	1	25
Above Moderate <b>120 AMI</b>	67	31	36
<b>Total</b>	<b>256</b>	<b>34</b>	<b>222</b>

From the Housing Element.

City of St. Helena 2023-2031 Housing Element Update

Certified, September 25, 2023

Implementation Program	Objectives	Implements: What Policies	Who is Responsible	Potential Funding Source	Timeframe
<b>H-A Available Sites Inventory</b> The City will prepare a sites inventory and suitability analysis that identifies suitable sites for housing development that allows targeted income housing developers to have a clear idea of what sites are suitable for meeting the Regional Housing Needs of the City. To accommodate the remaining lower-income RHNA of 156 units, the City of St. Helena will identify and rezone a minimum of 14 acres to the HDR zoning district, allowing exclusively residential uses and a minimum of 20 units per acre to a maximum of 28 units per acre by January 31,	Identify housing sites suitable to accommodate:     - Very low income: 104 units    - Low income: 59 units    - Moderate income 26 units    - Above Moderate income: 67 units    - Total: 256 units      Provide sites that proactively work to overcome concentrations of lower- and moderate-income earning populations; with the goal of facilitating the development of 82 lower income units in the	HE1.1	Planning Department	General Fund (staff time)	By January 31, 2024  Publicly-available inventory: by 2024  Hunter Subdivision Building permits: 2025

From the zoning code – see the red circled word, IF

## 17.30.030 Inclusionary housing requirements.

## G. Requirements for Owner-Occupied Affordable Units.

1. One-half of the affordable units that are required to be constructed in connection with the construction of market-rate units intended for owner-occupancy shall be available at affordable sales prices to households whose annual household income does not exceed one hundred percent (100%) of median income. If one-half of the affordable units required are made available by the developer at affordable sales prices to households whose annual household income does not exceed eighty percent (80%) of median income, the developer shall be entitled to an additional density bonus of five percent for the proposed development, beyond any density bonus to which the developer would be entitled pursuant to Chapter 17.29, Density Bonus, and California Government Code Section 65915 et seq.
2. As an alternative to receiving an additional density bonus of five percent, a developer may submit a request for another incentive in lieu of the density bonus. Such requests shall be considered on a case-by-case basis by the city council and shall be approved, at the city council's sole discretion, if the city council determines that such alternative incentive will further affordable housing opportunities.
3. The remaining one-half of the required affordable units shall be available at affordable sales prices to moderate-income households. Where the number of required affordable units is an odd number, the number of units affordable to moderate-income households may be one greater than the number affordable at or below one hundred percent (100%) of median income.

Zoning code – ADUS do not count towards affordable units.

## 17.30.030 Inclusionary housing requirements.

A. **Inclusionary Requirement.** At least twenty percent (20%) of all new dwelling units in a residential development project shall be affordable units, which shall be constructed and completed concurrently with the related market-rate units. The affordable units developed pursuant to this chapter shall be of the same tenure as the market-rate units, meaning that affordable rental units shall be developed to satisfy the requirement for rental developments, and affordable owner-occupied units shall be developed to satisfy the requirement for owner-occupied developments. In the event that a development is comprised of both rental and owner-occupied units, the requirement to develop twenty percent (20%) the new dwelling units as affordable units shall be applied to the rental and owner-occupied components of the development project separately. **The requirement to construct and complete affordable units pursuant to this chapter shall not be satisfied by designating accessory dwelling units as affordable units, and accessory dwelling units constructed as part of the development project shall not be counted as dwelling units for purposes of calculating the required number of affordable units.** The affordable units may be constructed in phases if the market-rate units are constructed in phases; provided, that the percentage of inclusionary units to be developed in each phase shall be equivalent to or greater than the total percentage of inclusionary units to be developed as part of the residential development until such time that all the inclusionary units have been built. For fractions of affordable units, including fractions resulting from construction of less than five dwelling units, the developer may elect, at his or her option, to construct the next higher whole number of affordable units, perform an alternative equivalent action which has received the approval of the city council pursuant to subsection B of this section, or pay the housing in-lieu fee specified in subsection E of this section for such fraction. Notwithstanding the above, this section shall not apply to projects which fall into one or more of the following categories:

Association of Bay Area Governments – ABAG

<https://abag.ca.gov/sites/default/files/documents/2022-03/ADUs-Projections-Memo-final.pdf>

Association of Bay Area Governments | Bay Area Metro Center | 375 Beale Street, Suite 700 | San Francisco, CA 94105 | abag.ca.gov

Table 1. Percent of ADUs Affordable to Different Income Categories

Percent	Income Category
30%	Very low income
30%	Low income
30%	Moderate income
10%	Above moderate

(page 64, Growth Management Policies – General plan 2040 St Helena)

**LU1.7** Continue to **limit the approval of market rate residential development** to the maximum allowed under the Growth Management System. Regulated affordable units and second units are exempt from this limitation.

<https://www.cityofsthenela.gov/DocumentCenter/View/5275/ADU-Code-Update-2025-PDF>  
ADU ORDINANCE 2025 -002

## 7. Architectural Requirements.

a. The materials and colors of the exterior walls, roof, and windows and doors **must be the same as those of the primary dwelling.**

g. All windows and doors in an ADU **less than 30 feet from a property line that is not a public right-of-way line must either be (for windows) clerestory with the bottom of the glass at least six feet above the finished floor, or (for windows and doors) utilize frosted or obscure glass.**

Lisa Wise Consulting doc



### *What Zoning Cannot Do*

There are things that zoning cannot do since it is limited in some respects by State law and legal precedent. However, issues not addressed in zoning are usually addressed by other planning tools, such as specific plans and design guidelines. Zoning will not do the following:

- ✗ **Dictate Architectural Style.** Although development codes can improve the overall physical character and design of the community, they must present objective, quantifiable criteria when it comes to design. Architectural style is usually addressed in specific plans and design guidelines adopted separately.
-

**On math: A thought on numerators and denominators.**

My brain woke me up again in the middle of the night. It asked me a simple, intriguing question that sent my brain on a spree.

At a planning commission this month, a question from a resident triggered a discussion, and a consulting planner said something like: by lowering the denominator, the percentage of the density is actually higher. That phrase stuck in my brain—hence the question it asked.

In a percentage, what do the numerator and denominator represent conceptually, and how can you affect a better outcome? Since the piece I wrote on the zoning code, and thinking about that 163 over 256, lower income 50–80% AMI over median/moderate 100/120% AMI, respectively, the question that still remains for me is 256 over X. What is X, the total amount of housing overall that we will end up building in order to achieve the 256 units required by RHNA?

Since the code language on owner-occupied units doesn't even require 50–80% AMI units, and that represents 163 of the 256, there is no real math problem that is calculable to figure out X.

I'm not a mathematician. Sure, I liked math in school, but most of it is gone these days. I wouldn't know what to do with a squiggly-line equation if my life depended on it, even though back then I enjoyed solving those kinds of problems. So right now, I can only work in basic, conceptual math on this word problem: how many total units will we need to build to achieve RHNA?

This also brings up in my mind, the concept of efficiency. For example, total efficiency would be if we built 256 over 256 = 100%, and had a direct approach to achieving the numbers. Least negative impact on the system and infrastructure.

Every percentage has two parts: a numerator and a denominator. The numerator is the thing you're counting. The denominator is the total you're measuring it against. And the percentage is just the ratio between the two. Here's the thing: changing the numerator and changing the denominator are not the same.

When you change the numerator, you're changing the thing itself. In the case of housing, this is the goal or target number required by RHNA. When you increase that numerator, you're increasing efficiency. This takes effort, and it matters.

When you change the denominator, you're changing the frame. The pool is getting bigger or smaller, and the percentage changes, but the underlying outcome might not change at all. There are ways to control the denominator, and it changes the way things are measured, and I think this concept needs further analysis.

Here's an example:

$$10/100 = 10\%.$$

$$20/200 = 10\%.$$

In a small town, with limited resources like land, water, sewer capacity, and road widths, there is a significant impact between those two ratios, even though they have the same percentage.

What I see that is broken right now is that the zoning code for owner-occupied units does not have any requirement for the 163 units required out of the 256, and this directly impacts the efficiency of achieving the goal. There has to be a plan in place to target that number directly. Whether it is through Housing Impact Fees (HIF) being collected locally or through the Napa County HIF, there needs to be a better strategy.

**If we were doing a very straightforward calculation:**

$$20\% \text{ of } X = 256$$

$$X = 1,280.$$

Since the 20% in the owner-occupied units does not include the 50–80% AMI category, we would need to hope there is an alternate plan in place to achieve the 163 units. Perhaps it will be Our Town St. Helena that contributes to that directly, through HIFs and philanthropy. Perhaps fundraising is the solution.

However, for me right now, without knowing the direct strategy to efficiently achieve the target, my brain is unfortunately worried about the denominator. My brain says the best outcome for our town would be to hit the required RHNA number with the least amount of extra market-rate units—the housing our town doesn't need more of and that will only add strain to our resources. So the framework, the denominator, is really important to control.

We appear to have either not counted ADUs at all or counted them toward a category that doesn't need help—the moderate-income 26/256. This is one way we are shooting ourselves in the foot with the denominator. The other way is by not writing into the zoning code a direct effect on the 50–80% AMI categories, affecting the numerator. Without understanding the mechanisms, it could easily be 256/3,000. Or ?

**We have designated 12 sites as by-right, and there are targeted numbers per site. However, if each project doesn't hit those targets, we will need to find other sites to achieve the numbers. What is the back-up plan?**

At the end of the day, the numerator is our target. The denominator is what we need to try to control. The St. Helena General Plan wants the denominator as low as possible. There are people out there seeing numbers being added to the numerator and not caring what happens to the denominator. The denominator is what our reality will be, the side effect of this mandate on our town, what we need to put guardrails on.

Here's the sticky wicket. It boils down to the math, and the codes and laws we have to follow. From what I can tell, the developers know how to get their math to pencil out. They know the codes and the mechanisms to work within, and the laws are now written to protect them. This is purely an observation—and kudos to them for figuring it out.

What I want to know is: who's doing the math for our town? Because I'd like to see the work. I'd like to see how the math pencils out for this town, and maybe even check it, to make sure the outcome is by design, not by happenstance.

Anyone else out there curious about seeing the work?

**This is not a Nimby-Yimby situation.**

Michelle Liu Covell

Jan 28, 2026

Please watch this video - noted times.

**Tuesday, December 2, 2025 PC hearing video**

<https://sthelena.civicweb.net/document/275629/?splitscreen=true&media=true>

Watch at **1 hour 55 minutes**, where Mary Stephenson speaks. She is a housing advocate for decades. Hear what she says – too long to transcribe.

Watch at **2 hours 21 minutes**. Autumn Anderson, affordable housing advocate, Yimby, expresses her frustration.

"I share the same concerns about affordability and as a commissioner who was on the housing element subcommittee, we worked really hard to rezone to make it feasible to build all of the housing that we are required to build in our RHNA allocation. That doesn't mean we have any control over whether or not it gets built, and that's really frustrating. And I would like to see all of the parcels we've upzoned actually be used in the way that we intended, when we upzoned them, and actually have them supply housing that our local workforce can live in. I don't think this housing (Spring Grove Project) is that. I understand its all legal and by-right, but it doesn't accomplish what we need it to accomplish."

Before this is framed as just another NIMBY situation, I want to point out that two affordable housing advocates—one of whom is a YIMBY, to my knowledge—have both said that this project does not serve the intent of affordable housing.

Why this matters:

We have a limited number of sites. There is no cap on these types of projects, meaning all 12 sites, and potentially more, could be developed this way. The result would be a significant amount of housing, but none of it truly affordable. For those who support genuinely affordable homes, it's important to recognize that laws written to encourage affordable housing are, in cases like this, **failing to meet their intent**.

If the goal is real affordable housing, this project is not a good example. As affordable housing advocates have expressed here, even with these laws in place and projects like this being approved, we can still miss the opportunity to create housing that is truly affordable.

This raises a broader challenge for our community. Can we move past the NIMBY-YIMBY framing and take a more thoughtful look at whether we are actually achieving our goals? Can we acknowledge that, at times, we need to be more intentional than the laws themselves and find better ways to deliver real affordable housing?

There is a real risk that we approve projects that do not serve the intended purpose. In doing so, we may use up valuable and limited resources—land, water, sewer capacity—without providing affordable homes for the workforce and families needed to sustain the community we say we want to build.

So, if your initial reaction is that this is simply another NIMBY argument, I encourage you to take a closer look at the details and the materials. **A deeper review may show that raising these concerns is not opposition to affordable housing, but an effort to make sure we don't miss another important opportunity to get it right.**

Sincerely,

Michelle Liu Covell

Spoken as a resident and not in any other role



**Please take a look at the two plans below.**

Public comment - as resident 1.27.26 City Council  
Michelle Liu Covell

This proposal includes 41 for-sale units. Of those, 8 are considered “affordable” under the current code: 4 at 100% AMI and 4 at 120% AMI. The remaining units are market rate and are expected to sell in the low millions. It’s also important to note that buyers of the affordable units will still be responsible for HOA fees, utilities, and other ongoing costs. Those expenses are not subsidized; the only affordability component is the initial sale price of the unit.

The project is proposed on a 2.53-acre site.

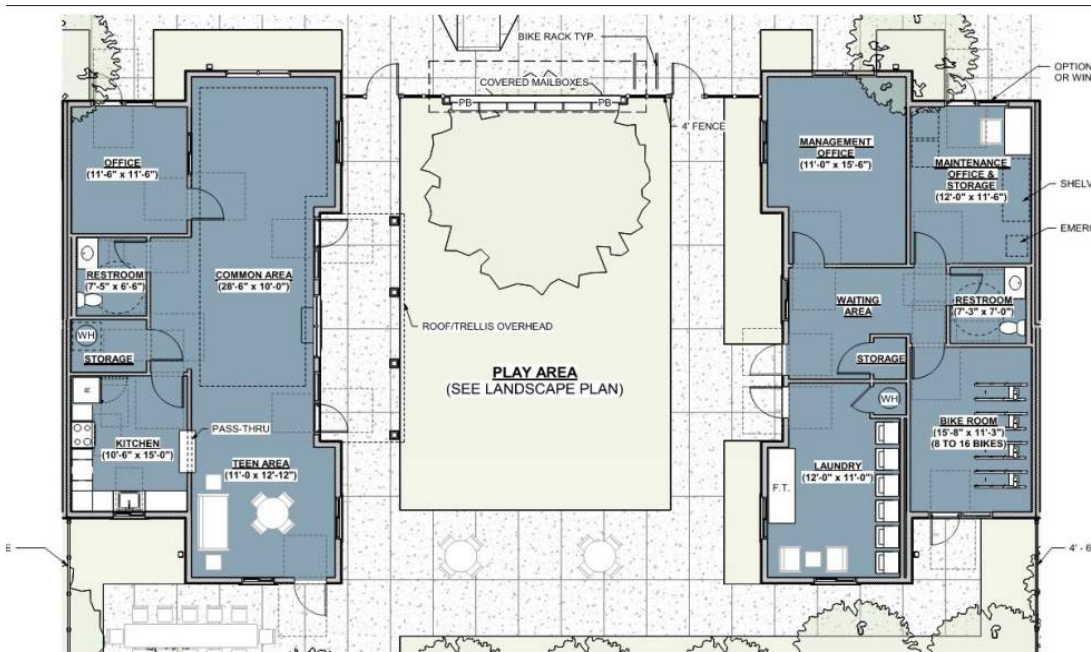


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This proposal below includes 39 rental units, all of which are 100% affordable, and is being developed by the nonprofit Our Town St. Helena. The project is located on a 1.75-acre site.

The development includes apartments of various sizes, along with a central community space that provides shared laundry facilities, common areas, a kitchen, and a designated teen space. The buildings are centered around a play area, creating an environment designed to support residents and families.

This approach focuses not only on housing affordability, but also on creating the conditions that help people and families succeed.



Both of these projects are located here in St. Helena.

One is being developed by a nonprofit.

One is being developed as a for-profit project.

The conversation we are trying to have is about finding the smartest way to work within the state's one-size-fits-all laws while still meeting the specific needs of our community. That requires listening to one another and working together as a team, as Billy mentioned.

This is not about classism or elitism, and it's not a NIMBY-YIMBY debate. It's about setting our town up for long-term success and being thoughtful with our limited resources.

It's also about setting up the people who invest in and choose to live here for success, alongside those who need affordable housing. As public servants, we have a responsibility to consider the entire community and to come to each meeting with an open mind.

I worry that, at times, people are arriving at meetings with their positions already decided. If we want the best outcomes for St. Helena, we owe it to the community to stay open, curious, and willing to engage with the full picture.

This is not a Nimby-Yimby situation. With limited resources, land, water/sewer etc, we have to be wise about the projects that are proposed, and to understand what we need to do with what we have, the General Plan, Zoning Codes, etc to make the most out of each site to serve what this town really needs. There is a lot at risk.

**From:** [Katie Sample](#)  
**To:** [Public Comment](#)  
**Subject:** Cumulative Risk Governance  
**Date:** Thursday, February 5, 2026 5:03:45 PM

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St Helena Council, Planning Commission, and Staff:

I am in 100% in agreement with the recent letter resident Michelle Covell wrote to you, and to state government officials raising the red flag regarding non-cumulative governing of St Helena. From scarcity of resources (immutable fact) and fire incident evacuation options. I realize St Helena, like many other small, rural towns in California, has been placed under undue pressure from a state mandate to build affordable housing, but what what have allowed to take place instead is an excuse to build market rate homes, not affordable housing. St Helena needs more million-dollar houses like swiss cheese needs more holes. As it stands out infrastructure cries for a moratorium on expansion until we can repair, replace and replenish the resources that EXISTING residents and businesses need and pay for ( through the nose, mind you). The housing projects you've approved fly in the face of reasonable and responsible governing. Why on god's earth would you do this? If we MUST expand housing on the broken back of insufficient resources to fulfill the state's irresponsible, cookie-cutter mandate for AFFORDABLE housing, why have you succumbed to undesirable projects that 'technically' tick off the state's checklist without truly fulfilling the very real need for affordable housing? This is not land stewardship, it's a manipulative loophole in response to the state's overt blackmail. Please enlighten me. What I'm missing in this political board game?

Thank you for considering my concerns and observations.

message from: **Katie Sample**





**From:** [Aña Ramirez](#)  
**To:** [Public Comment](#)  
**Subject:** Support housing in St Helena  
**Date:** Friday, February 6, 2026 1:10:04 PM

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City Council of St Helena,

I've never written a letter like this before, but I felt like I had to after I saw a Gen H insta reel about a new housing project in your town. I just wanted to say that I support it.

I've loved your town since I was a kid. I never got to live there, but I worked on Main Street when I was in high school. I was a server. On my breaks I would walk around town and always wished I could live there someday I also thought it was cool you had a bar named after me . But that was never really possible. When I heard about this project near where I used to walk around, and that it would include some affordable homes, it honestly made me excited.

My parents came to Napa Valley as immigrants to work in the vineyards. They didn't have much, but they stayed because they loved it here and believed that if you worked hard you could build a life. I grew up here, went to school here, and now I'm raising my own kids here. I want them to grow up in the same Valley that raised me. But every year it feels harder to see how that's going to work without more housing.

My husband works, I work, and we still feel like we're just barely getting by. Buying a home feels impossible and even renting keeps getting more stressful. A lot of people act like the housing problem only matters in Napa, but that's not true. It affects St. Helena, Yountville, all of it. These towns don't work on their own. The people who clean, cook, teach, serve, and take care of things there mostly can't afford to live there anymore. But with 8 affordable homes here, maybe they could.

I'm not asking for huge buildings or for towns to lose what makes them special. I'm just asking for housing in places that already make sense.

Sometimes it feels like certain towns are expected to stay exactly the same forever, even if that means regular families get pushed out. But communities are supposed to grow and make room for the next generation, not shut the door behind them.

I don't live in St. Helena, but what happens there affects all of us in the valley. I hope the Council will support the Spring Grove project and support families who are just trying to stay in the place they've always called home.

Thank you for taking the time to read this.

Sincerely,  
Aña Ramirez  
Napa

**From:** [Susan McWilliams](#)  
**To:** [Public Comment](#)  
**Subject:** We support Michelle Liu's letter  
**Date:** Saturday, February 7, 2026 8:36:07 AM

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She raises serious concerns about increased housing density and fire evacuation routes. Please address this critical issue.

Susan and Terry McWilliams  
40-year residents of St. Helena

Sent from my iPhone





**From:** [Daniel Hale](#)  
**To:** [Andrew Bradley](#); [Erika Opp](#); [Paul Dohring](#); [Michelle Deasy](#); [Michelle Deasy](#); [Aaron Barak](#); [Aaron Barak](#); [Billy Summers](#); [Kate Spadarotto](#)  
**Cc:** [Christopher Warner](#); [sue](#)  
**Subject:** Spring Grove proposal path  
**Date:** Saturday, February 7, 2026 11:43:52 AM

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Andrew,

Please place the following comment on the agenda for the 10 FEB City Council meeting relating to the Spring Grove Proposal. Call text or email with any questions.

Thanks,

Daniel Hale

Saint Helena City Council Members,

I believe it is clear at this point that this proposal is burdened by fundamental and unresolved deficiencies. In reviewing the process, it is difficult to understand how the project has advanced so far given the number of unanswered questions, unresolved issues, and significant gaps that remain.

These concerns range from General Plan, Zoning Code inconsistencies and incompatibilities that place HCD certification in question, as well as approaches to health and safety that rely on disregarding objective standards. Instead it depends on requiring extraordinary, and unrealistic levels of execution that meanwhile do not achieve compliance. That non-compliance suggests performance within the narrowest of margins and fails to account for known crisis behaviors, thereby placing citizens and our valued and capable fire professionals at greater risk than code is designed to mitigate.

It is evident that City Ventures submitted a largely standardized, off-the-shelf template, one designed to maximize buildout rather than respond meaningfully to the specific context, fabric, and regulatory framework, into which it seeks to insert itself. While profit is not inherently problematic, it cannot be the sole driver. While the state anticipates leveraging the clear opportunities that State mandates intend to provide, it does so with the clear understanding that State and Local objective health and safety standards remain constant and enforceable.

It is important to state clearly that the responsibility for submitting a project that complies with all applicable State and Local codes, as well as the General Plan, rests entirely with the applicant. While this is no small task, it remains the applicant's burden and obligation.

As acknowledged by both Planning staff and the applicant, SB 330 **vests** a project upon submission of a preliminary application and fixes the objective standards against which the project must be evaluated **to those in effect at that time**. This includes applicable State law and the City of St. Helena's objective General Plan policies, zoning regulations, and applicable building and fire code provisions, including any duly adopted municipal amendments in effect at the time of preliminary application.

SB 330 does not excuse non-compliance, it freezes standards. It does not waive them. It establishes certainty by ensuring that the applicable rules do not change mid-stream. This framework is intended to

provide predictability not only to developers, but also to City staff and residents throughout the review process.

Following submission, it is the municipality's responsibility to thoroughly review the application and identify any deficiencies. That review commonly occurs over multiple stages, and errors or oversights can arise on all sides, particularly when navigating nuanced local requirements. However, once deficiencies are identified, the obligation remains with the applicant to address them fully and to reconfigure the proposal as necessary to achieve compliance with all applicable objective standards.

On 21 Jan 2025 PC Meeting, both the applicant and City Staff were put on notice that the single access drive was a material deficiency in the proposal and fell outside of compliance to that reasoned and objective safety standard, as was the proposals gaping deficiencies in regard to flag lot standards (an objective standard that is built upon the legitimate concern to mitigate known hazards in bottleneck situations inherent in flag lot configurations).

A simple look back at the record of that Planning Commission meeting demonstrates a shining moment of checks and balances and scrutiny. Chair Ponte made clear the second access way was a material issue. He directed the applicant, staff and the City attorney to examine it and reconfigure proposal as needed to address this deficiency. He also demanded investigation into adherence to the strictly objective flag lot sections of municipal code. Anything that occurred moving the proposal forward, while pushing those material objective deficiencies aside raises startling concerns regarding the integrity of the review process and knowingly sets the entire proposal into a precarious position.

Once deficiencies are identified by credible sources, and the Spring Grove Proposal has multitudes, the obligation remains with the applicant to address them fully, correctly, and legally. Sure, the processes arduous, but denial of a project should not be interpreted as failure, nor as an endpoint. A denial simply provides an opportunity for reconsideration, learning, and the submission of an alternative proposal in a configuration that **is** compliant with all applicable objective State and Local Plans, Codes, and standards. It is clear that has not been done.

This process should not be driven by fear, blame, desperation, or expedience. It should be guided by a shared commitment to getting it right, without excuses, and by our responsibility as stewards of the community fabric we value and seek to protect, preserve and sustain. On that principle, I believe we can find common ground.

Sincerely,

Daniel Hale

On critical and correct path that serves the applicant, the State, Saint Helena staff, Planning Commission, City Council, and the Citizens of St Helena:

**Subject: Spring Grove Proposal- Specific Adverse impacts to Public Health and Safety**

**St Helena City Council, and residents of St Helena,**

**On February 10, 2026, the St. Helena City Council will consider the Spring Grove Proposal.**

The administrative record contains substantial evidence-derived from credible independent and “expert” sources-demonstrating that the Spring Grove Proposal violates numerous specific, objective, and mandatory provisions of State law, the City of St. Helena General Plan, and the St. Helena Municipal Code. These conflicts are not discretionary, or interpretive. They involve core, objective standards adopted for the express purpose of protecting public health, life safety, emergency access, and the City’s ability to provide essential public services.

The record further establishes that, as proposed, the project would result in a specific, adverse impact on public health and safety, as defined by Government Code §65589.5 (d) (2). This finding is not speculative. It is based on objective, quantifiable deficiencies and conflicts with adopted standards that were in effect at the time the application was deemed complete.

These impacts are significant, measurable, and directly attributable to the project's noncompliance with critical health and safety requirements, including but not limited to those governing emergency access, infrastructure capacity, and service provision. The administrative record demonstrates that no feasible mitigation measures exist that would satisfactorily avoid or reduce these impacts to an acceptable level. The only legally supportable means of avoiding the identified public health and safety impacts is denial of the project. Any alternate configuration, would reasonably require a new analysis, none of which has been prepared, provided, considered or demonstrated to be in compliance.

State housing law does not compel cities to approve housing projects that violate objective health and safety standards, nor does it authorize or suggest that local governments ignore, waive, degrade, or disregard such standards. To the contrary, Government Code §65589.5 expressly preserves the authority, and the obligation of local agencies to deny or condition projects where a specific, adverse impact on public health or safety is supported by substantial evidence in the record.

Accordingly, approval of the Spring Grove Proposal at its proposed density would be inconsistent with State law, the



City's General Plan, and the St. Helena Municipal Code, and would expose the City to legal vulnerability by disregarding mandatory, objective standards designed to protect life and safety. I urge the City Council to uphold its legal duty to enforce these standards and to reject any action or activity that would knowingly accept reduced or unsafe conditions. BY DENYING THE PROPOSAL, the Council will act in compliance with the law and fulfill its fundamental responsibility to protect the health and safety of the St. Helena community as I am convinced it is dedicated to do.

Thank you for your consideration,

Daniel Hale 1565 Pine Street Saint Helena

**From:** [Wayne Leong](#)  
**To:** [Andrew Bradley](#); [City Clerk](#); [Contact City Council](#)  
**Subject:** Public Comment – Spring Grove (PL24-065) – Zari Wildland Fire Analysis  
**Date:** Sunday, February 8, 2026 7:53:47 PM  
**Attachments:** [Spring Grove - Wildland Fire Analysis - 02.06.2026 \(1\).pdf](#)

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Dear Mayor Dohring and Members of the City Council,

Please accept the attached **Zari Consulting Group Phase 3 Wildland Fire Analysis** for the Spring Grove project (PL24-065) as written public comment for the February 10, 2026 City Council meeting.

This is a professional fire-protection engineering analysis prepared under **NFPA 1140 standards** and the **St. Helena Fire Code**. It evaluates wildfire hazard, emergency access, and evacuation feasibility for the site and concludes that the project's single access road and constrained layout create a quantifiable life-safety risk that cannot be mitigated by sprinklers or landscaping alone.

I respectfully urge the Council to review this report in advance of taking action, as it goes directly to the City's obligation to evaluate public health and safety before approving the Vesting Tentative Map.

Respectfully submitted

Wayne Leong



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## WILDLAND FIRE ANALYSIS PHASE 3

### Spring Grove

1447, 1505, and 1515 Spring Street  
St. Helena, CA



February 6, 2026  
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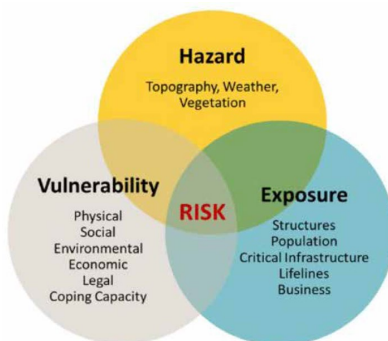
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## 1. INTRODUCTION

Zari Consulting Group, Inc. (ZCG) has been retained to perform a detailed Wildland Fire Analysis for the proposed Spring Grove residential development located at 1447, 1505, and 1515 Spring Street in St. Helena. The primary objective of this analysis is to evaluate the wildfire hazards associated with the site's specific location, its local topography, and its existing vegetative fuels. This report serves as a fire protection engineering assessment, providing evidence-based recommendations intended to mitigate the risk of structure ignition and facilitate safe, efficient emergency operations in an area recognized as one of the most fire-prone regions in California.

This report utilizes the 2022 edition of **NFPA 1140, Standard for Wildland Fire Protection**, which serves as the primary consolidated national standard for fire management and infrastructure protection. Furthermore, this review incorporates the **St. Helena Municipal Code (SHMC) Chapter 15.36**, which adopts and amends the California Fire Code to address the unique geographical, climatic, and topographical challenges specific to the St. Helena area. Specifically, **SHMC 15.36.010** provides foundational findings stating that response time and aggressive on-site fire mitigation, including the use of fire-resistant materials, and internal sprinklers, are critical to public health and safety.

As fire protection engineers, we emphasize that code compliance is the absolute minimum standard. However, in high-hazard zones, good engineering practices dictate that a more stringent approach to community safety is required. This analysis is built upon the "two-pronged approach" identified by the State Fire Marshal: aggressive fuel modification combined with exterior exposure protection. By addressing the property as a whole, this report seeks to provide a guideline for future Napa County developments. This involves shifting the perspective from merely defending a home to engineering a resilient community where structural integrity, landscape management, and evacuation protocols work together to increase life safety.



This analysis integrates the latest CAL FIRE Local Responsibility Area (LRA) Fire Hazard Severity Zone (FHSZ) maps. As of February 2025, CAL FIRE has reclassified significant portions of the Napa Valley floor between St. Helena and Calistoga as a Very High Wildfire Hazard Severity Zone. This reclassification is a regulatory shift, highlighting the increased risk resulting from a combination of volatile vegetation, accumulated fuel loads, and changing climate factors. Data from First Street (Fire Factor) indicates that St. Helena possesses a "Major" risk of wildfire, with 99% of all properties (approximately 2,304 properties) having a significant risk of being affected by wildfire over the next 30 years. This report also factors in the 2024 Citywide Evacuation Drill data, USDA "Wildfire Risk to Communities" metrics, and current 2025 CAL FIRE incident data to ensure the development is prepared for modern and future emergency scenarios. Adhering only to minimum state standards in a region where fire behavior frequently overwhelms standard suppression resources is considered an operational risk to both life and property.

## 2. PROJECT DESCRIPTION

### a) Existing Conditions

The project site currently consists of three parcels totaling approximately 2.52 acres of land that has historically served as a lower-density residential and agricultural buffer. Currently, the site is developed with older single-family residences and associated wood-frame outbuildings. The existing environment is defined by a dense over-canopy of mature trees, unmaintained shrubbery, and a creek that runs along the southern boundary.

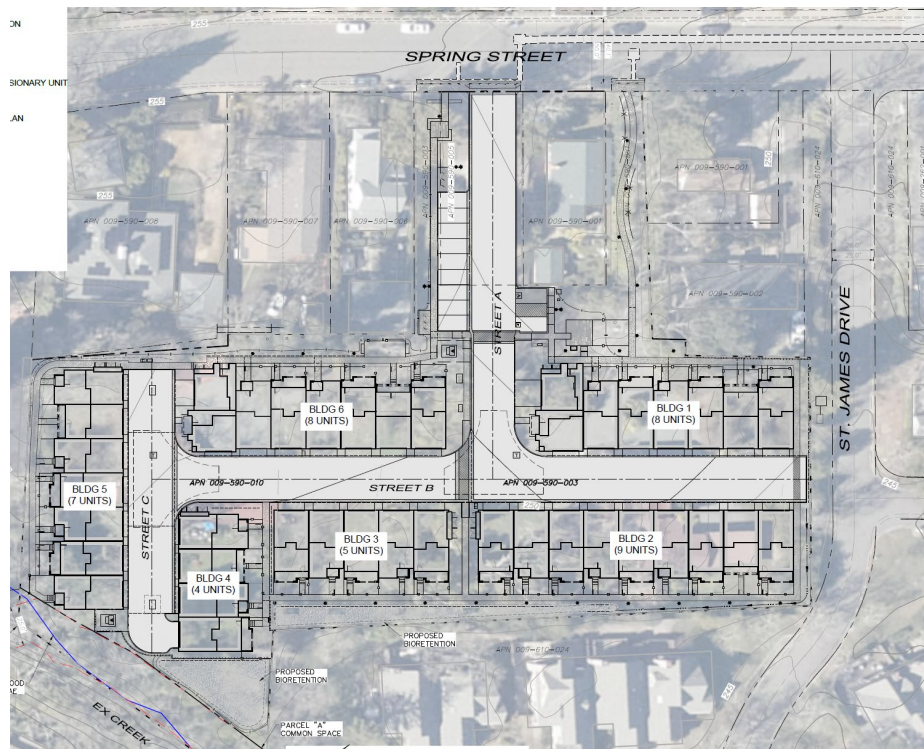
While the topography at the immediate street level is relatively flat, the site is situated at the absolute toe of the western foothills of the Mayacamas Mountains. This location acts as a natural catchment area for wind-driven embers and convective heat descending from the forested slopes above. Existing fuel conditions reflect decades of growth, where accumulated surface litter and "ladder fuels" (shrubs and low branches that allow ground fires to climb into the canopy) have created an environment prone to high-intensity burning. The current vegetation includes a mix of invasive annual grasses and aging hardwood species that have not been subjected to a regular maintenance, resulting in dense vegetation that provides high-continuity fuels for a fire front.



## b) Proposed Construction

The proposed project involves the demolition of the existing residences to clear the way for a high-density modern subdivision of 41 solar-powered, all-electric townhome-style condominiums (Buildings 1–6). This shift from three low-density homes to 41 high-density units represents a nearly 13-fold increase in the life load and an increase in the concentrated fuel load of the property. The design introduces modern architectural features such as "paseos" (narrow pedestrian corridors) and closely grouped multi-unit blocks that require specific fire-protection features.

The transition to all-electric living is a positive step for energy efficiency, but the concentration of solar panels and potentially on-site energy storage systems (ESS) adds a layer of complexity for fire department suppression efforts. Solar arrays can maintain dangerous voltages even after main power is cut, and high-density wood-frame construction combined with localized electrical hazards can lead to rapid fire growth scenarios. The close proximity of these buildings to one another creates a heightened risk of house to house fire spread via embers of plastic, fabric, and building materials. In a high-wind event, the lack of separation between the six building groups can create a fire where it spreads from structure to structure through radiant heat and ember intrusion. This density (16.3 units/acre) essentially creates an fuel load within a wildland area, requiring the entire site to function as a singular unit.





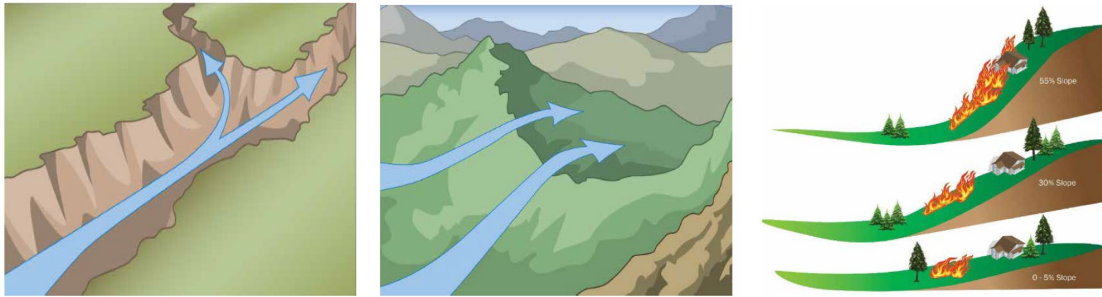
### c) Construction and Infrastructure

The framework for the Spring Grove development is defined by its architectural features and the egress constraints of its high-density site plan. In a Very High Fire Hazard Severity Zone, the proposed construction materials and infrastructure determines the community fire protection features. The following parameters detail the proposed construction type, expected population density, and the infrastructure limitations that impact both fire mitigation and emergency response.

- **Construction Type:** Type V-B (wood-frame, non-rated). This construction type relies on combustible structural members (2x4 or 2x6 framing). Without fire-rated exterior assemblies, the subdivision is vulnerable to external radiant heat and ember storms. In a Wildland Urban Interface (WUI) environment, Type V-B construction requires the highest level of external hardening to survive a wildfire passage. The use of wood-based structural elements means that once an ignition occurs, the structure itself becomes a fuel source for its neighbors.
- **Occupancy:** Group R-2 (Multi-family Residential).
- **Estimated Population:** Based on unit configurations of 3 to 4 bedrooms per unit, the site is projected to house between 112 and 143 residents at full occupancy. This population density increases the life load on the site's egress infrastructure. During an emergency, over 100 people and dozens of vehicles would be attempting to exit via a single road while fire engines are attempting to stage and deploy.
- **Infrastructure Constraints:** The site utilizes a restrictive "flag-pole" layout. A single 26-foot-wide access drive (Street A) provides the only ingress and egress for the entire development. This configuration creates a single point of failure for both evacuation and emergency response, where a single incident (fallen tree, blocked vehicle, or fire event at the entrance) could effectively isolate the entire community from emergency services. Furthermore, the 93,518 square feet of building area requires a robust water supply that may exceed the capacity of a single-ended main, potentially leading to pressure drops when multiple hydrants are opened simultaneously.

### 3. WILDFIRE ASSESSMENT

Common topographic fire hazards. (Left) Creeks can collect dry debris, increase heat, and funnel superheated air. (Middle) Wind can be directed over mountains. (Right) The steepness of a slope can significantly influence fire spread behavior. Images adapted from FEMA publications (2023).



#### a) Vegetation Density

The vegetation in the St. Helena area consists of mixed-severity fire zones. According to recent satellite data (LiDAR) and regional surveys, the density profile in these high-risk zones typically breaks down as 57% grass (under 1 foot), 14% shrubs (1–15 feet), and 29% trees (over 15 feet).

- **Chaparral (Dense Shrublands):** Present on the nearby hillsides, characterized by Manzanita and Chamise (1–15 ft tall). These are highly volatile fuels that form continuous, interwoven stands. These species contain flammable resins and oils that allow them to burn with extreme intensity even when green. By age 50, hard chaparral can consist of up to 50% dead, dry, and highly flammable material. This old growth chaparral is often described by firefighters as highly flammable due to its ability to generate 30-foot flames in moderate winds.
- **Hardwood Forests/Oak Woodlands:** Species such as California bay, madrone, and oak predominate. Due to decades of fire suppression, these forests are often 5–6 times denser than historic conditions. This overcrowding leads to excessive competition for water, higher tree mortality (aggravated by drought and beetle infestations), and a dangerous increase in surface fuels (leaf litter and downed branches).
- **Ladder Fuels:** LiDAR mapping focusing on the 1–4 meter zone indicates a significant presence of ladder fuels such as shrubs, vines, and lower branches that allow ground-level fires to climb into the tree canopy. This transitions a manageable surface fire into a high-intensity crown fire that is difficult to suppress from the ground and produces continuous ember hazards.
- **Riparian Fire Wick:** The southern creek setback acts as a natural fuel wick. Per **SHMC 15.36.010(A)**, the city finds that vegetation is a primary factor contributing to fire potential. Contrary to some expectations, research from 2000–2018 shows that most structures destroyed in California wildfires were located in hardwood forests, woodlands, or shrublands rather than coniferous forests. The riparian zone provides a continuous, unmaintained fuel path that leads fire directly to the foundations of Buildings 1, 2, and 6.

## b) Climate and Environmental

St. Helena experiences a Mediterranean climate characterized by hot, dry summers and low fuel moisture. Data from **First Street** indicates a projected temperature increase of 1 to 4 degrees F over the next 30 years. These rising temperatures increase the rate of evaporation and the "Vapor Pressure Deficit" (VPD), causing soil and vegetation to dry more quickly and remain flammable for longer periods throughout the year.

Combined with "Diablo Winds" (hot, dry northeasterly winds), these conditions accelerate fire spread at rates that overwhelm standard suppression resources. Recent history shows that above-average precipitation often leads to abnormal vegetation growth, resulting in even higher fuel loads during subsequent dry seasons (notably seen in 2017, 2018, and 2020). This cycle is a defining feature of the Napa Valley fire environment, making current fuel conditions highly deceptive. During these wind events, relative humidity can drop into the single digits, making every leaf and mulch bed on the property a potential ignition point for wind-blown embers.

## c) Topography and Slope

The site's position at the base of a significant western slope is a major risk factor. Fire travels significantly faster uphill due to pre-heating of fuels but, nocturnal drainage flow of dry, cold air can also push fires downhill toward the valley floor with enhanced speed. **NFPA 1140 Section 24.3.1.1** requires engineers to document the structure's location in relation to topographical features like natural chimneys, ridges, saddles, or steep draws.

The Mayacamas Mountains to the west of the site act as a massive heat-sink and wind-funnel. During a wildfire, these slopes project radiant heat and wind-driven embers directly toward the Spring Grove site. Because fire effectively doubles in speed for every 10-degree increase in slope, any fire starting on the ridges above St. Helena will reach the city limits in a fraction of the time anticipated on level ground. The project site sits in a natural catchment area where these topographical heat-flow patterns converge. This positioning means that structures are exposed to the maximum intensity of fire coming off the hills, as flames can reach their greatest length just as they hit the level ground of the valley floor.







- **2025 Berry Fire:** Occurred in the Knoxville Recreation Area. Managed by the CAL FIRE Sonoma-Lake-Napa Unit, it serves as a contemporary reminder of persistent ignition potential and the continuous demand on regional fire resources.
- **2025 Pickett Fire:** Napa County. The fire spread rapidly through terrain fueled dry vegetation typical in this area. Reaching a final size of 6,819 acres (10.3 sq. miles)
- **2017 North Bay Fires (Atlas & Nuns):** Part of a historic "Firestorm" that destroyed over 1,200 structures in Napa County alone. The Nuns fire burned largely in the Mayacamas Mountains west of the site.
- **2020 LNU Lightning Complex:** The largest fire in Napa County history, burning approximately 165,000 acres within the county (about one-third of its total land area). It destroyed over 522 structures in Napa County, proving that lightning-caused conflagrations can overwhelm urban centers.
- **1964 Hanley Fire:** A historic precursor following a nearly identical path to modern fires, confirming a multi-generational fire cycle driven by the region's unique geography.

Modern fires in Napa County are documented as more destructive than similarly sized historical fires. For example, the 2020 Glass Fire caused significantly more structural damage than historical events of similar acreage due to increased density in the Wildland Urban Interface (WUI). This trend highlights the inadequacy of traditional buffer zones when faced with modern climate stressors.

#### f) Adjacent Properties

The site is surrounded by residential properties and open land with heavy fuel loads. The proposed density of 16.3 units/acre is significantly higher than the surrounding single-family dwellings, creating a localized high-intensity fuel source. Data from "Wildfire Risk to Communities" identifies St. Helena as having high susceptibility due to the wildfire likelihood and populated areas.

Per SHMC 15.36.100, Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3. Reference sections below.

D. Section D107.1, One or two-family dwelling residential developments, California Fire Code 2022, Appendix B, is amended to read as follows:

Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.

#### D104.3 Remoteness.

Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

[2025 California Fire Code, Title 24, Part 9 / APPENDIX D FIRE APPARATUS ACCESS ROADS / SECTION D104—COMMERCIAL AND INDUSTRIAL DEVELOPMENTS / D104.3](#)

If a fire starts in the creek or an adjacent property, the lack of significant separation between the townhome blocks increases the likelihood that the entire 41-unit community will be involved simultaneously. This density turns a single structure fire into a multi-building conflagration that can quickly exhaust local fire department resources. Under NIST Scenario 3 (SSD less than 25 feet), adjacent structure ignition becomes the primary driver of structure loss, far outweighing the threat of direct wildland flame contact. The physical proximity of Building 5 to the southern boundary makes it a primary target for exposure from the creek corridor.

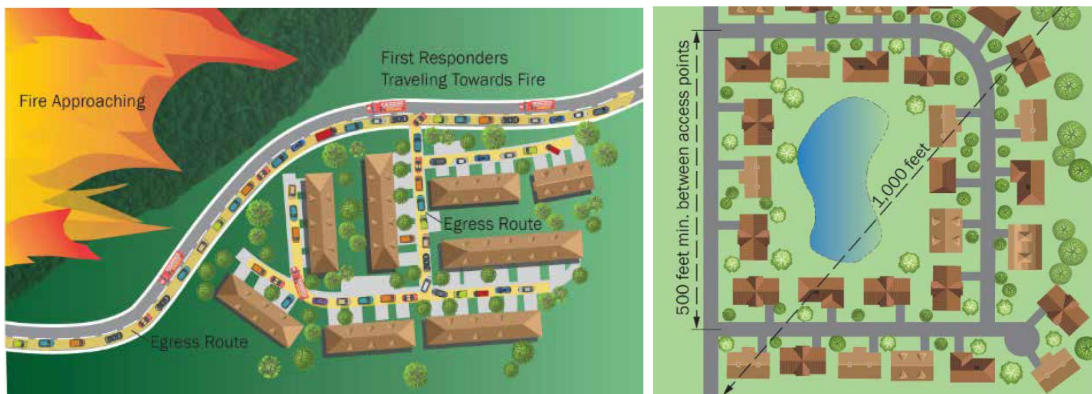


- **Evacuation Tags:** Residents must place designated tags on their homes or doors to signal that the premises have been cleared. This ensures that first responders do not waste critical minutes performing "primary searches" of structures while a fire front is approaching.
- **Evacuation Meeting Points:** Residents of the Spring Grove development (located West of Main Street) are directed to evacuate to St. Helena Primary School at 1701 Grayson Avenue. The evacuation route involves navigating Spring Street to Main Street, a corridor that is historically prone to extreme congestion during regional events. The project must have a formal community evacuation plan that coordinates these actions for the additional population.

**c) Site Access (NFPA 1140 & SHMC 15.36.100)**

Good engineering practice and **NFPA 1140 Table 11.1.4.1(a)** mandate that any residential development exceeding 30 households must be equipped with at least two separate fire access routes. The St. Helena municipal code specifically amended the CFC to state: **SHMC 15.36.100, Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.**

Given the Very High Fire Hazard Severity Zone designation of the Napa Valley floor, a secondary access point is a non-negotiable life-safety requirement. A "remote" access point is defined as being located a distance away from the primary entrance equal to at least half the diagonal dimension of the property. The lack of a secondary exit is the single greatest life-safety liability in the current proposal.



**(Left)** Schematic illustrating common life safety concerns and stresses affecting the general public, first responders, and the overall transportation network during major wildfire events. **(Right)** Diagram illustrating the concept of providing separate and independent egress routes from a neighborhood to improve evacuation safety during wildfire conditions.

**d) Staging and Evacuation**

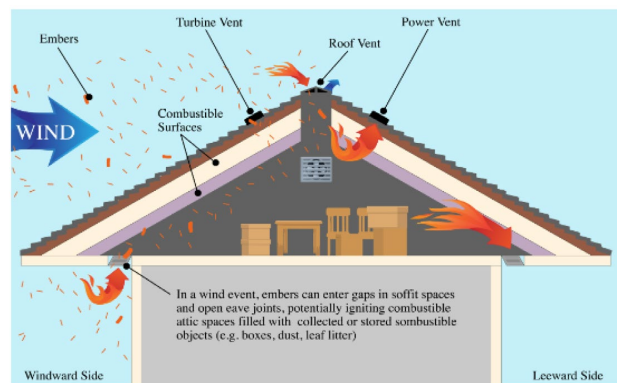
During a rapid-fire event, the Fire Department must stage apparatus (engines and aerial trucks) to perform structure protection while residents are simultaneously attempting to evacuate. The lack of on-site staging areas in the current proposal means that a fire truck parked on Street B to protect Building 1 would physically block the only evacuation path for residents in Buildings 2 through 6. This creates a trap where emergency response activity directly inhibits the life-safety of the residents. Strategic planning requires that access roads be wide enough to allow for apparatus flow and simultaneous resident egress.

## 5. CONSTRUCTION IN WILDFIRE PRONE AREAS

Regulation of structures in Wildland Urban Interface (WUI) zones focuses on creating a "defensible structure" that can survive the passage of a fire front without direct human intervention. Per the latest data, homes built under California's Chapter 7A WUI codes are three times more likely to survive than older structures. The Spring Grove project shall consider these standards not just as a code requirement, but as a core design philosophy.

### a) Construction

The Spring Grove subdivision can improve structural hardening to withstand intense ember storms and radiant heat by incorporating the following elements:



- **Roofing:** Constructed with Class A fire-rated materials, such as composite shingles, metal, clay, or concrete tile. Class A roofing is the first line of defense against overhead ember ignition. Any roof-mounted solar arrays must be installed such that they do not create "debris traps" where leaves and twigs can collect under the panels.
- **Ember-Resistant Vents:** Attic, eave, and crawlspace vents should demonstrate the ability to resist the intrusion of flame and embers. Vents must be screened with corrosion-resistant, noncombustible wire mesh with openings not to exceed 1/8 inch, complying with **ASTM E2886**. This specific mesh size is proven to block up to 80% of hazardous firebrands while still allowing necessary airflow.
- **Exterior Siding and Walls:** Exterior vertical walls of noncombustible or ignition-resistant materials such as fiber-cement siding, brick, stucco, or masonry. Wood-based siding is highly discouraged and at minimum should meet strict 1-hour fire ratings if utilized. The first 6 inches of vertical space above any horizontal surface (decks, soil) should be a noncombustible material to prevent wicking fire into the wall cavity.
- **Windows and Doors:** Exterior windows and glass within doors should be dual-pane tempered glass. This resists the intense radiant heat that causes single-pane glass to shatter, which would otherwise allow embers to enter and ignite the home's interior. Exterior doors must be solid-core or fire-rated for at least 20 minutes.
- **Decks and Overhangs:** Walking surfaces of decks and porches must be constructed of noncombustible materials. All eaves and overhanging projections must be "boxed-in" (soffited) with ignition-resistant materials to prevent embers from finding weak areas in the roof-to-wall junction. Wood decks attached to homes act as "fuses," carrying ground fire directly to the structure's siding and eaves.



**b) NIST Hazard Mitigation Methodology (HMM)**

The National Institute of Standards and Technology (NIST) is an agency of the U.S. Department of Commerce. NIST's Engineering Laboratory, specifically its Fire Research Division, provides the scientific basis for fire codes and standards through advanced research on Wildland Urban Interface (WUI) fire behavior. NIST research (specifically Technical Note 2205) indicates that in high-density developments like Spring Grove, the primary fire threat transitions from wildland embers to adjacent structure exposure.

- **High Structure Density Risk:** NIST findings state that "one structure ignition leads to large losses in high-density communities. Spacing between homes affects community survivability. In this 41-unit configuration, complete structure and parcel hardening are essential for the survivability of the entire community. If Building 3 ignites, its radiant heat will likely ignite Building 4 unless both are fully hardened.
- **Projections and Appendages:** Fences, patio covers, and other attached structures must meet 1-hour fire ratings. Noncombustible "breaks" must be installed in any continuous fencing that connects buildings to one another. Wood-to-wood contact between fences and homes shall be evaluated and approved.

## 6. WILDFIRE MITIGATION

### a) Defensible Space

Per **NFPA 1140 Section 26.1** and **SHMC 15.36.080**, a mandatory 100-foot defensible space is required, focusing on the "Home Ignition Zone" (HIZ). Priority must be given to the area 100 to 200 feet from the structures:



1. **Zone 0 (The Ember-Resistant Zone, 0–5 feet):** This is the most critical zone. It must be entirely noncombustible (rock, stone, or concrete). No mulch, firewood, furniture, woody shrubs, or overhanging branches are permitted. This zone prevents smoldering material from igniting the building at the sill plate. Any vegetation in this zone must be limited to sparse, low-growing succulents with extreme water content.
2. **Zone 1 (The Lean, Clean, and Green Zone, 5–30 feet):** Remove all dead plants, pine needles, and surface litter. Prune trees to a height of 6–10 feet from the ground to eliminate "ladder fuels." Ensure horizontal separation between tree crowns (minimum 10 feet) to prevent fire spread across the canopy.
3. **Zone 2 (The Reduced Fuel Zone, 30–100 feet):** Create vertical and horizontal spacing between shrubs and trees. Mow grass to a maximum height of 4 inches to reduce flame length and intensity. This zone serves to slow the fire down before it reaches the structures.

### b) Vegetation and Maintenance

A formal Vegetation Management Plan (VMP) must be a condition of approval. Per NFPA 1140 Section 26.2.2, all live vegetation must be maintained annually before the start of the summer fire season. Maintenance must include the removal of ladder fuels to preclude ground fires from spreading into the tree canopy. The developer must comply with the City's annual Weed Abatement Program to reduce community-wide risk. The City Manager's "Fire Resilience" strategy emphasizes that "each person is responsible for making their own property as fire resistant as possible."



### c) Irrigation Strategies

A high-efficiency, permanent, and automated irrigation system must be maintained for all Zone 1 vegetation. Research indicates that keeping landscape moisture content high significantly reduces the probability of spot-fire ignition from flying embers. The system should be designed to allow the Fire Department to pre-wet the perimeter during a high-wind event and must remain operational even if municipal power is lost through the use of backup power or gravity-fed systems. Smart controllers that shut off during high-wind events to preserve pressure should be avoided in favor of manual overrides for fire staff.

### d) Relative Water Content (RWC)

We recommend the exclusive use of "fire-wise" plants. Species with high Relative Water Content (RWC) do not contain flammable resins, oils, or waxes. Deciduous trees (Oaks, Maples) are preferred over coniferous species (Pines, Junipers), which act as standing fuel. A formal list of approved species with high RWC must be incorporated into the project's final landscape design to ensure compatibility with the Wildland Urban Interface (WUI) environment. Non-native, highly flammable species like Eucalyptus or Acacia must be strictly prohibited.

**e) Soil Maintenance**

Foundations must be kept clear of excessive organic mulch or surface litter. In Wildland Urban Interface (WUI) fires, structures are often lost because organic mulch smolders for hours after the fire front passes, eventually igniting the wood-frame structure. Noncombustible soil covers (gravel, rock, or bare soil) are required within the first 5 feet of each building. Additionally, soil stabilization is required to prevent post-fire erosion and debris flow from the western slopes, which can damage structures after the fire is extinguished.

**f) Tank and Hydrant Systems**

A formal fire water analysis is required per **SHMC 15.36.090**. The system must confirm that the GPM and pressure are sufficient for a high-density Type V-B subdivision.

- **Hydrant Staging:** Per **NFPA 1140 Section 15.3**, fire hydrants must be placed so apparatus can stage and connect without blocking the only access road.
- **Bollard Protection:** Mandatory for the hydrant on Street C to ensure that the water supply is not disabled by an accidental vehicle impact during an evacuation.
- **Main Looping:** We recommend looping the internal water mains to ensure a redundant supply to every building. A dead-end main on Street B could lead to pressure loss if the single supply line is compromised.

**g) Evacuation Road**

The single access road (Street A) is a "single point of failure" and a primary life-safety concern.

- **Capacity:** 41 high-density units represent approximately 143 residents and dozens of vehicles attempting to exit via one 26-foot road.
- **NFPA 1140 Table 11.1.4.1(a) and SHMC 15.36:** Requires at least two separate and remote access routes for developments over 30 units.
- **Operational Hazard:** Lessons from Southern California and the 2024 St. Helena drills prove that single-access communities face significantly higher mortality risks during rapid-onset fires. A secondary, remote evacuation route is a life-safety necessity to avoid gridlock. Without this redundancy, the project introduces a material health and safety concern that cannot be mitigated through building hardening alone.



## 7. CONCLUSION

Based on SHMC Chapter 15.36, the 2025 CAL FIRE maps, and the "Major Risk" Fire Factor assessment, the Spring Grove subdivision faces a material and high risk of wildfire danger. The combination of dense Type V-B wood construction, a single point of access, and proximity to high-intensity fuels creates an inherent risk that minimum building codes do not fully mitigate. Recent fire history, including the 2020 LNU Lightning Complex and Glass Fire, proves the reality that fire in the Napa Valley frequently outpaces standard suppression capabilities.

The protection of the existing and future residents depends on a design that prioritizes ignition resistance and evacuation redundancy. By implementing a defensible space strategy, hardening homes against embers, and providing a secondary evacuation route, the developer can mitigate the material health and safety risks inherent to this project. Failure to address the access redundancy and site constraints will result in a community that is fundamentally vulnerable to the next regional fire.

**Please don't hesitate to contact our office if you have any questions or would like to discuss our comments in further detail.**

**ZARI CONSULTING GROUP, INC.**



Duran Muniz  
Project Manager

**ZARI CONSULTING GROUP, INC.**



Joseph P. Zari, PE  
Principal

**From:** [Wayne Leong](#)  
**To:** [City Clerk](#)  
**Subject:** Fwd: Rebuttal to City Attorney Memo re Fire Access – Spring Grove (PL24-065)  
**Date:** Sunday, February 8, 2026 7:59:09 PM  
**Attachments:** [260208 - Rebuttal to City Attorney Memo re Fire Access.pdf](#)

---

City Clerk,

In the event Andrew is not available to submit this comment letter for the Feb 10 City Council meeting, please submit it.

Thank you,  
Wayne



[www.leongarch.com](http://www.leongarch.com) + [www.leong-leong.com](http://www.leong-leong.com)  
Napa Valley + New York  
P.O. Box 2, St. Helena, CA 94574  
t: [\(707\) 963-5461](tel:7079635461)

----- Forwarded message -----

**From:** Wayne Leong <[wayne@leongarch.com](mailto:wayne@leongarch.com)>  
**Date:** Sun, Feb 8, 2026 at 12:53 PM  
**Subject:** Rebuttal to City Attorney Memo re Fire Access – Spring Grove (PL24-065)  
**To:** Andrew Bradley <[abradley@cityofstheleena.gov](mailto:abradley@cityofstheleena.gov)>, <[contactcitycouncil@cityofstheleena.gov](mailto:contactcitycouncil@cityofstheleena.gov)>

Andrew and City Council Members:

I submit this comment to directly rebut the City Attorney's memorandum titled "Memo re Wolfe Letter re Spring Grove," dated February 5, 2026.

The memo's central conclusion—that the Spring Grove project may lawfully be approved with a single fire apparatus access road—is incorrect as a matter of municipal law.

At the time the Spring Grove Vesting Tentative Subdivision Map application was deemed complete, the 2022 St. Helena Fire Code was in effect. St. Helena Municipal Code §15.36.110(D) is clear and mandatory: residential developments exceeding 30 units shall be provided with two separate and approved fire apparatus access roads. This requirement contains no waiver, no discretionary exception, and no sprinkler substitution. The Spring Grove project proposes 41 units served by a single access road and therefore does not comply.

The City Attorney's analysis rests on the erroneous premise that local fire code amendments "expired" on December 31, 2025. Municipal ordinances do not expire by operation of a new state code cycle. Local fire-safety standards adopted pursuant to Health & Safety Code §§17958.5 and 17958.7 remain in effect unless and until repealed by ordinance. No such repeal exists. Absent repeal, §15.36.110(D)

remains fully enforceable.

The memo also conflates building permit review with entitlement approval. The possibility that a future building permit may be reviewed under the 2025 California Fire Code does not authorize the City to approve a vesting tentative map that violates existing municipal law. An unlawful entitlement cannot be cured at the permit stage.

The suggestion that a sprinkler exception from the model Fire Code survives by implication is likewise incorrect. When the City amended Appendix D “to read as follows,” it legally replaced the section. The omission of the sprinkler exception was deliberate and has been carried forward through successive adoption cycles.

Finally, Housing Element policies, zoning density ranges, SB 330, and the Housing Accountability Act do not override mandatory, objective life-safety standards. Where density objectives conflict with fire access requirements, safety controls. Neither staff error nor delay can vest the City into approving a project that violates its own code.

The Council’s lawful options are therefore limited and clear:

- Require a second approved fire apparatus access road; or
- Require the project to be reduced to 30 units or fewer.

Approving a 41-unit project with only one access road would exceed the Council’s authority and expose the City to avoidable legal and public safety risk.

Respectfully submitted,  
Wayne Leong



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Napa Valley + New York

P.O. Box 2, St. Helena, CA 94574

t: [\(707\) 963-5461">707\) 963-5461](tel:7079635461)

**From:** [David Lattin](#)  
**To:** [Public Comment](#)  
**Subject:** Fwd: Fire Safety Concerns Regarding the Spring Grove Development  
**Date:** Sunday, February 8, 2026 10:29:01 PM

---

Please enter the letter below into public comment.

Thank you,

David Lattin

Sent from my iPhone

Begin forwarded message:

**From:** David Lattin <lattindavid20@gmail.com>  
**Date:** February 8, 2026 at 10:33:20 AM MST  
**To:** firechief@cityofsthelena.gov  
**Subject:** Fire Safety Concerns Regarding the Spring Grove Development

Dear Chief Sorensen,

My wife, Kendra, and I have lived at 1433 Spring Street since 1987. Over the years, we have self-evacuated several times at the advice of the City and County Fire Departments when fire threatened our town. We did so to avoid the potential for dangerous auto congestion during a rapid evacuation under catastrophic fire conditions. (Friends of mine over in Sonoma County have relayed horror stories to me).

We are deeply concerned for the potential dangers posed by the Spring Grove development that is planned behind our home. With the recent fire safety consultant's report that has come to our attention, it appears that a number of 'red flag' construction violations have been ignored by City Council during the approval process.

Before you are asked to weigh in again, please read (or reread) the Zari Consulting Group Fire Safety Report for the items that concern us and should deeply concern the City and you. In our minds, the City has the OBLIGATION to modify the design of this development to address these concerns. California housing mandates CANNOT override County or City fire safety regulations.

We are in favor of housing to be built behind us. We are totally against it as it is currently designed.

Respectfully,

David Lattin and Kendra Craven







February 9, 2026

**By Email**

Mayor Paul Dohring  
Members of the City Council  
City of St. Helena  
1088 College Avenue  
St. Helena, CA 94574  
[cityclerk@cityofsthelena.gov](mailto:cityclerk@cityofsthelena.gov)  
[publiccomment@cityofsthelena.gov](mailto:publiccomment@cityofsthelena.gov)

**Re: Vesting Tentative Map and Water Neutrality Agreement for  
Spring Grove Development Project (File No. PL24-065); Fire  
Access Road Requirements**

Dear Mayor Dohring and Councilmembers:

Please accept and consider the following points and concerns, submitted on behalf of the Saint Helena Neighborhood Association (“SHNA”), prepared in response to the February 5, 2026 Memorandum from the City Attorney (“BBK Memo”), which addressed concerns raised in our earlier letter of January 27, 2026.

The BBK Memo advances several arguments to avoid St. Helena’s mandatory dual fire apparatus access road requirement. Each argument fails as a matter of law. The central premise of the BBK Memo, that the City’s carefully enacted local fire safety amendments somehow expired automatically on January 1, 2026, contradicts both the plain language of California law and basic principles of municipal legislative authority. Local ordinances do not vanish into thin air simply because the state updates the baseline standards upon which the local ordinances are based. The City’s local amendments to the 2022 California Fire Code, including the dual access road requirement, remain binding law until the City Council affirmatively repeals or modifies them through proper legislative process. The requirement is therefore applicable to the Spring Grove Project.

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## **I. Local Fire Code Amendments Do Not Automatically Expire**

The BBK Memo argues that the City’s local amendments to the 2022 California Fire Code “are no longer in effect” as of January 1, 2026. This misconstrues Health & Safety Code § 17958 and contradicts basic principles of municipal law.

### **A. The Statute Contains No Automatic Expiration Provision**

Health & Safety Code § 17958(a) provides that local amendments “shall become effective 180 days after publication of the California Building Standards Code by the California Building Standards Commission.” This provision establishes when local amendments become effective; it does not speak to when they expire. The statute is silent on expiration, and the BBK Memo cites no authority holding that local building code amendments automatically sunset when new state codes are published.

Under BBK’s interpretation, every three years, during the triennial code adoption cycle, California’s 482 cities and 58 counties would simultaneously lose all local fire safety, seismic, and building standards for the approximately 180-day period between state publication and local re-adoption. Emergency access roads, earthquake protections, and wildfire protection requirements would evaporate statewide. The Legislature could not have and did not intend such a patently chaotic result.

### **B. Legislative Intent Confirms Continuity of Local Amendments**

Assembly Bill 130 (2025), which added subdivision (b) to Health & Safety Code § 17958, directly refutes BBK’s position. Subdivision (b)(1) restricts new residential amendments from October 1, 2025 to June 1, 2031, unless they are “substantially equivalent to changes or modifications that were previously filed by the governing body of the city or county and were in effect as of September 30, 2025.” This language presumes that local amendments adopted under prior code cycles remain “in effect” during the transition to new codes.

If BBK’s interpretation were correct, and all 2022 amendments expired on January 1, 2026, then nothing would have been “in effect as of September 30, 2025”

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for jurisdictions to carry forward. The statutory exception would be meaningless. Courts reject interpretations that render statutory language surplusage. (*Asian Americans Advancing Justice v. Padilla* (2019) 41 Cal.App.5th 850,863 (“When statutory language is clear and unambiguous, there is no need for construction and courts should not indulge in it”); *Yes in My Backyard v. City of Culver City* (2023) 96 Cal.App.5th 1103, 1116 (courts avoid statutory constructions that result in surplusage”).)

### **C. Municipal Ordinances Persist Until Repealed**

St. Helena Municipal Code § 15.36.100(D), adopted by Ordinance No. 22-12 on December 13, 2022, is a duly enacted municipal law. Under California law, ordinances remain in effect until repealed or superseded by subsequent legislative action. The City Council has not repealed Ordinance 22-12. The BBK Memo acknowledges that the City has only “introduced” amendments to adopt the 2025 Code but has not yet adopted them. Until that adoption occurs, the 2022-based local amendments remain operative.

BBK’s interpretation would lead to an outcome that even the City Council has not effectuated: the premature repeal of fire safety standards through mere passage of time rather than deliberative legislative action.

## **II. St. Helena’s Ordinance Language Unambiguously Deleted The Sprinkler Exception**

The BBK Memo argues further that even if the City’s local amendments remain in effect, the sprinkler exception was never deleted because St. Helena “only lists language actually being modified.” This likewise contradicts the plain text of St. Helena’s ordinances and basic principles of statutory construction.

### **A. “Amended to Read as Follows” Means What it Says – The Sprinkler Exception is Removed**

SHMC § 15.36.100(D) states:



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Section D107.1, One or two-family dwelling residential developments, California Fire Code 2022, Appendix [D], **is amended to read as follows:**

Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3. (Emphasis added.)

The phrase “amended to read as follows” is legislative drafting language that signals complete replacement of a code section. When a legislative body amends a section “to read as follows,” it replaces the entire section with new text. What follows the colon is the complete, operative provision.

If the City Council intended only to add “or multi family” while preserving the model code’s sprinkler exception, it would have drafted the ordinance to say so explicitly. It might have said: “Section D107.1 is amended by adding the words ‘or multi family’ after ‘two-family dwellings’ in the first sentence.” Or: “The following text is added to Section D107.1...” But that is not what the ordinance says. Instead, by stating the section “is amended to read as follows,” followed by text that contains no exception, the City Council enacted a complete replacement provision that deliberately omits the state’s sprinkler exception, and then re-enacted it on three separate occasions.

#### **B. The BBK Memo’s Interpretation Contradicts The City Council’s Express Findings**

The BBK Memo suggests the deletion of the exception was inadvertent, asserting that “nothing in the ordinance or staff reports...made any mention of a deliberate intention to delete the exception.” (BBK Memo at 4.) This assertion is incorrect.

St. Helena adopted its deletion of the sprinkler exception based on express legislative findings under Health & Safety Code § 17958.7. Those findings, codified at SHMC § 15.36.030, identify specific “local climatic, geological, or topographic conditions” that justify stricter fire access standards:

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A. The city is characterized by a narrow valley floor surrounded and intermingled with steep hill terrain, containing areas which are very susceptible to wildland fires.

¶¶

C. St. Helena is divided geographically into two parts by the north to south flow of the Napa River. Significant damaging flooding occurs in portions of the city approximately every five to ten (10) years.... This natural barrier can serve as a severe impediment to public safety services because of the severity of slopes and the existence of natural barriers such as the Napa River, Sulphur Creek, and York Creek.

These findings make clear why the City rejected the state's sprinkler exception: the City's topography creates single points of failure for emergency access. When the Napa River floods, Sulphur Creek overflows, or wildfire conditions block roadways, internal sprinklers cannot substitute for redundant access routes. Sprinklers protect structures from internal fire spread; they do nothing to maintain emergency vehicle access or resident evacuation routes when external conditions block the sole access road.

The City Council made these findings three times, in Ordinance 16-15 (2016), Ordinance 19-10 (2019), and Ordinance 22-12 (2022), filing them with the California Building Standards Commission each time as required by statute. The legislative record accordingly shows that deletion of the sprinkler exception was not inadvertent; it was a deliberate policy choice grounded in documented local conditions and executed through proper legislative process.

### **C. The “Routine Practice” Argument Lacks Legal Authority**

The BBK Memo asserts that “City staff has confirmed that it is the city’s routine practice to only list language actually being modified when listing the local amendments.” (BBK Memo at 4.) Even if this characterization of staff practice were accurate, it cannot override the plain language of a duly enacted ordinance. Courts interpret ordinances according to their express terms, not according to staff practices or unexpressed intentions. (*Move Eden Housing v. City of Livermore* (2025) 114 Cal.App.5th 1282, 1293-1294 (if the statutory language is unambiguous, then its plain meaning controls). Where ordinance language is unambiguous, as it is here, courts do

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not engage in speculation about what the drafters might have meant or what staff practices might suggest.

Furthermore, the BBK Memo provides no citation to any resolution, staff report, or ordinance establishing this alleged “routine practice.” Without documentary evidence, this assertion is simply attorney argument. It cannot overcome the clear statutory language of SHMC § 15.36.100(D).

### **III. The D106/D107 Distinction Is Irrelevant And Was Deliberately Rejected By the City**

The BBK Memo argues that Section D106.1 (governing multi-family projects of 100+ units) controls instead of Section D107.1 (governing one and two-family residential developments of 30+ units), and that the Project is therefore exempt because it has only 41 units. (BBK Memo at 4.) This argument fails for two reasons.

#### **A. St. Helena Deliberately Amended D107.1 to Include Multi-Family Developments**

The model California Fire Code distinguishes between:

- Section D106 (“Multiple-family residential projects”)
- Section D107.1 (“One- or two-family dwelling residential developments”)

The City modified Section D107.1 by adding “or multi family” to bring multi-family developments within its stricter 30-unit threshold. This was not a scrivener’s error. The City deliberately expanded D107.1’s scope to cover projects that would otherwise fall under D106’s more lenient 100-unit threshold.

The BBK Memo acknowledges this, noting that “staff intends to strike the local modification to Section D107.1 adding “or multi family” as unnecessarily duplicative’ in the forthcoming 2025 adoption. (BBK Memo at 4.) This admission confirms two things: (1) the “or multi family” language was a deliberate local modification, and (2) it remains in effect in the current code.

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## **B. The Ordinance's Plain Language Governs**

SHMC § 15.36.100(D) states that “Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads.” The Spring Grove development is a 41-unit town home project. It “exceeds thirty (30)” units. Under the plain language of the ordinance, it requires two access roads.

## **IV. Housing Policy Arguments Cannot Override Express Public Safety Requirements**

The BBK Memo advances two policy arguments: (1) requiring dual access would conflict with the Housing Element's unit projections and (2) allowing single access is consistent with “the City's other planning documents.” (BBK Memo at 5.) Neither argument provides a legal basis to ignore the City's fire safety requirements.

The Housing Element is a planning document that projects development capacity based on zoning and general plan designations. It does not, and indeed cannot, waive objective development standards like fire apparatus access roads. If site constraints prevent a parcel from meeting fire access requirements at maximum theoretical density, the parcel may simply be developable at lower density or may require property acquisition to achieve secondary access.

Fire safety requirements and housing goals must both be satisfied. When they conflict, the City may need to find alternative sites to meet Regional Housing Needs Allocation numbers, adjust densities, or assist developers in acquiring necessary access easements. What the City cannot do is administratively waive mandatory life-safety standards to accommodate a developer's preferred project design.

The BBK Memo candidly admits that “site constraints preclude a secondary access to the Project without the developer acquiring additional land from other private property owners.” (BBK Memo at 5.) This is precisely the situation that fire access requirements are designed to address: preventing approval of projects that cannot meet minimum safety standards due to site limitations.



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The fact that requiring compliance would be inconvenient or costly for the developer does not create an exception to mandatory safety standards. If the site cannot accommodate the required infrastructure, the developer's remedies are to (1) acquire additional property for secondary access, (2) reduce the project size, or (3) seek a different site. The developer does not have a fourth option: judicially rewriting St. Helena's fire code.

## **V. The Housing Accountability Act Does Not Bar Enforcement Of Fire Safety Standards**

Finally, BBK argues that the time to raise objections under Government Code § 65589.5(j)(2)(A)(i) has expired. (BBK Memo at 5.) This argument likewise misconstrues both the Housing Accountability Act ("HAA") and the City's enforcement authority.

### **A. The HAA Does Not Create Vested Rights in Noncompliant Projects**

The HAA's streamlining provisions require cities to identify noncompliance with objective development standards within specified timeframes. But these provisions do not vest rights in projects that do not comply with applicable health and safety standards, especially State-promulgated standards. The HAA prohibits cities from disapproving compliant projects; it does not require cities to approve noncompliant ones.

If City staff initially misinterpreted the applicability of the fire code (as the BBK Memo suggests), that does not cure the Project's actual noncompliance. The California Fire Code and St. Helena's local amendments remain objective, applicable standards. The Project must either comply with them or obtain necessary variances or modifications through proper administrative processes.

Moreover, life-safety codes are not waivable through procedural defaults. Even if the HAA's 30-day or 60-day windows for compliance review had somehow created an estoppel (they did not), the City retains authority to enforce mandatory safety standards at the building permit stage and throughout construction. Fire

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apparatus access roads are not optional amenities subject to negotiation; they are non-negotiable safety infrastructure.

## **VI. Even If the 2025 State Fire Code Applies, the City Can Carry Forward Its Amendments**

The BBK Memo is correct that the California Fire Code itself is a state standard not subject to local vesting. (BBK Memo at 2.) However, this does not resolve the question of which fire code provisions apply to the Project. First, as discussed in Section I, St. Helena’s current local amendments remain in effect until superseded by newly adopted amendments. The City has not yet adopted the 2025 Code with new local amendments. Second, when the City does adopt the 2025 Code, it may (and under Health & Safety Code § 17958(b)(1) is expressly authorized to) carry forward amendments that were “in effect as of September 30, 2025” and are “substantially equivalent” to prior amendments. Given that the same topographical conditions identified in SHMC § 15.36.030 continue to exist, the City would be well within its authority to re-adopt substantially similar provisions deleting the sprinkler exception for the 2025 Code cycle.

Thus, even under the developer’s preferred timeline, the Project would ultimately be subject to the same dual-access road requirement, either under the still-effective 2022-based amendments, or under substantially equivalent amendments that the City adopts for the 2025 Code.

## **VII.. Conclusion**

The BBK Memo’s arguments fail at every level:

- Local fire code amendments do not automatically expire when new state codes are published;
- The ordinance language “amended to read as follows” unambiguously replaced Section D107.1 with text that deliberately omits the sprinkler exception;
- The deletion was neither inadvertent nor unexplained; it was supported by express legislative findings about local topography that have been filed with the state three times over at least nine years;

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- The City deliberately expanded Section D107.1 to cover multi-family projects, rejecting the distinction the developer now attempts to exploit;
- Policy arguments about housing goals and site constraints do not override mandatory safety standards; and
- The Housing Accountability Act does not vest rights in noncompliant projects or bar enforcement of fire safety requirements

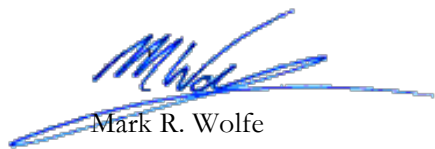
In sum, the Spring Grove development is subject to Municipal Code § 15.36.100(D), which requires two separate and approved fire apparatus access roads for developments exceeding 30 units. The Project has 41 units and proposes only one access road. It does not comply.

The remedy is straightforward: the developer must either (1) acquire the necessary property interests to provide a code-compliant secondary access road, or (2) reduce the project to 30 or fewer units. No amount of legal argument can alter the physical reality that St. Helena's topography creates genuine public safety hazards when developments lack redundant emergency access.

Thank you for your consideration of these concerns.

Most sincerely,

M. R. WOLFE & ASSOCIATES, P.C



Mark R. Wolfe  
On behalf of Saint Helena Neighborhood  
Association

MRW:

cc: City Attorney ([ethan.walsh@bbklaw.com](mailto:ethan.walsh@bbklaw.com))

## YIMBY Law

2261 Market Street STE 10416

San Francisco, CA 94114

[hello@yimbylaw.org](mailto:hello@yimbylaw.org)



YIMBY LAW

2/09/2026

City of St. Helena  
City Council  
465 Main St.  
St. Helena, CA 94574  
[publiccomment@cityofstheleena.gov](mailto:publiccomment@cityofstheleena.gov)

Re: Subdivision approval for 1447, 1505, 1515 Spring Street, Agenda Item 11

Dear St. Helena Planning Commission,

YIMBY Law is a 501(c)3 non-profit corporation, whose mission is to increase the accessibility and affordability of housing in California. YIMBY Law sues municipalities when they fail to comply with state housing laws, including the Housing Accountability Act (HAA). This Commission has an obligation to abide by all relevant state housing laws when evaluating the above captioned proposal, including the HAA. Should the City fail to follow the law, YIMBY Law will not hesitate to file suit to ensure that the law is enforced.

This development will consist of 41 units of townhomes with 8 deed-restricted affordable units, located on Housing Element opportunity site 9. As you have already identified, the site's residential capacity is critically underutilized, and is already consistent with both the St. Helena General Plan and the applicable zoning designation. Your staff have adequately laid out the legal necessity of approving this project's Vesting Tentative Subdivision Map.

California Government Code § 65589.5, the Housing Accountability Act, prohibits localities from denying housing development projects that are compliant with the locality's zoning ordinance or general plan at the time the application was deemed complete, unless the locality can make findings that the proposed housing development would be a threat to public health and safety. The most relevant section is copied below:

(j) When a proposed housing development project complies with applicable, objective general plan and zoning standards and criteria, including design review standards, in effect at the time that the housing development project's application is determined to be complete, but the local agency proposes to disapprove the project or to approve it upon the condition that the project be developed at a lower density, the local agency shall base its decision regarding the proposed housing development project upon written findings supported by substantial evidence on the record that both of the following conditions exist:

(1) The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.



(2) There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

...

(4) For purposes of this section, a proposed housing development project is not inconsistent with the applicable zoning standards and criteria, and shall not require a rezoning, if the housing development project is consistent with the objective general plan standards and criteria but the zoning for the project site is inconsistent with the general plan. If the local agency has complied with paragraph (2), the local agency may require the proposed housing development project to comply with the objective standards and criteria of the zoning which is consistent with the general plan, however, the standards and criteria shall be applied to facilitate and accommodate development at the density allowed on the site by the general plan and proposed by the proposed housing development project.

The above captioned proposal is zoning compliant and general plan compliant, therefore, you must approve the application and all necessary permits or maps, or else make findings to the effect that the proposed project would have an adverse impact on public health and safety, as described above.

A Density Bonus is being sought in order for the Project proponent to be granted waivers to which they are entitled under California state Density Bonus Law, California Government Code § 65915(e), so long as there are no specific, adverse impacts, upon health, safety, or the physical environment, and there are no feasible methods to satisfactorily mitigate or avoid the specific adverse impacts. The HAA, § 65589.5 (j)(3) specifies that the receipt of a density bonus does not constitute a valid basis on which to find a proposed housing development project is inconsistent, not in compliance, or not in conformity, with an applicable plan, program, policy, ordinance, standard, requirement, or other similar provision.

In light of the fact that health and safety issues form limited reasons to disapprove of this project, local opponents of housing affordability have submitted comments alleging that it contains inadequate fire safety measures. The St. Helena Fire Department has concluded that the project poses no public safety threat, and has directly refuted the third party report alleging that such threats exist.

I am signing this letter both in my capacity as the Executive Director of YIMBY Law, and as a resident of California who is affected by the shortage of housing in our state, and would be eligible to apply for residency in the proposed housing development project.

Sincerely,



Sonja Trauss  
Executive Director  
YIMBY Law

YIMBY Law, 2261 Market Street STE 10416, San Francisco, CA 94114



JOSHUA S. DEVORE  
jdevore@dpf-law.com

February 9, 2026

Mayor Paul Dohring  
Vice Mayor Michelle Deasy  
Council Member Aaron Barak  
Council Member Kate Spadarotto  
Council Member Billy Summers

**RE: PL24-065 Spring Grove Vesting Tentative Map and In Lieu Retrofit Fee**

Dear Mayor Dohring, Vice Mayor Deasy and Council Members:

We write briefly on behalf of our client, Julie Dickson, to respond to certain of the more-problematic assertions in the January 27, 2026, Memorandum of BBK responding to our Comments of January 23 and 26.

**The Minor Design Review Was Ineffectual**

The Community Development Director lacked the legal authority to approve the project's design as a Minor Design Review. The authority apparently relied upon, granted under SHMC § 17.05.080, applies explicitly only at the building permit stage:

The following activities are subject to all design criteria of the city; however, the review shall be conducted administratively by the community development director as a component of the building permit review.

Because the project is a tentative subdivision map application, not a building permit, and of "residential ... buildings that do not comply with the applicable design standards of Chapter 17.16, Residential Zoning Districts..." they are subject as a matter of law to Major Design Review by SHMC 17.05.070(B)(8).

Although counsel suggests that the project could be deemed as consistent with the zoning code after considering all waived standards, the project objectively (1) did not comply with the applicable design standards at the time of application; and (2) in either case, the authority to grant such approval was never delegated to the Community Development Director.

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SHMC Table 17.03.030 does not grant the Community Development Director power to approve design reviews in connection with subdivision maps. Vesting tentative subdivision maps are not building permits, and their approval authority is specifically assigned pursuant to SHMC Chapter 16.16. The contents – including the design of the structures for purposes of a vesting map under SHMC § 16.16.030 – are to be considered and recommended by the Planning Commission pursuant to SHMC § 16.16.060.

The City's Municipal Code does not grant the Community Development Director the power to supersede the expressly delegated power to the Planning Commission of vesting tentative map review. SHMC § 2.28.020, which defines the duties of the Planning Director, grants no such power to the Planning Director, but rather specifically provides only the duty to make recommendations. Counsel cites no provision of the City code that allows for approval authority, and municipal staff can act only with delegated authority.¹ Void acts of a public officer cannot be ratified. The design approval was legally ineffectual, and an asserted failure to appeal the design review is irrelevant because the design review, as a matter of law, is a nullity.

#### **The Failure to Comply with the Garage Setback Is a Safety Hazard**

Counsel agrees that the design does not comply with the required garage setbacks from the street. The underlying reason why garages are to be setback are not merely aesthetic as counsel appears to suggest without citation. Rather, the required 10' setback of SHMC § 17.16.040(A)(7)(e) creates space between the street and the garage door for a car. The project ignores that practicality.

Further, the City's response to the Zari report is that a ladder can be deployed to reach the third stories of the development and shows a photograph of a ladder in a driveway. (Feb. 10 Staff Report p. 256.) Because of the failure to comply with the garage setback, the base of that ladder would be in the street, blocking any emergency vehicles from passing.

The reality is that the project's design is fundamentally unworkable and unsafe because there are no driveways in front of the garages, only aprons and curb cuts. It is not conceivable that every garage will be pristine and empty for two cars to readily park effortlessly. The ill-conceived design with no street parking anywhere near the residences will inevitably mean cars will be improperly parked obstructing the garages or travel lanes. It also places the homes closer to vehicle exhaust.

Failure to comply with SHMC § 17.16.040(A)(7)(e) is a health and safety hazard that is incapable of mitigation.

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¹ Compare with: *Californians for Homeownership, Inc. v. City of La Habra*, No. G064286, 2025 WL 4056820, at *5 (Cal. Ct. App. Dec. 18, 2025) (authority was delegated to City Manager by code.)

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### **The Failure to Comply with Egress Requirements Is a Safety Hazard**

Counsel's letter concedes that certain of the units do not comply with required entry design standards. Again, there is no evidence that these are merely simple aesthetic rules: they facilitate safe ingress and egress from buildings in the case of emergency. There are no stated plans to warn residents of these exceptions and the safety hazard they present. The recent "FAQs" added to the Staff Report assert that "Entry design is not under purview of the City Council" but (1) as noted above, no legal design review has occurred; and (2) more importantly, the safety of the project is the ultimate responsibility of the City Council.

Counsel contends that the California Residential Code applies rather than the California Building Code, but cites no authority for that proposition. The Residential Code applies to Townhouses only where they have "a yard or public way on not less than two sides." (Residential Code R202, Definitions, "Townhouse Unit".) However, the proposed streets have not been "deeded, dedicated or otherwise permanently appropriated to the public for public use" and are not "public ways." (*Id.*, Public Way.) The project thus does not qualify as Townhouse Units, but rather proposed multifamily structures subject to the California Building Code.

Moreover, Counsel's letter baldly asserts that the City claims to not be "aware of any obstructions that would prevent an individual from accessing the public way." (S.R. pp. 244-45) Yet, the only egress doors do not exit to the public way, directly contrary to the building code. The Residential Code is the same as the CBC: R318.1 Means of Egress, "The required egress door shall open directly into a public way or to a yard or court that opens to a public way." Instead, they exit away from the internal private streets, towards flammable materials such as wooden fences and vegetation; and the (potentially burning) buildings are between their doors and the private street.

Even assuming the Residential Code applies:

*"The purpose of this code is **to establish the minimum requirements to safeguard the public health, safety and general welfare through** structural strength, **means of egress facilities**, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations."*

Cal. Res. Code § 1.1.2 Purpose (emphasis added).

There is no direct exit route from the buildings to a public way or safe place of refuge. Again, this presents a direct risk to public safety.



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**The Single Access Point and Backwards Design Is a Safety Hazard**

We note further that, as set forth in the Zari reports, the single vehicular access point of the project, coupled with its unusual design of placing the only egress doors on the back side of the buildings away from the street, present a development that is at odds with protecting public health and safety. The City Council is under no obligation to approve this unusual and unsafe design. Rather, it has an obligation to protect the City's existing and future residents, and mitigate the City's financial risk in the event of a catastrophe from a design that has been documented to be unsafe by a noted expert.

Sincerely,

DICKENSON, PEATMAN & FOGARTY PC

A handwritten signature in blue ink, appearing to read "JD", is positioned above the name Joshua S. Devore.

Joshua S. Devore

cc: City Clerk  
Ethan Walsh, Esq.

**From:** [Corey Smith](#)  
**To:** [Public Comment](#)  
**Subject:** Fwd: Housing Vote Tomorrow  
**Date:** Monday, February 9, 2026 1:55:16 PM

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Can you please add to the public record?

----- Forwarded message -----

From: **Corey Smith** <[corey@housingactioncoalition.org](mailto:corey@housingactioncoalition.org)>  
Date: Mon, Feb 9, 2026 at 12:57 PM  
Subject: Housing Vote Tomorrow  
To: <[pdohring@cityofsthelena.gov](mailto:pdohring@cityofsthelena.gov)>, <[mdeasy@cityofsthelena.gov](mailto:mdeasy@cityofsthelena.gov)>, <[abarak@cityofsthelena.gov](mailto:abarak@cityofsthelena.gov)>, <[kspadarotto@cityofsthelena.gov](mailto:kspadarotto@cityofsthelena.gov)>, <[bsummers@cityofsthelena.gov](mailto:bsummers@cityofsthelena.gov)>

Mayor and City Council Members,

I hope this email finds you well. I'm reaching out regarding a proposed housing project on Spring Street ahead of Tuesday's council hearing.

While we have not reviewed the details of the project itself, it came across our radar as a result of the application before the City Council being continued twice, which caused it to surface in broader conversations among housing policy and advocacy organizations. We are now following the project's approval process.

We understand that city staff has found it is consistent with applicable standards, including the city's Housing Element. I want to remind you that the Housing Element is the city's plan to build (much needed) housing. Each city must do its fair share. In addition to this project following the city's own guidelines as a Housing Element site, it's critical that each city follow state housing law.

This is critical because California's housing shortage is not an abstract policy problem, but a lived reality shaped by decades of underbuilding. When individual cities fail to plan for and allow their fair share of housing, the impacts are pushed onto neighboring communities and future generations, which constrains supply, increases competition for existing homes, and limits who can realistically live and work in a community.

State housing law exists to ensure that every city contributes to addressing this imbalance, rather than deferring responsibility or relying on others to absorb growth. Approving housing that is consistent with adopted plans reflects a commitment to long-term stability, opportunity,

and ensuring communities remain functional, resilient, and accessible across income levels.

Please let me know if you have any questions,  
Corey Smith  
Executive Director, Housing Action Coalition

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**Corey Smith** 陈锐 | Pronouns: He/Him

Executive Director | Housing Action Coalition  
555 Montgomery Street, Suite 720, San Francisco, CA 94111  
Cell: (925) 360-5290 | Office: (415) 300-0967



Email: [corey@housingactioncoalition.org](mailto:corey@housingactioncoalition.org) | Web: [housingactioncoalition.org](http://housingactioncoalition.org)  
**Please note the new email and website.**

To opt out of all HAC emails, respond to this email with "unsubscribe all".

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**Corey Smith** 陈锐 | Pronouns: He/Him

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Email: [corey@housingactioncoalition.org](mailto:corey@housingactioncoalition.org) | Web: [housingactioncoalition.org](http://housingactioncoalition.org)  
**Please note the new email and website.**

To opt out of all HAC emails, respond to this email with "unsubscribe all".

**From:** [Richard Corsetti](#)  
**To:** [Public Comment](#)  
**Subject:** Spring Grove Housing Project  
**Date:** Tuesday, February 10, 2026 9:31:21 AM

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There are several issues that the City Council and legal needs to address before approval can be granted for this project. One of the most important is the need to have two roads leading in and out of the site to allow fire and emergency vehicles in and resident evacuations.

Sincerely,

Richard Corsetti  
1401 Spring Street





2.10.26

Dear City Council,

Please provide clarity regarding the attached. There are many parcels within town that fall into the "flag lot" category, and there is general consensus among the professional community that the proposed project parcel distinctly falls within this municipal code definition. When the conflict around this specific item was first brought to the attention of the planning commission on the 21st of January 2025 staff was asked to provide clarity. Other than the attached section from the current project staff report I can find no other reference.

This would appear to be distinctly material given the request for tentative subdivision map approval as well as multiple other concerns that have been raised. What is the reasoning and justification for not adhering to the municipal definition and codified development restrictions?

## PROPOSED SITE DESCRIPTION

Spring Grove is a high-density residential development. This project is designated as a Housing Development Project per Government Code section 65589.5(h)(2), emphasizing all-electric living.

**Site Location:** The project site encompasses three distinct parcels totaling approximately 2.52 acres at 1447, 1505, and 1515 Spring Street. Situated on the west side of St. Helena, the site is bordered by Spring Street and St. James Drive. The parcels at 1447 and 1515 Spring create "Site9" within the 2023-31 Housing Element. While 1505 Spring serves as the primary medium-density access corridor, the main residential footprint is zoned for high-density residential (HR).

This specific configuration creates a "flag-pole" style layout, where the primary access road (Street A) traverses a relatively narrow strip to reach the bulk of the development. This complicates fire apparatus maneuvers and limits the visibility of responders entering the site. The constrained nature of the "flag" portion of the lot means that any incident occurring at the entrance (Street A) would effectively isolate the 41 homes from emergency services.

**FD Response:** The proposed Spring Grove Subdivision meets minimum lot width dimensional requirements and therefore does not meet the definition of a "flag lot". Therefore, Fire Department access is not constrained.

St Helena municipal definition of "flag lot":

*"Flag lot" means a lot in which the buildable portion of the lot is connected to and accessible from a public or private right-of-way by a narrow strip of land. The wider, buildable portion of the lot is situated behind adjoining lots which front on the same public or private street. Also known as a "panhandle lot."*

**17.24.060 Flag lots.**

Many residential properties with the potential for additional dwelling units are difficult to develop under conventional zoning standards. This section provides standards for residential development on flag lots to ensure effective utilization of the property. These standards supplement the base zone standards; where standards in this section conflict with those of the base zone, the standards of this section shall apply. In those cases where the flag lot is also substandard in area for the zone, the small lot standards shall also apply.

- A. Flag lots shall be permitted in the A-20, LR-1A, LR, MR, HR, and WW districts only. Review of flag lots will be subject to conditional use permit approval as well as the provisions of Title [16](#), Subdivisions.
- B. The density and development standards of the zoning district in which a property is located shall apply to a flag lot development with the following exceptions:
  - 1. The narrow strip of land (or panhandle portion of the lot) connecting the lot with a public or private street shall have a minimum width and frontage of twenty (20) feet (sixteen (16) foot access drive plus four feet for landscaping). The minimum width and requirement may be increased in higher density situations that permit multiple units to be constructed, or where an additional landscape buffer is necessary.
  - 2. A panhandle may provide access to two lots.
  - 3. The panhandle portion of the lot connecting with a public or private street shall be included when calculating residential densities but shall be excluded when determining the compliance with minimum lot width and lot size standards.
  - 4. A grading and drainage plan shall be submitted to and reviewed by the public works director to determine the impacts of the flag lot on adjacent properties. Finished building pad elevations shall not be significantly different from those of adjoining properties.
- C. The standards for residential driveways or access drives as set forth in Chapter [17.26](#), Parking and Loading, shall be observed to provide access to a flag lot. The access drive to the flag lot shall be inspected annually by the fire chief to ensure that landscaping or other obstructions do not hinder emergency vehicle access.
- D. The provision of gates, turnarounds, clearance, road grades, and distance to fire hydrants shall be reviewed and approved by the fire chief. The site address of each flag lot shall be placed on a sign in the panhandle of the lot so as to be clearly visible to police, fire and other emergency services personnel from the public or private street.
- E. On-site parking shall be provided pursuant to Chapter [17.26](#), Parking and Loading. Additional on-site parking spaces for guests may be required, if the on-street parking provided in the area of the proposed flag lot is inadequate.
- F. Landscaping in the panhandle portion of a flag lot alongside the driveway shall be required. Improvements such as curb and gutter may also be required by the public works director for an access drive in the panhandle

Thank you for providing clarity on this matter.

Sincerely,

Joshua Parke

St Helena City Council, SH City Management, SH Fire officials,

Understanding the process by which the State Fire Code is adopted and amended is critical to this discussion. With each adoption cycle, and with any subsequent amendments, local jurisdictions are expected to analyze the State Code and make modifications based on specific local conditions. These local findings must clearly identify the conditions present and explain the reasons for any amendments. This practice is explicitly allowed and encouraged by the State, and St. Helena, like other municipalities, has consistently followed this approach.

Within the St. Helena Fire Code, Sections 15.36.010 (General Findings), 15.36.020 (Codes Adopted), and 15.36.030 (Specific Findings for Code Amendments) clearly document the City's reasoned and thoughtful approach to adopting and amending the State Fire Code in response to local conditions. These code sections are attached for reference, along with the Fire Map located on pages 9-21 of St. Helena's General Plan, Element 9: Public Health, Safety, and Noise.

Together, these documents explain the basis for the City's fire code amendments and the local conditions that necessitate them. In particular, Section 15.36.100, Fire Apparatus Access Roads, makes clear that residential proposals exceeding 30 units require two fire apparatus access drives. The rationale for deleting Exceptions 1 and 2 is clearly supported by local conditions and strengthens the objective standard requiring two access drives. The code further specifies that these access drives must be separated in accordance with the requirements of Section D104.3.

For additional context, this approach is consistent with standard practice throughout the region. Municipalities facing similar conditions, including Sonoma, Healdsburg, and Calistoga, have also removed Exceptions 1 and 2 from their fire codes. Calistoga has gone a step further by lowering the threshold for requiring a second access drive from 30 units to 20 units, reinforcing the importance of multiple access routes for emergency response. An excerpt from the Calistoga Municipal Code is included below for reference.

- N. Appendix D Fire Apparatus Access Roads. California Fire Code Appendix D107.1 is amended as follows:

**D107.1 One- or two-family dwelling residential developments.** Developments of one- or two-family dwellings where the number of dwelling units exceeds 20 shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Appendix D104.3.

Exceptions 1 and 2 are deleted.  
(Ord. 757 § 4 (Exh. A), 2022)

Taken together, these examples demonstrate that St. Helena's fire code amendments are well within accepted practice, firmly grounded in documented local conditions, and aligned with regional standards intended to enhance public safety and emergency access.

State housing law does not compel cities to approve housing projects that violate objective health and safety standards, nor does it authorize or suggest that local governments ignore, waive, degrade, or disregard standards that have been amended to address specific local conditions. To the contrary, Government Code §65589.5 expressly preserves the authority-and the obligation-of local agencies

I urge the City Council to uphold its legal duty to enforce these standards and to reject any action or activity that would knowingly accept reduced or unsafe conditions by disregarding mandatory, objective standards designed to protect life and safety.



## Excerpts form SHMC 15.36

**15.36.020 Codes adopted.**

The 2022 California Fire Code, known as the California Code of Regulations, Title 24, Part 9, based on the International Fire Code, 2021 Edition, published by the International Code Council in its entirety, including appendices: Chapter 4, Appendix B and Appendix BB (Fire Flow Requirements for Buildings), Appendix C and Appendix CC (Fire Hydrant Locations and Distribution), Appendix D (Fire Apparatus Access Roads), Appendix E (Hazard Categories), Appendix F (Hazard Ranking), Appendix G (Cryogenic Fluids—Weight and Volume Equivalents), Appendix H (Hazardous Materials Management Plans and Hazardous Inventory Statement), Appendix I (Fire Protection Systems Noncompliant Conditions), Appendix J (Building Signage), and Appendix K (Temporary Haunted Houses, Ghost Walks and Similar Amusement Uses), and referred to as the “International Fire Code” or “IFC,” is adopted as amended and made a part of this code by reference per findings as set forth in Section [15.36.030](#). (Ord. 22-12 § 3 (Exh. A); Ord. 19-10 § 3 (Exh. A); Ord. 16-15 § 3 (Exh. A); Ord. 13-4 § 3 (Exh. A); Ord. 10-7 § 2; Ord. 07-2 § 2; Ord. 03-2 § 1; Ord. 02-5 § 7; prior code § 5A.11)

**15.36.010 General findings.**

- A. The fire and hazardous materials section of the public health and safety element of the city general plan recommends that on-site fire mitigation should include use of fire-resistant materials, sprinklers, and early warning systems; and provides that factors which contribute to the potential for fire are vegetation and distance from fire stations;
- B. Because response time of fire suppression units has a critical impact on the ability to protect life and property in case of fire or other emergencies, buildings must be provided with built-in fire protection systems to offset the negative impact of excessive response time;
- C. The residential growth management system section of the land use element of the city general plan prescribes that density and population shall not exceed that which can be served by adequate public facilities and service;
- D. The fire department has increasing incidence of simultaneous demands for service that completely deplete our resources; and provides that fire protection requirements for new construction and remodeled buildings shall be strengthened to reduce planned growth on fire department capabilities and to provide a reasonable degree of fire and life safety at minimum fire suppression cost; and
- E. The city council desires to enhance the adequate protection of buildings and structures by the adoption of this chapter. (Ord. 22-12 § 3 (Exh. A); Ord. 19-10 § 3 (Exh. A); Ord. 16-15 § 3 (Exh. A); Ord. 13-4 § 3 (Exh. A); Ord. 10-7 § 2; Ord. 07-2 § 2; prior code § 5A.10)

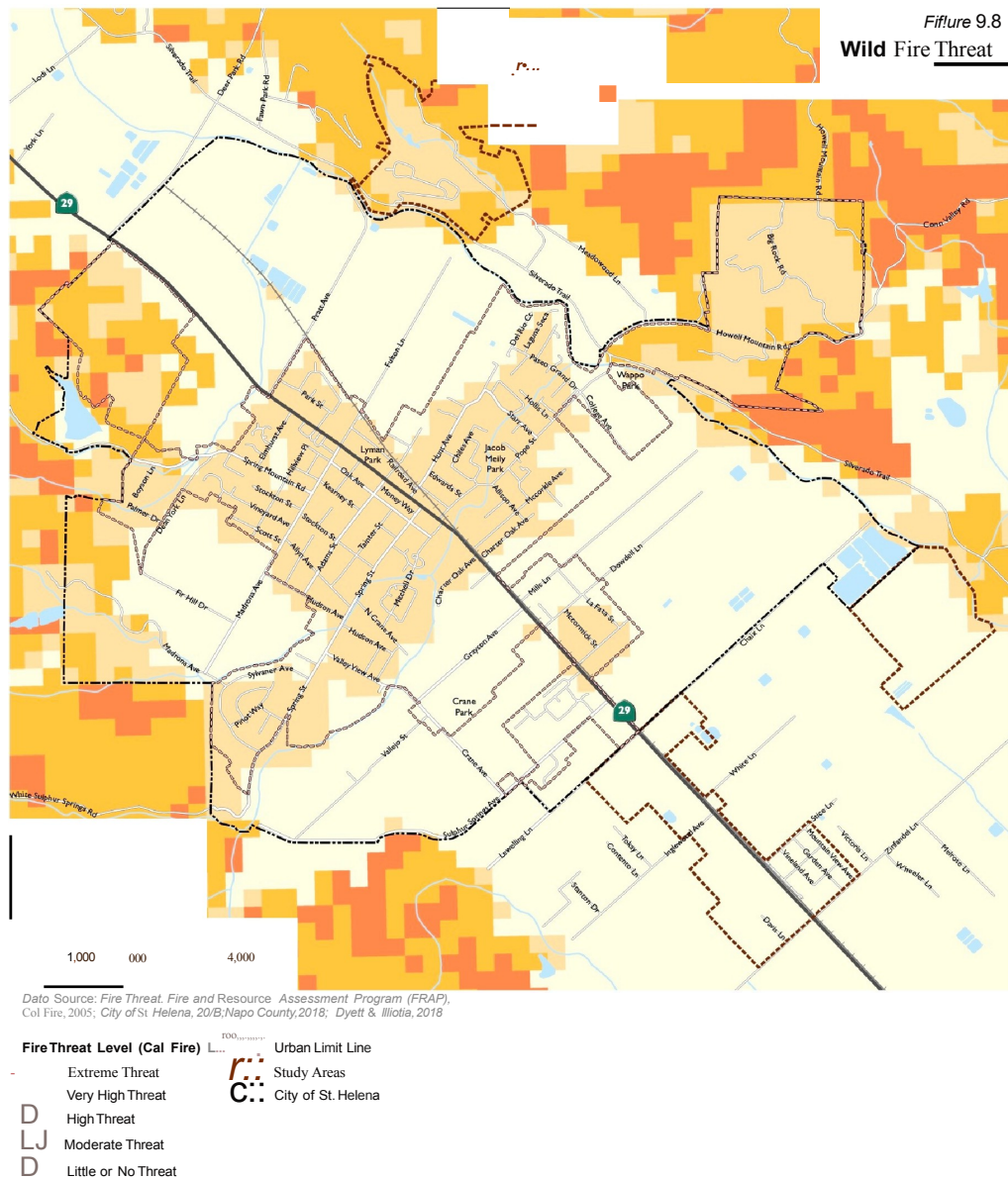
**15.36.030 Specific findings for code amendments.**

Each amendment to the California Fire Code adopted by this chapter is reasonably necessary because of the following determinations due to local climatic, geological, or topographic conditions pursuant to Health and Safety Code Section [17958.5](#):

- A. The city is characterized by a narrow valley floor surrounded and intermingled with steep hill terrain, containing areas which are very susceptible to wildland fires. Wildland fires are considered a significant threat in St. Helena. Native vegetation of brush, woodland, grassland and forest becomes extremely flammable during summer and remains so if drought conditions prevail during the winter months. Drought cycles appear in this area every seven through eleven (11) years.
- B. Earthquake is considered to be one of the most potentially destructive threats to life and property in the city. A moderate to severe seismic incident on any of the several fault zones in relatively close proximity to St. Helena is expected to cause extensive property damage, disruptions to communications systems, and damage to public utility systems.
- C. St. Helena is divided geographically into two parts by the north to south flow of the Napa River. Significant damaging flooding occurs in portions of the city approximately every five to ten (10) years. Warnings are usually given several hours to a few days before such floods. This natural barrier can serve as a severe impediment to public safety services because of the severity of slopes and the existence of natural barriers such as the Napa River, Sulphur Creek, and York Creek.
- D. Some areas of the forested hillside terrain that border the city have been designated as a woodlands and watershed area. These are areas that are local responsibility areas (LRA) for fire response and as such fall under the wildland-urban interface (WUI) guidelines set forth in Chapter 49 of the Fire Code and Chapter 7A of the Building Code. (Ord. 22-12 § 3 (Exh. A); Ord. 19-10 § 3 (Exh. A); Ord. 16-15 § 3 (Exh. A); Ord. 13-4 § 3 (Exh. A); Ord. 10-7 § 2; Ord. 07-2 § 2; prior code § 5A.12)

Map from ST Helena General Plan:

9 public health, safety, and noise







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 50 California Street, Suite 3200  
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 P: 415.262.5100 F: 415.262.5199

Linda C. Klein  
 415.262.5130  
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File No. 107377

February 10, 2026

**VIA E-MAIL**

Ethan J. Walsh  
 City Attorney  
 City of St. Helena  
 1088 College Avenue  
 St. Helena, CA 94574

**Re: 1447, 1505, and 1515 Spring Street**  
**APNs: 009-590-003, 009-590-005-000, and 009-590-010**

To Mr. Walsh:

We write on behalf of our client, City Ventures (“Applicant”), concerning its proposed 41-lot subdivision (“Project”) at 1447, 1505, and 1515 Spring St (“Property”) in the City of St. Helena (“City”). Several public commenters have submitted correspondence to the City to contest the Project’s design and safety features. City staff, including you, have responded to those comments, explaining why the Project meets applicable, objective standards and must be approved. You requested that the applicant also respond to comments, providing supplemental information to help the public understand how the law applies to the Project and requires its approval.

The proposal before the City Council is the Project’s vesting tentative map (“VTM”) and Water Neutrality In-Lieu Retrofit Fee. The City has already determined the Project is exempt from the California Environmental Quality Act (“CEQA”) and granted a demolition permit and Minor Design Review approval (including approval of the requested State Density Bonus Law (“SDBL”) waivers). The time to appeal these approvals has expired.

**1. Project and Permitting Background**

The Project seeks to convert three existing single-family homes into 41 solar, all-electric townhouse-style homes with private garages distributed throughout six buildings on the roughly 2.53-acre site. The Project includes 93 parking spaces, comprised of two dedicated spaces within each home’s garage, as well as 11 surface parking stalls, over 50 bicycle parking spaces, and extensive landscaping, incorporating mature trees and vegetation along with new plantings chosen to complement the project design and setting.

The Project complies with the Property’s General Plan land use designation and the Housing Element. 1505 Spring Street is designated “Medium Density Residential,” which



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permits densities between 5.1 and 16 dwelling units per acre. 1447 and 1515 Spring Street, where the development would occur, are designated “High Density Residential,” which permits 16.1 to 28 dwelling units per acre.

The Property was a housing opportunity site in the 2015–2023 Housing Element and remains a housing opportunity site in the current 2023–2031 Housing Element (“Housing Element”). The Housing Element states that 1447 and 1515 Spring Street could have 62 units but that the City anticipates the construction of 48 units.¹

The parcels at 1447 and 1515 Spring, where the proposed townhomes are to be constructed, are zoned high-density residential. 1505 Spring is medium-density residential and will provide access to the development. The City has calculated that, combined, the Project parcels have an allowable density of between 15.5 and 27.3 units/acre. At an overall density of 16.2 units/acre, Spring Grove will be at the low end of the allowed density range.

Per the City’s Inclusionary Housing ordinance, 20 percent of the Project’s units will be affordable to moderate-income households. Under SDBL, project’s where at least 10 percent of the units would be affordable for moderate-income households to buy enjoy certain benefits, including unlimited waivers or reductions of development standards. (Gov. Code, § 65915, subds. (b)(1)(D), (e)(1); see *Bankers Hill 150 v. City of San Diego* (2022) 74 Cal.App.5th 755, 775 [“so long as a proposed housing development project meets the criteria of the Density Bonus Law by including the necessary affordable units, a city may not apply any development standard that would physically preclude construction of that project as designed”].) The Applicant requested eleven waivers to allow the Applicant to physically construct the Project as designed.

## **2. None of Commenters’ Critiques Provides a Basis to Deny the Project**

The Project is a housing development project under the Housing Accountability Act (“HAA”) that is consistent with applicable, objective standards (meaning objective standards not waived under the SDBL). (See Gov. Code, § 65589.5, subds. (h)(2), (j)(1).) The HAA prohibits the City from disapproving the Project or conditioning its approval on reducing density² unless the City makes written findings supported by a preponderance of the evidence on the record that both of the following conditions exist:

(A) The housing development project would have a specific, adverse impact upon the public health or safety unless the project is disapproved or approved upon the condition that the project be developed at a lower density. . . . [and]

¹ The addendum to the General Plan Environmental Impact Report for the Housing Element found no significant impacts from the Housing Element related to emergency response plans, exposure to wildfires, or public facilities. (Housing Element Addendum, available at <https://www.cityofsthelena.gov/DocumentCenter/View/559/General-Plan-EIR-Addendum--April-2023-PDF>.)

² The Project already is at the minimum density permitted by the City on the Property, and this is another reason the City cannot approve the Project conditioned on lower density.

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(B) There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.

(Gov. Code, § 65589.5, subd. (j)(1).) A “specific, adverse impact” means “a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.” (*Ibid.*) A specific, adverse impact upon public health and safety arises infrequently. (*Id.*, subd. (a)(3).) Importantly, SDBL waivers are not a valid basis to determine the Project is inconsistent with an otherwise applicable, objective standard. (*Id.*, subd. (j)(3); see *id.*, subd. (f)(1) [“[n]othing in this section shall limit a project’s eligibility for a density bonus, incentive, or concession, or waiver or reduction of development standards and parking ratios, pursuant to Section 65915”].)

As described below, none of the issues raised by public commenters show that the Project would have an unmitigable “a specific, adverse impact upon the public health or safety.”

a. Single Point of Access for Emergency Vehicles

Several commenters claim that the Project violates state and local fire codes for providing one point of access for emergency vehicles. The Project is in full compliance with fire safety regulations for multiple-family residences. Even if the Project was considered to be comprised of one or two-dwelling residences, the Project complies with fire codes.

i. *The Project Meets the Applicable Fire Code Requirements*

Under the 2025 Fire Code, Appendix D, no second fire apparatus access road is required for multiple-family dwellings unless there are more than 100 units. (24 Cal. Code Regs., § D106.1 (2025).) The City has not adopted modifications to the 2025 Residential Code. (See Health & Safe. Code, §§ 17958.7, 18941.5 [requiring cities to make certain findings before adopting modifications to state building code].) Thus, the Project, which proposes only 41 multiple family dwelling units, requires no second fire apparatus road.³

Even if the Project proposed development of one- or two-family dwellings, the Project would comply with Fire Code. Under the 2025 Fire Code, Appendix D, “developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.” (24 Cal. Code Regs., § D107.1 (2025).) But “where there are more than 30 dwelling units accessed from a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system . . . access from two directions shall not be required.” (*Id.*, § D107.1.1 (2025).) Here, the exception to the two-access-road requirement applies. All of the Project’s dwelling

³ The Zari Consulting Group, a consultant hired by community members concerned about the Project, agreed with the City’s classification of the Project, concluding that the Project would be classified as “multi-family residential.” (Zari Consulting Group, 3rd Party Plan Review (Jan. 26, 2026), at p. 2.)

Page 4

units will be equipped throughout with an approved automatic sprinkler system, meeting applicable, objective fire safety standards.

In a letter dated February 9, 2026, Mr. Wolfe argues that the City’s amendments to the 2022 Fire Code remain effective in 2026 and do not need to be readopted. He is incorrect. The California Building Codes are updated every three years, with the latest update taking effect on January 1, 2026. According to the California Building Standards Commission, “[e]ven if a local government does not adopt Title 24 by ordinance [by Title 24’s effective date], Title 24 becomes the applicable code for all building occupancies by default.” (Cal. Building Standards Commission, *Guide for Local Amendments of Building Standards* (July 2024, 7th Ed.), at p. 4.⁴) In addition, amendments to Title 24 “must be adopted for each new edition of Title 24.” (*Id.*, at p. 5; see, e.g., Staff Report to Sunnyvale City Council (Sept. 30, 2025) [“All local jurisdictions are required to hold public hearings and adopt these codes with any local amendments by January 1, 2026, or be mandated to accept by default the version adopted by the State.”]⁵; City Manager Report to Berkeley city Council (Oct. 28, 2025), at p. 8 [“The City Council could . . . take no action and allow the state mandated codes to take effect without local amendments specifically designed for Berkeley.”]⁶.)⁷

ii. *Even if City Modifications to the 2022 Fire Code Applied, the Project Meets City Requirements*

Even under the City’s modifications to the 2022 Fire Code, the lack of a second fire access does not result in an inconsistency with the City’s code and even if it did, there is no evidence that the lack of a second access results in a specific, adverse impact upon public health or safety.⁸

First, it is unclear that the City removed exceptions to Section D107.1, which had substantially the same language in the 2022 Code as it does in the 2025 Code. While the City amended Section D107.1 to include “multi family dwellings,” it did not amend Section D107.1.1 or D107.1.2. (Mun. Code, § 15.36.100.D.) Nor did the City alter Section 106.1, which applies

⁴ Available at <https://www.dgs.ca.gov/bsc/codes/local-amendments-to-building-standards---ordinances>.

⁵ Available at <https://sunnyvaleca.legistar.com/LegislationDetail.aspx?ID=7682689&GUID=33162351-432E-4616-996F-0D05C49AF7D2&FullText=1>.

⁶ Available at <https://berkeleyca.gov/sites/default/files/documents/2025-10-28%20Item%2017%20Adoption%20of%20Berkeley%20Building%20Codes%2C%20Including%20Local%20Amendments.pdf>.

⁷ Mr. Wolfe’s reliance on Assembly Bill 130 also is misplaced. There is no inconsistency with Assembly 130’s language and the fact that cities that failed to carry forward their amendments to state building codes by January 1, 2026, would be subject to the 2025 Building Code without local amendments.

⁸ The Applicant has a conversation with the neighboring property owner to ask about an easement to allow a second point of access. That owner stated that price would be very high (above fair market value) because it opposed the Project. Although a second access is not required, if the City decides the public good would be better served by the Project having a second access, it could take the necessary property through its eminent domain power, showing that the lack of a second access cannot be used to deny the Project or condition it on fewer units.

to multiple-family dwellings and allows up to 100 units with a single fire access road. The Fire Department interprets the City's amendments to the 2022 Code as leaving the exceptions intact.⁹ Second, even if the City deleted the exception provided by Fire Code section D107.1, the Project still complies with City Code. City Code section 15.36.110 allows the city manager, the fire chief, and the fire code official "to modify any of the provisions of the California Fire Code upon application in writing by the owner or lessee, or his or her duly authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the fire code; provided, that the spirit of the fire code shall be observed, public safety secured, and substantial justice done." (*Id.*, § 15.36.110.) The Fire Department, which reviewed all Project applications, found the Project met the spirit of the Fire Code when it determined the Project consistent with all applicable, objective standards. The Project meets this spirit because it complies with state codes and will install a robust fire sprinkler system.

Third, no commenter has provided a preponderance of evidence that the Project, by having one point of fire access, would result in a specific, quantifiable adverse impact that is not addressed by the Project's sprinkler system and other fire safety measures, including the installation of fire water lines, fire hydrants, and fire riser rooms. For example, commenters noted that the City amended the Fire Code because the City is "characterized by a narrow valley floor surrounded and intermingled with steep hill terrain, containing areas which are very susceptible to wildland fires" and other general findings about the City as a whole. (E.g., Letter from Mr. Wolfe (Jan. 27, 2026), quoting Mun. Code, § 15.36.030.A.) The Property, however, is essentially flat, surrounded by residential development, and served by straight, standard width streets. The Property is not in a mapped fire zone or an area designed as "wildland urban interface." While commenters relayed general fears and hypotheticals, they did not point to specifics that would require denial of the Project or approval conditioned on fewer units.

b. Dead End at Street B

Under the 2025 Fire Code, "[d]ead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved area for turning around fire apparatus." (24 Cal. Code Regs., § 503.2.5 (2025).) The Zari Consulting Group claims that the Project violates this California Fire Code section by providing no hammerhead or turnaround at the east end of Street B. But the Zari Consulting Group mismeasured Street B, which is not more than 150 feet in length from the end of the hammerhead return, which is the point from which the dead end is measured. (Response from the Fire Department to the Zari Consulting Group Report, part of the February 10, 2026, City Council Staff Report for the Spring Grove Project ("February Project Staff Report"), at pp. 263–264 of the pdf.) Accordingly, no turnaround is required.

Even if Street B was more than 150 feet, which it is not, the Fire Code states that the "fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur: [t]he building is equipped throughout with an approved automatic

---

⁹ The Fire Department's response to Zari Consulting Group's comments explains that its policy is to interpret any local amendment to the California Fire Code that does not specifically negate an exception in the Fire Code as leaving that exception in place.



sprinkler system.” (24 Cal. Code Regs., § 503.1.1.1.) The Project is so equipped. Further, the Fire Department reviewed the Project plans for compliance with applicable state and local Fire Codes and confirmed that turning radii are adequate throughout the Property. Thus, the dead end of Street B presents no adverse impact upon public health or safety and provides no reason to deny the Project or condition its approval on reduced density.

c. Fire Hose Reach

The Zari Consulting Group claims that the Project violates Fire Code by exceeding the allowable distance between access roads and a point on the exterior wall of Building 2. This claim is incorrect and ignores an applicable exception.

Under the 2025 California Fire Code, a “fire apparatus access road . . . shall extend to within 150 feet of . . . all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.” (24 Cal. Code Regs., § 503.1.1 (2025).) According to the Fire Department diagrams in its response to Zari Consulting Group, all exterior walls of Building 2 are accessible within 150 feet for fire hoses. (February Project Staff Report, at p. 266 of the pdf.) Regardless, the Fire Code offers an exception to this rule: “the fire code official is authorized to increase the dimension of 150 feet where . . . the building is equipped throughout with an approved automatic sprinkler system installed in accordance with [provisions of the Fire Code].” (24 Cal. Code Regs., § 503.1.1 (2025).) Such an approved automatic sprinkler system will be installed throughout the Project’s buildings. Additionally, the Fire Department has 200-foot fire hoses, removing any concern about hoses being too short to reach the rear of Building 2. Thus, the Fire Department had authority to and did approve the Project as meeting Fire Code. Moreover, there is no evidence that the need for an extension hose, assuming arguendo that such a need exists, creates a significant, quantifiable adverse impact on public health and safety.

d. Water Supply and Fire Flow

Zari Consulting Group suggests, but provides no evidence to support, that the municipal water system may lack sufficient flow to provide the Project with sufficient water for fire protection. The Fire Department has reviewed the Project and based knowledge of the municipal water system came to the opposite conclusion. Moreover, the CEQA addendum prepared for the Housing Element, which anticipated more units on the Property than the Project proposes, concluded that the City could meet the fire demand of such development. (City of St. Helena 2023 General Plan Update Addendum (Apr. 2023), at p. 75.)

e. Staging Constraints

Zari Consulting Group alleges that the Project presents a narrow layout that may create bottlenecks for emergency vehicles. The Fire Department, in its review of the Project, found no such issue. The Project meets the required widths and clearances established in the Fire Code. (See 24 Cal. Code Regs., §§ 503.2.1, 503.2.2 (2025).) In addition, the Project’s covenants, conditions, & restrictions (“CC&Rs”) will require homeowners to park in their garages and

Page 7

prohibit use of garages for storage. The Applicant has developed townhomes substantially similar to the homes proposed here throughout California and can attest to the fact that owners comply with the CC&Rs. Thus, there are no staging constraints.

f. Aerial Apparatus Access

The analysis by Zari Consulting Group lastly claims that the Project's plans do not demonstrate the required unobstructed width or vertical clearance for aerial ladder trucks. The Fire Department has verified that aerial equipment can access the third-story windows throughout the Project area. (See 24 Cal. Code Regs., § D105.1 (2025) [outlining aerial apparatus requirements]; see also February Project Staff Report, at p. 256 of the pdf [providing photographic evidence that the Fire Department's ladders can reach heights greater than what the Project proposes].) Further, to the extent the City wants to require that the information be added more clearly on the building permit plans, it can do so without denying the Project or conditioning its approval on reduced density.

g. Payment of an In-Lieu Fee for Water Neutrality

Several public commenters took issue with the Project's payment of an in-lieu fee to satisfy the City's Water Neutrality Policy. Paying the in-lieu fee, however, fulfills the City's requirements.

City Code allows for compliance with the Water Neutrality Policy through either (1) water supply and conservation projects; or (2) payment of an in-lieu fee. (Mun. Code, § 13.12.030.) By the Water Neutrality Policy's terms, the fee amount is "equivalent" to the cost of retrofitting properties with sufficient water-saving devices to be water neutral and the cost of staff time. (*Ibid.*) Here, the engineering department approved the fee for the Project, which will provide more than enough funding to reach water neutrality because the analysis assumes an occupancy of eight people per townhome, which greatly exceeds the likely occupancy. (See February Project Staff Report, at p. 13 [outlining water neutrality calculations].) There is no evidence that the City will not use the fee as stated, thereby ensuring the Project does not alter the City's water consumption. The Project will also be extremely water efficient, particularly compared to existing housing stock in the City. The Project therefore has no adverse impact on water neutrality, complies with the City's applicable, written standards, and would not cause a significant adverse impact on public health or safety.

h. Design Features

Commenters have also provided subjective critiques of the Project's aesthetics. These critiques are irrelevant to the decision before city council.

Under the HAA, the City must approve the Project if it "complies with applicable **objective** general plan, zoning, and subdivision standards and criteria" and does not present a specific, adverse impact on public health or safety. (Gov. Code, § 65589.5, subd. (j)(1) [emphasis added].) Under the HAA, "objective" means "involving no personal or subjective

judgment by a public official and being uniformly verifiable by reference to an external and uniform benchmark or criterion available and knowable by both the development applicant or proponent and the public official.” (*Id.*, subd. (h)(9).) Commenters’ aesthetic critiques do not relate to such objective standards and have no bearing on public health or safety, and are thus irrelevant to council’s decision. (See, e.g., Letter from the California Department of Housing and Community Development to the Town of Mill Valley (Nov. 2, 2022), at pp. 3–4 [examples of what qualifies as an “objective” standard];¹⁰ see generally *California Renters Legal Advocacy and Education Fund v. City of San Mateo* (2021) 68 Cal.App.5th 820 [explaining the meaning of “objective” under the HAA].)

i. Additional Commenter Concerns

Public commenters also criticized the Project’s SDBL waivers and environmental analysis. The City’s responses to comments have addressed these concerns. As the City noted, absent a finding of a specific adverse impact, the City is obliged to grant the Project’s waivers under the SDBL. (See Gov. Code, § 65915, subd. (e).) Neither the City’s issuance of a California Environmental Quality Act (“CEQA”) exemption for the Project, nor the City’s design review approval of the Project (including the waivers granted as part of that process) is currently before the Council. And none of the other commenter concerns rises to the level of a “specific, adverse impact upon public health or safety.”

**3. Penalties Under State Law if the City Denies the Project or Requires the Project to Have Fewer Units**

As explained above, the Project is consistent with all applicable, objective standards, and thus protected by the HAA. If the City denies the Project in violation of the HAA, it risks the following penalties:

- The City may be subject to an HAA enforcement suit by the applicant, a person who would be eligible to apply for residency in the housing development project, or a housing organization. (Gov. Code, § 65589.5, subd. (k)(1)(A)(i).)
  - o Senate Bill (“SB”) 808 has recently accelerated the timeline for judicial review of a housing development permit denial. Now, once a petitioner files suit to contest the denial, the court clerk must set a hearing for review of the petition no later than 45 calendar days from the date of filing. The court must render its decision no later than: (1) 30 calendar days after the matter is submitted; or (2) 75 calendar days after the petition is filed, whichever is earlier. (Code Civ. Proc., § 1094.9, subd. (d).)
- A reviewing court must issue an order compelling the city to comply within a time period not to exceed 60 days, and that order can include an order that the city “take

¹⁰ Available at <https://www.hcd.ca.gov/sites/default/files/docs/planning-and-community/HAU/mill-valley-TA-110222.pdf>.

action on the housing development project.” (Gov. Code, § 65589.5, subd. (k)(1)(A)(ii).)

- The court may also issue an order directing the city to “approve the housing development project” if the court finds that the city acted in “bad faith” when it disapproved or conditionally approved the housing development in violation of the HAA. (Gov. Code, § 65589.5, subd. (k)(1)(A)(ii).)
- The court must award reasonable attorney’s fees and costs of suit to the plaintiffs/applicants. (Gov. Code, § 65589.5, subd. (k)(1)(A)(ii).) Recently, Assembly Bill (“AB”) 712 confirmed that this provision is mandatory and expanded coverage beyond just HAA claims so that mandatory fee recovery applies to all claims asserting rights under broadly defined housing reform laws. (Gov. Code, § 65914.2, subd. (b)(1).)
- If the city fails to comply with the court’s order, then the court “shall impose” upon the city fines in a minimum amount of \$10,000 per housing unit in the housing development project. Because the Project consists of 41 units, the total amount of fines could be a minimum of **\$410,000**. In determining the amount of this fine, the court must consider the city’s progress in attaining its Regional Housing Needs Allocation (“RHNA”) numbers and any prior violations of the HAA. (Gov. Code, § 65589.5, subd. (k)(1)(B).)
- If the City were to persist in its denial despite a court order, then the City risks the court finding that the city acted in “bad faith” by failing to carry out the court’s order within the time period prescribed by the court, at which point the court “shall multiply” the amount of the fine identified above by a factor of five. Assuming a court were to impose the minimum of \$10,000 per housing unit for a total of \$410,000, the fine against the city under these circumstances could amount to **\$2,050,000**. (Gov. Code, § 65589.5, subd. (l).)
- Pursuant to recent amendments to the HAA, if a court has previously found that the city violated the HAA within the “same planning period,”¹¹ then the court also “shall multiply” these fines “by an additional factor” for each previous violation. (Gov. Code, § 65589.5, subd. (l).)

Should the City violate state housing laws, the financial risks are large. For example, the City of Berkeley was ordered to pay \$1.4 million to reimburse a developer for its attorneys’ fees and 2.6 million in fines when a judge determined it violated the HAA. (Frances Dinkelspiel, *Berkeley must pay \$4M after illegally blocking housing project at Ohlone shellmound site*,

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¹¹ This phrase is not defined in the HAA. Presumably, this phrase is a reference to the Housing Element cycle, which is set to expire in 2031 for the City of St. Helena.



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Berkeleyside (Feb. 16, 2024).¹²) The City of La Cañada Flintridge also received an adverse ruling on claims under the HAA and had to pay the developer’s attorneys’ fees and costs. That city contemplated appealing the adverse decision but opted not to do so when ordered to post a \$14 million bond to cover the developer’s potential losses from litigation delay. (Jeff Collins, *La Cañada Flintridge Abandons ‘Builder’s Remedy’ Appeal*, Pasadena Star-News (Mar. 7, 2025).¹³) In addition to financial penalties, the City also would still have to approve the Project.

In sum, the California Legislature has sought to discourage local jurisdictions from disapproving housing, particularly housing identified to meet that jurisdiction’s RHNA in its Housing Element.

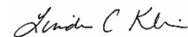
#### 4. Conclusion

For the foregoing reasons, there is no basis to deny the Project or to condition Project approval on reducing units. There is no evidence showing that the Project would have a specific adverse impact on public health or safety if approved with the conditions the City has already proposed.¹⁴ The City can avoid steep penalties by voting to approve the Project.

Finally, it should not be lost that the Project will help to meet the pressing need for housing—including affordable housing—in the City. We therefore urge City Council to approve the Project.

Sincerely,

Cox, Castle & Nicholson LLP



Linda C. Klein

Cc: Kelso Barnett

¹² Available at [https://www.berkeleyside.org/2024/02/16/court-ruling-1900-fourth-street#:~:text=new%20window\)%20Facebook-,1900%20Fourth%20St.,used%20to%20build%20affordable%20housing.](https://www.berkeleyside.org/2024/02/16/court-ruling-1900-fourth-street#:~:text=new%20window)%20Facebook-,1900%20Fourth%20St.,used%20to%20build%20affordable%20housing.)

¹³ Available at <https://www.pasadenastarnews.com/2025/03/05/la-canada-flintridge-abandons-builders-remedy-appeal/>.

¹⁴ These conditions already including the requirement for “NFPA 13 fire sprinklers,” compliance with the City’s Fire Code, and one-hour minimum fire resistant construction in certain areas.

**From:** [Duran Muniz](#)  
**To:** [City Clerk](#); [Public Comment](#)  
**Cc:** [Joseph P. Zari, PE](#); [Tamara Sorensen](#); [Cameron Crebs](#)  
**Subject:** Re: Spring Grove - Plan Review Report  
**Date:** Tuesday, February 10, 2026 11:17:55 AM  
**Attachments:** [Spring Grove - Wildland Fire Analysis - 02.10.2026.pdf](#)

---

Dear City Staff,

We are submitting the attached **Wildland Fire Analysis** for the proposed Spring Grove development located at 1447, 1505, and 1515 Spring Street in St. Helena, CA.

This analysis includes:

- A wildland hazard assessment of the surrounding area
- An emergency evacuation evaluation for the proposed development
- Case studies and examples of regional traffic and evacuation performance from other properties and emergency events throughout California.

Please feel free to contact me with any questions.

Thank you,

Duran Muniz | Project Manager  
**Zari Consulting Group, Inc.**  
Fire Protection Engineers | Building Code Experts

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**From:** Duran Muniz <[duan.muniz@zaricode.com](mailto:duan.muniz@zaricode.com)>  
**Sent:** Monday, February 9, 2026 2:18 PM

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**Cc:** Joseph P. Zari, PE <joseph.zari@zaricode.com>; Tamara Sorensen  
<tamara@vanguardproperties.com>; Cameron Crebs <cam@peg-inc.net>  
**Subject:** Spring Grove - Plan Review Report

We are submitting the attached Third-Party Plan Review for the proposed Spring Grove development located at 1447, 1505, and 1515 Spring Street in St. Helena, CA. This review evaluates the proposed site layout, infrastructure, and overall community design as currently submitted.

The report includes an assessment of the fire hazard history of the area and evaluates the required fire department access, including the need for a secondary entrance for a project of this size.

It also identifies several items that do not meet current code requirements, including:

- Non-compliant dead-end fire access conditions exceeding allowable lengths without a turnaround.
- Fire hose reach and travel distances that exceed the 150-foot maximum permitted by code.

As outlined in the report, there are multiple areas where the proposed design does not meet the California Fire Code and applicable NFPA standards, and where modifications will be required. In addition to the identified code deficiencies, the report emphasizes that, given the high-hazard wildland-urban interface conditions, the fire history in St. Helena, and the egress constraints of the site, the development should be evaluated using a more conservative approach. Meeting only the bare minimum code requirements would not adequately address the elevated risks associated with this location.

I will follow this submittal with a **Wildland Fire Analysis** for the proposed site and the surrounding St. Helena area tomorrow morning.

Please feel free to reach out with any questions.

Thank you,

Duran Muniz | Project Manager  
**Zari Consulting Group, Inc.**  
Fire Protection Engineers | Building Code Experts

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## WILDLAND FIRE ANALYSIS PHASE 3

### Spring Grove

1447, 1505, and 1515 Spring Street  
St. Helena, CA



February 10, 2026  
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**Zari Consulting Group, Inc** | Fire Protection Engineers | Building Code Experts  
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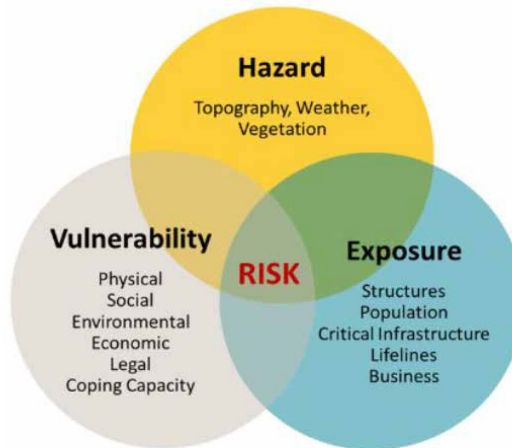
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## 1. INTRODUCTION

Zari Consulting Group, Inc. (ZCG) has been retained to perform a detailed Wildland Fire Analysis for the proposed Spring Grove residential development located at 1447, 1505, and 1515 Spring Street in St. Helena. The primary objective of this analysis is to evaluate the wildfire hazards associated with the site's specific location, its local topography, and its existing vegetative fuels. This report serves as a fire protection engineering assessment, providing evidence-based recommendations intended to mitigate the risk of structure ignition and facilitate safe, efficient emergency operations in an area recognized as one of the most fire-prone regions in California.

This report utilizes the 2022 edition of **NFPA 1140, Standard for Wildland Fire Protection**, which serves as the primary consolidated national standard for fire management and infrastructure protection. Furthermore, this review incorporates the **St. Helena Municipal Code (SHMC) Chapter 15.36**, which adopts and amends the California Fire Code to address the unique geographical, climatic, and topographical challenges specific to the St. Helena area. Specifically, **SHMC 15.36.010** provides foundational findings stating that response time and aggressive on-site fire mitigation, including the use of fire-resistant materials, and internal sprinklers, are critical to public health and safety.

As fire protection engineers, we emphasize that code compliance is the absolute minimum standard. However, in high-hazard zones, good engineering practices dictate that a more stringent approach to community safety is required. This analysis is built upon the "two-pronged approach" identified by the State Fire Marshal: aggressive fuel modification combined with exterior exposure protection. This report factors in state-wide data identifying California as having the second-largest number of small communities with limited evacuation routes in the nation. By addressing the property as a whole, this report seeks to provide a guideline for future Napa County developments.



This analysis integrates the latest CAL FIRE Local Responsibility Area (LRA) Fire Hazard Severity Zone (FHSZ) maps. As of February 2025, CAL FIRE has reclassified significant portions of the Napa Valley floor between St. Helena and Calistoga as a Very High Wildfire Hazard Severity Zone. Data from First Street (Fire Factor) indicates that St. Helena possesses a "Major" risk of wildfire, with 99% of all properties (approximately 2304 properties) having a significant risk of being affected by wildfire over the next 30 years. This report also factors in findings from StreetLight Data which highlights the extreme vulnerability of rural communities with limited escape routes. Adhering only to minimum state standards in a region where fire behavior frequently overwhelms standard suppression resources is considered an operational risk to both life and property.



## 2. PROJECT DESCRIPTION

### a) Existing Conditions

The project site currently consists of three parcels totaling approximately 2.52 acres of land that has historically served as a lower-density residential and agricultural buffer. Currently, the site is developed with older single-family residences and associated wood-frame outbuildings. The existing environment is defined by a dense over-canopy of mature trees, unmaintained shrubbery, and a creek that runs along the southern boundary.

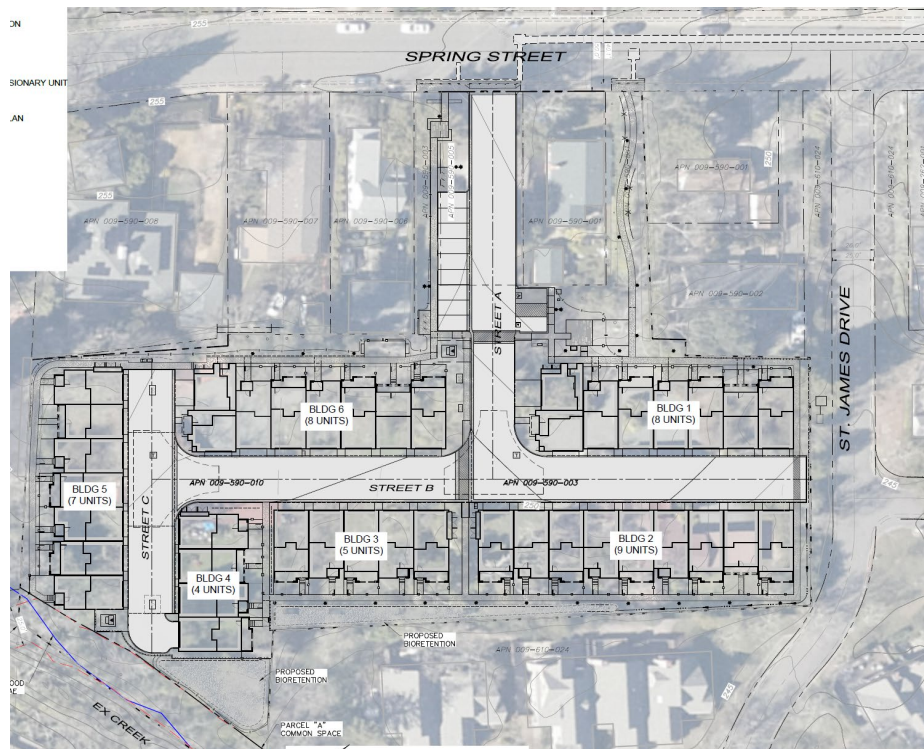
While the topography at the immediate street level is relatively flat, the site is situated at the absolute toe of the western foothills of the Mayacamas Mountains. This location acts as a natural catchment area for wind-driven embers and convective heat descending from the forested slopes above. Existing fuel conditions reflect decades of growth, where accumulated surface litter and "ladder fuels" (shrubs and low branches that allow ground fires to climb into the canopy) have created an environment prone to high-intensity burning. The current vegetation includes a mix of invasive annual grasses and aging hardwood species that have not been subjected to a regular maintenance, resulting in dense vegetation that provides high-continuity fuels for a fire front.



## b) Proposed Construction

The proposed project involves the demolition of the existing residences to clear the way for a high-density modern subdivision of 41 solar-powered, all-electric townhome-style condominiums (Buildings 1–6). This shift from three low-density homes to 41 high-density units represents a nearly 13-fold increase in the life load and an increase in the concentrated fuel load of the property. The design introduces modern architectural features such as "paseos" (narrow pedestrian corridors) and closely grouped multi-unit blocks that require specific fire-protection features.

The transition to all-electric living is a positive step for energy efficiency, but the concentration of solar panels and potentially on-site energy storage systems (ESS) adds a layer of complexity for fire department suppression efforts. Solar arrays can maintain dangerous voltages even after main power is cut, and high-density wood-frame construction combined with localized electrical hazards can lead to rapid fire growth scenarios. The close proximity of these buildings to one another creates a heightened risk of house to house fire spread via embers of plastic, fabric, and building materials. In a high-wind event, the lack of separation between the six building groups can create a fire where it spreads from structure to structure through radiant heat and ember intrusion. This density (16.3 units/acre) essentially creates an fuel load within a wildland area, requiring the entire site to function as a singular unit.



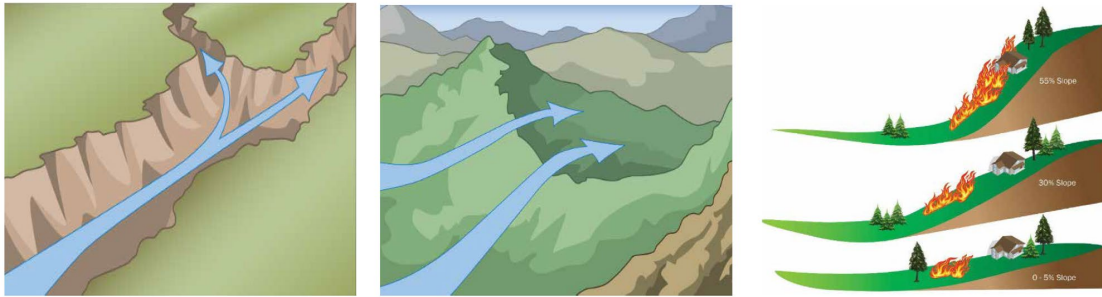
### c) Construction and Infrastructure

The framework for the Spring Grove development is defined by its architectural features and the egress constraints of its high-density site plan. In a Very High Fire Hazard Severity Zone, the proposed construction materials and infrastructure determines the community fire protection features. The following parameters detail the proposed construction type, expected population density, and the infrastructure limitations that impact both fire mitigation and emergency response.

- **Construction Type:** Type V-B (wood-frame, non-rated). This construction type relies on combustible structural members (2x4 or 2x6 framing). Without fire-rated exterior assemblies, the subdivision is vulnerable to external radiant heat and ember storms. In a Wildland Urban Interface (WUI) environment, Type V-B construction requires the highest level of external hardening to survive a wildfire passage. The use of wood-based structural elements means that once an ignition occurs, the structure itself becomes a fuel source for its neighbors.
- **Occupancy:** Group R-2 (Multi-family Residential).
- **Estimated Population:** Based on unit configurations of 3 to 4 bedrooms per unit, the site is projected to house between 112 and 143 residents at full occupancy. This population density increases the life load on the site's egress infrastructure. During an emergency, over 100 people and dozens of vehicles would be attempting to exit via a single road while fire engines are attempting to stage and deploy.
- **Infrastructure Constraints:** The site utilizes a restrictive "flag-pole" layout. A single 26-foot-wide access drive (Street A) provides the only ingress and egress for the entire development. This configuration creates a single point of failure for both evacuation and emergency response, where a single incident (fallen tree, blocked vehicle, or fire event at the entrance) could effectively isolate the entire community from emergency services. Furthermore, the 93,518 square feet of building area requires a robust water supply that may exceed the capacity of a single-ended main, potentially leading to pressure drops when multiple hydrants are opened simultaneously.

### 3. WILDFIRE ASSESSMENT

Common topographic fire hazards. (Left) Creeks can collect dry debris, increase heat, and funnel superheated air. (Middle) Wind can be directed over mountains. (Right) The steepness of a slope can significantly influence fire spread behavior. Images adapted from FEMA publications (2023).



#### a) Vegetation Density

The vegetation in the St. Helena area consists of mixed-severity fire zones. According to recent satellite data (LiDAR) and regional surveys, the density profile in these high-risk zones typically breaks down as 57% grass (under 1 foot), 14% shrubs (1–15 feet), and 29% trees (over 15 feet).

- **Chaparral (Dense Shrublands):** Present on the nearby hillsides, characterized by Manzanita and Chamise (1–15 ft tall). These are highly volatile fuels that form continuous, interwoven stands. These species contain flammable resins and oils that allow them to burn with extreme intensity even when green. By age 50, hard chaparral can consist of up to 50% dead, dry, and highly flammable material. This old growth chaparral is often described by firefighters as highly flammable due to its ability to generate 30-foot flames in moderate winds.
- **Hardwood Forests/Oak Woodlands:** Species such as California bay, madrone, and oak predominate. Due to decades of fire suppression, these forests are often 5–6 times denser than historic conditions. This overcrowding leads to excessive competition for water, higher tree mortality (aggravated by drought and beetle infestations), and a dangerous increase in surface fuels (leaf litter and downed branches).
- **Ladder Fuels:** LiDAR mapping focusing on the 1–4 meter zone indicates a significant presence of ladder fuels such as shrubs, vines, and lower branches that allow ground-level fires to climb into the tree canopy. This transitions a manageable surface fire into a high-intensity crown fire that is difficult to suppress from the ground and produces continuous ember hazards.
- **Riparian Fire Wick:** The southern creek setback acts as a natural fuel wick. Per **SHMC 15.36.010(A)**, the city finds that vegetation is a primary factor contributing to fire potential. Contrary to some expectations, research from 2000–2018 shows that most structures destroyed in California wildfires were located in hardwood forests, woodlands, or shrublands rather than coniferous forests. The riparian zone provides a continuous, unmaintained fuel path that leads fire directly to the foundations of Buildings 1, 2, and 6.



## b) Climate and Environmental

St. Helena experiences a Mediterranean climate characterized by hot, dry summers and low fuel moisture. Data from **First Street** indicates a projected temperature increase of 1 to 4 degrees F over the next 30 years. These rising temperatures increase the rate of evaporation and the "Vapor Pressure Deficit" (VPD), causing soil and vegetation to dry more quickly and remain flammable for longer periods throughout the year.

Combined with "Diablo Winds" (hot, dry northeasterly winds), these conditions accelerate fire spread at rates that overwhelm standard suppression resources. Recent history shows that above-average precipitation often leads to abnormal vegetation growth, resulting in even higher fuel loads during subsequent dry seasons (notably seen in 2017, 2018, and 2020). This cycle is a defining feature of the Napa Valley fire environment, making current fuel conditions highly deceptive. During these wind events, relative humidity can drop into the single digits, making every leaf and mulch bed on the property a potential ignition point for wind-blown embers.

## c) Topography and Slope

The site's position at the base of a significant western slope is a major risk factor. Fire travels significantly faster uphill due to pre-heating of fuels but, nocturnal drainage flow of dry, cold air can also push fires downhill toward the valley floor with enhanced speed. **NFPA 1140 Section 24.3.1.1** requires engineers to document the structure's location in relation to topographical features like natural chimneys, ridges, saddles, or steep draws.

The Mayacamas Mountains to the west of the site act as a massive heat-sink and wind-funnel. During a wildfire, these slopes project radiant heat and wind-driven embers directly toward the Spring Grove site. Because fire effectively doubles in speed for every 10-degree increase in slope, any fire starting on the ridges above St. Helena will reach the city limits in a fraction of the time anticipated on level ground. The project site sits in a natural catchment area where these topographical heat-flow patterns converge. This positioning means that structures are exposed to the maximum intensity of fire coming off the hills, as flames can reach their greatest length just as they hit the level ground of the valley floor.



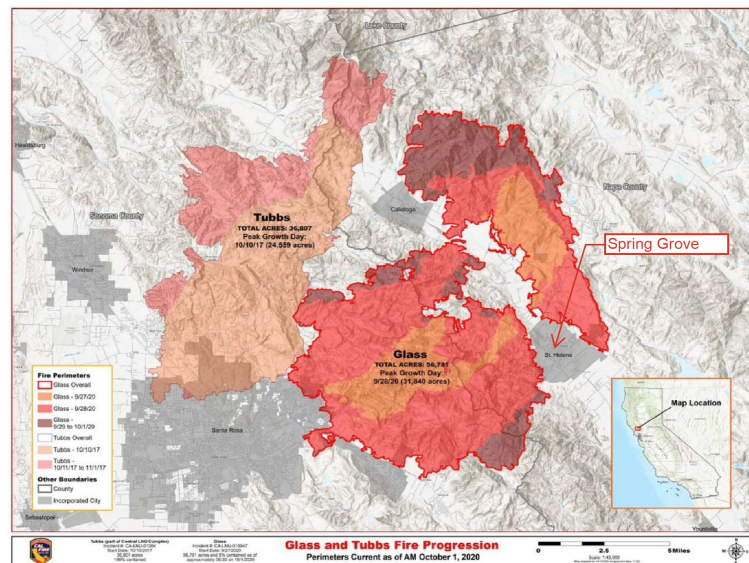
**d) Wind Effects**

Wind is the most influential variable in fire events in the Napa Valley. Historically, wind-driven embers have been documented traveling over 1 mile ahead of the actual fire front, igniting homes before the main fire front arrives. In a high-density development like Spring Grove, the narrow spacing between the six building groups can create a wind-tunnel or Venturi effect.

This accelerates the movement of embers through the community, forcing them into building crevices, vents, and eaves. This structure-to-structure ignition, where the heat from one burning building ignites its neighbor, is the leading cause of structure loss in urban WUI disasters. Without substantial separation or aggressive hardening, the 41 units act as a single, massive fuel block. Additionally, wind patterns in the valley can shift rapidly, making evacuation routes that appear safe at the onset of a fire suddenly untenable due to thick smoke and blowing debris.

**e) Fire History**

Overall, St. Helena is categorized as a high hazard area for wildfires. The City of St. Helena "Fire Resilience" website explicitly states that "residents live and work in a fire-prone area." According to Cal Fire Hazard Severity Zone map, the high severity zone is located 0.5 miles from the proposed Spring Grove site. Recent history confirms that Napa County remains under constant threat from wildfire ignitions, even during years with high rainfall. Modern fire events are becoming increasingly destructive due to urban expansion into wildland areas, with the 2020 fire season alone burning over 200,000 acres in Napa County alone.



**Fires in Napa County:**

- **2017 Tubbs Fire:** Demonstrated the "urban conflagration" effect, where fires starting in wildlands penetrated city limits and destroyed homes in "lower risk" urban areas through massive ember storms in neighboring Sonoma County. 36,807 acres (57.5 sq. miles)
- **2020 Glass Fire:** Burned 40,000+ acres, causing destruction to wineries, resorts (such as Meadowood), and 308 homes in Napa County. It demonstrated that fires can jump the Napa River and Hwy 29 with ease, directly threatening the core of St. Helena.

- **2025 Berry Fire:** Occurred in the Knoxville Recreation Area. Managed by the CAL FIRE Sonoma-Lake-Napa Unit, it serves as a contemporary reminder of persistent ignition potential and the continuous demand on regional fire resources.
- **2025 Pickett Fire:** Napa County. The fire spread rapidly through terrain fueled dry vegetation typical in this area. Reaching a final size of 6,819 acres (10.3 sq. miles)
- **2017 North Bay Fires (Atlas & Nuns):** Part of a historic "Firestorm" that destroyed over 1,200 structures in Napa County alone. The Nuns fire burned largely in the Mayacamas Mountains west of the site.
- **2020 LNU Lightning Complex:** The largest fire in Napa County history, burning approximately 165,000 acres within the county (about one-third of its total land area). It destroyed over 522 structures in Napa County, proving that lightning-caused conflagrations can overwhelm urban centers.
- **1964 Hanley Fire:** A historic precursor following a nearly identical path to modern fires, confirming a multi-generational fire cycle driven by the region's unique geography.

Modern fires in Napa County are documented as more destructive than similarly sized historical fires. For example, the 2020 Glass Fire caused significantly more structural damage than historical events of similar acreage due to increased density in the Wildland Urban Interface (WUI). This trend highlights the inadequacy of traditional buffer zones when faced with modern climate stressors.

#### f) Adjacent Properties

The site is surrounded by residential properties and open land with heavy fuel loads. The proposed density of 16.3 units/acre is significantly higher than the surrounding single-family dwellings, creating a localized high-intensity fuel source. Data from "Wildfire Risk to Communities" identifies St. Helena as having high susceptibility due to the wildfire likelihood and populated areas.

Per SHMC 15.36.100, Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3. Reference sections below.

D. Section D107.1, One or two-family dwelling residential developments, California Fire Code 2022, Appendix B, is amended to read as follows:

Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.

#### D104.3 Remoteness.

Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

[2025 California Fire Code, Title 24, Part 9 / APPENDIX D FIRE APPARATUS ACCESS ROADS / SECTION D104—COMMERCIAL AND INDUSTRIAL DEVELOPMENTS / D104.3](#)

If a fire starts in the creek or an adjacent property, the lack of significant separation between the townhome blocks increases the likelihood that the entire 41-unit community will be involved simultaneously. This density turns a single structure fire into a multi-building conflagration that can quickly exhaust local fire department resources. Under NIST Scenario 3 (SSD less than 25 feet), adjacent structure ignition becomes the primary driver of structure loss, far outweighing the threat of direct wildland flame contact. The physical proximity of Building 5 to the southern boundary makes it a primary target for exposure from the creek corridor.





**b) City of St. Helena Evacuation Protocols**

As demonstrated during the **June 19, 2024, Citywide Evacuation Drill**, St. Helena utilizes specific life-safety markers that the Spring Grove project must integrate:

- **Hi-Lo Sirens:** In an emergency, the Police Department will utilize "Hi-Lo" sirens to signal an immediate evacuation order. The narrow 26-foot throat of Street A must remain clear of all obstructions to allow these emergency vehicles to navigate while residents are attempting to exit.
- **Evacuation Tags:** Residents must place designated tags on their homes or doors to signal that the premises have been cleared. This ensures that first responders do not waste critical minutes performing "primary searches" of structures while a fire front is approaching.
- **Evacuation Meeting Points:** Residents of the Spring Grove development (located West of Main Street) are directed to evacuate to St. Helena Primary School at 1701 Grayson Avenue. The evacuation route involves navigating Spring Street to Main Street, a corridor that is historically prone to extreme congestion during regional events. The project must have a formal community evacuation plan that coordinates these actions for the additional population.

**c) Site Access (NFPA 1140 & SHMC 15.36.100)**

Good engineering practice and **NFPA 1140 Table 11.1.4.1(a)** mandate that any residential development exceeding 30 households must be equipped with at least two separate fire access routes. The St. Helena municipal code specifically amended the CFC to state: **SHMC 15.36.100, Developments of one, two-family or multi family dwellings where the number of dwelling units exceeds thirty (30) shall be provided with two separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3.**

Given the Very High Fire Hazard Severity Zone designation of the Napa Valley floor, a secondary access point is a non-negotiable life-safety requirement. A "remote" access point is defined as being located a distance away from the primary entrance equal to at least half the diagonal dimension of the property. The lack of a secondary exit is the single greatest life-safety liability in the current proposal.



**(Left)** Schematic illustrating common life safety concerns and stresses affecting the general public, first responders, and the overall transportation network during major wildfire events. **(Right)** Diagram illustrating the concept of providing separate and independent egress routes from a neighborhood to improve evacuation safety during wildfire conditions.

**d) Staging and Evacuation**

During a rapid-fire event, the Fire Department must stage apparatus (engines and aerial trucks) to perform structure protection while residents are simultaneously attempting to evacuate. The lack of on-site staging areas in the current proposal means that a fire truck parked on Street B to protect Building 1 would physically block the only evacuation path for residents in Buildings 2 through 6. This creates a trap where emergency response activity directly inhibits the life-safety of the residents. Strategic planning requires that access roads be wide enough to allow for apparatus flow and simultaneous resident egress.

## 5. REGIONAL TRAFFIC AND EVACUATION ANALYSIS

A review of regional data indicates that the Spring Grove development's egress challenges are reflective of a broader, systemic risk within California's WUI communities.

**National and State Context:** According to traffic analytics from StreetLight Data, California contains 14 of the top 100 communities in the United States with the most limited emergency escape routes. This analysis, which focused on towns with populations under 40,000, highlights that St. Helena is part of a high-risk group where the "Paradise" scenario, residents being trapped or forced to abandon vehicles, is a statistically significant possibility. The 2018 Camp Fire, which killed 86 people, remains the primary reference point for how fast-moving blazes can overwhelm rural towns with limited exit capacity (ATTACHMENT 1).

**St. Helena Specific Constraints:** St. Helena currently supports approximately 4000 housing units (ATTACHMENT 3). Local safety reviews have emphasized the need for a cumulative exit evacuation analysis that accounts for current and projected populations. The addition of 41 high-density units at Spring Grove increases the pressure on a road network that is already classified as having a high fire severity risk. Growth management in this context is a "public health and safety matter" because the existing evacuation infrastructure has finite capacity. Without a cumulative analysis, the city risks creating an environment where regional gridlock prevents residents from even reaching the main arterial roads like Highway 29.

**Operational Risk and Case Studies:** The 2025 Pacific Palisades "Evacuation Disaster" provides a modern parallel to the risks inherent at Spring Grove. In that incident, despite years of requests for detailed fire preparation plans, the community experienced total gridlock. Residents were stuck in vehicles as flames approach nearby, ultimately leading to an order for people to abandon their cars on Sunset Boulevard. The use of bulldozers to clear abandoned cars to make way for emergency crews demonstrates that a single-exit or single-road strategy (like Street A) can result in a total failure of both life-safety and suppression efforts. This case highlights that "orderly" evacuation is often a fallacy in rapid-onset events where panicked residents abandon vehicles when traffic stops moving (ATTACHMENT 9).

**Evacuation Behavioral Modeling and Bottlenecking:** Research from the University of California, Berkeley Institute of Transportation Studies (ATTACHMENT 2) indicates that wildfire evacuation decision-making and departure timing are complex variables. Modeling suggests that infrastructure limitations often lead to "bottlenecking" where the physical capacity of the road cannot handle the simultaneous departure of even a small percentage of the population. Specifically:

- **Infrastructure Capacity:** Infrastructure capacity is often the primary bottleneck, regardless of how quickly residents receive alerts.
- **Phased Evacuation Challenges:** While "phased" evacuations can theoretically reduce peak demand, they are often impossible to coordinate during high-intensity fires that threaten multiple zones simultaneously.
- **Resident Behavior:** Data suggests that joint-choice making and resident panic can lead to non-linear departure times, causing sudden surges in traffic that the existing road network cannot absorb.

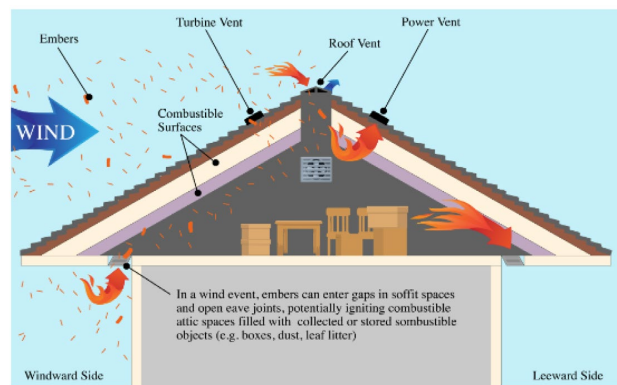
The Spring Grove project, by adding 41 units with only one exit point, essentially creates a localized bottleneck that feeds into a larger, regional bottleneck, significantly increasing the risk of entrapment during a fire event.

## 6. CONSTRUCTION IN WILDFIRE PRONE AREAS

Regulation of structures in Wildland Urban Interface (WUI) zones focuses on creating a "defensible structure" that can survive the passage of a fire front without direct human intervention. Per the latest data, homes built under California's Chapter 7A WUI codes are three times more likely to survive than older structures. The Spring Grove project shall consider these standards not just as a code requirement, but as a core design philosophy.

### a) Construction

The Spring Grove subdivision can improve structural hardening to withstand intense ember storms and radiant heat by incorporating the following elements:



- **Roofing:** Constructed with Class A fire-rated materials, such as composite shingles, metal, clay, or concrete tile. Class A roofing is the first line of defense against overhead ember ignition. Any roof-mounted solar arrays must be installed such that they do not create "debris traps" where leaves and twigs can collect under the panels.
- **Ember-Resistant Vents:** Attic, eave, and crawlspace vents should demonstrate the ability to resist the intrusion of flame and embers. Vents must be screened with corrosion-resistant, noncombustible wire mesh with openings not to exceed 1/8 inch, complying with **ASTM E2886**. This specific mesh size is proven to block up to 80% of hazardous firebrands while still allowing necessary airflow.
- **Exterior Siding and Walls:** Exterior vertical walls of noncombustible or ignition-resistant materials such as fiber-cement siding, brick, stucco, or masonry. Wood-based siding is highly discouraged and at minimum should meet strict 1-hour fire ratings if utilized. The first 6 inches of vertical space above any horizontal surface (decks, soil) should be a noncombustible material to prevent wicking fire into the wall cavity.
- **Windows and Doors:** Exterior windows and glass within doors should be dual-pane tempered glass. This resists the intense radiant heat that causes single-pane glass to shatter, which would otherwise allow embers to enter and ignite the home's interior. Exterior doors must be solid-core or fire-rated for at least 20 minutes.
- **Decks and Overhangs:** Walking surfaces of decks and porches must be constructed of noncombustible materials. All eaves and overhanging projections must be "boxed-in" (soffit) with ignition-resistant materials to prevent embers from finding weak areas in the roof-to-wall junction. Wood decks attached to homes act as "fuses," carrying ground fire directly to the structure's siding and eaves.



**b) NIST Hazard Mitigation Methodology (HMM)**

The National Institute of Standards and Technology (NIST) is an agency of the U.S. Department of Commerce. NIST's Engineering Laboratory, specifically its Fire Research Division, provides the scientific basis for fire codes and standards through advanced research on Wildland Urban Interface (WUI) fire behavior. NIST research (specifically Technical Note 2205) indicates that in high-density developments like Spring Grove, the primary fire threat transitions from wildland embers to adjacent structure exposure.

- **High Structure Density Risk:** NIST findings state that "one structure ignition leads to large losses in high-density communities. Spacing between homes affects community survivability. In this 41-unit configuration, complete structure and parcel hardening are essential for the survivability of the entire community. If Building 3 ignites, its radiant heat will likely ignite Building 4 unless both are fully hardened.
- **Projections and Appendages:** Fences, patio covers, and other attached structures must meet 1-hour fire ratings. Noncombustible "breaks" must be installed in any continuous fencing that connects buildings to one another. Wood-to-wood contact between fences and homes shall be evaluated and approved.

## 7. WILDFIRE MITIGATION

### a) Defensible Space

Per **NFPA 1140 Section 26.1** and **SHMC 15.36.080**, a mandatory 100-foot defensible space is required, focusing on the "Home Ignition Zone" (HIZ). Priority must be given to the area 100 to 200 feet from the structures:



1. **Zone 0 (The Ember-Resistant Zone, 0–5 feet):** This is the most critical zone. It must be entirely noncombustible (rock, stone, or concrete). No mulch, firewood, furniture, woody shrubs, or overhanging branches are permitted. This zone prevents smoldering material from igniting the building at the sill plate. Any vegetation in this zone must be limited to sparse, low-growing succulents with extreme water content.
2. **Zone 1 (The Lean, Clean, and Green Zone, 5–30 feet):** Remove all dead plants, pine needles, and surface litter. Prune trees to a height of 6–10 feet from the ground to eliminate "ladder fuels." Ensure horizontal separation between tree crowns (minimum 10 feet) to prevent fire spread across the canopy.
3. **Zone 2 (The Reduced Fuel Zone, 30–100 feet):** Create vertical and horizontal spacing between shrubs and trees. Mow grass to a maximum height of 4 inches to reduce flame length and intensity. This zone serves to slow the fire down before it reaches the structures.

### b) Vegetation and Maintenance

A formal Vegetation Management Plan (VMP) must be a condition of approval. Per NFPA 1140 Section 26.2.2, all live vegetation must be maintained annually before the start of the summer fire season. Maintenance must include the removal of ladder fuels to preclude ground fires from spreading into the tree canopy. The developer must comply with the City's annual Weed Abatement Program to reduce community-wide risk. The City Manager's "Fire Resilience" strategy emphasizes that "each person is responsible for making their own property as fire resistant as possible."



### c) Irrigation Strategies

A high-efficiency, permanent, and automated irrigation system must be maintained for all Zone 1 vegetation. Research indicates that keeping landscape moisture content high significantly reduces the probability of spot-fire ignition from flying embers. The system should be designed to allow the Fire Department to pre-wet the perimeter during a high-wind event and must remain operational even if municipal power is lost through the use of backup power or gravity-fed systems. Smart controllers that shut off during high-wind events to preserve pressure should be avoided in favor of manual overrides for fire staff.

### d) Relative Water Content (RWC)

We recommend the exclusive use of "fire-wise" plants. Species with high Relative Water Content (RWC) do not contain flammable resins, oils, or waxes. Deciduous trees (Oaks, Maples) are preferred over coniferous species (Pines, Junipers), which act as standing fuel. A formal list of approved species with high RWC must be incorporated into the project's final landscape design to ensure compatibility with the Wildland Urban Interface (WUI) environment. Non-native, highly flammable species like Eucalyptus or Acacia must be strictly prohibited.

**e) Soil Maintenance**

Foundations must be kept clear of excessive organic mulch or surface litter. In Wildland Urban Interface (WUI) fires, structures are often lost because organic mulch smolders for hours after the fire front passes, eventually igniting the wood-frame structure. Noncombustible soil covers (gravel, rock, or bare soil) are required within the first 5 feet of each building. Additionally, soil stabilization is required to prevent post-fire erosion and debris flow from the western slopes, which can damage structures after the fire is extinguished.

**f) Tank and Hydrant Systems**

A formal fire water analysis is required per **SHMC 15.36.090**. The system must confirm that the GPM and pressure are sufficient for a high-density Type V-B subdivision.

- **Hydrant Staging:** Per **NFPA 1140 Section 15.3**, fire hydrants must be placed so apparatus can stage and connect without blocking the only access road.
- **Bollard Protection:** Mandatory for the hydrant on Street C to ensure that the water supply is not disabled by an accidental vehicle impact during an evacuation.
- **Main Looping:** We recommend looping the internal water mains to ensure a redundant supply to every building. A dead-end main on Street B could lead to pressure loss if the single supply line is compromised.

**g) Evacuation Road**

The single access road (Street A) is a "single point of failure" and a primary life-safety concern.

- **Capacity:** 41 high-density units represent approximately 143 residents and dozens of vehicles attempting to exit via one 26-foot road.
- **NFPA 1140 Table 11.1.4.1(a) and SHMC 15.36:** Requires at least two separate and remote access routes for developments over 30 units.
- **Operational Hazard:** Lessons from Southern California and the 2024 St. Helena drills prove that single-access communities face significantly higher mortality risks during rapid-onset fires. A secondary, remote evacuation route is a life-safety necessity to avoid gridlock. Without this redundancy, the project introduces a material health and safety concern that cannot be mitigated through building hardening alone.



## 8. CONCLUSION

Based on SHMC Chapter 15.36, the 2025 CAL FIRE maps, and the "Major Risk" Fire Factor assessment, the Spring Grove subdivision faces a material and high risk of wildfire danger. The combination of dense Type V-B wood construction, a single point of access, and proximity to high-intensity fuels creates an inherent risk that minimum building codes do not fully mitigate. Recent fire history, including the 2020 LNU Lightning Complex and Glass Fire, proves the reality that fire in the Napa Valley frequently outpaces standard suppression capabilities.

The protection of the existing and future residents depends on a design that prioritizes ignition resistance and evacuation redundancy. By implementing a defensible space strategy, hardening homes against embers, and providing a secondary evacuation route, the developer can mitigate the material health and safety risks inherent to this project. Failure to address the access redundancy and site constraints will result in a community that is fundamentally vulnerable to the next regional fire.

**Please don't hesitate to contact our office if you have any questions or would like to discuss our comments in further detail.**

**ZARI CONSULTING GROUP, INC.**



Duran Muniz  
Project Manager

**ZARI CONSULTING GROUP, INC.**



Joseph P. Zari, PE  
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Feb 10, 2026

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**Re: Proposed Housing Development Project at 1447-1515 Spring St**

Dear St. Helena City Council,

The California Housing Defense Fund (“CalHDF”) submits this letter to remind the City of its obligation to abide by all relevant state laws when evaluating the proposed 41-unit housing development project at 1447 Spring Street, 1515 Spring Street, and 1505 Spring Street, which includes 8 moderate-income units. These laws include the Housing Accountability Act (“HAA”), the Density Bonus Law (“DBL”), and AB 130.

The HAA provides the project legal protections. It requires approval of zoning and general plan compliant housing development projects unless findings can be made regarding specific, objective, written health and safety hazards. (Gov. Code, § 65589.5, subd. (j).) The HAA also bars cities from imposing conditions on the approval of such projects that would render the project infeasible unless, again, such written findings are made. (*Ibid.*) As a development with at least two-thirds of its area devoted to residential uses, the project falls within the HAA’s ambit, and it complies with local zoning code and the City’s general plan. Increased density, concessions, and waivers that a project is entitled to under the DBL (Gov. Code, § 65915) do not render the project noncompliant with the zoning code or general plan, for purposes of the HAA (Gov. Code, § 65589.5, subd. (j)(3)). The HAA’s protections therefore apply, and the City may not reject the project except based on health and safety standards, as outlined above. Furthermore, if the City rejects the project or impairs its feasibility, it must conduct “a thorough analysis of the economic, social, and environmental effects of the action.” (*Id.* at subd. (b).)

2201 Broadway, PH1, Oakland, CA 94612  
[www.calhdf.org](http://www.calhdf.org)

CalHDF also writes to emphasize that the DBL offers the proposed development certain protections. The City must respect these protections. In addition to granting the increase in residential units allowed by the DBL, the City must not deny the project the proposed concessions and waivers with respect to side setback, private ground floor open space, landscape area, paved area, distance to drive aisle, curb cuts, full height recesses, attached rowhouse block standards, entry design, recreation space visibility, and bicycle parking. If the City wishes to deny requested waivers, Government Code section 65915, subdivision (e)(1) requires findings that the waivers would have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact. If the City wishes to deny requested concessions, Government Code section 65915, subdivision (d)(1) requires findings that the concessions would not result in identifiable and actual cost reductions, that the concessions would have a specific, adverse impact on public health or safety, or that the concessions are contrary to state or federal law. The City, if it makes any such findings, bears the burden of proof. (Gov. Code, § 65915, subd. (d)(4).) Of note, the DBL specifically allows for a reduction in required accessory parking in addition to the allowable waivers and concessions. (*Id.* at subd. (p).) Additionally, the California Court of Appeal has ruled that when an applicant has requested one or more waivers and/or concessions pursuant to the DBL, the City “may not apply any development standard that would physically preclude construction of that project as designed, even if the building includes ‘amenities’ beyond the bare minimum of building components.” (*Bankers Hill 150 v. City of San Diego* (2022) 74 Cal.App.5th 755, 775.)

Furthermore, the project is eligible for a statutory exemption from environmental review pursuant to section 21080.66 of the Public Resources Code. Caselaw from the California Court of Appeal affirms that local governments err, and may be sued, when they improperly refuse to grant a project a CEQA exemption or streamlined CEQA review to which it is entitled. (*Hilltop Group, Inc. v. County of San Diego* (2024) 99 Cal.App.5th 890, 911.)

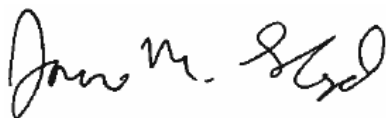
As you are well aware, California remains in the throes of a statewide crisis-level housing shortage. New housing such as this is a public benefit: it will provide important homeownership opportunities; it will increase the city's tax base; it will bring new customers to local businesses; and it will reduce displacement of existing residents by reducing competition for existing housing. While no one project will solve the statewide housing crisis, the proposed development is a step in the right direction. CalHDF urges the City to approve it, consistent with its obligations under state law.

CalHDF is a 501(c)(3) non-profit corporation whose mission includes advocating for increased access to housing for Californians at all income levels, including low-income households. You may learn more about CalHDF at [www.calhdf.org](http://www.calhdf.org).

Sincerely,

A handwritten signature in blue ink, appearing to be 'Dylan Casey', with a stylized, cursive script.

Dylan Casey  
CalHDF Executive Director

A handwritten signature in black ink, appearing to be 'James M. Lloyd', with a cursive script.

James M. Lloyd  
CalHDF Director of Planning and Investigations







## Agenda Report to the City Council

Agenda Section: NEW BUSINESS

Department: Recreation

<b>DATE:</b>	February 10, 2026
<b>FROM:</b>	Ashley Sylvester, Director of Community Services
<b>SUBJECT:</b>	City of St. Helena Public Art Project
<b>RECOMMENDED ACTION:</b>	Receive direction from the City Council related to the public art project.
<b>PREVIOUS COUNCIL ACTION:</b>	In November 2020, City Council approved an Acceptance of Donations and Charitable Gifts to the City Policy, which provides a framework for accepting donations to the City in various forms and dollar amounts.  In August 2023, City Council adopted Resolution 2023-105 allowing for the implementation of a pilot Mural Permit Application and Public Art Donation Installation Policy.
<b>STATEMENT OF THE PURPOSE:</b>	To seek City Council's support for the installation of public art to St. Helena. The Art Pieces being presented will be on loan to the City of St. Helena.
<b>FINANCIAL IMPACT:</b>	Public Works staff and artist representatives will perform the installation with a total cost of less than \$10,000.

### BACKGROUND:

There is great community interest in having more public art in St. Helena, and there have been sporadic attempts to explore opportunities for more art of various kinds in the public sphere. So, the current effort to install art capitalizes on the opportunity and will hopefully generate community interest and investment of time and money into public art.

This project additionally aligns and is consistent with General Plan Implementation Action AC1.C "Adopt an Art in Public Places program and ordinance to ensure that public art projects occur efficiently and in a way that meets citywide objectives."

### DISCUSSION:

As this opportunity to obtain about 11 art pieces has presented itself, staff has been working very hard to prepare for the installation. As part of this effort, staff is collaborating with the local artist to develop up to ten (11) temporary public art installations proposed for placement within the City of St. Helena. Some of the installations will occur in public spaces and a few may be installed on private property with owner's consent along Hwy 29. Each of the art pieces is over 8 feet in height. Final locations will be determined in the next couple of weeks.

Staff is working in consultation with the City Attorney to evaluate potential liability, insurance, indemnification, and risk management considerations associated with the installation, display, and maintenance of the proposed art pieces. Agreements with private and public property owners may be necessary and if so will be executed prior to installation.

Installation will be overseen by Public Works staff in collaboration with representatives of the artist. The proposed installation method includes anchoring each art piece to concrete slabs or sidewalk, subject to final engineering, safety, and accessibility review. Installation is anticipated to occur in early-March, in advance of the City's 150th Birthday Celebration.

As mentioned earlier, there is much to be done before the loaned art can be installed including contract for the loan of art with the artist, ensuring insuring coverage for the art, planning for the transportation and installation, and obtaining permission from two public agencies and two private property owners to install art pieces.

This effort will serve as a continuation of the Public Art Pilot Program previously presented to the City Council in August 2023. Staff views this phase as an opportunity to further evaluate implementation practices, maintenance considerations, processes to gain property owner agreement, and gauge public response. Staff anticipates returning to the City Council in the coming months with a comprehensive policy and committee structure to support the increase of public art in St. Helena and also to explore potential funding strategies to support future projects.

**ENVIRONMENTAL REVIEW:**

There is no environmental impact with the presented project. Each artwork proposal will continue to be individually reviewed for environmental and site impacts.

**GOAL:**

Goal 4: Provide Effective Community Information & Opportunities for Engagement

Goal 5: Enhance Quality of Life



# **City of St. Helena Public Art Project**

**February 10, 2026**

**City Staff: Ashley Sylvester, Director of Community Services**



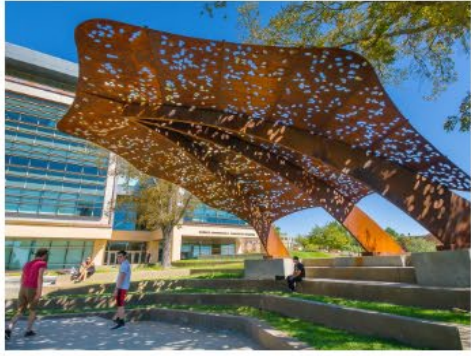


“ *I have spent my career exploring the power of public art: how it can engage communities and elevate the mundane to the memorable, creating lasting impressions in the viewer.* ”

Award-winning Napa-based artist **Gordon Huether** specializes in large-scale public art installations and private art commissions.

Projects have included art installations for private corporations, airports, transportation centers, parking garages, hotels, universities, hospitals, recreation centers, civic buildings, libraries, and museums.

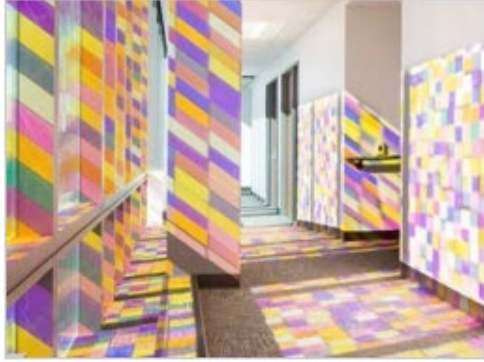




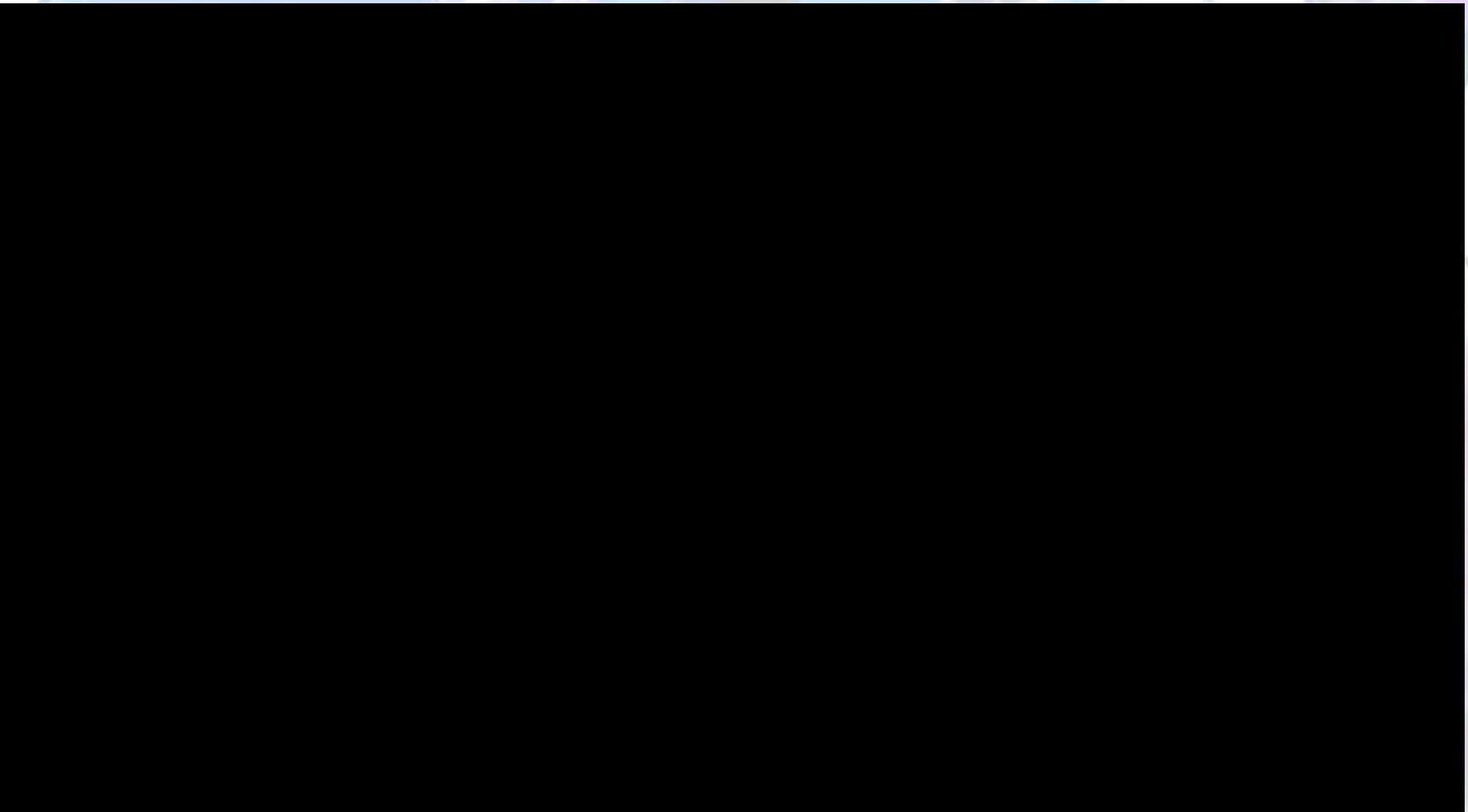












Lyman Park



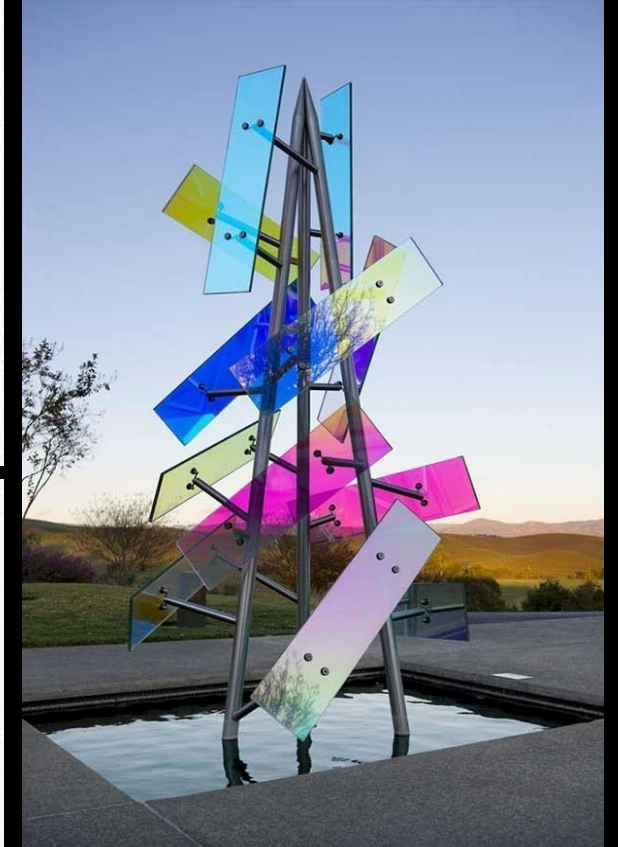
Hand of the Land

Hwy 29 / Main Street Corridor



Barrel Rings

City Hall Vineyard



Reflections



# LOCATION MAP





# LOCATION MAP





## INSTALLATION...



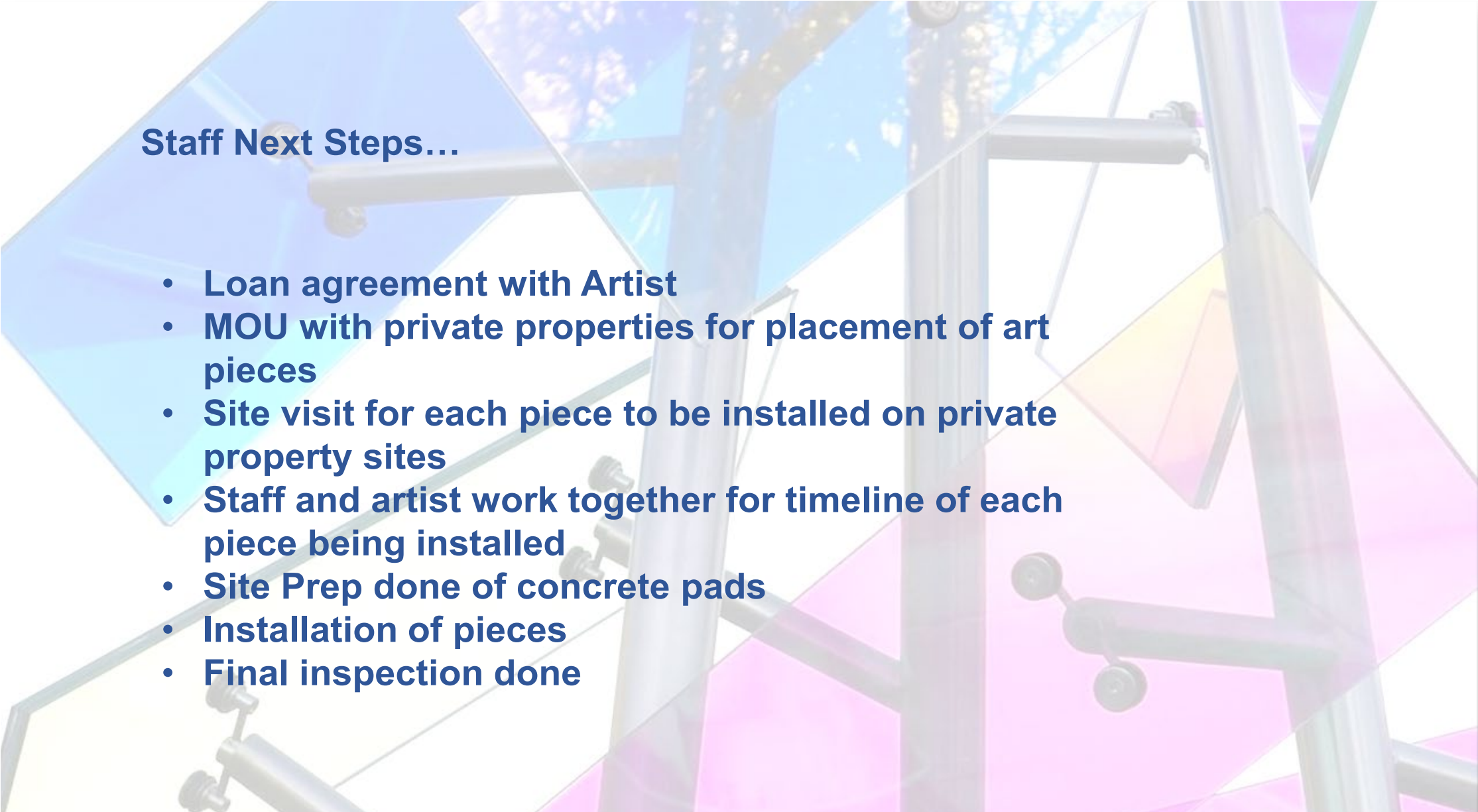
**2' X 2' Pad**



**4' x 4' Pad**



**6' x 6' Pad**



## **Staff Next Steps...**

- **Loan agreement with Artist**
- **MOU with private properties for placement of art pieces**
- **Site visit for each piece to be installed on private property sites**
- **Staff and artist work together for timeline of each piece being installed**
- **Site Prep done of concrete pads**
- **Installation of pieces**
- **Final inspection done**

## Item 13.1- City of St. Helena Public Art Project

*Receive direction from the City Council related to the presented public art project.*

Thank you  
~  
Questions?





## Agenda Report to the City Council

Agenda Section: NEW BUSINESS

Department: Administration

<b>DATE:</b>	February 10, 2026
<b>FROM:</b>	Andrew Bradley, Program Manager
<b>SUBJECT:</b>	Consideration and proposed approval of a resolution for the City Council appointment of applicants to fill the Library Board of Trustees vacancy.
<b>RECOMMENDED ACTION:</b>	Approve a resolution appointing one applicant to the Library Board of Trustees.
<b>PREVIOUS COUNCIL ACTION:</b>	None.
<b>STATEMENT OF THE PURPOSE:</b>	Appoint an applicant to the vacant Library Board of Trustees position.
<b>FINANCIAL IMPACT:</b>	There is no financial impact associated with this report.

### BACKGROUND:

Library Board of Trustees Member Jonathan Furuta provided his resignation on December 19, 2025. The vacant Library Board of Trustees position has a term ending June 30, 2027.

The City Clerk's Division conducted a recruitment and received three applications for consideration for the Library Board of Trustees. The City Council will conduct a special meeting on February 10, 2026, to interview applicants and make the appointment during the regular meeting.

### DISCUSSION:

The City held a recruitment for the Library Board of Trustees vacancy (1 vacancy) and received three applications for consideration.

- Becky St. Clair
- Kristina Skinner
- Vanessa Chase

### DOCUMENTS ATTACHMENTS:

[Resolution Appointing one member to Library Board of Trustees](#)  
[Library Board of Trustees Application - Vanessa Chase - 02 Feb 2026 Redacted](#)  
[Library Board of Trustees Application - Kristina Skinner - 26 Jan 2026 Redacted](#)  
[Library Board of Trustees Application - Becky St. Clair - 26 Jan 2026 Redacted](#)



**CITY OF ST. HELENA**

**RESOLUTION NO.**

**Appointing applicant to the Library Board of Trustees**

**RECITALS**

- A. There is one vacant position on the Library Board of Trustees due to a resignation; and
- B. Applications have been received from community members; and
- C. Per City Council Rules of Procedure appointments shall be made by interview and the Mayor shall nominate applicant with the appointments subject to approval by the majority of Council; and
- D. An applicant interview meeting is scheduled to be held on February 10, 2025 at 4:30 p.m.

**RESOLUTION**

NOW, THEREFORE, the City Council of the City of St. Helena resolves as follows:

**Library Board of Trustees**

- 1. _____ is appointed to the St. Helena Library Board of Trustees to fill vacant position that expires on June 30, 2027.

Approved at a Regular Meeting of the St. Helena City Council on February 10, 2025, by the following vote:

**Mayor Dohring:**

**Vice Mayor Deasy:**

**Council Member Barak:**

**Council Member Spadarotto:**

**Council Member Summers:**

APPROVED:

ATTEST:

_____  
Paul Jamison Dohring, Mayor

_____  
Andrew Bradley, City Clerk



## City of St. Helena

CA-26-003

### COMMISSION/COMMITTEE APPLICATION

Received Date: January 28, 2026

Application Type: Library Board of Trustees

**NAME:** Vanessa Chase  
**ADDRESS:** [REDACTED], St. Helena, CA, 94574  
**PHONE:** [REDACTED]  
**EMAIL ADDRESS:** [REDACTED]  
**LENGTH OF RESIDENCY:** 5.5 years  
**EMPLOYER:** SHUSD substitute teacher and IHSS caregiver  
**EMPLOYMENT STATUS:** Part-time  
**REASON FOR APPLYING:** I adore the library and so does my daughter. We are frequent users and visitors to the library. I would like the opportunity to help sustain the library and better it for the community.  
**EDUCATIONAL BACKGROUND:** (High School, College, Professional, Vocational, or other Schools Attended. Please include Major or Field of Study, Dates attended, Degree and date of Degree)  
 I am a college graduate with a bachelors in kinesiology. I also have a multiple subject teaching credential and a single subject credential in science.  
**OTHER RELEVANT EXPERIENCE:** I have had my own classroom and had an extensive library in my class since the school did not have it's own library. I have volunteered in many classrooms and schools. I have done a lot of community service as a child and as an adult. I was a 4-H member as a child and now I am a leader in 4-H.  
**COMMUNITY INVOLVEMENT:** I am a 4-H leader this year. I was involved with 4-H as a child as well. I have volunteered at schools. This year I am vice president of the PTG for the primary and elementary schools. I have been a coach with parks and rec and with boys and girls club.  
**REFERENCE 1:** Name: Tiffany Montelli  
 Address: [REDACTED]  
 Phone Number(s): [REDACTED]  
 Email: [REDACTED]  
**REFERENCE 2:** Name: Lana Tillotson  
 Address: [REDACTED]  
 Phone Number(s): [REDACTED]  
 Email: [REDACTED]  
**REFERENCE 3:** Name: Lisa Montelli  
 Address: [REDACTED]  
 Email: [REDACTED]

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**GENERAL QUESTIONS:**

THIS DOCUMENT AND ALL ATTACHMENTS ARE AVAILABLE FOR PUBLIC INSPECTION

**Have you ever attended a meeting of the Commission to which you are applying?**

I have not.

**What is your understanding of the role and responsibility of this Commission?**

My understanding is that the library staff will present the commission with policies that either need updating, revision or need changing in order to get community input. My role would be to provide the input of the community. Also, public works would be addressing the condition of the building, location of the library and it's future. I would also help with programming, support and promotion for the library.

**What would be your goal(s) as a Commissioner?**

My goal would be to strengthen the programs available to the youth of the community. I know many kids enjoy going to the library especially after school. I would love to see more things for the kids to do in order to foster a love of reading. I would also like to help provide more activities for adults to help them to make friends and use the resources available at the library.

**Have you previously served, or do you currently serve, on a St. Helena Commission or Committee? If yes, which one(s) and for what period of time?**

No I have not.

**Is there anything else you would like us to consider when reviewing your application?**

I would like to thank you for this opportunity and look forward to serving on the library board.

---

*I agree that all of the information contained in my responses to the questions on this application are true and accurate to the best of my knowledge. I further agree that, by checking the box below and submitting this application, online or otherwise, I am affixing my digital signature to this form as of the date submitted. I also agree that if appointed, I will serve on the Commission/Committee for which I have submitted this application.*

☒ I AGREE

_____  
Vanessa Chase

_____  
January 28, 2026

Vanessa Chase

St. Helena, CA 94574

## OBJECTIVE

Seeking a substitute teaching position that allows me to utilize my curriculum planning skills and provides opportunities to work with culturally and linguistically diverse students in grades K-8.

## PROFESSIONAL SKILLS AND KNOWLEDGE

- Establishing and enforcing expectations for behavior and procedures for maintaining order among the students for whom they correspond to.
- Developing and executing daily and unit lesson plans.
- Administering assessments, tracking and analyzing class performance.
- Conducting group and one-on-one math, reading and writing activities.
- Fostering a classroom environment conducive to learning and promoting excellent student engagement.
- Developing excellent rapport with students □ Participating in faculty and parent conferences.

## TEACHING EXPERIENCE

**2025-2026 St. Helena Unified School District**

St. Helena, CA

*Substitute Teacher TK-12th grade*

**2012-2017 Almond Acres Charter Academy**

San Miguel, CA

*Third Grade Teacher*

**2011-2012 Galt Joint Union School District**

Galt, CA

*Substitute Teacher Preschool-8th grade*

**2011- 2012 San Juan Unified School District**

Sacramento, CA

*Substitute Teacher Preschool-8th grade*

**2011-2011 Cameron Ranch Elementary School**

Carmichael,

CA

*Student Teacher 2nd grade*

**2010-2011 Clayton B Wire Elementary School**

Sacramento, CA

*Student Teacher 4th grade*

**2009- 2009 Cameron Ranch Elementary School**

Carmichael, CA

*Teacher's Assistant 2nd/3rd grade combo*

## EDUCATION

**California State University Sacramento**

Sacramento, CA

- Bachelor of Science- Exercise Science/Kinesiology
- SB 2042 Multiple Subject Credential Program – Bilingual Multicultural Education Department
- Single Subject Teaching Credential-Science
- Supplementary Authorizations in Science and Physical Education

**American River Junior College**

Sacramento, CA

- A.A. Liberal Studies

## Trainings:

- Enhanced English Language Acquisition (45 hours)
- Daily 5/ CAFÉ Conferences (2 years)



- CREEC training
- NWEA training
- Thinking Maps training
- NGSS Webinars
- Discovery ED training
- GLAD training
- SPBL training
- TEFL certification



## City of St. Helena

CA-26-002

### COMMISSION/COMMITTEE APPLICATION

Received Date: January 26, 2026

Application Type: Library Board of Trustees

**NAME:** Kristina Skinner  
**ADDRESS:** [REDACTED] Saint Helena, California, 94574-1371  
**PHONE:** [REDACTED]  
**EMAIL ADDRESS:** [REDACTED]  
**LENGTH OF RESIDENCY:** Saint Helena  
**EMPLOYER:** Solicia Aguiar, director of LGBTQ Connection  
**EMPLOYMENT STATUS:** Employed  
**REASON FOR APPLYING:** I grew up going to the library any chance I had, whether it was for programming after school or to pick out a new book. I even attended a sleepover or too that Leslie hosted during the summer, which are some of my fondest memories. As an adult, I want to continue to support the library by being part of the commission and in helping make decisions that contribute to the betterment of our community and making the library an accessible space to everyone.  
**EDUCATIONAL BACKGROUND:** (High School, College, Professional, Vocational, or other Schools Attended. Please include Major or Field of Study, Dates attended, Degree and date of Degree)  
University of Portland, BA in Psychology, Minor in Gender/Women's Studies, attended 2019-2023, received in 2023  
**OTHER RELEVANT EXPERIENCE:** I volunteered at SHPL for most of my high school and middle school career after school in the children's section. In addition, I was a TA at SHHS library and volunteered at the primary school library. In college, I worked at our on campus library for a year and a half.  
**COMMUNITY INVOLVEMENT:** volunteer with voters choice network  
**REFERENCE 1:** Name: Emma Pierce  
Address: [REDACTED], St. Helena, CA, 94574  
Phone Number(s): [REDACTED]  
Email: [REDACTED]  
**REFERENCE 2:** Name: Mara Strickler  
Address: [REDACTED], St. Helena, CA, 94574  
Phone Number(s): [REDACTED]  
Email: [REDACTED]  
**REFERENCE 3:** Name: Susan Swan  
Address: [REDACTED]  
Phone Number(s): [REDACTED]  
Email: [REDACTED]

---

#### GENERAL QUESTIONS:

THIS DOCUMENT AND ALL ATTACHMENTS ARE AVAILABLE FOR PUBLIC INSPECTION

**Have you ever attended a meeting of the Commission to which you are applying?**

No

**What is your understanding of the role and responsibility of this Commission?**

The commission provides strategic planning, governance, and advocates for the community to make sure the needs are being met. They also have subcommittees that tackle a specific duty that commissioners are interested in such as social media and youth engagement.

**What would be your goal(s) as a Commissioner?**

I want to give a voice to more of the underrepresented communities in St. Helena and to expand on opportunities given to our youth at the library, making the space welcoming and full of fun services the youth can take advantage of.

**Is there anything else you would like us to consider when reviewing your application?**

In my current position as youth advocate at LGBTQ+ Connection, we also partner with the library in providing a monthly movie night for both St. Helena High and Calistoga Jr./Sr. High School's GSAs (gender and sexuality alliance club) where they can get to know each other, eat snacks, and have a safe space to be themselves.

---

*I agree that all of the information contained in my responses to the questions on this application are true and accurate to the best of my knowledge. I further agree that, by checking the box below and submitting this application, online or otherwise, I am affixing my digital signature to this form as of the date submitted. I also agree that if appointed, I will serve on the Commission/Committee for which I have submitted this application.*

☒ I AGREE

Kristina Skinner

January 26, 2026

**Kristina Skinner**  
St. Helena, CA 94574

**Education:**

**University of Portland,** Portland, OR May 2023  
*B.A. Psychology, Minor in Gender, Women, and Sexualities Studies, GPA: 3.71*  
Social Justice UP Study Abroad Program in London, England June-August 2022

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**Awards:**

**Volunteer of the Year Award,** City of American Canyon, Spring 2025

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**Work Experience:**

**Circulation Assistant,** *Clark Library,* Portland, OR Winter 2022- Spring 2023

- Shelve and organize books
- Provide a positive and welcoming environment by checking in/out books
- Attend to patron questions and help locate books for them to check out

**Customer Service Rep,** *Caymus Vineyards,* Rutherford, CA Fall 2023- Summer 2024

- Answer customer questions both online and over the phone
- Book reservations for customers through Tok software
- Fulfill online orders of merchandise over the phone for customers using Commerce 7

**Youth Advocate,** *LGBTQ Connection,* Napa, CA Fall 2024- Present

- Assist the Youth Programs Coordinator in engaging youth and outreach efforts for socials, health services, and support groups.
  - Schedule one on one meetings with youth participants and co-lead youth leadership teams at wellness center sites.
  - Collaborate on community projects focusing on LGBTQ+ awareness and activism driven by youth input.
- 

**Internship Experience:**

**Social Media Intern,** *Community Leaders Coalition,* Napa, CA Winter 2024-Spring 2024

- Create content for social media posts and post to CLC's various platforms
- Conduct outreach with CLC contacts for voter education, 'Get out the Vote,' voter registration, etc.
- Build a Youth Voter Outreach Program in high schools, colleges and youth engagement programs across Napa County

**DEI Intern,** *Vitidore Inc.,* Davis, CA Fall 2022

- Work remotely for a startup to advance Diversity Equity and Inclusion efforts in the company
- Create work climate survey to measure employee satisfaction in the company
- Lead a company wide DEI meeting within the internship time frame on resources that provided an inclusive work environment
- Provide periodic training on DEI topics with resources such as podcasts and reading clubs

**HR Intern,** *City of St. Helena,* St. Helena, CA Winter 2024-Spring 2024

- Create a work climate survey for all City employees to measure employee satisfaction
- Design the HR page on the City website page
- Build content/pages for the City's new Intranet page



**Kristina Skinner**  
St. Helena, CA 94574

Solicia Aguilar  
Director  
LGTBQ Connection

Michele Grupe  
Director  
Community Leaders Coalition

Elvia Najera Santiago  
Field Operations Specialist  
Vitidore Inc.



## City of St. Helena

CA-26-001

### COMMISSION/COMMITTEE APPLICATION

Received Date: January 23, 2026

Application Type: Library Board of Trustees

**NAME:** Becky St. Clair

**ADDRESS:** [REDACTED], Angwin, CA, 94508

**PHONE:** 269-605-3438

**EMAIL ADDRESS:** [REDACTED]

**LENGTH OF RESIDENCY:** Angwin

**EMPLOYER:** Director, Paulin Center for the Arts; Freelance Writer and Editor

**EMPLOYMENT STATUS:** Employed

**REASON FOR APPLYING:** I absolutely love the SHPL. They were my saving grace when I was going through depression and needed to get out of the house, when I needed reading material for my entire family during Covid, and when I needed somewhere cooler to take my kids in the summer. We've played taiko drums, built gingerbread houses, watched puppet shows, watched concerts and movies, enjoyed history presentations, and put together LEGOs at the library.

I worked for the SHPL in 2018-2019 and was so excited to be part of bringing library services and events to the community. I got to meet people from all walks of life from our community, and saw the positive impact the library had on their lives. I had many, many ideas, and was passionate about learning more about how the SHPL operates. I currently volunteer a small number of hours for the SHPL, and am honored to be able to support them in whatever way I can.

In addition, I am an avid reader and my husband is a librarian. I grew up visiting the library at least once a week, and have had a library card for as long as I can remember, wherever I've lived. Libraries are part of the fabric of my being, and the SHPL is special to me. I want to see it flourish, and I want to help even more people recognize the library's value, as well. If my service on the board will be part of accomplishing those things, I'm all in.

**EDUCATIONAL BACKGROUND:** Gem State Academy (Idaho)  
Walla Walla University (Washington State) - BA in English; minor in music  
University College London - semester study abroad - culture, theater, history, government  
Andrews University (Michigan) - MA in Communications (one class away from finishing)  
Pacific Union College (California) - MA in Strategic Communications (in progress)

**OTHER RELEVANT EXPERIENCE:** Employed by SHPL 2018-2019  
Served on a school board for six years  
Significant engagement with libraries and their systems

THIS DOCUMENT AND ALL ATTACHMENTS ARE AVAILABLE FOR PUBLIC INSPECTION

Professional communicator and would serve well on the communications subcommittee

**COMMUNITY INVOLVEMENT:**

Walla Walla Symphony - greeting and distributing programs  
 United Way of SW Michigan - putting together school backpacks for underprivileged children  
 United Way of SW Michigan - yard work for seniors and shut-ins  
 Ronald McDonald House - making meals for long-term patients' families  
 Various churches (Idaho, Washington, Oregon, Michigan, California) - teaching children's classes, playing piano, leading worship music, speaking, editing newsletter, making/serving food for events, event set-up and tear-down, etc.  
 Angwin Food Pantry - stocking shelves  
 We Care Animal Rescue - socializing cats, tidying rooms, cleaning  
 Pacific Union College Elementary - library organization and cataloging (not as complex as "real" libraries--very basic!)  
 PUC Preparatory School - event coordination

**REFERENCE 1:**

Name: Amanda Granados  
 Address: [REDACTED] Angwin  
 Phone Number(s): [REDACTED]  
 Email: [REDACTED]

**REFERENCE 2:**

Name: Trina Maia  
 Address: [REDACTED], St. Helena  
 Phone Number(s): [REDACTED]  
 Email: [REDACTED]

**REFERENCE 3:**

Name: Jessica Fowler  
 Address: [REDACTED], St. Helena  
 Phone Number(s): [REDACTED]  
 Email: [REDACTED]

---

**GENERAL QUESTIONS:**

**Have you ever attended a meeting of the Commission to which you are applying?**

No

**What is your understanding of the role and responsibility of this Commission?**

To help guide and advise the SHPL on policies, decisions, or whatever they need advice on. And to participate in a subcommittee connected to my interests/skills to help develop/advise in that area.

**What would be your goal(s) as a Commissioner?**

Greater understanding of the processes that go into running a public library  
 Positive impact on the SHPL specifically, and therefore the community as a whole  
 Help develop ideas to support and enhance what the SHPL is already doing and perhaps help them develop new approaches and methods to do what they do even better  
 Meeting other people who also care about the SHPL  
 Leave the library better than it was when I arrived, even if in just a small way

**Have you previously served, or do you currently serve, on a St. Helena Commission or Committee? If yes, which one(s) and for what period of time?**

No

---

THIS DOCUMENT AND ALL ATTACHMENTS ARE AVAILABLE FOR PUBLIC INSPECTION

*I agree that all of the information contained in my responses to the questions on this application are true and accurate to the best of my knowledge. I further agree that, by checking the box below and submitting this application, online or otherwise, I am affixing my digital signature to this form as of the date submitted. I also agree that if appointed, I will serve on the Commission/Committee for which I have submitted this application.*

☒ I AGREE

_____  
Becky St. Clair

_____  
January 26, 2023

THIS DOCUMENT AND ALL ATTACHMENTS ARE AVAILABLE FOR PUBLIC INSPECTION



# BECKY ST. CLAIR

ORGANIZER | COMMUNICATOR | PEOPLE ENTHUSIAST

## SKILLS SUMMARY

### COMMUNICATION

- Nearly 20 years professional writing and editing experience in variety of media for diverse audiences
- Exceptional interpersonal skills after 12 years in public relations
- Extensive experience with Google Suite, Microsoft Office, MailChimp, and Canva
- Experience creating, copy editing, and proofreading magazines, web content, and marketing materials
- Outstanding written communication skills
- Excellent project management skills

### ORGANIZATION

- Familiar with various project management platforms: ClickUp, Monday.com, Asana, Liquid Planner
- Able to effectively juggle multiple projects and deadlines, due to 8 years as a freelancer also maintaining a day job
- Independently coordinated & led two successful multi-day festivals for 200 high school students
- Met every deadline as Managing Editor for a book with 14 writers and am currently working on a second book
- Coordinate graduation weekend for a liberal arts college

### INTERPERSONAL SKILLS

- Regularly assisted and collaborated with team photographers, graphic designers, and web designers on projects
- Coordinated and hosted monthly artist opening receptions, including planning with the artist, providing heuer d'oeuvres and drinks, and engaging with event attendees
- Managed PR and information coordination for a university both in print and online, fielding challenging phone calls, emails, and online comments

## CONTACT

Angwin, CA 94508

## BRIEF INTRO

I am an educated professional with 18 years of experience creating, organizing, and managing all channels of communication. I have strong interpersonal skills and a talent for thinking outside the box. I'm a team player and a self-starter with a passion for learning and relationship-building and a love for storytelling.

## EDUCATION

### *In Progress*

**PACIFIC UNION COLLEGE**  
Angwin, California

**Masters in Strategic Communication**

### **ANDREWS UNIVERSITY**

Berrien Springs, Michigan

**Masters in Communication (33 of 36 credits)**

### **LONDON UNIVERSITY COLLEGE**

London, U.K.

**Courses in art, literature, culture, history, and theatre**

### **WALLA WALLA UNIVERSITY**

College Place, Washington

**Bachelors in English (cum laude)**

# BECKY ST. CLAIR

ORGANIZER | COMMUNICATOR | PEOPLE ENTHUSIAST

## EXPERIENCE

*This list is not a complete record of my previous employment.  
See my website for a full list: [beckysstclair.wixsite.com/writer](https://beckysstclair.wixsite.com/writer)*

### CONTENT COORDINATOR

Angwin Living Magazine (Angwin, California)

2023-present

- Identify cover feature families, conduct interview, coordinate with photographer, write monthly cover feature
- Coordinate additional 1-2 pages of seasonal content
- Put together Calendar of Events for the area

### DIRECTOR

Paulin Center for the Arts (Angwin, California)

2021-present

- Manage a team of 10-12 instructors and the program's budget
- Handle all marketing, PR, hiring, and communication
- Coordinate enrichment events for students
- Run and emcee quarterly student recitals
- Create and produce posters and printed programs for events
- Oversee online scheduling and billing platform

### OFFICE MANAGER, DEPARTMENT OF MUSIC

Pacific Union College (Angwin, California)

2019-present

- Manage all departmental communication, both internally and externally
- Oversee 6-8 student employees
- Organize & lead 4-day music festival for 200 high school students
- Assist team members with logistics for performances & events
- Research content for regular department newsletters
- Develop & implement department-wide systems and processes

### FREELANCE WRITER & EDITOR

Various Entities, Organizations, & Individuals

2017-present

- Juggle multiple client jobs simultaneously
- Meet or beat nearly every deadline
- Track progress of projects and set reminders for follow-up
- Communicate clear expectations to clients and others I work with
- Work effectively with others remotely and across time zones

## AWARDS

### 2025

**HONORABLE MENTION: LONG FORM  
FEATURE WRITING**

Society of Adventist Communicators

**AWARD OF EXCELLENCE**

Associated Church Press

**HONORABLE MENTION: NEWS STORY**

Associated Church Press

### 2024

**BEST LONG-FORM FEATURE WRITING**

Society of Adventist Communicators

### 2017

**HONORABLE MENTION: CAMPAIGN**

Society of Adventist Communicators

**AWARD OF MERIT**

L.A. Awareness Film Festival

**3RD PLACE: SHORT DOCUMENTARY**

kingdomwood International Film Festival

**OFFICIAL SELECTION & AWARD**

Christian Life International Film Festival

### 2015

**HONORABLE MENTION: PRINT**

Society of Adventist Communicators

### 2010

**AWARD OF EXCELLENCE**

Society of Adventist Communicators

# BECKY ST. CLAIR

ORGANIZER | COMMUNICATOR | PEOPLE ENTHUSIAST

## EXPERIENCE

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### **MEDIA COMMUNICATIONS MANAGER**

**Andrews University (Berrien Springs, Michigan)**

**2013-2017**

- Writing in various styles for various media, including news, feature articles, press releases, blogs, web copy, social media, and marketing materials
- Managing social media platforms for the institution
- Coordinating on-campus announcement system and online events calendar
- Video production with in-house professionals and third-party companies
- Handling crisis communication for the university

### **DIRECTOR OF COMMUNICATIONS**

**Project Patch (Vancouver, Washington)**

**2011-2013**

- Coordinating any and all copywriting for both digital & print
- Website and social media content management
- Overseeing production of marketing materials
- Copy editing all written material produced by organization
- Magazine article writing
- Ghost writing for fundraising

### **NEWS & INFORMATION COORDINATOR**

**Walla Walla University (College Place, Washington)**

**2007-2011**

- Copywriting and editing for various media and audiences, including newsletters, news, press releases, magazine articles, social media, and web content
- Working with administration on crisis communication
- Managing organization's social media channels
- Internal communication regarding emergency preparation
- Worked with two other staff and administration to create Staff Council, then later served as chair the Council

## SAMPLE WORK

[beckysstclair.wixsite.com/writer/portfolio](http://beckysstclair.wixsite.com/writer/portfolio)